National Aeronautics and Space Administration



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SPECIAL EDITION

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9- by 15-Foot Wind Tunnel Modification Underway

We're making an investment to upgrade the most utilized low-speed propulsion acoustic facility in the world. The 9- by 15-Foot Low-Speed Wind Tunnel is under construction to increase its capability by reducing the background noise levels in the test section. The upgrades will be completed at the end of next summer. The newly renovated tunnel will keep Glenn in the forefront of addressing long-term aircraft noise reduction challenges. Our test and construction staff are committed to employing sound safety practices to ensure successful completion of this complex project. Please observe the restricted access inside and outside the tunnel, as forklifts and cranes will be used for hardware delivery and assembly.

Your attentiveness to safety is appreciated!



AeroSpace Frontiers

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Submit short articles and calendar items to the editor at doreen.b.zudell@nasa.gov.

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GRC-2017-C-07101

AN EVENING WITH THE

Photo by Marvin Smith

Dr. Kavandi gives welcoming remarks.



GRC-2017-C-07039

Photo by Rami Daud

Guests network and enjoy refreshments on the library patio.



GRC-2017-C-07078

Photo by Rami Daud

Glenn's Francisco Guzman, left, offers guests an inside view of the 8- by 6-Foot Supersonic Wind Tunnel using a head-mounted virtual reality device.

 On the Cover:
 Dr. Aaron Weaver discusses how the Space Launch System will enable future exploration of deep space destinations during An Evening With the Stars event.

 GRC-2017-C-07121
 Photo by Marvin Smith

Glenn's EWTS: Shaping the World of Tomorrow

The lamps of knowledge shone brightly throughout the Louis Stokes Wing of the Cleveland Public Library during "An Evening With the Stars (EWTS), NASA Glenn Shaping the World of Tomorrow" program, Sept. 12. The event featured presentations by Glenn researchers and a networking reception for more than 300 guests.

Glenn presented EWTS to increase awareness of the center and its unique contributions to research and technology that is shaping the world of tomorrow. For the fourth year in a row, the Ohio Aerospace Institute (OAI) coordinated sponsorship for the event that attracted more than 25 companies, universities and organizations.

Center Director Dr. Janet Kavandi recognized several key people for their support of this year's event, including OAI's new President and CEO Jeff Rolf and Executive Vice President Ann Heyward; the Ohio Aerospace and Aviation Council Chairman Dr. Carlos Grodsinsky, who is also ZIN Technologies' CEO and Senior Vice President of Technology; and the Cleveland Public Library Executive Director and CEO Felton Thomas Jr. and his staff as gracious hosts for the event.

Kavandi reflected on the decades of expertise at NASA Glenn responsible for the research and game-changing technology that has enabled exploration of the universe and revolutionized air travel. "The men and women of NASA Glenn possess the imagination to create a vision and the expertise and skill to transform that vision into technologies that will allow aircraft to fly faster and quieter, and allow our spacecraft to carry astronauts to new worlds while communicating over the vast distances of space," she said.

Kavandi then introduced three of Glenn's "rising stars" who captivated the audience with presentations on the center's Facilities and Capabilities, Journey to Mars and Cognitive Communications work.

Mary Lobo, chief of Glenn's Test Facility Management Branch, spoke about "Bringing the Atmosphere and Space Down to Earth" using Glenn's unique testing facility capabilities to help reduce risks by simulating the harshest environment of flight and space.

Dr. Aaron Weaver, Glenn's contracting officer's representative for NASA's Space Launch System Program Universal Stage Adapter, shared Glenn's portfolio of testing and other activities for the Orion spacecraft and Space Launch System rocket, to usher in a new era of exploration—the "Threshold to the Next Space Age."

Dr. Janette Briones, computer engineer and technical lead for NASA Glenn's Cognitive Communications Project for artificial intelligence and machine learning algorithm development, addressed "Next-Gen Communications," critical to our ability to collaborate with other NASA centers and government agencies on land and/or in space.

By S. Jenise Veris

EWTS Project Manager Zachary Lucas and Champion Deputy Director Dr. Marla Pérez-Davis thank team members across the center, who helped make the event a success.



GRC-2017-C-07130 Photo by Bridget Caswell Lobo presents.



GRC-2017-C-07124 Photo by Marvin Smith Dr. Weaver presents.



