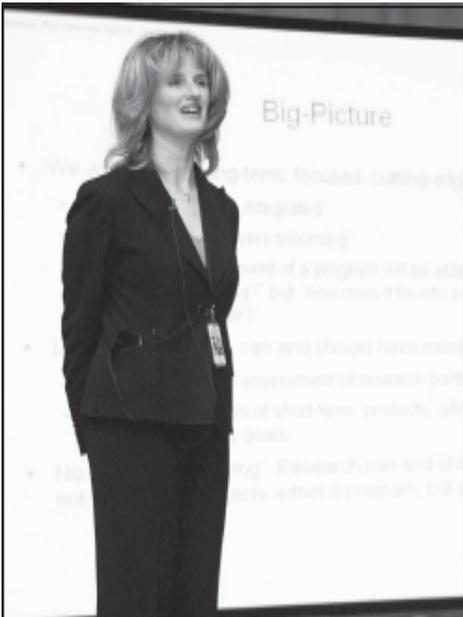


AEROSPACE Frontiers

Volume 7 Issue 11 December 2005

AA of aeronautics stresses integrated research



C-2005-1712

Photo by Marvin Smith

Dr. Porter visited Glenn to talk with employees about NASA's Aeronautics Program.

During her All Hands address at Glenn on November 16, NASA's new Associate Administrator for the Aeronautics Mission Directorate, Dr. Lisa Porter, said that conducting long-term, focused research is key to reshaping NASA's Aeronautics Program.

"We need to set milestones that will enable us to continually assess our progress toward these long-term goals," she explained.

Since transitioning from the role of NASA Administrator's senior advisor for Aeronautics in October, Porter has been working to set those priorities. To start, during a series of Aeronautics Program Workshops she solicited input from all four NASA aeronautics centers to begin developing milestones in three areas:

Fundamental Aeronautics, Aviation Safety, and Airspace Systems. She stressed that each area will operate under an integrated approach that values sharing and rejects duplication.

"It's important to obtain proper input from researchers who will do the work," she said. "Researchers should know not only what they are doing but why they are doing it. Everything we do must have technical credibility and merit."

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Aguilar selected to head Glenn Operations Directorate

Kenny Aguilar has returned home to Cleveland and NASA Glenn as director of Center Operations. Aguilar rejoins Glenn after spending 12 years away, most recently at NASA Headquarters as deputy assistant administrator for Diversity and Equal Opportunity.



Aguilar

In his new position, Aguilar builds on a career devoted to recruiting and developing NASA's talented workforce first begun as Glenn (Lewis) deputy director of Personnel and then director of Equal Opportunity Programs.

Aguilar brings a wealth of experience that includes NASA Kennedy Space Center director of Personnel, where he was responsible for management of personnel programs, recruitment and employment, student programs, employee development/training, the union/management partnership, benefits, awards and policy

Continued on page 10

Dale confirmed as Deputy Administrator

NASA Administrator Michael Griffin applauded the U.S. Senate's confirmation of Shana Dale as NASA's 12th deputy administrator.



Dale

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Inside

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President Bush honors three managers among the top Federal employees

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Presidential Rank presented to three Glenn managers

Three Glenn managers were among an elite group of Federal executives who President George W. Bush conferred the Presidential Rank Award—the highest award reserved for civil servants.

On November 4 in Washington, DC, the Presidential Rank of Meritorious Executive was presented to External Programs Director John Hairston, Jr., and Chief Counsel J. William Sikora.

Hairston was recognized for his leadership and unique ability to leverage the capabilities of NASA employees with local, regional, and national partners in support of the Agency's mission to ed-

ucate the next generation of explorers.

Sikora was recognized for consistently demonstrating leadership and exceptional creativity, initiative, and innovation in providing NASA with high-quality, customer-focused legal services, particularly as the legal advisor to the Columbia Accident Investigation Board.

Glenn Chief Scientist Anthony Strazisar accepted the Presidential Rank of Meritorious Senior Scientist. He is recognized for his extraordinary leadership and expertise in optimizing the effective-

ness of colleagues, team members, and Glenn facilities in advancing experimental validation of computational fluid dynamics applied to the design of aircraft engine compressors.

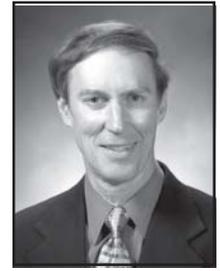
The U.S. Office of Personnel Management administers the Presidential Rank Award Program, which is determined through a rigorous selection process with final approval given by the President. ♦



Hairston



Sikora



Strazisar

Headquarters' Appointments

Paul Morrell was named NASA's chief of staff on September 16. Prior to his new position, Morrell served as a senior advisor to the Administrator, helping develop, adopt, disseminate, and implement a broad range of policies and activities in the furtherance of national research and development goals. Morrell has more than 24 years of experience in the legislative, government, and political arena. He joined NASA in April 2005 after serving as director for Communications Planning for the National Security Council.

