



Ramon Lugo Named Glenn Center Director

He brings skill and experience

NASA Administrator Charles Bolden has named Ramon “Ray” Lugo III as director of NASA Glenn, effective July 18. Lugo had been Glenn’s acting director since March and served as deputy center director since November 2007.

“Ray is a tremendous leader who brings decades of experience and important skills to this job,” Bolden said. “I’m confident with him at the helm, Glenn will continue to excel in all of the activities that take place there.”

Read Lugo’s thoughts on being director in his column on page 2.



Ramon "Ray" Lugo

NASA Administrator Comes to Town

Addresses local community



C-2010-2698

During his visit to Cleveland on July 9, NASA Administrator Charlie Bolden conducted an employee All Hands meeting, met with members of the business community at an Industry Roundtable convened by the Greater Cleveland Partnership, and addressed a capacity crowd at the invitation of the City Club of Cleveland.

Ramon “Ray” Lugo’s appointment as Glenn’s new director headlined Bolden’s remarks at each venue. The Administrator also discussed NASA’s mission, new activities slated for Glenn, and their potential impact to Northeast Ohio under the President’s budget proposal for 2011.

Senator Sherrod Brown, Congressman Dennis Kucinich and Associate Director Bill Wessel accompanied Bolden during his visit and participated as panelists during the roundtable and All Hands meeting.

—BY S. JENISE VERIS



C-2010-2706

Photos by Marvin Smith



C-2010-2667

Top, clockwise: Bolden addresses guests at the City Club of Cleveland; Bolden with panel at All Hands meeting; Bolden talks with various STEM program students.

Inside

- STS-132 CREW VISITS** 2
Astronauts give post-mission briefings at OAI and Rock Hall
- SUMMER OF INNOVATION** 3
Glenn is helping bridge the gap between summer vacation and school
- CENTER AWARDS** 4-5
Employees receive Glenn’s highest honors
- TRANSPORTING HISTORY** 8
Apollo Command Module joins other exhibits at Glenn’s Visitor Center

It is My Honor to Serve

I want to take this opportunity to let you know how honored I am to have been selected as the 11th Director of Glenn Research Center. It would be presumptuous of me to believe that I belong in the group of men who preceded me, but I plan to work hard to earn my place in this group. My hope is to continue this column, as I would like to maintain a dialogue with the NASA Glenn family.

I want to share with you what I want to accomplish during my tenure as Director. I offer these goals in no order of priority because I believe they are all important.

We are committed to making sure Glenn delivers on its assigned responsibilities. We are off to a good start with the Radioisotope Power Systems Program Office, the Exploration Technology Development and Demonstration Program, the Aeronautics Project Office



C-2010-2615

Center Director Lugo at a recent All Hands at Plum Brook Station.

and the Space Grants Project. We need to make sure we execute these programs and projects flawlessly and commit to making sure we develop good estimates, develop and implement good project plans, implement good systems engineering discipline and ultimately deliver components, subsystems, systems or complete capabilities.

Second, we need to deliver end-to-end technology solutions to internal, external, and commercial partners and stakeholders. If we can effectively manage the transition from research and technology demonstration to flight, I'm confident we will be sought after not

only within the agency but on a national and global level.

Third, we must institutionalize learning and continuous improvement. The best organizations in the world make sure they learn not only from their successes but from their failures. We must continuously look at how we deliver products and services to our customers and find ways to improve.

Finally, we need to build a climate of trust at the center. As I make decisions to move us into the future, I don't expect everyone to agree with every decision, but I promise to provide insight as to how I arrive at a decision and the logic that was used to make it. I will work hard to earn and hold your trust. I ask that we work together to develop the transparency that is needed to build a workplace filled with trust.

Hopefully, this column will help you understand my leadership style and goals as your new Center Director. Moving forward, I need to hear your thoughts and ideas so that together we can paint a future that includes all of us.

STS-132 Crew Rocks Cleveland

Holds Briefings at OAI and Rock Hall

Broadview Heights native Mike Good and four of his STS-132 crewmates—Commander Ken Ham, Pilot Tony Antonelli and mission specialists Garrett Reisman and Steve Bowen—visited the Cleveland area on July 12–13. The crew gave a post-flight mission briefing for NASA employees at OAI and participated in a technical debriefing with Glenn's International Space Station (ISS) Electric Power Systems (EPS) Team who helped design and test batteries that were replaced during their spacewalks. The crew repeated the mission briefing for the public at the Rock & Roll Hall of Fame and Museum and made a special presentation of items flown on the shuttle to Rock Hall President and CEO Terry Stewart. The museum visit included a tour and a radio interview with the onsite Sirius Vinyl Classic's disc jockey Dusty Street. The crew also attended a Bon Jovi concert at Blossom Music Center, where they presented mission memorabilia to the rock group backstage.

