



ORBITER NEWS

News, announcements, and more.

A Recognition of Excellence: 2023 Aerospace Corporate Awards

June 22, 2023

The Aerospace Corporation celebrated the outstanding contributions of its people at the 2023 Corporate Awards Ceremony on Thursday, June 22, recognizing impactful achievements that moved the corporation and the nation's space enterprise forward.

The hybrid celebration, hosted by Aerospace President and CEO Steve Isakowitz and Executive Vice President Wayne Goodman, was held in-person at El Segundo, with Aerospace employees around the country attending virtually.



"I want to express my gratitude to all of you for another year of excellence and for the impact you are making every day for our nation's space programs," said Isakowitz. "I hope you come away from today's ceremony with a greater appreciation for our important role and just how many ways our people are making a difference for our nation."

This year's awards introduced several new categories that reflect Aerospace's Corporate Strategy: Enterprise Mission Success, Technical Excellence, Operational Excellence, and People Excellence, in addition to Growth in Our Value, Innovation, Shaping the Future, and Program Recognition. Additionally, SPOT Awards and Employee Resource Group award winners were celebrated.

"The achievements we are recognizing today represent the best of what Aerospace has to offer and speak to the unparalleled impact our people make throughout the year," said Goodman. "Our success starts with our core values, including our unwavering commitment to integrity and objectivity. Our vision – to be the nation's trusted partner, solving the hardest problems for the preeminent space enterprise – focuses and guides our efforts. And our strategic imperatives help propel us forward as we provide technical leadership and value to our government partners."

The ceremony concluded with the awarding of Aerospace's highest honors: the President's Distinguished Achievement Award, and the Trustees' Distinguished Achievement Award. Here's a **complete list of today's winners**, along with the citation for their accomplishments:

Operational Excellence Award

The Operational Excellence Award went to the **Colorado Springs II Facilities Team** for executing the design, construction, and physical accreditation of the new Colorado Springs II facility, collaborating with contractors, enterprise services and program offices to synthesize envisioned needs into defined requirements for development of the building design. The team devised solutions for technical and administrative problems throughout the project to enable the contractor team to stay on schedule, while also leveraging alternative delivery methods to mitigate the impact of global supply chain issues on the project.

Team Members: John Biggs, Kevin Gilpin, Thomas Murphy, Damian Bonura, Geovanny Garcia, John Moon



Growth in Our Value Award



The Growth in Our Value Award was presented to the **Signals Intelligence (SIGINT) Architecture Modeling Team** for successfully bridging the gap in end-to-end signals intelligence mission modeling, becoming the preeminent resource for architecture modeling. By modifying, enhancing, and connecting existing Aerospace tools into an interoperable system, the Aerospace team was able to optimize the architecture across a range of objectives in a way never before possible. This newly developed capability was critical to designing the transition path from today's capability to the most diverse, integrated, and capable architecture of the future.

Team Members: Michael Winthrop, Kaitlyn Fields, Jon Shields, Joshua Kollat, Zoltan Somogyi, Brian Carter, Sarah Morgan, Rachel Allen, David Galvan

Innovation Award

The Innovation Award was presented to the **Upper Stage Nozzle Oscillation Anomaly Resolution Team** for developing a root cause theory for a performance issue and created state-of-the-art system and component models identifying that cause, which were later validated in system level testing. This effort led to a simple solution which upgraded performance for both Atlas V and Vulcan vehicles and enabled several National Security Space and commercial missions to meet performance requirements.

Team Members: Jeff Lollock, Ryan Tuttle, Morad Alvarez, Derek Ring, Brian Sako, James Tuck-Lee, Peter Winzen



The Upper Stage Nozzle Oscillation Anomaly Resolution Team received the Innovation Award.

Shaping the Future Award



The Landsat Next Constellation Team received the Shaping the Future Award.

The first Shaping the Future Award went to the **Landsat Next Constellation Team** for providing orbital design, concept design center runs, direct project-level cost estimation and flight subsystem engineering for the next generation of U.S. land imaging satellites. These contributions are enabling game-changing revisit times and allowing for vastly improved assessments of dynamic phenomena. The coordinated effort across Aerospace departments in support of Landsat Next enabled NASA and USGS supported an evidenced-based decision to depart from the legacy single-satellite Landsat architecture, and truly shape the future.

Team Members: Barbara Braun, Steve Covington, Doug Daniels, Kari Wulf, Shannon Begeman, Adam Reardon, Nick Speciale, Dick Covington, Leslye Boyce, Pete Phillips, Megan Miller, Manuel Puyana, Eric Mahr, Julie Feil, Nishant Prasad, Blake Rogers, Harrison Wight, Jeff Goodell, Keith Evenson

Shaping the Future Award

The Shaping the Future Award also went to the **Overhead Persistent Surveillance Team** for developing a unique toolset to analyze performance and determine an optimized approach for providing a cross-agency surveillance architecture. The toolset required extending airborne algorithms to the space domain, enabling trades that were not possible with legacy capabilities. Aerospace confirmed accuracy through an on-orbit demonstration using Aerospace's novel high-fidelity processor and used this new capability to complete a comprehensive set of constellation and payload level trades to define and assess the performance of contractor and Government Reference Architectures. The analysis provided the basis for a recommendation for the path forward on a multi-billion-dollar decision.

Team Members: Joshua Buli, Adam Chandler, Karl Doty, Grant Karamyan, Krista Katayama, Michael Miller, Victoria Richmond, Robert Santoro



The Overhead Persistent Surveillance Team received the Shaping the Future Award.

People Excellence Award – Corporate Citizenship and Community Outreach



The Aerospace Huntsville Cares Team received the People Excellence Award for Corporate Citizenship and Community Outreach.

The People Excellence Award for Corporate Citizenship and Community Outreach went to the **Aerospace Huntsville Cares Team** for its significant and positive impact upon Huntsville and the greater Huntsville area. In keeping with their commitment to building relationships in the community and supporting a broad range of community projects and partner organizations. The team also held its first Holiday Gift Drive for Always Endure and Senior Helpers.