GRC-2017-C-07148 Photo by Marvin Smith Dr. Briones presents.

2017 NASA Agency Honor and Center Awards



Frate



Welch



Del Carmen



Nolan



Horn



Calhoun



Del Roso



Butterfield



Reehorst



Babula



Johnson





Rohn

Dalton

Guzik



DISTINGUISHED PUBLIC SERVICE MEDAL

Forman A. Williams*

OUTSTANDING LEADERSHIP MEDAL

Marivell Baez* David T. Frate Cleve Horn Sandra T. Reehorst Dennis W. Rohn Gary A. Ruff* Gerard E. Welch

EQUAL EMPLOYMENT OPPORTUNITY MEDAL

Cynthia C. Calhoun

EXCEPTIONAL SERVICE MEDAL

Maria Babula Penni J. Dalton Guillermo Del Carmen Richard L. Del Roso Joan V. Haug*

*Not in attendance



More than 100 NASA Glenn employees earned awards for their exemplary accomplishments in science, engineering, technology, leadership and administrative services during the 2017 NASA Agency Honor and Center Awards Ceremony, Aug. 23. Retired astronaut Michael T. Good assisted Center Director Dr. Janet Kavandi in awarding medals <u>and certificates</u>.



Zvosec



Havenhill



Niederhaus



Wittry



Bakhle



Bland



Koury



Van Lear



Bamberger



Manning

Ginty



Lopez



Williams



Melcher



Padula



Greenwalt



Manthey



Winter



Lewandowski



Sullivan

Susan M. Johnson Karen A. McLaughlin* Joseph E. Morris Susan E. Nolan George R. Schmidt* Richard N. Sorge*

EXCEPTIONAL PUBLIC SERVICE MEDAL

Paul R. Butterfield Carlos M. Grodsinsky Stephen J. Guzik Lesha P. Zvosec

EXCEPTIONAL ACHIEVEMENT MEDAL

Shanton V. Bland Carol A. Ginty Christine B. Greenwalt Maria A. Havenhill Leahmarie Koury Isaac Lopez Mark W. Manthey Charles E. Niederhaus Benjamin S. Van Lear Christopher J. Williams Gilbert A. Winter Jan M. Wittry

EXCEPTIONAL PUBLIC ACHIEVEMENT MEDAL

Helmut H. Bamberger



Zimmerli



Holodnak



Schifer



Swank



Hanna



Loyselle



Arnett



Lobo



Schmidt



Bowman



Harcula



McIntyre



Gallagher



Moss



Smith



Chapman



Hartenstine



Nazario



Hartwig



Oriti



Sours



Cook



Jenkins



Palivoda

EXCEPTIONAL ENGINEERING ACHIEVEMENT MEDAL

Kevin J. Melcher

EXCEPTIONAL SCIENTIFIC ACHIEVEMENT MEDAL

Beth E. Lewandowski

EXCEPTIONAL TECHNOLOGY ACHIEVEMENT MEDAL

Milind A. Bakhle Robert M. Manning Santo A. Padula Roy M. Sullivan Gregory A. Zimmerli

EARLY CAREER ACHIEVEMENT MEDAL

Lori A. Arnett Rochelle L. Gallagher Jason W. Hartwig Melissa R. Holodnak Mary J. Lobo Antoine D. Moss Kathryn Oriti Nicholas A. Schifer Elliot A. Schmidt Cory A. Smith Mary A. Sours Aaron J. Swank

SILVER ACHIEVEMENT MEDAL (INDIVIDUAL)

Cheryl L. Bowman Jeffryes W. Chapman Sandra Cook Mark A. George* Jason M. Hanna Katherine A. Harcula Christopher A. Hartenstine Dallas R. Jenkins



Ryant



Henry



Acquaviva



Downey



Palivoda



Del Rosario



Phillips



Blankschaen



Nolan



Schroeder



Patricia L. Loyselle Leah M. McIntyre Margaret L. Nazario Monica M. Palivoda Denise L. Ryant

SILVER ACHIEVEMENT MEDAL (GROUP)

Advanced Electric Propulsion SEB Team

Advanced Exploration Systems Modular Power Systems (AMPS) Modular Fuel Cells Team