Pictured, top, clockwise: Crew listens to the National Anthem prior to the briefing at the Rock Hall; astronauts, left to right, Bowen, Good, Reisman, Antonelli and Ham with summer interns; and Bowen, Good and Reisman talk with ISS EPS lead Greg Schmitz about ISS batteries.



C-2010-2853

Photos by Marvin Smith



C-2010-2791



C-2010-2817

NASA's Summer of Innovation

Focus on STEM Education

NASA Glenn is helping bridge the educational gap between summer vacation and in-school learning by playing a significant role in NASA's Summer of Innovation (SoI) project. This initiative not only helps bridge that gap, but also addresses the nation's need for developing excellence in science, technology, engineering and mathematics (STEM).

Glenn's Dovie Lacy, SoI project manager, leads the initiative. SoI creates partnerships with educators in summer projects and other community activities across the nation to infuse NASA content and resources into their curriculum to inspire or expand STEM-related skills and knowledge.

NASA's SoI was created in support of President Obama's *Educate to Innovate* campaign to improve student participation in STEM education for the continued technological and economic strength of the nation.

"SoI targets middle school students who are underrepresented, underserved and underperforming in STEM disciplines along with teachers who serve them," Lacy explained. "NASA's goal is to increase the number of future scientists, mathematicians and engineers, with an emphasis on broadening participation of low-income, minority students."



C-2010-3372 Photo by Quentin Schwinn

Above, clockwise: Melvin and Blige taping a PSA; Tom Benson demonstrating a wind tunnel at Paddlefest; and Foreman exercising with students in Project Connect, a program in Cincinnati.

Lacy has assembled a dynamic core team to implement the new initiative. Glenn's contribution includes personnel from the Educational Programs Office and the Procurement Directorate. Education specialists Carol Galica and Rick Gilmore from SGT are detailed to Headquarters to provide project integration of center collaborations; while Nikki Brown and Robert Lisy provide procurement and budget analysis, and Magdiel Santana, ANLX, provides project control at Glenn.

Astronaut and current External Programs Chief Michael Foreman, detailed to NASA Glenn, is a passionate activist for the SoI project, too. He and fellow astronauts, center employees and retirees are part of NASA's technologies



and human resources that align with SoI partners across government institutions, companies, foundations, universities and nonprofits to expand the opportunity to engage more youth in STEM-related activities.

Some of the recent Glenn-supported SoI activities and venues include: conducting a Physics of Football session for 400 youth at the Donovan McNabb football camp in Philadelphia; demonstrating wind tunnel technology at the Paddlefest Kids Expo in Cincinnati; taping a SoI Public Service Announcement with R&B singer Mary J. Blige in downtown Cleveland and astronaut Leland Melvin; and discussing career paths with prominent personalities in NASA history during the "Legends and Trailblazers Workshop" in Orlando.

"The Summer of Innovation pilot has truly taken NASA Education Programs to a higher level in its outreach efforts and support of STEM education for middle-school age students," said Robyn Gordon, director of Center Operations at Glenn.

To learn how you can become involved in a SoI project or view an updated list of Glenn-supported events across the nation, visit <https://www.nasa.gov/soi>.



Adult Bald Eagle at PBS.



Baby Peregrine Falcon days old (above) and growing up (right).



Glenn's Feathered Interns

Student interns aren't the only ones in training this summer. Peregrine Falcons made a nest for their little one under the bridge above Underpass Road at Lewis Field and Bald Eagles returned to their nest at Plum Brook Station to raise two eaglets. Both sets of parents incubated the eggs, and share in the feeding and teaching of survival skills.

Environmental Scientist Rosemary Giesser, SAIC/Safety, Health and Environmental Division, reports that the birds are no longer on the Federal Endangered Species list, but are still considered threatened in Ohio.

—BY S. JENISE VERIS

2010 Center Awards

NASA Glenn held its annual Center Awards Ceremony on July 15. In his welcoming remarks, Associate Director Vernon "Bill" Wessel said the ceremony represents a great opportunity for Glenn management and the entire workforce to recognize examples of excellence and express thanks to our "center's best."