Effective October 3, Administrator Griffin added the responsibility of deputy chief of staff to **Jeffrey Jezierski's** role as NASA's White House liaison. Jezierski is responsible for the placement and interaction of the presidential appointees at NASA. He assisted the transition from Administrator Sean O'Keefe to Administrator Griffin. He also coordinates events and communications with the White House and other agencies within the Executive Branch. Prior to coming to NASA, Jezierski served as a deputy associate director in the Office of Presidential Personnel at the White House from May 2001 to July 2003.

On September 23, **Christopher Scolese**, former deputy director of Goddard Space Flight Center, came onboard at Headquarters as the Agency's chief engineer, replacing **Rex Geveden** who recently was named associate administrator. As chief engineer, Scolese reports directly to Administrator Griffin and is responsible for the overall review and technical readiness of all NASA programs. The Office of the Chief Engineer assures that the development efforts and missions operations are being planned and conducted on a sound engineering basis with proper controls and management of technical risks.

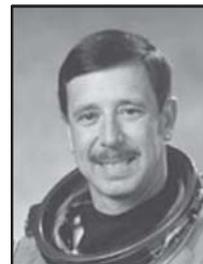
Veteran space shuttle commander **Scott Horowitz** became associate administrator for the Exploration Systems Mission Directorate, effective September 28. He leads the Agency's efforts to develop the new spacecraft that will return astronauts to the Moon and travel to Mars and other destinations in the solar system. Prior to his appointment, Horowitz, a retired U.S. Air Force colonel, served as pilot or commander on four shuttle missions, and he was director of Exploration and Space Transportation at ATK, the



Coats



Geveden



Horowitz



Roe

company that produces the space shuttle's solid rocket motors. Administrator Griffin named **Doug Cooke** deputy associate administrator. Cooke, who most recently served as acting associate administrator for Exploration Systems, has been instrumental in developing NASA's next generation spacecraft concepts during his 32-year NASA career.

On October 3, **Lesa Roe**, former deputy director of NASA's Langley Research

Continued on page 10

Dr. Earls receives highest honors

Center Director Dr. Julian Earls' years of service to NASA as well as to the local community were recently recognized with prestigious honors.

After the Agency's Strategic Management Council meeting on October 26, Agencywide senior management personnel, including Administrator Mike Griffin, gathered at the Visitor Center for a farewell reception for Earls, who retires on January 3, 2006.

During the reception, Administrator Griffin bestowed NASA's highest honor—the Distinguished Service Medal—on Earls. This medal is awarded only to Federal employees who, by distinguished service, ability, or courage, have personally made a contribution representing substantial progress to the NASA mission in the interests of the United States.

This NASA Honor Award is the most recent bestowed on Earls during his 40-year career with the Agency. Previous medals include: Outstanding Leadership (2004), Exceptional Service (1995), Certificate of Appreciation (1994), and Equal Opportunity (1974).

On October 15, Cleveland State University (CSU) recognized Center Director Earls with its most prestigious non-academic honor during the 4th annual Moses Cleveland Black Tie Scholarship Dinner.

CSU President Michael Schwartz presented the President's Medal to Earls for his significant contributions to the growth and development of CSU's academic quality.

"I am honored and humbled to receive the President's Medal," Earls said. "It takes on special significance to receive an award from Dr. Schwartz, an outstanding educator, administrator, and leader."

During the dinner-reception, the Cuyahoga County Commissioners and Congresswoman Stephanie Tubbs Jones also recognized Earls for his outstanding commitment to education. ♦

Right: Administrator Griffin presents Dr. Earls with a certificate of appreciation that accompanies the Distinguished Service Medal.



Photo by Marvin Smith



C-2005-1706

Above: pictured left to right, Dr. Earls, Associate Administrator Rex Geveden, NASA Kennedy Deputy Director Dr. Woodrow Whitlow, and Glenn Deputy Director Rich Christiansen gather during Dr. Earls' reception by Agency senior management.

C-2005-1705

Photo by Marvin Smith

Below: CSU President Schwartz bestows the CSU President's Medal upon Dr. Earls.

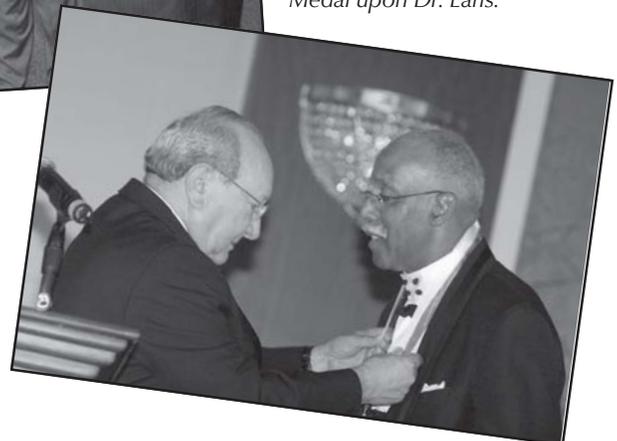


Photo courtesy of Cleveland State University/MPA

Dale joins NASA's ranks

Continued from page 1

The former deputy director for Homeland and National Security joined NASA in November.

"With Shana coming on board, I'm confident we now have the right leadership team to guide the Agency as we move forward in the next great era of space exploration," Administrator Griffin said.