Team Members: Iris Nunn, Yvonne Fagan, Ben Hayes, Steve Taylor, Carlyn Robinson, Laura Vannozzi, James Northern III

People Excellence Award – Leadership and Mentorship

The People Excellence Award for Leadership and Mentorship went to **Karolyn Young**, a STEM advocate whose long-term efforts promoting DEI and mentoring have had a measurable, positive impact on Aerospace’s People Excellence, Growth and Workforce Goals. Karolyn’s notable achievements include her work with the National GEM Consortium, which is committed to providing resources and support to students from underrepresented communities pursuing advanced STEM degrees, and her creation of the GEM Ambassador program. In addition to teaching at the Aerospace University, she is a fierce advocate for corporate citizenship and community outreach.



Karolyn Young received the People Excellence Award for Leadership and Mentorship.

People Excellence Award – Diversity, Equity, and Inclusion



The UPLIFT Diversity Program Team received the People Excellence Award for Diversity, Equity, and Inclusion.

The People Excellence Award for Diversity, Equity, and Inclusion went to the **UPLIFT Diversity Program Team** for successfully developing and fielding a new prototype program to strategically connect Aerospace organizations to universities and underrepresented minority groups. The Aerospace UPLIFT Program goals are to recruit diverse Ph.D talent or build relationships with industry partners to drive more diverse talent recruitment opportunities, and to build upon our DEI goals by bringing in external perspectives, best practices, and new DEI programs and initiatives to the Aerospace organization. The UPLIFT program is already effecting change in the community and at Aerospace with regards to recruiting, representation, and retention.

Team Members: Don Walker, Amber Glow, Alan Hopkins, Angela Couture, Cathy Kaneshiro, Chelsea Johnson, Christine Lin, Amanda Wang, Faby Navarro, Tina Fulkerson, Yao Lao

Technical Excellence Award

The Technical Excellence Award went to the **Power Converter Gallium Nitride (GaN) High Electron Mobility Transistor (HEMT) Team** for developing a novel test methodology related to the use of Gallium Nitride for power converters across the space industry, revealing performance deficiencies that the standard test methodology would not have caught. These results informed the Aerospace team's recommendation to limit the implementation of GaN transistors to low-risk applications, drastically reducing overall technical risk while allowing for technology maturation for future program benefit. Aerospace recommendations led to zero impact modifications to an existing program and led to reduced risk of cross-program adoption of this evolutionary technology.

Team Members: Michael Willhoff, John Scarpulla, Rebecca Glick



The Power Converter Gallium Nitride (GaN) High Electron Mobility Transistor (HEMT) Team received the Technical Excellence Award.

Enterprise Mission Success Award



The Enterprise Mission Success Award went to the **Operational C2 Enterprise Study Team** for developing a federated space command and control plan, achieving unprecedented collaboration and new levels of technical leadership to resolve one of the most challenging enterprise integration problems facing national security space: the integration of operational command and control for space combat power capabilities. Through an objective, transparent systems engineering process, the team identified and presented a recommended approach for reducing risks and eliminating gaps and other issues in the base architecture that has been approved by the Program Integration Council.

Team Members: Jared Fortune, Michael Mirowski,

Rhett Breeden, Thomas Eden, Thomas Sullivan, Kristin Kolarik, John Doucet, Dana Honeycutt, Josh Train, John Halpine, Richard Lane, Terje Turner

Program Recognition Award

The Program Recognition Award went to **Aerospace Innovation Makes it to Space Team** for developing and providing proof of concept for an innovative sensor design and airborne prototype, as well as acquisition support and an on-orbit characterization campaign that demonstrated performance previously considered unachievable. Working across disciplines and agency lines, the team enabled the transition of the Aerospace sensor concept to a first-of-a-kind mission amongst the highest national security priorities. In doing so, the team demonstrated the value and impact of Aerospace prototyping capabilities, and their proven ability to solve our customer's most difficult problems.



The Aerospace Innovation Makes it to Space Team received the Program Recognition Award.

Employee Resource Group Awards

Aerospace's Employee Resource Groups (ERGs) play a vital role enriching the culture and experience at Aerospace for all its employees. Individuals who were honored throughout the past year by the ERGs were recognized during the Corporate Awards ceremony.

The Aerospace Asian Pacific American Association's Dr. Alexander C. Liang Pacific Achievement Award went to **Dr. Joanna Cardema, Dr. Curtis Iwata** and **Kien Le**.

The Aerospace Black Caucus's Robert H. Herndon Black Image Award went to **Shardai Rhodes, David Jackson** and **Leard Bell**.

Three people were honored with the Aerospace Women's Committee Women of the Year Award: **Julia Carter, Navneet Mezcciani** and **Trina Kilpatrick**.

President's Distinguished Achievement Awards

The first President's Distinguished Achievement Award went to the **Space Strategy Review Team** for developing innovative technical approaches to inform the Space Strategic Review that resulted in changes to national policy. In early 2022, the National Security Advisor initiated a strategic review of national security space strategy and capabilities to inform the development of the upcoming budget request. Acting on a short timeline, the Aerospace team led a quick-turn technical assessment for a critical space capabilities study, resulting in an internal classified



The Space Strategy Review Team received the President's Distinguished Achievement Award.

review that illustrated the potential policy implication and limitations on the future Force Design for space capabilities. Other team members concurrently provided an independent approach to develop and assess options for the specific policies in line with other released national security space policy.

The team used a novel integration of Aerospace tools and developed a completely new framework for their assessments. Their work demonstrated a superior level of technical depth, producing two independent results that supported the same conclusions and surpassed customer expectations. The review was briefed and signed off by the Secretary of Defense and the Director of National Intelligence.

Team Members: Bryan Guernsey, Marcus Shaw, Ralph Fero, Kelly Gov, Stephen Bayliss, Ryan Pfeiffer

The second President's Distinguished Achievement Award went to **Dr. Shawn Iravanchy**, whose exceptional leadership, initiative, and innovative thinking directly led to a major pivot that shaped the future of the Strategic SATCOM mission. Over the course of this multi-year effort, Shawn reached across the Aerospace enterprise to form an integrated team spanning ETG and multiple customer-facing program office organizations. He demonstrated exceptional leadership, initiative and persistence working with the internal Aerospace team and in partnering with the customer to lead the engagement strategy and garner support for his recommendations.