Glenn Research Center AS9100C Recertification Team

> Journey to Tomorrow Upgrade Team

NASA Glenn 75th Anniversary Book Team

> Small Acquisition Transition (SAT) Team

SENIOR EXECUTIVE SERVICE APPOINTMENT

Rubèn Del Rosario Laura A. Henry

PRESIDENTIAL RANK AWARD

Alan H. Phillips

GROUP ACHIEVEMENT AWARD

75th Anniversary Open House Planning and Execution Team

Aeroscience Ground Test Facilities Funding Model Team

Altitude Combustion Stand Reactivation Team

BLI2DTF Technology Development and Test Team

> CAS Collaboration Rooms Team

European Service Module (ESM) Structural Test Article Team

Glenn Extreme Environments Rig Team

Glenn Technology Transfer Office Licensing Team

Mechanical Vibration Facility Commissioning Team

> NASA's STEP Level 2 Cohort Team

The Agreement Business Process Design and Documentation (BPDD) Team

The Orbital Maneuvering System Engine/Thrust Vector Control (OMS–E/TVC) Project Team

FORTY-YEAR SERVICE AWARD

Cynthia S. Acquaviva James A. Blankschaen Alan N. Downey Henry F. Kacher* Randall R. Kwasny* Anderson K. Marlow, Jr.* Susan E. Nolan Monica M. Palivoda Thomas H. St. Onge* Dale K. Stalnaker*

FORTY-FIVE-YEAR SERVICE AWARD

Jimmy Simek* Donald Swedinovich, Jr.*

FIFTY-YEAR SERVICE AWARD

Marvin E. Goldstein* Lawrence J. Schroeder, Jr.

*Not in attendance

NASA AGENCY HONOR AND CENTER AWARDS



Steven V. Szabo Engineering Excellence Award



Craftsmanship Award—Assembly and Build-up



Craftsmanship Award—Manufacturing Technologies

CENTER AWARDS

STEVEN V. SZABO ENGINEERING EXCELLENCE AWARD

BLI2DTF Inlet Rakes Engineering Design Development Team

David J. Arend John Z. Gyekenyesi Thomas G. Gyekenyesi Charles A. Herrmann Quynhgiao N. Nguyen David R. Root Tony D. Shook Scott R. Thomas (retired) John D. Wolter

CRAFTSMANSHIP AWARD

Assembly and Build-up Propulsion Drive Electronics (PDE) Connectors—Orion European Service Module (ESM) at White Sands Test Facility Team

Andrew S. Fausnaugh

Robert A. Paulin

Manufacturing Technologies Boundary Layer Ingestion Inlet Distortion Tolerant Fan (BLI2DTF) Instrumentation Team

> Timothy A. Dunlap Derrick L. Espenschied Christopher R. Metro

2016 DISTINGUISHED PUBLICATION AWARD

Prolonged Silicon Carbide Integrated Circuit Operations in Venus Surface Atmospheric Conditions

Philip G. Neudeck Roger D. Meredith Liangyu Chen David J. Spry Leah M. Nakley Gary W. Hunter

DIVERSITY LEADERSHIP AWARD

Joseph W. Connolly Vincent E. Satterwhite

SAFETY AWARD (CIVIL SERVANT)

Calogero Dirienzo*

SAFETY AWARD (CONTRACTOR)

Scott D. Mahnke



Citations are reproduced from the 2017 Honor Awards Program. Photos by Marvin Smith.

To view the 2017 Honor and Center Awards Ceremony booklet with award citations and team members, visit https://events.grc.nasa.gov/honorawards/

SUPERVISOR AWARD

Timothy J. Ruffner Luz Y. Jeziorowski

SUPPORT ASSISTANT/ CLERICAL AWARD

Wendy A. Berndt Denise A. Kelly Kathryn M. Roser Mary A. Salvo

FEDERAL ACQUISITION CERTIFICATION FOR PROGRAM AND PROJECT MANAGERS

Michael J. Barrett

Trudy F. Kortes

GRC LARGE BUSINESS PRIME CONTRACTOR OF THE YEAR

Aerojet Rocketdyne

GRC SMALL BUSINESS PRIME CONTRACTOR OF THE YEAR

Summit Technologies and Solutions, Incorporated

GRC SMALL BUSINESS TECHNICAL PERSON OF THE YEAR

Debra Millard

GRC SMALL BUSINESS PROCUREMENT PERSON OF THE YEAR

Ronald Matthews

NASA SMALL BUSINESS PRIME SOCIOECONOMIC GOAL ACHIEVEMENT

Glenn Research Center

*Not in attendance

Glenn Staff Showcase Aeronautics Research During Dr. Shin's Visit

NASA Associate Administrator of the Aeronautics Research Mission Directorate (ARMD) Dr. Jaiwon Shin visited NASA Glenn, Aug. 24–25. Shin met with senior managers, toured several facilities at Lewis Field and Plum Brook Station and held a Town Hall meeting where he presented ARMD awards.