Dale previously served as chief of staff and general counsel for the Office of Science and Technology Policy in the Executive Office of the President. Earlier in her career, Dale served as staff director for the Space and Aeronautics Subcommittee of the House Science Committee's Subcommittee on Space and Aeronautics where she gained substantial experience related to NASA. She also served as Republican counsel for the Science and Space Subcommittees on the House Committee on Science, Space and Technology. In addition, Dale's work as a congressional staffer included participating in drafting federal law involving NASA and the Commercial Space Act of 1998.

News and Events

Wild Halloween fun

Glenn's Eva, the Inflatable Astronaut, joined other costumed characters for the wildest trick-or-treat in town during Cleveland Metroparks Zoo's 7th annual Boo at the Zoo. Eva, Disney princesses, Spiderman, Harry Potter, and other costumed guests handed out candy, snack foods, and other special treats, including NASA insignia decals. Friends of the National Zoo sponsor this event as a safe and fun alternative for families with children ages 2 to 12 to enjoy Halloween festivities. Animal encounters, keeper talks, festive decorations, and haunted trails rounded out the exciting extravaganza, which ran 2 weeks leading up to Halloween. Pictured is Eva visiting with Boo at the Zoo guests.

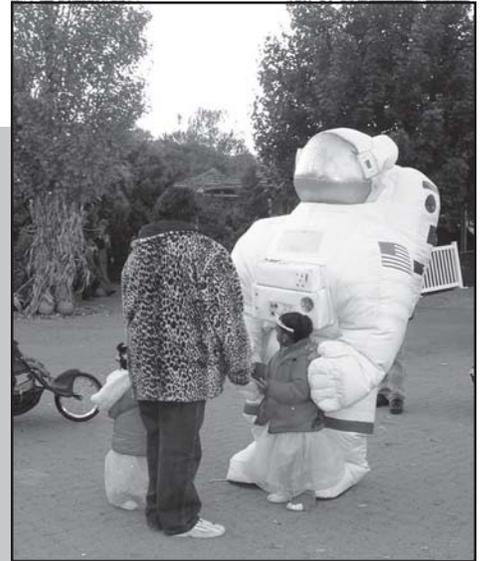


Photo by Jeffrey Hammel



Photo by Barbara Esker

WAG clothing drive

Glenn's Women's Advisory Group (WAG) concluded their Fall Suit Drive on October 26, collecting 383 items of professional clothing to be distributed through Dress For Success, a nonprofit organization that helps women making the move from welfare to the workplace. WAG's Spring Accessory Drive in April acquired 770 accessories, bringing the total from both events to 1176 items. WAG acknowledges the generosity of Glenn employees who made the drives so successful. Pictured is WAG member, Valerie Lyons, chief, Power and Electric Propulsion Division, and Dress for Success Program Services Manager Rachel DeAngelo while delivering the donations to the Dress for Success office.

Photo by Karen Edwards



Breakfast and baskets

WNWV, 107.3, FM, The Wave radio station brought some excitement to this year's Combined Federal Campaign (CFC) by providing free coffee and donuts and offering spins on their prize wheel during the CFC Basket Raffle on October 20. Other local sponsors provided information on their services and distributed samples of their products to employees. Twenty-five baskets were raffled, garnering a total of \$1892 to the CFC. Names of basket donors and winners can be found at http://www-internal.grc.nasa.gov/WWW/CFC/GRC/basket_enter_2.html.



Photo by Bob Davis

Aspiring astronauts

Instead of sleeping in on Saturday, November 5th, over 350 students from 23 local schools spent the day at Glenn during the 13th annual Young Astronaut Day. Astronaut Sunita L. Williams, a Euclid native, welcomed students who tested their skills in a number of fun and challenging engineering and scientific activities. Glenn's Aeronautics Division and the Northern Ohio section of the American Institute of Aeronautics and Astronautics sponsored this year's event. Pictured above are students from St. Patrick School, Bryan, OH, performing a Hubble Space Telescope repair simulation activity. Inset photo: Astronaut Williams observes students from Superior Middle School, Montpelier, OH, performing a space shuttle docking exercise to the International Space Station using SpaceSim software.



Photos by Doreen Zudell

Center Director's Message

My philosophy of education and administration



Dr. Earls

As I mark my final days as your colleague and director, I was reflecting on a request to submit my philosophy of education and administration. This request was in concert with my consideration of options for the next phase of my life. My philosophy of education has governed my daily life and influenced me in my many opportunities and roles at NASA. That philosophy flows from four quotations.

The first is from Sidney J. Harris, who said, "The primary purpose of a liberal education is to make one's mind a pleasant place in which to spend one's time." The second is from Grayson Kirk, who said, "The most important function of education at any level is to develop the personality of the individual and the significance of his life to himself and to others. This is the basic architecture of life; the rest is ornamentation and decoration of the structure." The third is from Emerson, who said, "The true value of an education is the ability to make yourself do the thing that has to be done, when it ought to be done, whether or not you like it." The fourth quote is from my dearly departed mother and father who had an eighth grade and fourth grade education, respectively. They said, "Education without common sense is like a load of books on the back of a jackass."

My philosophy embraces these concepts of education to achieve peace within oneself, to provide service to others, to be persistent, and to exercise sound judgment. My administrative philosophy does not differ from my educational philosophy.