His thought and change leadership challenged the status quo and resulted in a more resilient architecture that incorporates tenants of continuous production, reducing complexity and program cost while accelerating capability delivery.



Dr. Shawn Iravanchy received the second President's Distinguished Achievement Award.



Justin Shaw received the President's Distinguished Achievement Award.

The third President's Distinguished Achievement Award went to **Justin Shaw** for exceptional technical analysis and perseverance in determining root cause and providing an operational solution for a critical national payload issue. This new spacecraft payload's performance was not accurate enough to meet the needs of the user, resulting in loss of critical mission data for the nation. Justin undertook an independent analysis of the spacecraft's payload performance and discovered the root cause. He independently created a stand-alone model of the payload and analyzed over 5,000 different configurations resulting in proof that calibration values were in error.

Justin's approach was successfully implemented in operations, enabling the payload to meet requirements

and provide the needed mission capability. His model development and analysis also resulted in a new and innovative way to calibrate future payloads on orbit. Justin's extraordinary efforts single-handedly saved the newest, most capable payload on a critical national asset, and without his efforts, this critical mission payload data would not be available to a broad range of national users.

The fourth President's Distinguished Achievement Award went to **Jason Fields**, who leveraged his exceptional expertise in optical systems to spearhead an innovative approach for image collection that enabled national security space systems to achieve mission success after many previous failed attempts. Multiple national security space systems made attempts to achieve a specific objective that proved to be exceedingly difficult. Jason leveraged his broad and deep expertise in optical systems and imaging to advocate the new approach and gathered buy-in from other stakeholders, leading to a successful operation.

As a result of his analysis and recommendations, and a months-long development and testing campaign, the government customer is now training its personnel to execute the tactic and incorporate it as a standard operating procedure.



Jason Fields received the President's Distinguished Achievement Award.

President's Distinguished Achievement Award: Lifetime Achievement



Willard Downs received the President's Distinguished Achievement Award for Lifetime Achievement.

The President's Distinguished Achievement Award for Lifetime Achievement went to **Willard Downs** for his more than 50 years of leading world class, innovative teams, and for creating an incredible culture of mentoring and leadership that spans multiple generations at Aerospace. Willard is well-known for taking on the hardest of problems and pulling together cross-organizational teams of experts to solve them. He is a trusted partner for independent technical analyses that have informed multiple multi-billion-dollar acquisition programs, and he has made significant contribution to advancing enterprise-wide strategies.

His commitment to diversity, equity and inclusion is demonstrated through his leadership with the Aerospace Black Caucus and our employee resource groups, as well as his support of the Robert H. Herndon Black Image Awards and the Herndon Science Fair. His work has been widely decorated throughout his career, including with a President's Distinguished Achievement Award in 2008, and the company's first Corporate Award for Commitment to Our People: Leadership and Mentorship.

Willard's dedication and commitment to Aerospace and its people are truly unrivaled, and his impact and legacy will stretch far into the future.

Trustee's Distinguished Achievement Award



This year's Trustees' Distinguished Achievement Award was presented by Board of Trustees member Admiral Cecil Haney.

The Trustee's Distinguished Achievement Award went to the **Space Workforce 2030 Team**, for the successful launch of a first-of-its-kind, collaborative effort to increase diversity and representation across the whole of the space enterprise. Officially launched at Space Symposium in 2022, this effort has now grown to include over 30 leading space companies across the industry who have pledged to work together to advance the number of women and people of color in our technical workforces and leadership ranks.

The participating companies have made the unprecedented commitment to share workforce data, exchange best practices, and hold themselves accountable by reporting out on their collective progress annually at Space Symposium. Aerospace's role as an objective, trusted partner made it uniquely positioned to help launch Space Workforce 2030, reinforcing awareness of Aerospace's value as a connector and convener across the space enterprise, and furthering its reputation as a forward-thinking employer of choice.

The team's efforts led to extensive engagements throughout the inaugural year. It was featured prominently at events like Space Symposium and attracted widespread media coverage, even gaining attention from other industries interested in replicating this effort. The collective impact of the team and dozens more across Aerospace who contributed to this effort meaningfully moved the space industry

forward, laying the foundation for an enduring, long-term commitment to building a diverse, innovative workforce capable of seizing the many exciting opportunities that await us in space.

Team Members: Via Van Liew, Alison Bauerlein, Sandy Yonemoto, Angela Couture, Sabrina Steele

Isakowitz concluded the ceremony commending all award winners and thanking employees for another year delivering on Aerospace's mission.

"There is immense change and transformation taking place at our company and across the entire space domain. Today's achievements demonstrate how well we are adapting in this new era and the impact we are making for our growing set of partners," said Isakowitz. "I want to thank all of our Aerospace team members for the role you play in our success, and for bringing your own unique superpowers to our company... Wayne and I deeply appreciate all that you do for Aerospace."

Snapshot: Albuquerque Team Wins 1st Place in Golf Tournament

June 29, 2023

Submitted by Daniel Frampton:

Congratulations to the Albuquerque Security Team. They participated in a team building event by playing in a charity golf tournament and took first place. The team, known as TEAM NNSA (National Nuclear Security Administration), comprised of the following members who picked their own name:

- ♦ Chris "The Westside Rattler" Garcia who played in the lead off position and kept us in play all day.
- ♦ Dan "The Mocha Moccasin" Frampton who played in the clean-up position and had a few good swings.
- ♦ Kelly "The Vixen Viper" Romero who played in whatever role she wanted, she was the boss of the moss, she also kept us hydrated all day, for our own safety of course.
- ♦ Kevin "The Black Mamba" Wyckoff who played in the second position and navigated the team, picking and choosing where we wanted to aim at during play.



A true team win.

