



# Employees Gather to Reflect on Center's Namesake

## John H. Glenn Memorial

The NASA Glenn family gathered in the MIC auditorium, Dec. 12, to pay tribute to John H. Glenn, Jr., an American hero and humble servant for whom the center was renamed in 1999. Glenn, who served the people of this nation as a military combat and test pilot, astronaut and senator from Ohio, died Thursday, Dec. 8, at the age of 95.

Cleveland VA Medical Center Chaplain George Hankins, Center Director Dr. Janet Kavandi and fellow astronaut Patrick G. Forrester participated in the brief ceremony that honored Glenn's awe-inspiring life of service and accomplishments.

Tom Hartline, chief of Glenn's Facilities and Test Directorate, officiated the ceremony. Hankins offered the invocation based on his favorite quote from Glenn: "If there is one thing I've learned in my years on this planet, it's that the happiest and most fulfilled people I've known are those who devoted themselves to something bigger and more profound than merely their own self-interest."

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GRC-2016-C-09584 Photo by Marvin Smith  
Astronaut Forrester pays tribute to Glenn.



GRC-2016-CN-00015 Photo by Marsheba Bond  
The lab team, pictured left to right, is Roger Tokars, Bertram Floyd, John Pouch and Jeff Wilson observing entangled photon source in Glenn's Quantum Optics Laboratory.

## Quantum Communications Technology Research Helps Ensure Spacecraft Safety

Secure communications between Earth and space is vital to the safety of humans and spacecraft. Toward that goal, NASA Glenn researchers are partnering with industry on innovative communication technology that will help maintain safety and the agency's preeminence in space.

Current space command and control communications, secured through asymmetric keys and based on algorithms that are computationally complex, will no longer be secure once quantum computers become available. These powerful computers, which could be developed in just a few short years, would readily crack many common cryptography methods, enabling hostile entities to take control of spacecraft.

Until now, secure quantum communication demonstrations have suffered from low data rates and required operation in the dark. NASA's Space Communication and Navigation (SCAN) Office and Glenn's Center Innovation Fund are proactively funding research to develop quantum communication techniques, which will be unconditionally secure even against a quantum computer attack.

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## Safety Anchors Glenn's 7 Expected Behaviors

Along with the Glenn Senior Management Team, I recently announced our 7 Expected Behaviors, **HEROICS**, which represents helping others to succeed, excellence, respect, openness, integrity, cooperation and safety. Like our namesake John Glenn, who called his spacecraft Friendship 7 to symbolically take his friends with him on his heroic flight, we are committed to all **7 Expected Behaviors**. For this month's Safety Corner, I will focus on safety, which expresses **“Demonstrating a vigilant commitment to a safe work environment through good situational awareness and communication.”**

*Let's ensure a safe journey to achieve excellence and teamwork throughout the new year.*

—Janet

## John H. Glenn Memorial

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Kavandi shared significant Glenn biographical highlights and reflected on a training exercise with Glenn prior to his STS-95 mission. She commented on how fortunate we were to witness, for nearly a century, the man NASA identified and chronicled in the book “The Right Stuff.” Kavandi noted how senior management has crafted and adopted “Glenn's 7 Expected Behaviors,” which best reflects the character, integrity and type of service our namesake exhibited daily.

During his remarks, Forrester, deputy chief of the Astronaut Office at NASA's Johnson Space Center, praised Glenn for representing the best of his country through his character, faith, family and service. Hartline closed by thanking those who played a role in putting the event together so quickly.

Following the ceremony, many of the NASA family stayed to exchange their own stories and reflect on the contributions of our most beloved NASA Glenn family member.

By S. Jenise Veris



GRC-1999-C-01155

Photo by Hugh Aylward

*Glenn and his wife, Annie, rode a float in the parade as part of the renaming festivities in 1999.*

Editor's note: The February *AeroSpace Frontiers* will share highlights of John Glenn's life and legacy.

## Laura Henry Appointed Chief Counsel

Laura A. Henry has been appointed to the Senior Executive Service position of Chief Counsel for NASA Glenn's Office of the Chief Counsel, effective Nov. 27,



Henry

2016. Henry has more than 32 years of combined experience with NASA and the Defense Logistics Agency (DLA) in Cleveland.

“For the past 17 years, Laura has served as Deputy Chief Counsel and member of Glenn's leadership team, establishing a highly regarded legal reputation,” said Center Director Janet Kavandi. “She is known for her integrity, and for her expert legal, technical, managerial and client resolution skills.”

Henry began her legal career as a captain in the U.S. Army serving as Judge Advocate in the Judge Advocate General's Corps. She later worked as Attorney-Advisory (General) at the DLA.

## Center Names Moroney New Deputy CIO

Louise Moroney has been selected as the new Deputy Chief Information Officer (CIO) for NASA Glenn's Office of the Chief Information Officer, effective Nov. 27, 2016.