Pictured, left to right: Wessel with Spanos. Not pictured: Blaze

Craftsmanship Award *Manufacturing Technologies*

Al V. Blaze

For the successful processing and application of miniature spheres to the SiC fibers in support of the Flame Extinguishment Experiment.

Assembly & Buildup Technologies

Patrick Spanos

For developing a process that incorporates high-level inspection tooling and CNC programming to streamline the mating of new hardware to existing hardware.



Pictured, left to right: Dever, Kascak, Jansen and Hartman.

Steven V. Szabo Engineering Excellence Award

Conical Bearingless Motor Generator Design Team

Timothy P. Dever, Ralph H. Jansen and Peter E. Kascak; with Erhard S. Hartman, Gilcrest Electric & Supply Co.

For technical excellence in developing an innovative new bearingless motor generator, which completely levitates and spins the rotor on a magnetic field.



Pictured, left to right: Wessel, Lewandowski, Dr. Myers, Dr. Nelson and Dr. Licata.

Diversity Leadership Award

David Cotton

For his outstanding sense of leadership, collaboration, and teamwork among the workforce and external community.



Wessel with Cotton



Dr. Miranda

Dr. Felix A. Miranda
For going above and beyond to further diversity in science and technology, and for his devotion to mentoring younger generations.

Distinguished Publication Award *"Development and Validation of a Predictive Bone Fracture Risk Model for Astronauts"*

Beth E. Lewandowski, Dr. Jerry G. Myers and Dr. Emily S. Nelson with Cleveland Clinic's Dr. Angelo Licata

Photos by Marvin Smith



Support Assistant/Clerical Award

Stephanie J. Black, Francine T. McWhorter and Susan A. Ritter.
Marsheba M. Bond, Carole A. Bruck, Olga I. Lozano, Denise S. Prestien
and Holly N. Walburn, SGT, Inc.



Pictured, left to right: Wessel with civil servant honorees Black, Ritter and McWhorter.



Pictured, left to right: Wessel, SGT CEO Harold Stinger; Lozano, Prestien, Bruck, Walburn, Bond and SGT TIALS Program Manager Bruce Emmel.



Wessel with SLI's Brian Rice.

Small Business Prime Contractor of the Year

Sierra Lobo, Inc.

For outstanding contributions to NASA's mission designing a process, set-up and machining for ARES I-X USS sections (tuna cans), saving the project from months of delay.



Pictured, left to right: Steele, Bitler, Philipps, Metzger and Dreibelbis.



Wessel with MSM's Kevin McQuade.

Small Business Subcontractor of the Year

MSM Group Inc.

For providing valuable support and innovative solutions to the Glenn contractor community.

Technical Person of the Year

Gynelle Steele

For outstanding leadership and innovation in support of NASA's SBIR and STTR Programs.



Steele

Glenn Program Team of the Year

Small Business Innovation Research & Small Business Technology Transfer Team

Gynelle C. Steele with Dean W. Bitler and Cynthia L. Dreibelbis, AP Solutions, Inc.; and Marie E. Metzger and Denice M. Philipps, SGT, Inc.

For providing innovative means to improve program performance significantly with NASA and NASA Glenn, as well as providing additional value to the small businesses they encounter.

Graphic design by Aaron Greene

Glenn recognized for Communications and Public Outreach

Glenn's Community and Media Relations Office (CMRO) recently teamed with the Imaging Technology Center and Publishing Services to earn several national awards for excellence in communications and public outreach.

The National Association of Government Communicators (NAGC), a national non-profit network of federal, state and local government employees dedicated to the goals of better communication, understanding and cooperation among all people, presented first place honors to Glenn's Community Relations and Web Portal teams at NAGC's Blue Pencil/Gold Screen Awards.

NAGC recognized the Community Relations team and its Publishing

Services partner in the category of visual communications for the "Mobile Orion Vehicle Explorer" (MOVE) traveling exhibit. Team members include Orlando Thompson, and Danielle Mills-Woodson and William Buckingham (Paragon Tech), Community Relations, with Gayle DiBiasio (WYLE) Publishing Services. Formerly



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The MOVE is a popular parade exhibit.

with Glenn's Visitor Center, Buckingham now serves as project manager of NASA's Goddard Space Flight Center Visitor Center.

The Web Portal team and members of the Imaging Technology Center won

the NAGC award in the category of Webcast/Flash Programs for "Lessons of a Widowmaker (and Other Aircraft)." Team members include Kathleen Zona, Tori Woods (SGT) and Kelly Heidman (WYLE), CMRO; Gary Nolan and Emery Adanich (WYLE), Imaging Technology Center; and Bob Arrighi (SGT), Glenn History Office. To view the flash program, visit <http://www.nasa.gov/externalflash/aero/>.

