

Glenn's Technologies Shine at Inaugural "Stars" Event

The spotlight shown on NASA Glenn's innovation and its people during a spectacular event titled, "An Evening With the Stars: Exploration of NASA Glenn Innovation" held at the Great Lakes Science Center (GLSC), Oct. 15. The evening featured presentations by Glenn researchers and a networking reception in the Glenn Visitor Center aimed at raising the visibility of the center throughout northeast Ohio.

The Ohio Aerospace Institute (OAI) coordinated sponsorship for the event with more than 35 companies, universities and organizations. "We hope to make this an annual celebration and community learning experience

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Director Free welcomes guests to the event in the GLSC's giant domed OMNIMAX Theater.

PBS Has A Lot of Shaking Going On



NASA Glenn recently took delivery of the mechanical vibrationtable, a 22-foot-wide, 55,000-pound vibrationsimulating table in the Space Power Facility (SPF) at Plum Brook Station. It is the newest addition to the world-class hardware housed in the SPF. For details, visit http:// www.nasa.gov/content/nasas-space-power-facility-gettingready-to-shake-orion-up/.

Director Provides Workforce Updates

Director Jim Free highlighted recent center accomplishments and updated employees on issues pertaining to technical capabilities, new business and human resources during his All Hands meeting, Oct. 2.

Free reported that 54.4 percent of the Glenn workforce responded to the 2014 Employee Viewpoint Survey, with results expected to be released at the end of October. Administered under the U.S. Office of Personnel Management (OPM), the survey is considered an important management tool in driving organizational change. Continued on page 2

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Increased Activity=Increased Awareness

I'm impressed with the Mission Integration Center and how it is quickly becoming a hub for information and collaboration. We've successfully relocated Program and Projects, Systems Engineering and Mission Assurance staff to the new building. We've held several key events in the auditorium. These increased activities do increase vehicle and pedestrian traffic in the area requiring heightened safety awareness. I hope you will join me in staying mindful of our center traffic policies, especially with respect to pedestrian crossing, speed limits and no texting while driving. Your commitment to observing these policies will continue to keep us safe throughout both of our campuses.

-Jim

Two Named To Senior Executive Staff

Center Director Jim Free recently announced the appointment of two new members to his senior staff:

Sean M. Gallagher has been appointed Chief Information Officer (CIO) of NASA Glenn and Director of the Office of Chief Information Officer (OCIO). The CIO governs the center's information technology (IT) portfolio and manages



Gallagher

Dr. Sankovic

centerwide IT policy, technology development, procedures, architecture and communications security systems and services to ensure optimal mission support and compliance with agency directives and policies.

Gallagher joined the Glenn workforce in 2012, bringing a wide range of experience managing IT services in the military and industry. He was selected deputy CIO, July 2012, and following the retirement of the former chief, William "Randy" Humphries, began a detail of the chief's duties, November 2013. Most recently Gallagher has led the center's IT consolidation activities to enhance governance and improve services in the most efficient manner, while effectively implementing the OCIO reorganization.

Dr. John M. Sankovic has been appointed Director of the Office of Technology Incubation and Innovation. In that role he oversees discretionary investments in technology, tech transfer and licensing, promoting and protecting the center's intellectual property portfolio and identifying infusion opportunities. Sankovic also serves as the Center Chief Technologist.

Sankovic joined Glenn 27 years ago as a co-op and has had a distinguished NASA career serving in various technical, supervisory and mid-level program/project management positions of increasing responsibility across a variety of Glenn competencies. Most recently, Sankovic served as the acting Deputy Director of the Space Flight Systems Directorate and Chief of the Space Operations Project Office managing work assigned to Glenn in the areas of electric power, space communications, human health and physical sciences. -By S. Jenise Veris

All Hands —

Continued from page 1

Free is a member of the Technical Capability Assessment Team (TCAT) that is working to establish a more efficient operating model for the agency. This model would enable NASA centers to maintain critical capabilities and meet current and future mission needs. He encouraged employees to visit the TCAT Web site, (internal only) https:// tcat.hq.nasa.gov/index, for details on the technical areas under review.

He also discussed the topic of New Business-what it means, how we do it, how prospects are brought forward, and why the center needs to review proposals. Employees should submit their ideas through their organizations so these prospects can be elevated to the center's New Business Board for review. Visit (internal only) https://www. grc.nasa.gov/newbusiness to learn more about the process.