Moroney

Moroney has more than 25 years of progressive leadership experience across information technology (IT) strategy, operations and cyber defense. Prior to joining NASA, Moroney served as the deputy for the Chief Strategy Office of the Defense Information Systems Agency (DISA).

Prior to her civilian role as deputy for DISA, Moroney served the organization in several roles in a military capacity. Throughout her military career in the U.S. Army, she held a variety of leadership and staff positions across the IT and cyber mission areas in both Army tactical and strategic/installation levels and in the Joint Operations environment.

## News and Events

### Astronaut for a Day



GRC-2016-C-08940

Photo by Bridget Caswell

Glenn's Alan Micklewright talks with 11-year-old Jacob about a T-34 airplane's controls and cockpit during a visit to Lewis Field, Nov. 15. Glenn staff helped A Special Wish Foundation, Cleveland Chapter, fulfill Jacob's "Astronaut for a Day" wish. During his tour, Jacob met Center Director Janet Kavandi and did hands-on science activities as part of his "astronaut training."

### Aspiring Astronauts Take on Challenges



GRC-2016-C-09036

Photo by Rami Daud

NASA astronaut Michael T. Good talks about his experiences in space with a group of students from the Archimedes Allies pilot team during the 24th annual Young Astronaut Day at NASA Glenn, Nov. 5. More than 200 students from Northeast Ohio and Pittsburgh competed in aerospace-themed activities that encouraged teamwork and demonstrated that math, science and engineering can be fun.

### Dayton Regional Science Festival



GRC-2016-CN-00014

Photo by Zachary Lucas

Stephanie Brown-Houston, Office of Education, guides students in an ORION spacecraft activity during the Dayton Regional Science Festival, Nov. 18-19. It was one of several hands-on STEM activities and exhibits where NASA staff engaged 800 students and their families. The NASA Aerobus was also on display, featuring videos highlighting Glenn's 75th Anniversary.

## Quantum Communications

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A team of Glenn researchers—Jeffrey Wilson, John Lekki, Roger Tokars, Bertram Floyd and John Pouch—is working with an entangled photon source to make quantum communications faster and more robust. This source, which was developed by AdvR Inc., through a Glenn-managed Small Business Innovation Research contract, is pumped by a laser and generates pairs of entangled photons (smallest units of light) at a high rate. Through the strange properties of quantum mechanics, entangled photons are connected to each other even when separated over long distances, such that when one is measured its partner is immediately affected.

Wilson said that this property enables communicators to detect eavesdropping as the quantum connection cannot be re-stored once one of the photons has been intercepted. The team is developing methods to utilize the entangled photons to reduce noise effects for daytime quantum communications operation. These methods will be tested in 2017 outside between the Instrument Research Laboratory and Communications Laboratory.

"Our team recently met with Dr. Paul Kwiat from the University of Illinois, chief scientist for a JPL-led ISS experiment, to demonstrate for the first time superdense quantum teleportation

between Earth and space," said Lekki. "This effort would be the first step in establishing a quantum network that will enable unconditionally secure communications between locations on Earth."

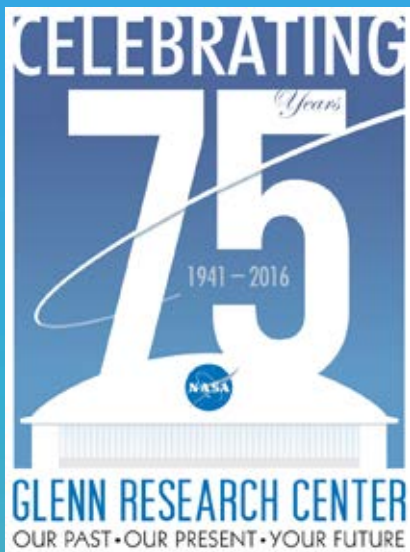
By S. Jenise Veris

### Emergency and Inclement Weather Lines

Lewis Field: 216-433-9328 (WEAT)  
Plum Brook Station: 419-621-3333

### Connect With Glenn





# A Look Back at Glenn's Diamond Anniversary

"I extend my utmost appreciation to the employees and contractors in Center Operations and other directorates whose hard work made NASA Glenn's 75th anniversary a tremendous success! We hosted numerous high-quality events, including the 75th anniversary groundbreaking reenactment in January, the Women-Owned Small Business Industry Day in May, the open houses in May and June, and the flagship Evening With the Stars program in September. These and the many other events during the past year showcased the talents of our dedicated workforce and the incredible research work they do for our agency and the nation. Thank you!"