Glenn's *AeroSpace Frontiers* staff earned honors for two prestigious publication awards: a Gold Hermes Award in the publication/newsletter category and an APEX Award for Publication Excellence for its series, "Propelling Glenn Forward: Our Center Directors." The editorial team includes Kelly DiFrancesco, and Doreen Zudell and S. Jenise Veris (SGT).

Retirements

Jose Ayala, Manufacturing Engineering and Process Branch, Manufacturing Division, retired on July 31, 2010, with 33 years of NASA service.

Dan Buttler, Fabrication and Instrumentation Branch, Manufacturing Division, retired on July 31, 2010, with 36 years of federal service, including 32 with NASA.

Erich Gottl, Operations Management Branch, Facilities Division, retired on July 31, 2010, with 36 years of NASA service.

Jose Guerra, Machining Branch, Manufacturing Division, retired on July 31, 2010, with 32 years of NASA service.

Bob Mattingly, Advanced Metallics Branch, Structures and Materials Division, retired on July 31, 2010, with 40 years of NASA service.

David Newman, Institutional Resources Analysis Division, Office of Chief Financial Officer, retired on July 3, 2010, with 33 years of NASA service.

Erlene Trsek, Structures and Materials Division, Research and Technology Directorate, retired on July 30, 2010, with 35 years of NASA service.

Richard Woodward, Acoustics Branch, Aeropropulsion Division, retired on July 30, 2010, with 45 1/2 years of NASA experience.



Ayala



Guerra



Trsek

Share Your Skills

MC²STEM High School, Great Lakes Science Center, needs Glenn volunteers for the 2011 school year. Volunteers are needed in the following areas:

Tutors:

Math and reading tutors are needed on Mondays, Tuesdays, Wednesdays, 4-5 p.m.

Mentors:

Job shadowing is needed on Tuesdays and Thursdays and begins in November

Subject Matter Experts:

As-needed basis to present expert background information about sustainability/going green, communication, robotics and rocketry

Speakers:

Present 21st Century soft skills to students: resume writing, speaking, professional behavior, financial responsibility, college preparation and social networking etiquette

Contact Carolyn Hoover:
216-433-6372

SBIR COTR Appreciation Awards



Photo by S. Jenise Veris

Pictured, left to right: Dr. Hunter, SBIR Program Manager Gynelle Steele and Linne. Not pictured: Clark.

Eric Clark, Photovoltaic and Power Technologies Branch; Dr. Gary Hunter, Sensors and Electronics Branch; and Diane Linne, Propulsion and Propellants Branch, received Contracting Officer's Technical Representative (COTR) Appreciation Awards from the NASA Glenn Small Business Innovation Research (SBIR) Office, June 23. They were lauded for making it their mission to support the infusion of NASA mission technologies into SBIR projects for commercial development.

BPW Scholarship

NASA Glenn's Business and Professional Women (BPW) Scholarship Chairperson Suzanne Aldrich presented the 2010 BPW NASA Glenn Career Advancement Scholarship (\$500) to Ashley Murry, Cost Management and Payments Branch, on June 10. Murry will apply the scholarship towards completion of a master's degree in Accountancy from Cleveland State University.



Photo by Tracy Sprouse

Pictured is Aldrich, right, presenting to Murry, with Nuba Nawash, Glenn's BPW president.

In Memory



Goldberg

Fredric N. Goldberg, 75, who retired in 1997 with 41 years of NASA service, died on June 22. Prior to retirement, Goldberg served as a principal network research engineer supporting the center's High Performance Computing and Communications Program (HPCC). He was instrumental to early efforts that enabled Glenn access to high-speed Internet connectivity and computing resources needed for cutting edge research, prior to availability agencywide. Goldberg also designed and built Glenn's fiber optic infrastructure that remains viable today. He codeveloped an improved communication method for acquiring pre-launch weather data during the era of Lewis-managed launch services. He also co-authored the book "ISDN at NASA Lewis Research Center," 1992, summarizing implementation of a model based fault detection and diagnosis technique for space shuttle main engine applications. His son, Robert Goldberg, works in Glenn's Mechanics and Life Prediction Branch.

DEADLINES

News items and brief announcements for publication in the September issue is noon, Aug. 20. Larger articles require at least one month notice.