Center reorganization, a center buyout and phased retirement were also among the topics discussed at the All Hands:

- Reorganization: A short-term assessment of the center realignment is expected after 6 months.
- Center buyout: A request that was sent to Headquarters in August is still under review. OPM has up to 4 months to decide on the request. If approved, the center will submit a specific implementation plan that requires Headquarters' approval.
- Phased retirement: OPM has issued the final regulations allowing agencies to implement phased retirement. This initiative is designed to assist agencies with succession planning, mentoring and knowledge transfer. For more details, visit the NASA Shared Service Center Web site https://www.nssc.nasa. gov.

Employees can review the All Hands PowerPoint presentation on the Glenn WING page. Click on the "Director's Corner," then "Reports and Presentations."

-By Doreen B. Zudell

Glenn's Technologies Shine

Continued from page 1

to share the incredible innovations being developed every single day at the NASA Glenn Research Center," said Ann Heyward, executive vice president of OAI.

Other speakers included Dr. Kirsten Ellenbogen, GLSC director, and Jeffrey Rolf, Ohio Aerospace and Aviation Council chair and vice president of Commercial Airframe Programs, Parker Hannifin Corp. NASA Administrator Charlie Bolden and Senators Sherrod Brown and Rob Portman sent congratulatory videos.

Center Director Jim Free welcomed 400 guests from federal, state and local government, academia and industry. After providing a brief historical perspective of the center that highlighted technological contributions, Free focused on NASA's most valuable resource: its people.

"Glenn's accomplishments are the accomplishments of people," he explained. "The agency provides the stage; but the people—engineers, scientists, technologists—bring the stage to life and write the script that becomes not only their own personal story, but NASA's story."

Four of Glenn's brightest stars captivated the audience with presentations on technological achievements in core competency areas of air-breathing propulsion, communications, power, and materials and structures, amid the backdrop of the giant domed OMNIMAX Theater.

Dennis Huff, Acoustic Branch, explained Glenn's role in testing and developing the Chevron nozzle as well as other propulsion technologies that reduce aircraft noise, fuel burn and emissions. Dr. Robert Romanofsky, Advanced High Frequency Branch, detailed a successful partnership between Glenn and GATR Technologies to develop the world's first inflatable antenna certified by the Federal Communications Commission and used worldwide to provide communications support for U.S. Armed Forces, Homeland Security, intelligence agencies and more.

James Soeder, Power Division, described Glenn's demonstrated expertise in electrical energy generation, distribution and storage through its integral role in developing the International Space Station's power system. Joyce Dever, High Temperature and Smart Alloys Branch, shared examples of Glenn successes in materials and structures technology

such as the ME3 disk alloy, the composite fan case and the spring tire.

A common theme was apparent throughout all of the presentations—partnerships between industry and NASA have resulted in invaluable technological advancements that touch our everyday lives.

-By Doreen B. Zudell

Event Coordinator Nikki Welch and Champion Deputy Director Greg Robinson thank the team members across the center that helped make this event so successful.





NOVEMBER 2014

Hu

Dr. Romanofsky





Soeder

Dever

Pictured above: Technical presenters. Middle: Huff's presentation included bigblights on Chevron nozzle technology. Below: Guests enjoy a networking reception in the Glenn Visitor Center at the GLSC.



C-2014-7224

Photo by Bridget Caswell



C-2014-7161

Photo by Michelle Murphy

News and Events

CFC Winding Down with Final Activities -

The generosity of NASA Glenn employees that "Give for Good" has enabled Glenn to reach the half-way mark of our campaign. Please help us reach the \$452,820 goal by donating to the CFC through Employee Express or pledge cards until December 15, 2014!

-CFC Committee

International Food Fest Dec. 4, 11 a.m. to 1 p.m. Administration Building

CFC Art Show

December 8 10 a.m. to noon MIC Auditorium



Congressional Visitors Updated on Partnerships



C-2014-6552

Congressional Representatives Marcy Kaptur and Tim Ryan and staff visited NASA Glenn, Sept. 24, for an update on the center's efforts to aid economic development in Northeast Ohio. Center Director **Jim Free and Director of Venture** and Partnerships Dr. Joe Shaw provided an overview of Glenn's outreach strategies and technology partnerships and joined the representatives on the tour. Dr. Robert Romanofsky, left, explains the choice of material used to construct the GATR inflatable antenna to Kaptur and Ryan.

Photo by Marvin Smith

Center Instructors Honored

Glenn's Office of Human Capital Management (OHCM) recognized 130 employees who have served as internal instructors to fill a void left by budget constraints. During a ceremony and reception in the MIC Aud., Sept. 25, members of the center's senior management presented certificates of appreciation to those who stepped forward to share their expertise with coworkers on such topics as safety,



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Photo by Bridget Caswel

travel, procurement, ethics and supervision. Pictured: OHCM Director Lori Pietravoia and Deputy Director Gregory Robinson present a certificate to Dr. Karen Gilliam.