—Robyn Gordon, Director, Center Operations





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**1. Groundbreaking Reenactment & Stakeholders and Partners Meeting**  
Jan. 25, 2016

**2. Cleveland Hopkins International Airport Public Gallery Opening**  
March 24, 2016

**3. Women-Owned Small Business Industry Conference**  
May 3, 2016

**4. NASA Day at Progressive Field**  
May 14, 2016

**5. National Lab Day**  
Lewis Field, May 12, 2016  
Plum Brook Station, May 18, 2016

**6. Public Open Houses**  
Lewis Field, May 21 and 22  
Plum Brook Station, June 11 and 12

**7. Technology Day**  
May 24, 2016

**8. Air Shows**  
AirVenture, July 25 to 31  
Chicago Air & Water Show, Aug. 20 to 21  
Cleveland National Air Show, Sept. 3 to 5

**9. Centerwide Picnic and Retiree Reunion**  
Aug. 10, 2016

**10. Glenn Hall of Fame Induction**  
Sept. 14, 2016

**11. Evening With the Stars**  
Sept. 20, 2016



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# All-Electric Car Joins Center's Environmentally Friendly Fleet



GRC-2016-C-09516

Photo by Bridget Caswell

*Glenn's new Ford Focus battery-electric vehicle, right, and Ford Fusion plug-in hybrid electric vehicle, left, charge on a level 2 dual-charging station. The station was recently installed outside of the MIC building.*

NASA Glenn is committed to reducing emissions in the air—and on the ground. The most recent addition to its vehicle fleet, an all-electric car, honors the center's commitment to embrace new technology and reduce greenhouse gas emissions.

The Logistics and Technical Information Division (LTID) staff is currently operating and testing this all-electric car. It joins the center's diverse vehicle fleet that provides official on- and off-site travel support for civil service employees and on-site contractors. The center's pool of vehicles available to employees features hybrids and E85 (85 percent ethanol fuel) vehicles.

"More than 75 percent of the center's government-owned vehicles are fuel efficient and refuel with a renewable, biodegradable fuel," said Glenn's Fleet Manager Daniel Dessauer, LTID.

The fleet includes zero-emission neighborhood electric vehicles (NEVs). These battery-powered vehicles reach a top speed of 30 miles per hour (mph) and are intended for on-site travel.

Several plug-in hybrid electric vehicles (PHEVs) were added to the fleet at Lewis Field and Plum Brook Station this year. PHEVs combine the benefits of both an electric- and gas-powered vehicle. They have two fuel outlets: one that can be connected to an electrical outlet for charging and one that is fueled

with conventional gasoline. They can operate exclusively on electric power anywhere between 19 and 53 mph, but with the added benefit of an internal combustion engine, which greatly extends the vehicle's range of travel to a combined range of 550 miles.

To support the center's electric vehicles, the LTID and Facilities Division teamed up to install on-site charging stations. Both organizations have taken a long-term and proactive approach by working together to incorporate charging stations with new building construction projects when it is appropriate and feasible. A Level 2 station was recently installed at Lewis Field. This station charges vehicles in about 2 to 4 hours, as opposed to current on-site Level 1 stations, which charge vehicles in 4 to 6 hours. These stations are strictly available only for government-owned and Government Services Administration (GSA)-leased center vehicles, and not for employees' personal vehicles.

Dessauer said many of the hybrid and alternative fuel use vehicles are leased through the GSA. This includes trucks and vans, which are used for operations. The center has recently converted some of its government-owned heavy-duty trucks to alternative fuel use as well.

To reserve a vehicle, contact Vehicle Dispatch at 3-2200.



## Honor Award

Glenn's **Fleet Management and Transportation Team** received a 2016 NASA Honor Award for its exceptional service in developing and implementing environmentally friendly fleet management and transportation initiatives.

## New Fleet Manager Named



*Dessauer*

The Logistics and Technical Information Division is pleased to welcome Daniel Dessauer as NASA Glenn's new fleet manager. He is responsible for managing and optimizing the center's fleet of vehicles, trucks and special equipment. Dessauer began his Glenn career as a Pathways Student Trainee (Administrative) before being assigned to the Industrial Property Office as a Logistics Management Specialist.

## Retirements

**Marivell Báez**, Data Systems Branch, Testing Division, retired Jan. 3, 2017, with 33 ½ years of service.

**Sandra A. Brickner**, Research and Space Operations Branch, Procurement Division, retired Dec. 31, 2016, with 29 ½ years of service.

**Jerry Carek**, Plum Brook Station, retired Jan. 3, 2017, with 33 ½ years of service.

**Kim Dagleish-Miller**, Technology Transfer Office, Office of Technology Incubation and Innovation, retired Jan. 3, 2017, with 36 years of service.

**Debbie Giavasis**, Research and Space Operations Branch, Procurement Division, retired Jan. 3, 2017, with 36 ½ years of service.

**Patrick A. Iler**, Office of the Chief Financial Officer, retired Jan. 3, 2017, with 42 years of federal service, including 25 with NASA.