The key to both is an abiding respect for people. Another insightful quote from my parents is, "God did not give anybody everything, but He gave everybody something." Success administratively is dependent upon one's ability to recognize, support, and grow that "something" in others.

I strongly believe that my purpose as an administrator, executive, and leader has been to create an environment in which people can develop to their full potential. My philosophy is grounded in the belief that no one comes to work each day desiring to do a job poorly. Treating people equitably makes a real difference. I also believe that it is important to get employees involved and empower them to take "ownership" of an organization's policies and procedures. Only then do they honor, respect, and "take care" of those policies and procedures.

I hope that in my 40 years at Glenn, and especially in the last 2 years as your director, I have—through my actions and interactions—justly lived out these philosophies.

News Notes

FAREWELL RECEPTION FOR CENTER DIRECTOR

All Center employees are invited to a cake and coffee reception to wish Center Director Dr. Julian Earls a fond farewell on Thursday, December 8, at 2 p.m. in the Main Cafeteria.

AFGE MEETING: AFGE Local 2128 will hold its next monthly membership meeting on Wednesday, December 7, at 5 p.m. at Denny's Restaurant, 25912 Lorain Road, North Olmsted. All members are encouraged to attend.

LESA MEETING: LESA/IFPTE, Local 28, will hold its next monthly membership meeting on Wednesday, December 14, at noon in the Employee Center.

VC GOES WARP DRIVE: Glenn's Visitor Center (VC) will hold its monthly Third Saturday Program on Wednesday, December 28, this month to accommodate school-age children who are on holiday

break. During the December program, visitors will learn about creative, yet real, engineering concepts to allow faster exploration beyond the confines of our solar system. Glenn scientists Bryan Palaszewski and Marc Millis will illustrate current and far future possibilities for propelling into space. The program runs from 9 a.m. to 4 p.m. with presentations at 11 a.m., Millis on "Warp Drive, When?" and at 1 p.m., Palaszewski on "Advanced Propulsion Concepts." Other highlights include free photos from the Picture Yourself in Space booth, kids "make and take crafts," and plenty of handouts. For more information and reservations, call 216-433-9653 or visit <http://visit.grc.nasa.gov>.

Glenn earns ISO recertification

National Quality Assurance auditors recently completed the 5-day ISO 9001-2000 Quality Management and ISO 14001:2004 Environmental Management audit. The Center's Quality Management System was recommended for recertification to the ISO 9001-2000 standard, marking 6 successful years since the initial audit in September 1999. The Center's Environmental Management System will be transitioned to the 2004 version of the ISO 14001 standard after one action item has been completed. Glenn's Internal Audit Manager Peggy Raines would like to thank everyone who participated in the audit. The audit report is available at the Web site at <http://www.grc.nasa.gov/WWW/iso9000/>.

Nobby says, "no" to naysayers

BY S. JENISE VERIS

Norbert "Nobby" Lewandowski's message was clear to everyone who attended his presentation sponsored by Glenn's Disability Awareness Advisory Group (DAG) on October 31: your attitude can be more crippling than any physical disability.

From the moment he took the microphone to sing "New York, New York," Lewandowski began to dispel myths about his stuttering, and the potential for successful careers for people with disabilities.

"One percent of the population stutters, but almost all who stutter can sing without a problem. As a child, pop singer, Carly Simon learned to manage her stuttering by singing her sentences," explained Lewandowski, a successful businessman and motivational speaker.

Lewandowski shared how his attitude on achievement—if it is to be, it is up to me—helped him to set and achieve goals despite the naysayers he encountered in school and in the workplace. He was fired from an accounting firm because he refused to be limited to a desk without client interaction. Lewandowski said that he knew taking a stand was risky, but he believes "if you're not living on the edge, you're taking up too much room."

A few years later, Lewandowski opened his own CPA firm, which became the 18th largest in Northeast Ohio. In addition to achieving his goal of becoming CEO of a major company, he also realized his goal of becoming a nationally recog-



Photo by Dick Woodard

Lewandowski and Center Director Julian Earls lead a rousing chorus of "YMCA" with, left to right, Deb Cotleur and Sean Tucker, Equal Opportunity Programs Office; and Olga Gonzalez-Sanabria, director, Engineering and Technical Services.

nized motivational speaker, an occupation he finds very rewarding. As a result, he has been asked to serve on numerous boards including his alma mater, Kent State University, and the American Institute for Stuttering along with National Basketball Association all-stars Bill Walton and Kenyon Martin, who share his disability. ♦

Welcome home!

News Channel 5 anchor Leon Bibb helped Glenn's Veterans Awareness Committee (VAC) acknowledge the sacrifices of veterans during VAC's recognition ceremony on November 10 in the DEB Auditorium.

While the VAC honors all veterans, the recent event focused on the Vietnam conflict, commemorating its 35th anniversary of the end of American involvement, and provided a long overdue "Welcome home."

During the VC event, Bibb a decorated veteran of the U.S. Army, poignantly shared some of his personal thoughts, feelings, and experiences of his days leading up to and time served in the Vietnam conflict. ♦



Photos by Doreen Zudell

Left: Bibb stands with Puritas Community School students and other guests who provided support through cards, a poem, and donations of personal items for local veterans hospitals. Below: Bibb and Bill Saettel, Technology Transfer and Partnership Office, place a memorial



wreath as employees (retired and active duty) from the various military branches look on.