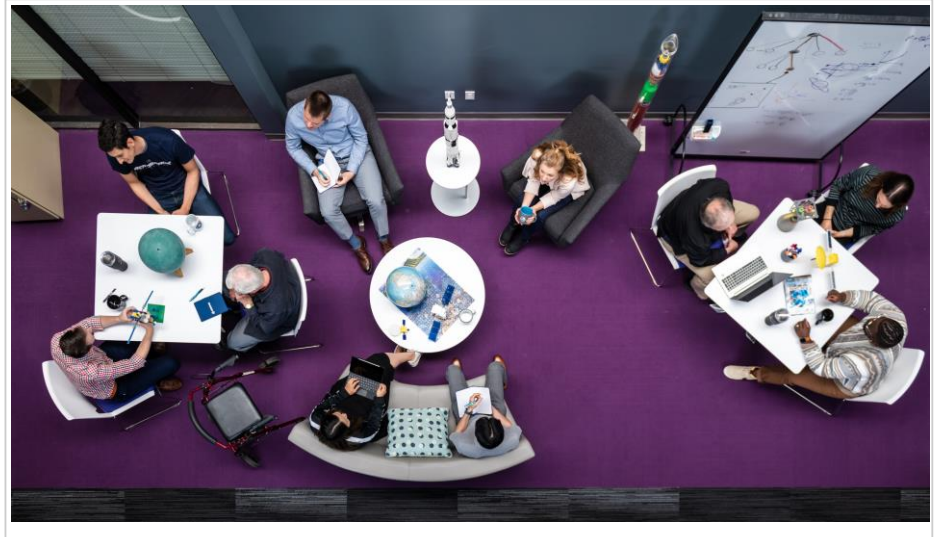
The tournament was held at the Santa Ana Golf Course and was challenging the whole day. After firing an 18 under par score, the team tied with two other teams. Team NNSA was declared the winner after a

scorecard playoff. This was a great team building effort and each of us learned a lot about each other, professionally and personally.

CCEO: How Pelotons Enable Aerospace to Lead from the Front

June 27, 2023

The modern space environment is transforming how success is determined. New challenges and opportunities continue to emerge, and increasingly, require collaborative and integrated approaches to solve the hard problems of this era. Aerospace is adapting to this rapidly evolving environment and supporting its customers in shifting focus toward a broader, more enterprise-oriented perspective.



“Integrating space capabilities is a high priority for many of our customers. Our role as a system engineering and integration FFRDC puts us in an ideal position to solve these hard problems,” said Wayne Goodman, Executive Vice President of Aerospace, at the recent corporate All Hands meeting. “And we are already starting to make progress through the Pelotons.”

Cross-customer collaboration, including NASA, Department of Defense, the Intelligence Community and numerous commercial space companies, is an especially big challenge with the increasing number of space consumers today. Cooperation and coordination are key, not only in terms of cost and efficiency, but also to ensure safety in space. With support from the Corporate



In bicycle road racing, the term “peloton” is a group of cyclists riding closely together to reduce drag and gain efficiency. While no actual biking is involved with the Aerospace Pelotons, the teams are intended to streamline efforts, enhance knowledge sharing and collaboration.

Chief Engineers Office (CCEO), the Pelotons serve as a way to leverage the breadth of Aerospace's technical expertise to identify where connections can be best used to solve hard problems. These self-managed enterprise integration teams vary in size depending on the need and area of focus.

"The Corporate Chief Engineer's Office (CCEO) provides the systems engineering support to the Pelotons, sharing best practices and lessons learned across the teams," said Mark Silverman, Corporate Chief Engineer. "CCEO also helps make connections between the teams since the delivery of capability to the end-user is dependent on two or more teams working together in some cases."

What Pelotons Mean to Aerospace

In competitive cycling, a peloton is the main group or pack of riders who save energy and reduce drag by riding close together and taking advantage of each other's momentum. At Aerospace, the Pelotons are intended to streamline efforts, enhance knowledge sharing and collaboration. These small and agile teams are made up of employees from across Aerospace that seek to strengthen Aerospace's cross-customer collaboration and build consensus for shared solutions.

They work to identify where different programs and missions have overlapping interests and facilitate collaboration by connecting diverse internal and external stakeholders.

"There's going to be some things that are specific to individual customers, but rather than duplicating the effort on what's overlapping – by putting together these teams, they're able to look at the hard problems that naturally exist for that topic and start to identify ways in which Aerospace can create impact and develop a solution," said Carrie O'Quinn, Systems Director of CCEO.

Seeing Across the Enterprise

As an FFRDC, Aerospace is uniquely positioned to facilitate enterprise integration because it is engaged with virtually all areas of the space enterprise, providing objective expertise throughout the mission lifecycle and supporting customers to anticipate future needs.

"We don't want to react to problems that pop up. Instead, we want to lead from the front and say, 'These are the problems that we are seeing within the space enterprise that are potentially going to impact your missions going forward'," said O'Quinn. "If we come up with recommendations, they are going to reach across all aspects of the space enterprise. Because we are that independent third-party that doesn't have to worry about being proprietary with our solutions, we can weigh all the different stakeholders' needs independently to get them the optimized solution for whatever problem we're trying to solve."

The Pelotons enable Aerospace to amplify its impact to its customers and the broader space community by accelerating innovation and collaborative problem-solving. For Aerospace, the Pelotons signify how the corporation's culture is adapting to achieve Enterprise Mission Success – a culture that aspires to lead from the front, collaborate across the space enterprise and operate with agility and speed.

"Pelotons offer direct support to the top of the 'T', which gets at the breadth of Aerospace's technical expertise," said O'Quinn. "We're pivoting the way we do business within Aerospace and while that depth is still very important, the breadth is one way to really tackle hard problems for our customer. The breadth of

knowledge that we have within Aerospace to solve the problem for the entire space enterprise, not just the one customer that asked the question, allows us to really get ahead of the problem and lead from the front.”

Press Release: Aerospace Names Eight STEM Scholarship Winners

June 27, 2023

EL SEGUNDO, Calif. June 26, 2023 – The Aerospace Corporation (Aerospace) continues its commitment to strengthen the diversity of the next generation of space leaders as it names this year’s Dr. Wanda M. Austin STEM Scholarship recipient and seven Future STEM Leaders Scholarship recipients.