GRC-2017-C-05820 Photos by Marvin Smith Left to right: Pérez-Davis, Lopez and Dr. Shin.



GRC-2017-C-05821 Left to right: Pérez-Davis, Dr. Wiesner and Dr. Shin.



GRC-2017-C-05822 Left to right: Pérez-Davis, Bridges and Dr. Shin.

During his Town Hall presentation, "A New Era of Aviation," Shin talked about the concept of a convergence of disparate technologies. This involves taking different existing technologies and combining them into something new. Two innovative examples of this concept are drones and smartphones. "We need to look at what's happening in other industrial sectors and relate that back to aviation," Shin said.

Deputy Center Director Dr. Marla Pérez-Davis and Director of Aeronautics Dr. Rubén Del Rosario assisted Shin in presenting the ARMD awards to Glenn employees. These prestigious awards recognize accomplishments that had a profound positive impact and benefit to ARMD, its partners and/or stakeholders.

Shin presented trophies and certificates to two individual winners and a group honorable mention:

Leadership and Management Excellence Award: Issac Lopez For leadership in team and resource management for the Convergent Aeronautics Solutions Project under the Transformative Aeronautics Concepts program.

High Potentials: Dr. Valerie Wiesner

For her leadership, insight and research into the effects of environmental factors on high-temperature engine materials.

Technology and Innovation Honorable Mention:

Commercial Supersonics Low Noise Propulsion Technical Challenge Team led by Jim Bridges.

Del Rosario also recognized two project teams for their contributions, dedication and professionalism in support of Aeronautics at Glenn:

Quiet Supersonic Technology (QueSST) team:

For outstanding contributions and customer service during the aerodynamic and propulsion testing of the QueSST model in the 8- by 6-foot wind tunnel.

Boundary Layer Ingesting Inlet/Destortion Tolerant Fan (BLI2DTF) team:

For outstanding contributions and success in completing, in a compressed test schedule, an extremely complicated test that included an elegant and sophisticated model design, integration into the 8- by 6-foot wind tunnel.

Additionally, **Doug Rohn**, recent retiree with 40 years of NASA service, was recognized for his accomplishments, leadership and faithful service to NASA and Glenn in the area of Aeronautics.

By Doreen B. Zudell

PROMOTIONS







Bury

Zoloty

Kristen Bury has been selected Integration Manager in the European Service Module Integration Office (EIO), Space Flight Systems Directorate. She will be responsible for supporting vehicle integration, the Joint Safety and Engineering Review Panel, European Service Module (ESM) reviews, and reporting and issues coordination for the Orion vehicle.

Concha Reid has been selected Bilateral Exchange Manager in the European Service Module (ESM) Integration Office, Space Flight Systems Directorate. Reid previously served as a battery and energy storage specialist, prior to a detail last vear managing NASA ESM-2 deliverable agreements for the Orion program.

Lawrence C. Zoloty has been selected Deputy Chief of the Human Capital Management and Consulting Division. Zoloty has served as the lead of the Employee and Labor Relations Team, and the past 5 years as Labor Relations Officer, a position he will retain.



RETIREMENTS

Arlette Haeberle, Planning and Integration Office, Facilities, Test & Manufacturing Directorate, retired Sept. 30, 2017, with 36 1/2 years of service.

Vincent Satterwhite, Aviation Environments Technical Branch, Testing Division, retired August 31, 2017, with 33 years of service.

Attention Retirees! To electronically subscribe to AeroSpace Frontiers, email arc-aerospacefrontiers-subscribe@lists.nasa.gov.