Canine contributions



C-2005-1708

Photo by Daniel Smith

Wynne, center, in front of the Smoky memorial during the recent dedication.

Glenn retiree Bill Wynne participated in the dedication of the "Smoky and Dogs War Memorial" at the Rocky River Reservation of the Cleveland Metro-parks on November 11. "Smoky" was a Yorkshire Terrier, owned and trained by Wynne, who performed heroic deeds and entertained soldiers in hospitals during World War II. The bronze monument was unveiled during the dedication of the newly expanded Memorial Field in Lakewood, OH. To learn more about Smoky, visit www.smokywardog.com.

Partnership advances knowledge of aircraft emissions

Production of cleaner, more efficient airplane engines was the ultimate goal of experiments conducted by NASA Glenn and its industry partners at Cleveland Hopkins International Airport from October 30 through November 9.

The tests were part of a national effort to study aircraft particulate emissions using a variety of aircraft. The Aircraft Particle Emission eXperiment 3 (APEX3) Project is the first to include small jets and large cargo aircraft.

"We were excited about conducting these tests at the Cleveland Hopkins International Airport," said APEX3 Project Manager Dr. Chowen Chou Wey, Vehicle Systems Project Office. "Working with our next-door neighbors and expert researchers from across the country in attaining the APEX3 objective was an extremely rewarding experience."

Wey said extensive airplane emissions data was gathered as a result of cooperation among NASA, Cleveland Hopkins International Airport, Continental Airlines, Continental Express Airlines, FedEx Express, GE Aircraft Engines, Pratt & Whitney, Rolls Royce, Environmental Protection Agency, Department of Transportation Volpe Center, Department of Defense Arnold Engineering Development Center, University of Missouri-Rolla, Montana State University, University of Central Florida, Aerodyne Research Inc., and Federal Aviation Administration.

During the collaborative effort, the team studied engine exhaust and plume development by acquiring data from behind parked aircraft at three downstream locations. Additionally, data was acquired downwind of nearby taxiing aircraft and those taking off.

"We were pleased to work with NASA Glenn, Continental Airlines, Continental Express and FedEx Express on this important project," stated John C. Mok, director, Cleveland Airport Systems. "Since operational costs are of para-

mount concern to all of us, the data gathered will be instrumental to the future success of every facet of the aviation industry. This project is an excellent example of many levels of partnership coming together for the ultimate good of everyone."



Handling the holiday blues after a loss

For those who have lost loved ones through death, divorce, or even relocation, negotiating the holiday season may prove painful and challenging. The same rituals that brought joy in years past can serve instead as stark reminders of missing loved ones.

Clinical specialist Angela Gentile, LISW, shares the following suggestions from the Ease@Work Employee Assistance Program (EAP) to help cope with loss during the holidays.

Don't Ignore it. Many people try to bury their grief and generate false cheer during an inevitably sad time. Acknowledge that it will be a difficult time and think about ways to simplify or scale back on the potential stressful activities.

Remember. While trimming the tree, hanging stockings, or eating a special meal during holiday gatherings, it is okay to give people a chance to share fond memories. It is a way to help people grieve; but try to limit this period and move on so that it does not become overwhelming.

Start a New Ritual. A new ritual can be a positive way to remember and honor the lost loved one. Make a donation a community effort or charity in their name or volunteer. Put your energies into taking part in new activities with relatives, neighbors, and friends.

Make it a practice to assist the elderly. Create a personalized book of coupons to redeem at the holidays or throughout the year. Include things like grocery shopping, baking cookies, mowing the lawn, and playing cards or games together. This is a wonderful lesson for realizing what a difference helping others can make in our lives.

Invite someone over for a holiday meal that you know might also be alone. Cook something special that you know they like to eat and give them a gift to make them feel like they are part of your family.

Get together with several other families and put together holiday baskets for a local hospital, assisted living, or nursing home. Limit the contents to edible gifts wrapped in holiday paper.

Whether you choose to try any of the above suggestions or not, EAP can help you gain the skills you need to cope. Contact Gentile at 3-2989 for more ideas or to schedule an appointment. ♦



Photo by Doreen Zudell

Glenn's Dr. Wey, front left, consults with Ed Lawrence-Kirk and Frank Dudek, Continental Airlines technicians who operated the aircraft during testing.

Glenn employees merit seven more Space Act Awards

NASA's Inventions and Contributions Board awarded seven Glenn-developed technologies a Space Act Award. These are monetary awards that recognize outstanding scientific or technical contributions sponsored, adopted, supported or used by NASA that is mutually significant to aeronautics or space industry.

ImMAC Software Suite: The integrated

multiscale Micromechanics Analysis Code (ImMAC) is a suite of software tools, composed of three primary programs MAC/GM, FEAMAC, and HyperMAC, which enable multiscale analysis of advanced materials and structures. Team members include Steven Arnold, Brett Bednarczyk (OAI) and Jacob Aboudi (OAI), Materials and Structures Division; and Craig Collier, Phillip Yarrington, Collier R&D.