Dr. Wanda M. Austin STEM Scholarship



Evelyn Gamez is this year’s Dr. Wanda M. Austin STEM Scholar. She recently started her paid summer internship at Aerospace and has been connected with her mentor. She is also receiving a \$10,000 per year scholarship, renewable for up to four years.

The recipient of the 2023 Dr. Wanda M. Austin STEM Scholarship is Evelyn Gamez, 2023 Valedictorian of Hawthorne High School in Hawthorne, Calif. Gamez received a paid summer internship, mentoring and a \$10,000 per year scholarship, renewable for up to four years. This fall, she will be attending California State Polytechnic University, Pomona, where she will be majoring in manufacturing engineering. Gamez was co-captain of the robotics team, president of the school’s Mathematics, Engineering, Science and Achievement (MESA) Club, and was also named MESA Student of the Year.

“We are thrilled to recognize and support Evelyn and all of this year’s STEM scholarship recipients,” said [Steve Isakowitz](#), Aerospace president and CEO. “Evelyn’s leadership, academic excellence and passion

for engineering make her an excellent addition to our growing ranks of Dr. Wanda M. Austin Scholars. These awards are an investment in strengthening our workforce and the communities where our employees work and live, while exemplifying our ongoing commitment to diversifying the space industry.”

The Dr. Wanda M. Austin STEM Scholarship was created eight years ago to provide internship opportunities and financial support to exceptional academic student leaders from underrepresented backgrounds.

Future STEM Leaders Scholarship



This year's Future STEM Leaders Scholarship recipients receive a one-time \$5,000 scholarship toward their studies at a four-year college or university. They are also matched with Aerospace mentors. Top left to right: Ada Pratico, Armani Boucaud, Elliott Bossetti, and Jeremy Cupp. Bottom left to right: Lorena Madrid Larranaga, Sabrina Montoya, and Sofia Gonzalez.

This year, there are a record seven recipients of the Future STEM Leaders scholarship from five of Aerospace's national locations. Each recipient receives a one-time \$5,000 scholarship towards their studies at a four-year college or university. They are also matched with Aerospace mentors as the students navigate college and the workforce. The Future STEM Leaders Scholarship program aims to provide opportunities to incoming first-generation college students at Aerospace locations across the country. Recipients are selected based upon active participation in their communities, demonstration of leadership initiative, and commitment to pursue an undergraduate degree in physical sciences, computer sciences, engineering, or mathematics.

Elliott Bossetti is a rising senior at Pine Creek High School in Colorado Springs, Colo. She is interested in cybersecurity and engineering, and is certified in Cloud Essentials and IT. She enjoys working with her peers in technological activities and projects.

Armani Boucaud is a rising senior at Alexandria City High School in Alexandria, Va. She is a student athlete, serves as secretary for both the National Junior Honors Society and the Zeta Phi Beta Sorority, and is a member of the Math Honor Society, the Key Club and the Black Student Union. She plans to study cybersecurity engineering in college.

Jeremy Cupp is a rising senior at Ogden High School in Ogden, Utah. He will be continuing his engineering studies in Fall 2023 and is looking forward to expanding his academic skills.

Ada Pratico is a graduating senior from Huntsville High School in Huntsville, Ala. She will be studying mechanical engineering this fall at Auburn University.

Sabrina Montoya is a graduating senior from Rio Rancho High School in Albuquerque, NM. She was named Outstanding Young Researcher during a local science competition for her team's project modeling optimal travel methods to Mars. She will be attending New Mexico State University in the fall to study aerospace engineering.

Lorena Madrid Larranaga is a rising senior at Albuquerque High School in Albuquerque, NM. She is a member of PAUSE, National Honors Society, MESA, Girls Who Code, Mock Trials, and Youth and Government proposing legislation to enhance the state of New Mexico and women's needs.

Sofia Gonzalez is a rising senior at Explore Academy from Albuquerque, NM. She enjoys participating in musical theatre during her free time and aspires to study biomedical engineering.

Both the [Dr. Wanda M. Austin STEM Scholarship](#) and the [Future STEM Leaders Scholarship](#) are funded through the [Aerospace STEM Endowment Fund](#), which is sustained solely through employee and trustee donations, charitable organizations, and estate gifts.

ABOUT THE DR. WANDA M. AUSTIN STEM SCHOLARSHIP

The Dr. Wanda M. Austin STEM Scholarship is an invitation-only scholarship, where recipients receive a paid internship at Aerospace and a scholarship of up to \$10,000 per year, renewable for up to four years. Scholarship recipients are required to pursue undergraduate studies in a STEM field at a four-year college and maintain a 3.0 or above grade point average. The Dr. Wanda M. Austin STEM Scholarship was named after Aerospace's former CEO and president for her dedication and support of STEM education. Visit the [Aerospace STEM Endowment Fund](#) to help provide support and resources to underserved students pursuing academics in STEM.

ABOUT THE AEROSPACE CORPORATION

The Aerospace Corporation is a national nonprofit corporation that operates a federally funded research and development center and has more than 4,600 employees. With major locations in El Segundo, California; Albuquerque, New Mexico; Colorado Springs, Colorado; and the Washington, D.C. region, Aerospace addresses complex problems across the space enterprise and other areas of national and international significance through agility, innovation, and objective technical leadership. For more information, visit www.aerospace.org. Follow us on Twitter: [@AerospaceCorp](#).

Students Discover New Horizons in Space at Aerospace's 46th Herndon Science Competition

June 26, 2023

Aerospace recently hosted the 46th annual Robert H. Herndon Memorial Science Competition at various campuses with programming designed to stimulate student interest in science, engineering, and technology, and increase diversity across the aerospace industry. The West Coast competition welcomed local high school and middle school students interested in STEM to the El Segundo campus on May 25 –

returning to an in-person format for the first time since 2019 – while the East Coast team hosted their activities on June 1. Huntsville also got in on the fun with its inaugural event, inviting students to participate in an essay competition and has plans to expand its format in the coming years.