Photo by Geneva Biglin

Fun and Fellowship at Plum Brook Station Picnic

Employees gathered outside the Engineering Building at Plum Brook Station (PBS), Oct. 1, to enjoy fun, food and fellowship. TFOME and PBS Management grilled hamburgers and hot dogs for all in attendance. Games of corn hole and sky darts followed lunch. Center Director Jim Free attended the event and then headed to the Space Power Facility to witness the arrival of the mechanical vibration table.

Staff Gather to Celebrate Launch Anniversary

More than 50 employees and retirees gathered at the NASA Glenn Picnic Grounds, Sept. 12, to celebrate the 21st launch anniversary of the Advanced Communications Technology Satellite (ACTS). Following the satellite's launch in September 1993, it supported 103 experiments and over 80 demonstrations during 78 months of continuous operations.



NOVEMBER 2014 Advancing Technology

Milestones in Stirling Research

Glenn and industry partners supporting the Radioisotope Power Systems (RPS) Program Office recently celebrated two important milestones. The Advanced Stirling Radioisotope Generator (ASRG) Engineering Unit 2 (EU-2), developed under the Department of Energy's former contract with Lockheed Martin (LM), is up and running at full power—5 weeks ahead of schedule. Team members from LM Valley Forge, LM Coherent Technologies (LMCT) and Sunpower, Inc., aided the effort. This generator represents the highest fidelity integrated Stirling space power system assembled to date. Its modular, self-contained unit is designed to meet multimission requirements for future deep space environments. Additionally, Glenn completed the first testing of a paired Advanced Stirling Convertor in the new RPS Systems Integration Laboratory. The



Photo by Jonathan Metscher

facility will enable advanced system testing of the EU-2 integrated with an LMCT-developed controller. Pictured, in Glenn's Stirling Research Lab with the EU-2, left to right: LMCT's Joel Wiser, Carla Jimenez and Dominic Florin with Glenn's Ed Lewandowski, Mary Ellen Roth, Sal Oriti and Nissim Lugasy.



Affordable Approach to Planetary Research

On Sept. 25, NASA launched the Balloon Observation Platform for Planetary Science (BOPPS), a high-altitude, stratospheric balloon mission, from NASA's Columbia Scientific Balloon Research Facility in New Mexico. Floating at roughly 127,000 feet above the Earth for nearly 17 hours, its telescope and cameras collected data on objects in our solar system unhindered by Earth's atmosphere. Top-level targets observed included the asteroid Ceres and two Oort Cloud comets. One of the comets observed by BOPPS, Comet Siding Spring, was on a path to come within 100,000 km of Mars in just a few weeks after the observation. The mission is a collaboration of the Johns Hopkins University Applied Physics Laboratory (APL), NASA Glenn and the Southwest Research Institute. Glenn manages the BOPPS project for the NASA Science Mission Directorate at NASA Headquarters, Washington, DC. Pictured is a time-lapsed photo of the BOPPS launch.

Photo by NASA

Rocket University Project Launches

Four members of NASA Glenn's Rocket University pilot program recently participated in several balloon launch tests of NASAFly, the GPS-guided parafoil component of their proposed payload recovery system, in Eloy, Ariz., Sept. 14 to 16. The tests demonstrated the successful operation and landing of NASAFly, as well as the ram-air canopy and drogue chute that will be used for a future balloon mission at over 100,000 feet. Glenn test participants, far right: Jeff Shin (standing) and Jeremiah McNatt help recover NASAFly and pack the drogue chute;



while right, Justin Niehaus, (red shirt) helps one of the payload recovery teams. Not pictured: Amanda Stevenson. Glenn is partnering with several other NASA centers, academic institutions and external organizations to offer Rocket University, a new 12- to 18-month technical development program for early career hires assigned to scientific/research, engineering or technical positions. The program provides technical knowledge and experience employing cross-functional project teams with hands-on application to the entire project life cycle.



Photos by Amanda Stevenson

Awards



The Girl Scouts of Northeast Ohio presented a 2014 Women of Distinction award to Robyn Gordon, director for Center Operations, during an awards and fundraising event, Sept. 18. She was one of 15 local women recognized for remarkable achievements as business, community and civil leaders dedicated to supporting opportunities for women and girls. Glenn's Susan Johnson, Aeronautics Mission Office, was the keynote speaker for the event.