Surface Enhancement Technologies to Achieve Improved Durability & Safety in Aerospace Materials: Advanced technologies were developed for surface enhancement of materials used in commercial and military jets, as well as the space shuttle. Work focused on processing, microstructure, properties, and durability. The developing team included members of Glenn's Materials and Structures Division: Major Robert Barrie and Peter Bonacuse (Army), Timothy Gabb, John Gayda, Gary Halford, Sai Raj, Jack Telesman (Glenn); and Pete Kantzos and Brian Shannon (OAI); along with Paul Prevey, Lambda Technologies.

Dr. Porter talks with Glenn employees

Continued from page 1

In addition to leading the Agency's aeronautics research efforts, Porter will continue to lead NASA's efforts in the devel-

opment of the national aeronautics policy in cooperation with other government agencies.

Decommissioning Project update

On October 18, Keith Peecook, acting Decommissioning project manager, and members of his team devoted the day to updating media and the local community on the decommissioning of NASA's Reactor Facility at Plum Brook Station (PBS) in Sandusky.

Members of the local media from Sandusky, Cleveland, Toledo, and Lorain participated in a briefing and tour of the Reactor that demonstrated decommissioning progress made since the last media tour in 2002. Later that day, the team met with community representatives during a quarterly Decommissioning Community Workgroup meeting held at the Cedar Point Center on the campus of BGSU Firelands in Huron.

Citizens of all ages participated in the 7th annual Community Information Session (CIS) that began at 7 p.m. following the Workgroup meeting. The CIS was an educational opportunity to meet and learn first hand from members of NASA's Decommissioning team who were there to answer visitors' questions.

"NASA has kept the community informed and involved from the beginning of the decommissioning. These events were the latest opportunity to do so," said Peecook. "We also welcome comments or questions via our Community Information Line on the Decommissioning Web site."



Photo courtesy of FOCUS GROUP

*Project Radiation Safety Officer Bill Stoner, PB
Decommissioning Program Office, talks with CIS visitors*

Decommissioning Project information was made available in several forms including a series of displays along with fact sheets, historical artifacts, pictures, the October edition of the project's quarterly newsletter, *Decommissioning News*, and a viewing of selected segments from the documentary "Of Ashes and Atoms," on the history of the Reactor Facility. ♦

Aircraft Engine Sensor/Actuator/Component Fault Diagnosis Using a Bank of Kalman Filters: A new robust method of automated real-time diagnosis of faults in an aircraft engine or a similar complex system applying Kalman filters, each uniquely designed for a specific failure hypothesis. Takahisa Kobayashi (QSS Group), Instrumentation and Controls Division, is the developer.

Spiral Orbit Tribometer: This innovation is a low cost method to rapidly compare and rank spacecraft lubricants and greases under realistic conditions. Developers include Stephen Pepper and Mark Jansen, William Jones, Jr., Materials and Structures Division; and Edward Kingsbury.

Hybrid Ice Protection System: Glenn's research into low-power ice protection since the early 1980's enabled the commercial success of a the first completely new form of ice protection certified by the Federal Aviation Administration in more than 40 years. The team responsible includes Cox & Company's Kamel Al-Khalil, Thomas Ferguson, and John Smith; with Glenn's Dean Miller and Andrew Reehorst, Propulsion Systems Division.

Active Combustion Instability Control: This innovation is based on the discovery of the intra-harmonic coupling mechanism that exists in the combustion process, which can be exploited in the control design by focusing control on the harmonics to suppress instability, enabling safe operation of low-emissions combustors over a wide operating envelope. George

Continued on page 10

NACA XI reunion held at Ames

BY S. JENISE VERIS

Fifty Lewis-Glenn retirees eagerly traveled to San Jose, CA, the weekend of September 30 to reunite and reminisce at the National Advisory Committee on Aeronautics (NACA) XI Reunion hosted by NASA Ames Research Center. This year's celebration also marked the 90th anniversary of NACA, a small civilian research organization that employed many of the pioneers of aeronautics and space technology from 1915 to 1958 before transitioning to NASA.

Next to the host institution, the Lewis-Glenn delegation was the largest group of NACA retirees welcomed by Vic Peterson, former Ames deputy director and chairperson for this year's event. The Ames program and hospitality committees provided a steady pace of activities that included a half-day tour of Ames and several bus tours to local and nearby attractions.

Among the Ames' facilities highlighted was NASA's Advanced Supercomputer Facility, which operates the third fastest computer in the world, and The Air Traffic Control Center and Control Tower, where retirees were engaged in a mockup of Ames research applied to improve airline scheduling and ground-handling operations for flight safety.

"With the aid of their giant, 3-D wrap-around screen, we could physically see the runways and taxiways as planes took off and came in for landings. It was as if we were taking part in a dream of the future," said Lewis delegate June Bahan-Szucs, a 1994 retiree from the Community and Media Relations Office and former member of the Rocket Engine Facility, during the NACA years.

Ames Center Director Scott Hubbard offered the keynote address at the Reunion banquet, where several distinguished NACA alumni were recognized including Jo Dibella, secretary to Dr. Hugh Dryden, who was the last NACA Director and first Deputy Administrator of NASA in 1976. Dibella is credited with coordinating the first NACA reunion.