“The kids seemed to have a lot of fun, and the teachers were very appreciative of the opportunity for their students to see some of the lab activities at Aerospace,” said Oliver Ambrosia, Director in ETG and chair of the Herndon Science Competition at AGO. “It took a lot of hard work from all the committee members and volunteers to plan and execute the event. We plan to aggressively recruit participants when the new school year starts for an even bigger event in ’24.”

The West Coast competition featured 70 total attendees, with experiments from seven schools and essays from five. Aerospace employees served as judges for the 20 essays and 14 experiments. Guest speakers included Todd Nygren, Senior Vice President of ETG, and Ashley Kowalski, analog astronaut for Aerospace's MDRS mission and NASA's SIRIUS-21 program. Students and guest teachers were treated to tours of the Physical Sciences Laboratories prior to the award ceremony.

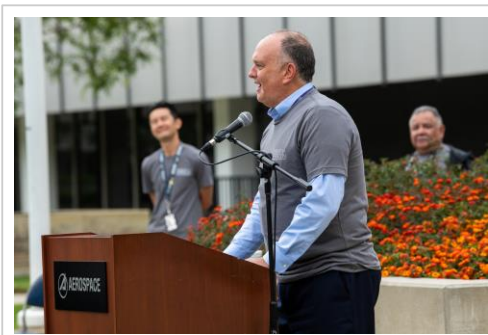
The East Coast competition – which was chaired by Christina Smith, Project Engineer in NSG – brought together some of Northern Virginia's brightest STEM students from 13 middle schools and high schools. Parents expressed that the event was worth taking a day off from work and school to attend, Smith said.

The students presented their original science and engineering projects and research for Aerospace to review. Topics included Space Debris and Cyber Security. The essay theme for this year's competition was “Discovering New Horizons in Space,” which asks students to reflect on the important role that space plays

in shaping the way people experience the world, and how engineering and science can shape space exploration in a new way.

"In Huntsville first year of participating in the Robert H. Herndon Competition, we volunteered as judges in the Regional Science Fair competition and had participants in the East Coast Essay Competition," said James Northern, Assistant Principal Director in DSG and chair of the Huntsville competition. "We look forward to growing the number of participants and the brand of Aerospace across the North Alabama region."

Check out photos from this year's Herndon Science Competition below:



Tanya Pemberton Named Aerospace's New Executive Vice President

June 15, 2023

EL SEGUNDO, Calif., June 15, 2023 – The Aerospace Corporation (Aerospace) has selected Senior Vice President Tanya Pemberton as Executive Vice President. Tanya will assume the role beginning January 1, 2024, following Dr. Wayne Goodman's retirement in December after 36 years of service to Aerospace and seven years as EVP.



Pemberton joined Aerospace in September 2019 to lead the National Systems Group. In her new role, Pemberton will be responsible for Aerospace's strategic focus on delivering enterprise mission success and technical excellence for its government partners. She will continue the executive focus on strengthening Aerospace's enterprise integration efforts to deliver resilient solutions that meet the needs of an increasingly diverse set of partners.

"At a time of great change in space, Tanya's extensive expertise will ensure Aerospace is well-positioned to deliver on our critical mission while furthering our focus on enterprise mission success and technical excellence," said Aerospace president and CEO Steve Isakowitz. "She is a top technical leader with proven experience developing strategy and effectively leading organizations through change, which will be invaluable as Aerospace adapts to meet the evolving needs of our partners."

As Senior Vice President for the National Systems Group, Pemberton led her team as their customers in the Intelligence Community developed next-generation architectures and leveraged cutting-edge capabilities developed by the commercial sector.

Pemberton has more than 30 years of experience in both industry and the federal government, delivering large-scale technical systems and working problems across multiple business sectors to include space systems, mission ground systems, information technology, and analytic organizations.

Prior to Aerospace, she served in a number of senior executive assignments in the Intelligence Community to include chief of staff; associate deputy director for science and technology; program director for a multibillion-dollar imaging satellite system; and chief information officer. She has been recognized for her work with numerous awards, including the Presidential Rank Award in 2013. She has a bachelor's degree in aerospace engineering from the Massachusetts Institute of Technology and a master's degree in aeronautical engineering from the California Institute of Technology.

To ensure continuity in the leadership transition, the positions to replace Pemberton and Vice President for Strategic Space Operations Jay Santee, who will also retire in December, will be posted in the coming weeks. The new Aerospace leaders will assume their roles January 1, 2024.

ABOUT THE AEROSPACE CORPORATION

The Aerospace Corporation is a national nonprofit corporation that operates a federally funded research and development center and has more than 4,600 employees. With major locations in El Segundo, California; Albuquerque, New Mexico; Colorado Springs, Colorado; and the Washington, D.C. region, Aerospace addresses complex problems across the space enterprise and other areas of national and international significance through agility, innovation, and objective technical leadership. For more information, visit www.aerospace.org. Follow us on Twitter: [@AerospaceCorp](https://twitter.com/AerospaceCorp).

Acquisition Expert Randall Walden Elected to Aerospace's Board of Trustees

June 15, 2023

EL SEGUNDO, Calif., June 15, 2023 – The Aerospace Corporation elected former U.S. Air Force acquisition and technical officer Randall Walden to its Board of Trustees on June 7, 2023. Walden has more than 40 years of military experience with the U.S. Air Force, working on technology, acquisition, and logistics in support of critical military capabilities.

“During this pivotal time in space, delivering resilient capabilities on accelerated timelines is critical to outpacing adversary threats,” said [Steve Isakowitz](#), Aerospace president and CEO. “Randy’s extensive expertise in rapid acquisitions and technology development makes him an invaluable addition to our board as Aerospace works to advance cutting-edge capabilities for our government partners.”



“We are thrilled to welcome Randy’s unique skillset and experience to our Board of Trustees,” said [Stephanie O’Sullivan](#), chair of the Board of Trustees. “His deep familiarity with our customers and his demonstrated technical leadership will greatly benefit Aerospace as we work to fulfill our role as a trusted partner to the nation’s space enterprise.”