Satterwhite

Signorelli

MORE THAN A MEMORY

Robert A. Signorelli, 89, a 1985 retiree with 35 years of service, died Aug. 17. Signorelli was a materials research scientist. He was a member of NASA Lewis's advanced composites development team that earned national recognition for developing and testing materials for improved performance and costs applied to aircraft turbine blades, engines and fans, space vehicles and advanced power and propulsion generating systems. Signorelli's expertise was in metal matrix composites, one of the three major advanced composites.

NATIONAL DISABILITY EMPLOYMENT AWARENESS MONTH

Glenn's annual observance is Tuesday, Oct. 31, from 2 to 3:30 p.m. in the Ad Building Auditorium. This year's theme is "Inclusion Drives Innovation." POC: Angela Pierce, 3-2813

NOVEMBER OUTDOOR SIREN TESTING

The Emergency Management Office staff will conduct an outdoor "voice" test at Building 87 on Wednesday, Nov. 1, at Lewis Field. An audible siren test focusing on the "all clear" tone will be conducted on Saturday, Nov. 4.

POC: Allen Turner, 3-6826

IFPTE LOCAL 28, LESA MEETING

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

NATIVE AMERICAN OBSERVANCE MONTH

Glenn's annual observance is Thursday, Nov. 9, from 9 to 11 a.m. in the MIC Auditorium. The speaker will be Mark Abotossaway. This year's theme is "Traditional Knowledge. New Ideas. A Better World."

POC: Dimeta Hughes, 3-3616

FEHB OPEN SEASON

Federal Employee Health Benefits (FEHB) Open Season runs Nov. 12 through Dec. 11, 2017. Glenn's FEHB Open Season Fair will be held Tuesday, Nov. 14, from 10 a.m. to 2 p.m. in the Upper Level of the Main Cafeteria, Bldg. 15.

POC: Rhonda Billick, 3-6286

NASA RETIRED WOMEN'S LUNCHEON

The next luncheon is Thursday, Nov. 16, at 1 p.m. at Old Vienna Restaurant, 30111 Lorain Rd. North Olmsted. Please reserve your place with Gerry Ziemba at goto64gerry@yahoo.com or 330-273-4850.

Deadline for next calendar section is Oct. 20, noon. News and feature stories require additional time. 11 National Aeronautics and Space Administration

John H. Glenn Research Center

Lewis Field 21000 Brookpark Road Cleveland, Ohio 44135

Plum Brook Station 3597 E. Scheid Road Sandusky, Ohio 44870

www.nasa.gov

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

Two Employees Presented SFA Honoree Awards

Glenn's Michael Belair and Carrie Green received the prestigious Space Flight Awareness (SFA) Honoree Award, Aug. 16. The VIP event, held at the Hyatt Regency Grand Cypress Hotel in Orlando, included viewing the Tracking Data and Relay Satellite (TDRS)–M mission launch, Aug. 18, at Kennedy Space Center in Cape Canaveral, Florida.

The SFA awards program is a NASA-managed motivational and recognition program for NASA and contractor employees who have major responsibilities for human spaceflight mission success.

Belair received the award for outstanding leadership and contributions to the development of the Orion European Service Module (ESM). As the NASA component engineer responsible for oversight of the ESM Auxiliary Engine, Belair is the NASA technical representative in numerous major project boards. His actions have led to prevention of potential flight failure and timely delivery of the EM–1 flight engines.

Green received the award for excellence in her commitment to safety and technical leadership for the European Service Module (ESM) Propulsion Subsystem Project (PSS) at Glenn. As the Safety and Mission Assurance Lead on ESM PSS, Green provides oversight to the European Space Agency (ESA)/Airbus by breaking boundaries between organizations and working cooperatively with multiple NASA centers and ESA/Airbus to resolve safety concerns with the current design.

Anita Liang, director of Glenn's Safety and Mission Assurance Directorate, joined astronauts Steve Bowen and Nicole Mann and NASA Deputy Associate Administrator for Policy and Plans, Human Exploration and Operations Mission Directorate, Greg Williams in presenting the awards.

By S. Jenise Veris



GRC-2017-CN-00058

Photo by NASA/KSC

Pictured, left to right: Liang, Bowen, Belair and his mother Denise, Mann and Williams.



GRC-2017-CN-00059

Photo by NASA/KSC

Pictured, left to right: Liang, Bowen, Green and her husband Michael, Mann and Williams.

Emergency and Inclement Weather Lines

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

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