**Ernest C. Mensurati**, Exploration Systems Branch, Procurement Division, retired Dec. 30, 2016, with 31 ½ years of federal service, including 28 years with NASA.

**Susan Nolan**, Human Capital Consultant Division, Office of Human Capital Management, retired Jan. 3, 2017, with 41 years of federal service, including 6 with NASA.

**Jerri Vokac**, Data Systems Branch, Testing Division, retired Jan. 3, 2017, with 41 ½ years of service.

**Mary Jo Waeltz**, Human Capital Consultant Division, Office of Human Capital Management, retired Jan. 3, 2017, with 36 years of federal service, including 29 with NASA.

## More Than a Memory



*Klemencic*

**Frank J. Klemencic**, 73, a 2005 retiree with 37 years of service, died in October 2016. Klemencic began his career in the Test Installation Division (TID) after graduating from NASA's Apprentice Program in 1967 as an experimental facilities electrician. He served primarily in the Engine Research and Space Power Service Section B modifying a wide range of sophisticated components. Klemencic received a 1979 NASA Group Achievement Award as a member of TID's Wind Turbine Support Team.

**Nick Prioletti**, 95, a 1978 retiree with 35 years of federal service, died Nov. 10, 2016. Prioletti was a U.S. Army World War II veteran who, upon discharge in 1944, joined the NASA workforce as a security guard. Following graduation from NASA's Apprentice Program in 1950, he became the center's only filament winding instrument mechanic. As a member of the Test Installations Division, he worked on projects such as the Atlas/Centaur launch vehicles; the Quiet, Clean, Short-Haul, Experimental Engines; and on the cyclotron.



*Prok*

**Daniel S. Prok**, 82, a 1989 retiree with 34 years of service, died Nov. 1, 2016. Prok joined NASA Lewis as an apprentice in 1953. He rose through the ranks of management before selection as chief of the Logistics Management Division in 1982. Prok oversaw the studies and planning that led to the functions of five different contractors consolidated into one 5-year contract called the Consolidated Logistics and Support Services. NASA Lewis became the benchmark for other NASA centers and government agencies who adopted consolidated multiyear contract agreements.



*Báez*



*Dagleish-Miller*



*Giavasis*



*Iler*



*Nolan*

## Calendar

### FEBRUARY SIREN TESTING:

The Emergency Management Office staff will conduct the Lewis Field outdoor voice test at Building 6 on Wednesday, Feb. 1. An audible siren test focusing on the "severe thunderstorm" tone will be held at Lewis Field on Saturday, Feb. 4. POC: Allen Turner, 3-6826

### IFPTE LOCAL 28, LESA MEETING:

LESA will hold its next membership meeting, Wednesday, Feb. 8, noon, in the Glenn Employee Center's Small Dining Room.

### NASA RETIRED WOMEN'S LUNCHEON:

The NASA Retired Women's Luncheon is Thursday, Feb. 16, 1 p.m. at Miss Hickory's Tea Room, 14217 Mill Hollow Lane (off of Route 82) in Strongsville. Please confirm your place by calling Gerry Ziemba at 330-273-4850 or email [gto64gerry@yahoo.com](mailto:gto64gerry@yahoo.com).

## In Appreciation

Thank you to my coworkers—many I consider great friends—for your support during my year-long fight with Acute Myeloid Leukemia. Your well-wishes helped me achieve full remission in August 2016.

—Jason Labay

**National Aeronautics and Space Administration**

**John H. Glenn Research Center at Lewis Field**

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**News and feature stories require additional time**

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Read *AeroSpace Frontiers* online at <http://www.nasa.gov/centers/glenn/news/AF/index.html>

# Gathering Spreads Good Cheer

Employees celebrated the season during Glenn’s Centerwide Holiday Gathering in the MIC Auditorium, Dec. 13. Center Director Janet Kavandi welcomed employees, then presented 16 boxes of employee-donated (Plum Brook Station, Lewis Field, OAI, Vantage Partners, and Alphaport) toys to members of the U.S. Marines Corps (3/25) for their Toys for Tots drive. Other festivities included a brief 2016 Center Accomplishments video; an Ugly Holiday Sweater Contest (1st place: Office of Technology Incubation and Innovation; 2nd place: Facilities, Test and Manufacturing Directorate); a Great Recipe Cook-Off (1st place: Angela Surgenor’s Peppermint Meltaways; 2nd place: Barb Madej’s Oatmeal with Raisinettes) and holiday music sung by Daniel Ricci. The event wrapped up with light refreshments and time to mingle with co-workers.

Photos by Bridget Caswell



GRC-2016-C-09675



GRC-2016-C-09634



GRC-2016-C-09618



GRC-2016-C-09678



GRC-2016-C-09685