Prior to this position, Walden worked as the director and program executive officer for the Department

of the Air Force Rapid Capabilities Office in the Office of the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics. In this role, Walden was responsible for directing selected study, development, and fielding activities. Notable recent accomplishments range from launch and development of the X-37B Orbital Test Vehicle, a reusable, unmanned space test platform for the U.S. Space Force to the B-21 Raider, the newest long-range strike bomber for the U.S. Air Force.

Walden previously held positions as technical director on the Air Staff, director of Information Dominance Programs, and director of Air Force Test and Evaluation. He has received the Defense Meritorious Service Medal, the Meritorious Service Medal, and the Distinguished Executive Presidential Rank Award.

Aerospace's Board of Trustees members have a myriad of backgrounds, representing academic and scientific institutions and public, government, and national security interests. These diverse points of view allow the board members to collectively provide better guidance and oversight of the corporation's activities.

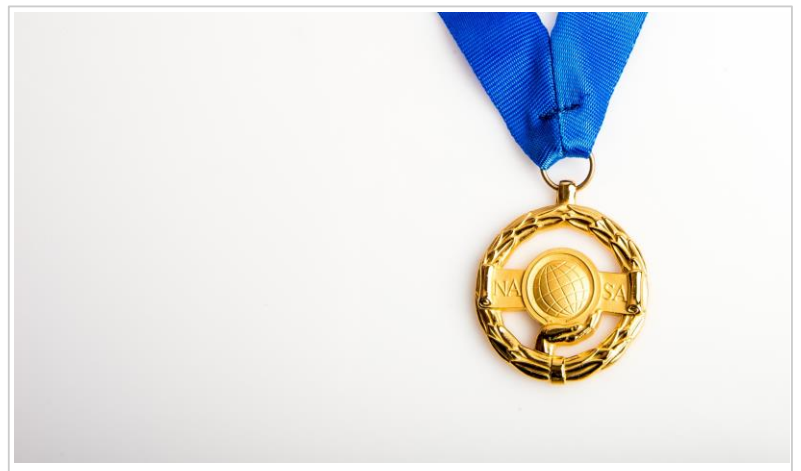
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Aerospace Employees Recognized by NASA for Exceptional Achievements

June 06, 2023

Employees across Aerospace play a key role in shaping the amazing possibilities of space for today and into the future. Through their tireless dedication to advancing new capabilities and delivering unparalleled support to the nation's space programs, Aerospace's experts continue to create impact not only within the corporation but across the industry and beyond. Recently, two Aerospace employees, Cristina Guidi and Martha Hess, were honored for their significant contributions and commitment to NASA, and each were recipients of the agency's Exceptional Public Service Medal.



As one of NASA's highest honors, the medal is awarded to any non-government individual for sustained performance that embodies multiple contributions to NASA projects, programs or initiatives. NASA depends on the deep expertise of Aerospace's technical experts, like Guidi and Hess, to partner on solutions across a broad range of areas. Awards like this highlight the unique connection between Aerospace and its government customers to get the job done.

"When our customers recognize The Aerospace Corporation for excellence, it is a testament to the caliber of talent we bring to some of the hardest challenges in space," said Jeffrey Hanley, General Manager in the Human Exploration and Space Flight Division. "At such a dynamic time for civil space and integration across the space enterprise, Cris and Martha bring invaluable leadership to our customers, our corporation and our people in service to our national goals in space. I'm extremely proud of the work they and their teams are conducting, and I appreciate that they are quick to share the spotlight with their most capable and deserving teams."

Guidi and Hess were presented with their Exception Public Service Medals in April and May, respectively, at NASA's Johnson Space Center and Langley Research Center.

Dedication to Excellence

Cristina Guidi, Principal Director in the Human Exploration and Space Flight Division, joined Aerospace in 2018 after 29 years at NASA. Her current projects include formulating the budget and strategic investments for NASA's Space Technology Mission Directorate (STMD), which develops technologies to support lunar and planetary missions.



Guidi has a unique depth of knowledge that she has strengthened throughout her career.

"The relationship between NASA and Aerospace is extremely important and the key reason is that we speak truth to power," said Guidi. "As an FFRDC, we are independent thinkers and considered the trusted agent of the government. We're in the position of not looking for profit, but for the good of the nation."

After graduating from Florida International University with an electrical engineering degree, Guidi received a master's degree in space systems from Florida Institute of Technology. With 76 launches under her belt throughout her career, Guidi's depth of knowledge is highly valuable to Aerospace and its customers. Her technical acumen, enthusiasm, broad expertise, mentorship and impact on STMD contributed to her being selected for this award.

"I was absolutely honored and humbled to have received this award," said Guidi. "With where I am in my career right now, all I want to do is provide value, provide good advice, good counsel and good services to my customer and nothing else. So, for them to actually recognize me

was very touching and I was definitely humbled. But I think the special part was just the fact that my customer realized and appreciated the value that we're bringing to them and to me, that that just meant the world."

A Culture of Integrity and Collaboration

Martha Hess, Principal Director in Aerospace's Human Exploration and Spaceflight Division, has played an instrumental role throughout her seven years at Aerospace expanding her team from about 15 people to more than 70 to meet the needs of NASA, working on a variety of LEO projects, including the International Space Station and Artemis Program.

"When I came to Aerospace, I knew I had so much to learn from the other Aerospace employees and I really valued my time with people," said Hess. "They taught me how to be an Aerospace employee and about this greater space environment. I was so open to learning from them and to understanding that I had so much to learn. That really made me not only a better Aerospace employee, but also a better NASA-facing resource."

Hess credits her background in the humanities at Texas State University to giving her a unique perspective that has served her well throughout her remarkable career. After graduating and joining NASA as a research scientist working on astronaut candidate selection and cardiovascular research, she joined what is

now Macy's, Inc. in a corporate role. Soon, she found her way back to NASA, where she served as a Program Manager for major development programs and then their Public Affairs and Communications contract for several years. During this period, she honed her skills in strategy and change management, leading many organizational change initiatives for NASA.

Hess's work at Aerospace supporting NASA now focuses on all aspects of human exploration and operations, including the planning and mission design for the Artemis program. Her breadth of expertise and dedication to mission success made her stand out for NASA's Exceptional Public Service Medal.