Pictured right: Dibella (center), the first reunion organizer, with left to right, Edie Watson Blackman and Helen Robinson.



Photos courtesy of NASA Ames



Above: Reunion guests at the Computer History Museum. Far left: Szucs marvels at the prototype astronaut suit on display in Ames' Visitor Center. Left: Reunion Chair Vic Peterson greets Ames Center Director Scott Hubbard at the banquet.

Reunion participants can recall this memorable event through a photo album that Peterson is personally assembling. It will be available early in the new year. In the meantime, the NACA Family can look forward to the next reunion that will be hosted by Langley Research Center. ♦

iTA progress remains steady

For now, NASA's new Chief Engineer Christopher Scolese will stay the course to ensure the Agency's goals regarding the independent Technical Authority (iTA) remain clear and credible for safe and reliable operations of NASA's ongoing and future missions and activities. Scolese noted in a November memo to all NASA employees that he is working throughout the Agency to ensure the engineering technical authority continues to be clear and unambiguous, as well as based on technical expertise and credibility.

According to Scolese, "We have learned much from the experience we have had with Technical Authority and will incorporate these lessons learned into our new development. We will also use these lessons learned to continue to improve the systems, organizations, and personal authorities that have been established since the Columbia accident." In the meantime, Scolese noted "we will continue to execute the current concept of independent Technical Authority while we take the time necessary to develop the improvements and plan a transition."

For more information on NASA's iTA, visit http://pbma.nasa.gov/ita_main_cid_501.

Honor

Glenn's Dr. Marla Perez-Davis, chief, Electrochemistry Branch, and Olga Gonzalez-Sanabria, director, Engineering and Technical Services, were honored as Distinguished Alumni during the University of Puerto Rico-Mayaguez (UPR) 2005 Alumni Association Ceremony held October 16. Both graduates of the UPR School of Engineering were among seven alumni of various disciplines who were recognized and presented with a plaque. The plaque reads: "for their professional endeavors for the benefit of our society, for serving as a role model for our youth, and for their legacy to future generations, is an affirmation of the prestige and academic excellence of our alma mater and its vital contribution to Puerto Rico."

Photo by Raphael Sanabria



Gonzalez-Sanabria and Perez-Davis

Center Operations Directorate welcomes new leadership

Continued from page 1

development. He also served as NASA Kennedy's director of Equal Opportunity Programs prior to accepting the position at NASA Headquarters.

"Ken's qualifications and ability to assume his new responsibilities is unquestionable among his peers around the Agency," said Dr. Earls.

Aguilar is the recipient of NASA Exceptional Service Medal, the Ohio Governor's Award of Merit, and the Community Service Award from National Image of Northeast Ohio among others.



Bilinovich

In addition to Aguilar taking the helm of the Center Operations Directorate, Michael Bilinovich joins the management team as the new chief of the Security Management and Safeguards Office.

Bilinovich brings to the position extensive experience in both local and Federal law enforcement. He has enjoyed a distinguished career as a special agent with the U.S. Secret Service first begun in Cleveland in 1983. Most notable among his assignments was assistant to the Special Agent in Charge overseeing security operations for Presidents Bill Clinton and George W. Bush. He also served as

the assistant to the Special Agent in Charge at the Houston Field Office and more recently, the Special Agent in Charge at the Cleveland Field Office. ♦

Seven Space Act Awards selected

Continued from page 8

Kopasakis, Instrumentation and Controls Division, is the developer.

Data Qualification/Validation Testbed: This software was created to conduct the verification procedure for a data validation system designed for a particular application, which was initially applied to a

component of rocket engine health management system. Shane Sowers (ANLX) Glenn's Instrumentation and Controls Division, is the developer. ♦

The Technology Transfer and Partnership Office manages these awards. Contact Laurel Stauber, Glenn's Awards Liaison Officer, 3-2820.

New leadership across the Agency

Continued from page 2

Center, took over the reins of center director following Roy Bridges' retirement announcement, effective January 2006. Roe previously served as Langley's associate director for Business Management from August 2003 until being named deputy director. She has more than 20 years experience in engineering, technical, and managerial positions, working for both government and private industry. She began her NASA career at Kennedy Space Center in 1987.

Michael Coats became director of NASA's Johnson Space Center, effective November 7. A former astronaut of three shuttle missions and vice president of Lockheed Martin Astronautics (Denver), Coats replaces Jefferson Howell, Jr., who is on assignment as a visiting professor to the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin. Coats first joined NASA in 1978 as a member of the first astronaut class specifically selected to fly the space shuttle. He retired from NASA and the Navy in August 1991.

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DEADLINES: News items and brief announcements for publication in the January issue is noon, December 9. The deadline for the February issue is noon, January 12. Submit contributions to the editor via e-mail, doreen.zudell@grc.nasa.gov, fax, 216-433-8143, phone, 216-433-5317 or 216-433-2888, or MS 3-11. Ideas for news stories are welcome but will be published as space allows. View us online at <http://AeroSpaceFrontiers.grc.nasa.gov>.



In Memory



Zydowicz

George Zydowicz, 50, a systems engineer with Lockheed Martin under the ODIN contract, recently passed away. Zydowicz, who was known as "GZ" by many of his close friends, supported UNIX-based systems and services since 1998.