Gordon

On Sept. 23, NorTech recognized Glenn's Dr. Paul Bartolotta, Carol Tolbert and Eric Baumann for their innovative work with the Adopt-a-City initiative. Also on the team were employees from



Dr. Bartolotta

Baumann



MAGNET (Manufacturing Advocacy & Growth Network), the city of Cleveland and Cuyahoga County. The team won in the "Most Innovative Integration or Use of a National Trend" category for work in pairing NASA experts with local small businesses in need of solutions to product challenges.

Glenn's John Lekki, Larry Liou, Jim Demers, Roger Tokars and Quang-Viet Nguyen were named a team finalist in the category of Most Innovative Technology. They were recognized for their work in hyperspectral remote sensing of harmful algal blooms in Lake Erie.

The NorTech Innovation Awards celebrate individuals and organizations that accelerate the pace of innovation in Northeast Ohio.



Brown-Houston

The Career Communications Group's Women of Color magazine presented awards to two Glenn employees during the 19th Annual Women of Color STEM Conference, Oct. 24. Stephanie Brown-Houston, Office of Education, received an Educational Leadership—Corporate Promotion of Education award. She is recognized for her leadership and success as a project manager in Glenn's Office



Dr. Hernandez-Lugo

of Education. Dr. Dionne Hernandez-Lugo, Photovoltaic and Electrochemical Systems Branch, received a Student Leadership award. She was nominated during her Pathway internship term at Glenn because of her independent and productive research skills.



The Midwest Regional Federal Laboratory Consortium for Technology Transfer has selected Joseph King, SGT/ Technology Transfer Office, as the recipient of the 2014 Regional Appreciation Award. King's extensive experience educating researchers and third parties in the technology transfer process has lightened the load of NASA Glenn engineers and scientists. He was instrumental in licensing agreements to repurpose NASA innovations with Nirvana, Endotronix, Meggitt and several Space Act Agreements with partner companies.

Coming this December: Orion's First Test Flight!

Orion, NASA's new spacecraft built to send humans farther than ever before, is launching into space for



the first time this December! The spacecraft will launch on Exploration Flight Test-1, an uncrewed mission designed to see how Orion performs in and returns from deep space journeys. Launching aboard a Delta IV Heavy rocket, Orion will orbit the Earth twice and reenter the atmosphere at a speed of 20,000 miles per hour-faster than any current spacecraft! Planning is underway for launch viewing events the morning of Dec. 4 at the Great Lakes Science Center and Lewis Field (internal staff only). Visit http://www.greatscience.com/ and Today@Glenn for more details.

Promotions

Thomas St. Onge has been named chief, Space Operations Project Office, Space Flight Systems Directorate. St. Onge has a background strong in pro-



St. Onge

ject management, leadership and supervisory experience. He previously served as chief, International Space Station and Human Health Office.

Robert LaSalvia has been named chief, Office of Education, Center **Operations Direc**torate. An experienced manager in educational programs, LaSalvia has developed and/or



LaSalvia

managed a variety of national programs targeted at supporting students and teachers. He served as deputy division chief, Office of Education, since 2011, and acting chief since March 2014.

Seeking NACA Retirees

NASA is preparing to observe the Centennial of the National Advisory Committee for Aeronautics 1919 (NACA). The NASA History Office would like



to update our records so we can share information with former NACA staff from Lewis. If you are one or have contact information for NACA retirees, please contact anne.mills@nasa.gov or 216-433-8715.

Welcome to the NASA Family





C-2014-5710

Photo by Marvin Smith

C-2014-6978

Photo by Bridget Caswell

Glenn welcomed six employees and new trainees, who reported for duty/ orientation in September and October. Pictured above, left, September new hires include: Lucas Crandall, Information and Signal Processing Branch, and Taylor Erdel, Workforce Planning and Strategic Solutions Division. Above, right, October new hires include, left to right, front: Tamika Laldee and MacAllister West, Office of the Chief Counsel, and back: Richard Senvitko, Space Power & Propulsion, Communication and Instrumentation Branch, and Matthew Shelton, Engineering Management Branch.

More Than a Memory

Robert F. Billy, 82, a 1988 NASA retiree with 37 years of service, died Sept. 16. Billy served in the Logistics Management Division, where he earned a Suggestion Award for a process to eliminate the potential for items to become mixed or miss-issued during relocation of warehouse stock. Billy also promoted positive employee morale as a member of the Lewis Social Activities Committee



Billy

Brown

(LeSAC). His daughter, Annemarie Hamilton, SGT, is manager of the TIALS Information Technology Services Group.