"Everything that we've done has been a team effort. I wish that this medal went to all the teams that I've been able to work with and be around," said Hess. "It really made me feel good and when I found out that some of my team members actually wrote the citation, I thought that was really sweet and it meant a lot to me."

A Trusted Partner Like No Other

Customer recognition like these highlights how companies across the industry have come to rely on Aerospace's expertise. The innovation and perspective that Aerospace employees bring to the industry is key to the nation's success in space and beyond.



The humanities played a key role in giving Hess the unique perspective she has relied on throughout her career.

“I think [the customer] is realizing that we operate in a special space. NASA has always relied on us for our deep technical expertise supporting some of their biggest problems for a long time,” said Hess. “As the industry is becoming more commercialized, they’re realizing that they need an entity that is conflict-free – something these commercial entities can’t provide. The government and NASA are really learning, as they move into a more commercial space, how important it is to have colleagues like us on the team.”

Congratulations to Cristina Guidi and Martha Hess!

Celebrating Pride Month at Aerospace

June 05, 2023

Throughout June, Aerospace is celebrating Lesbian, Gay, Bisexual, Transgender and Queer+ (LGBTQ+) Pride Month (Pride Month). This year’s Pride Month provides employees a great opportunity to celebrate the LGBTQ+ community at Aerospace and beyond, expand their awareness and understanding of LGBTQ+ rights and issues, and to learn more about becoming effective allies by engaging in a wide range of available activities.



Throughout the month, Aerospace Lambda Alliance (ALA) is offering a variety of opportunities for employees to gather and reflect on this year’s theme, “Proud Inside and Out.” ALA will be hosting events to allow employees and the broader community to get together and celebrate in person and virtually.

On June 18, 1970, the first Pride march took place in New York City to mark the one-year anniversary of the Stonewall Uprising. Today, Stonewall is often remembered as a catalyzing event that gave national attention to the LGBTQ+ rights movement and Pride Month serves as a time for people to reflect on themselves and the individuals and groups throughout history who have advocated for LGBTQ+ rights.

“It’s about bringing people together and giving them a safe space to be themselves and be around people who are like themselves” said Kelly Collett, ALA National Vice President. “It’s a time for everyone to be themselves, be visible, and celebrate who they are. It allows people to take off that shield for a month, a weekend or even a day and be seen.”

Coming Together

On June 20, ALA will host a virtual panel discussion on the topic of “Coming Out and Safety in the Workplace.” The panel will enable speakers and others to share experiences of creating a welcoming

professional environment for each other to be themselves, available employee resources and the impact of being a good ally.

“One of the most important things for being able to work effectively in a place is to feel comfortable and to feel like you’re able to be yourself as appropriate as possible is in the workplace,” said Shannen Daly, ALA Secretary. “That’s what we are hoping to accomplish with this event.”

In June 15, ALA will also be hosting an Aerospace Industry Hoppy Hour at Far Field Brewing Company in Lawndale, CA. The event is open to the aerospace industry and their guests and is a great way for LGBTQ+ folks and allies to gather for a fun evening. Later in the month, ALA will host Pride Ice Cream Socials at various Aerospace campuses across the country. Employees will be able to gather and celebrate Pride Month and the LGBTQ+ community while enjoying sweet treats. Event details will be posted soon.

Giving to the Community:

In states across the country, it has become increasingly challenging for many LGBTQ+ folks to thrive and live as their true selves. Throughout the month of June, ALA is partnering with Aerospace Cares to host a giving campaign that supports a variety of organizations that support the LGBTQ+ community.

“Pride Month is about being proud of who you are no matter who you are,” said Angela Triplett, ALA National President. “Whether you are out or not, it’s a great way for everyone to feel seen and part of a community.”

The Aerospace Lambda Alliance (ALA) is an Aerospace Employee Resource Group (ERG). Membership and participation in all ERGs are open to all employees, regardless of identity.

June 2023 Obituaries

June 01, 2023

Sincere sympathy is extended to the families of:

- ♦ Keith Bearden, member of technical staff, hired Feb. 25, 2019, died May 21, 2023
- ♦ William Bowen, office of technical support, hired April 18, 2011, died March 28, 2023
- ♦ Mark Brown, member of administrative staff, hired Aug. 29, 2011, died May 11, 2023
- ♦ Peter Choban Jr, member of technical staff, hired Feb. 14, 1983, died May 12, 2023
- ♦ Gary Connell, member of technical staff, hired Feb. 19, 1980 retired Sept. 1, 2000, died May 9, 2023
- ♦ Virginia Cook, office of technical support, hired Aug. 27, 1962, retired July 1, 1990, died March 12, 2023
- ♦ Basil Cooper Jr, member of technical staff, hired June 30, 1980, retired June 1, 2007, died March 13, 2023
- ♦ Shirley Eddy, office of technical support, hired Nov. 27, 1962, retired May 1, 1995, died April 25, 2023
- ♦ Lawrence Gladu, member of technical staff, hired Jan. 14, 1980, retired Oct. 1, 2005, died April 3, 2023
- ♦ Douglas Miller, office of technical support, hired March 16, 1981, retired Aug. 1, 2012, died April 25, 2023
- ♦ Earl Mills Jr, member of technical staff, hired Nov. 5, 1984, retired Aug. 1, 2005, died April 15, 2023
- ♦ Lloyd Morrow, office of technical support, hired Aug. 29, 1988, retired Aug. 1, 2014, died Feb. 9, 2023
- ♦ Lester Picot, member of technical staff, hired July 14, 2003, retired Aug. 1, 2020, died April 16, 2023
- ♦ Mark Shockey, member of technical staff, hired Dec. 18, 2000, died May 9, 2023
- ♦ Barry Sine, member of technical staff, hired Sept. 10, 1962, retired July 1, 1990, died March 10, 2023
- ♦ Judy Ungar, member of technical staff, hired Nov. 5, 1984, died April 9, 2023

These articles are reprinted from The Orbiter, a publication of The Aerospace Corporation 2310 E. El Segundo Blvd., El Segundo, CA 90245-4691 310-336-5000

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