Anthony Facca, Environments Branch, a friend and coworker of Zydowicz, said Zydowicz will be remembered for his incredible memory, friendliness, and professionalism.

"George contributed his considerable expertise and 30 years of IT experience to improving the distributed computing environment here at Glenn. His presence will be sorely missed," Facca said.

Otis Anderson, 56, who retired in 1995 after 30 years of NASA service, recently died. Anderson, who began as an apprentice, served as an electrician in the Test Installation Division prior to his retirement. He returned for a brief period as an onsite contractor with Akima from 1999 to 2001.



Anderson

In Appreciation

I would like to say thanks to all of the NASA Glenn and Analex people who supported me during the passing of my father. The kind words, prayers, cards, and flowers meant so much to me and my family. Again, thank you.

—Ed (and Betty) Zeeck, Jr.

Thank you for your support and the kindness expressed following the death of my father. You will never know how much it meant to me to be able to count on my Glenn family.

—Sandra Reehorst

"Special" Children's Fund

The Glenn "Special" Children's Fund was organized in 1958 to help all Glenn employees who have children with special needs. Forty-seven years later, the fund continues to assist Glenn employees during this special time of year. Employees who want to continue this tradition simply contribute the money they would normally spend on holiday cards to coworkers and postage to the fund.

Because the success of this fund depends on the Glenn community, the "Special" Children's Fund Committee asks employees to continue to be as generous as possible. Last year's generous contributions to this fund totaled over \$4000. If there are no requests from employees, the money collected goes to local charities. Thanks to the support of management at Glenn, 100 percent of the money donated went to the care of children.

Please send tax-deductible donations, no matter how small, to Carmela Bynum at Mail Stop 21-15. Cash and checks are accepted. Make checks payable to "Glenn's Special Children's Fund." To aid employees in their contributions, the committee will be sending donations envelopes in the interoffice mail.

Employees needing assistance for family members should contact Suzanne Aldrich at 3-9473. ♦



ACES program to begin third year

This year, 33 pairs of mentors and mentorees discovered the value of formal and informal organizational knowledge and open communication between employees at different organizational levels through their involvement in the Advancing Careers and Employees Success (ACES) program. Civil servant employees can now sign up to participate in the 2005-06 ACES program, which begins its third year in January.

Several mentors returned this year, including Cynthia Forman, Organization Development and Training Office chief. "The mentorees and their curiosity, energy, motivation, and diverse insights

are really reinvigorating. The more the program can bring us together, the better," she said.

The ACES program has proved to be beneficial to both the mentors and the mentorees. "My ACES experience has been outstanding. I was able to learn about many opportunities out there for development and advancement from my mentor, as well as create a new IDP (Individual Development Plan) tailored to my career goals," said mentoree, Anthony Nerone, Mechanical and Rotating Systems Branch.

ACES Program Coordinator and past mentoree, Jennifer Budd, Organization Development and Training Office, believes the program provides formal structure for knowledge sharing (both technical and cultural) that is vital for the health of the organization. For more information and to sign up for the 2005-2006 session, contact Budd, 3-8021, or visit <http://www.grc.nasa.gov/WWW/ODT/Mentoring>. ♦



This article was written by Kelly Gilkey, Structural Systems Dynamics Branch.

Volunteers help Visitor Center expand public outreach

BY DOREEN ZUDELL

Why does Evelyn Nunn, a Glenn Visitor Center (VC) volunteer since 1983, staff the VC lobby desk every Tuesday morning? Why would Allen Loew, a human resources manager, take the time to research the life of Orville Wright and portray the aviation pioneer in front of hundreds of people at the VC?

"I've always been interested in science and space, but my career took a different direction," Loew explained. "So my involvement with the VC, with the support and empowerment of the VC staff, enables me to be a part of the NASA mission."

Loew and Nunn are just two of 55 individuals who donate their time, talent, and enthusiasm to Glenn's VC. Volunteers range from students to senior citizens and from NASA Glenn retirees to members of the general public. They support the VC by conducting/assisting with tours and programs, staffing the lobby desk or amateur radio station, assisting in various departments of the VC, and providing general information and guidance to visitors.



Photo by Kelly DiFrancesco

Above: Boyd, right, presents the prestigious President's Award and the 5000 hour gold bar to Nunn, at the Volunteer Recognition Program. The President's Award is given to volunteers who are members of the Retired and Senior Volunteer Program (RSVP) with 4000 hours. The VC has 24 RSVP members. Left: Loew gives a presentation about the International Space Station.

The VC staff showed their appreciation to these individuals by hosting the annual Volunteer Recognition Program on November 9 in the VC Auditorium. All the VC volunteers received personal thanks and certificates of appreciation while 16 of them were given awards for reaching certain benchmark hours for the first time. Loew and fellow volunteer Aaron Clark, who were instrumental in providing support of the VC's public tours, earned special recognition.

"Our programs have expanded and the number of visitors has greatly increased over the past few years," explained VC Volunteer Coordinator Monica Boyd, BTAS/Community and Media Relations Office. "The VC staff couldn't accomplish our mission without the support of our volunteers. They are truly members of the NASA family and help us successfully meet the needs of the public." ♦

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