Grant M. Brown, 70, a 2004 NASA retiree with 40 years of federal service, died Sept. 16. A U.S. Army Vietnam War veteran, Brown was a mechanical engineering technician, who supported numerous programs, including the Combustor Materials team for the Enabling Propulsion Materials Program for High Speed Research. He also earned two Suggestion Awards: a muzzle protector for ballistic impact barrels, and an automatic solenoid valve to shut a gas supply line. His wife, Rose, is a Glenn retiree.

Alfred J. Lancki, 95, a 1980 NASA retiree with 38 years of federal service, died Sept. 25. Lancki was a U.S. Army/Air Force World War II veteran. In 1951, he joined the NACA/NASA workforce as an apprentice experimental model maker. Lancki later transferred to NASA Johnson where he produced hardware and tools for the Gemini, Saturn, Apollo, Skylab and Space Shuttle projects. He contributed significantly to the design and build of the Partial Gravity Simulator, which helped train/prepare astronauts for EVAs. His son-in-law, Damian Blazek, is a Glenn retiree.

In Appreciation

I would like to express my deep gratitude to all of the NASA family that has so generously allowed me to be available to my husband Dwayne during his last months. Additionally, the support of the community to Benjamin and me after Dwayne's death has been humbling and enormously comforting at this difficult time. -Therese Griebel

Calendar

RETIRED WOMEN'S LUNCHEON: The next luncheon will be held Thursday, Nov. 20 at 1 p.m. at the 100th Bomb Group in Brook Park. Reserve your place by calling Gerry Ziemba, 330-273-4850.

DR. PAI RETIREMENT GATHERING: Mark your calendar for Dr. Shantaram Pai's Retirement Reception, Tuesday, Dec. 9, from 1 to 4 p.m., Ad. Bldg. Aud. Former Glenn Center Directors Donald Campbell, Dr. Julian Earls and Dr. Woodrow Whitlow are scheduled to toast Dr. Pai. POC: Sandra Zolo, 216-433-2517

IFPTE LOCAL 28, LESA MEETING: LESA will hold its next membership meeting, Wednesday, Dec. 10, noon, in the Glenn Employee Center's Small Dining Room.

STRATEGIC ACTION PLAN OVERVIEW:

Learn how NASA Glenn is working to move "Above and Beyond," by reviewing the 2014 overview of NASA Glenn's strategic plan. Click here for more details: http://go.nasa.gov/1xQiP99.

BOAT AND RV STORAGE: It is not too late for employees to store their boat or recreation vehicle at Lewis Field or Plum Brook. POC: Connie Carroll, 3-5535.



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National Aeronautics and Space Administration

John H. Glenn Research Center at Lewis Field 21000 Brookpark Road Cleveland, Ohio 44135

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Read AeroSpace Frontiers online at http://aerospacefrontiers.nasa.gov

Astronaut Candidates Connect With NASA Glenn

Center Director Jim Free and other members of the NASA Glenn team rolled out the welcome mat to the 2013 Astronaut Candidate Class and their training supervisors, Oct. 16 and 17.

The eight astronaut candidates selected from a near recordbreaking 6,125 pool of applicants include Josh Cassada, Victor Glover, Tyler Hague, Christina Hammock, Nicole Mann, Anne McClain, Jessica Meir and Andrew Morgan. The accompanying supervisors were Patrick Forrester and Duane Ross.

"Visiting all 10 NASA centers is part of the second phase of a rigorous 2-year training program," explained Ross, who has coordinated the astronaut selection process since 1978. "The goal is to help them learn about each center and understand the citizenship of NASA."



On the first day, Free presented an overview of the center's competencies and accomplishments before accompanying the guests on tours at Lewis Field. Glenn experts highlighted our research and technology that benefits the International Space Station operations and aeronautics. The next day, Associate Director Janet Watkins and Plum Brook Station (PBS) Director David Stringer accompanied the candidates on a tour of Plum Brook's world-class facilities, including the newest addition—the mechanical vibration table.

The visit left some lasting impressions with the candidates, who enjoyed learning Glenn's link to many game-changing technologies in aeronautics and



space flight. They also shared their appreciation for centerleadership's availability and eagerness to make a connection.

-By S. Jenise Veris



Pictured, top: Jerry Hill, far right, guides the candidates on a tour of the PBS Spacecraft Propulsion Research "B-2" Facility. Above: After lunch at the Guerin Management Center, the candidates (Hague, Morgan, Meir, Hammock, Mann, McClain, Cassada, and Glover) take a group photo; and left: The candidates tour the Icing Research Facility at Lewis Field.