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

Hermes
Award
2009-
2010



Calendar

WOMEN'S RETIREE LUNCHEON: The next NASA Retired Women's Luncheon will be Thursday, Aug. 19 at Don's Pomeroy House, 13664 Pearl Road, Strongsville, at noon. Please notify Gerry Ziemba, 330-273-4850, for reservations. Luncheons are held the third Thursday of February, May, August and November and are open to all.

RETIREES REUNION: Mark your calendar for a NASA retiree reunion hosted at the Gardens At Westlake on Friday, Aug. 20, from 7 to 9 p.m. Come and enjoy the music, hors d'oeuvres and fellowship. For reservations, contact NASA retiree Lou Chelko, 440-871-5821.

AFGE MEETING: AFGE LOCAL 2182 will hold its next membership meeting on Wednesday, Sept. 1 at 5 p.m. at Denny's Restaurant, 25912 Lorain Road, North Olmsted.

STAFF NEEDED FOR OUTREACH EVENTS: Staffers are needed to support Community and Media Relations venues for the following events in Ohio: Cleveland Air Show, Sept. 4-6, Cleveland; Kent State Flight Heritage Day, Sept. 11, Kent; MERFI Air Show, Sept. 11-12, Urbana. To learn more about staffing these events, visit: <http://outreach.grc.nasa.gov>.

IFPTE LOCAL 28, LESA MEETING: LESA will hold its next membership meeting on Wednesday, Sept. 8 at noon in the Small Dining Room of the Employee Center, building 15.

GLENN PUBLIC TOURS: Glenn invites the public to tour its laboratory and testing facilities on the first and third Saturday of each month this summer. Tours are free and available to U.S. citizens and foreign national students in grades K-12. A bus will start the tours from Glenn's Briefing Center at 10:30 a.m., and run every hour with the last tour departing at 1:30 p.m. The September tours include: Sept. 11—Ballistics Impact Laboratory and Sept. 25—Zero Gravity Research Facility. For further information, list of all the tours, or to reserve a spot, call 216-433-9653, or visit <http://visit.grc.nasa.gov>.

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Apollo Capsule Transported to Glenn's New Visitor Center

On June 22, the Apollo Command Module, used in the Skylab 3 manned mission in 1973, joined the other 50-plus exhibits and artifacts at the NASA Glenn Visitor Center at Great Lakes Science Center (GLSC) in Cleveland.

Earlier this year, NASA Glenn signed a Space Act Agreement naming GLSC as the official site of Glenn's visitor center. The move maximizes exposure to regional and national audiences about the importance of aeronautics, science and space exploration.

"The Apollo Command Module had been part of Glenn's onsite visitor center since 1986, and due to its historical significance to the space program, it is only fitting that it continues to be part of our visitor center at Great Lakes Science Center," said Orlando Thompson Sr., Community and Media Relations Office.

Thompson helped organize the move of the massive spacecraft, which weighs 12,800 pounds and measures 11 foot high and 13 foot wide. Its stand weighs another 1,200 pounds. Because it is a one-of-a-kind artifact, the module falls under the NASA standard of a "critical lift" object. So NASA and the Smithsonian Institution's Air and Space Museum (owner of the module) followed stringent requirements in moving the artifact.

The 2-day process required removing the large glass panel in the old onsite

visitor center to remove the capsule. It was then wrapped in a protective cover and placed in the Hangar overnight. The next day the capsule was loaded onto a truck and transported on a designated route along interstates and East Ninth Street to the GLSC. The command module was then set in place at the NASA Glenn Visitor Center for viewing.

"The response from the public has been incredibly enthusiastic. Thousands of people had already seen it after just a few days on display," said Val Davillier, director of GLSC exhibits. "Visitors are eager to look at the capsule and learn about that moment in American technological history."

—BY DOREEN B. ZUDELL



Photos by Bridget Caswell C-2010-2609

Stages of the 2-day move of the Apollo Command Capsule.



Retrieval



Packaging



Delivery

Skylab 3 Mission

Mission: Began on July 28, 1973

Total flight time: 59 days and 11 hours

Crew: Alan Bean, Owen Garriott and Jack Lousma

Module Touchdown: Module landed in the Pacific Ocean approximately 300 km southwest of San Diego. Splashdown was at 6:20 p.m. Eastern Daylight Time. The recovery ship, U.S.S. New Orleans, retrieved the command module and crew 42 minutes after landing.

Significance: Set nine international records for spacewalks and time that astronauts spent in space. Skylab missions proved the capability of astronauts to live and work in space for long periods of time.