

ORBITER NEWS

News, announcements, and more.

A Recognition of Excellence: 2022 Aerospace Corporate Awards

June 23, 2022



The Aerospace Corporation honored technical ingenuity, dedication to mission success and other outstanding contributions by its people at the 2022 Corporate Awards Ceremony Thursday.

The hybrid celebration marked the first time since 2019 that the annual event had an in-person element with individuals gathering at El Segundo, other onsite locations around the country and virtually. The ceremony was hosted by Aerospace President and CEO Steve Isakowitz and Executive Vice President Wayne Goodman.

“Today, we are going to be celebrating the many ways Aerospace and its people are advancing our nation’s leadership in space to meet the challenges of today and make the most of the exciting future in front of us,” said Isakowitz. “There will be cutting-edge technical achievements, creative solutions to hard problems, and inspiring examples of the many ways our people are delivering on our mission for the good of the nation.”

Awards were given out in various categories: Velocity, Growth in Our Value, Innovation, Shaping the Future, Technical Excellence, Dedication to Mission Success, and Commitment to Our People. Additionally, SPOT Award and Employee Resource Group award winners were celebrated.

“The achievements we are recognizing today exemplify Aerospace’s core values and reflect the strategic imperatives that guide us,” said Goodman. “Along with our vision, these elements form the foundation of who we are, and help sustain the excellence that has defined our company since its earliest days.”

The ceremony concluded with the awarding of Aerospace's highest honors: the Program Recognition Award, President's Distinguished Achievement Award, and the Trustees' Distinguished Achievement Award.

Velocity Award

The Velocity Award goes to the **Project Huddle Team** in recognition of their rapid development of an innovative capability that enables cross-platform sharing of architecture and technical data between digital engineering models and analysis tools. By implementing this common data layer which supports consolidation and translation of information across multiple disparate data sources, the team's efforts were key to increasing the speed and efficiency of enterprise integration analyses and enabling the delivery of numerous customer analyses and digital products that could not have been accomplished otherwise.



Members of the Project Huddle Team (center) receiving the Velocity Award from Aerospace President and CEO Steve Isakowitz (right) and Executive Vice President Wayne Goodman (left).

Team Members: Dr. Curtis Iwata, Karina Martinez, Scott Nealon, Mihir Patel, Ken Piper, Aaren Rice, Trent Severson

Velocity Award

The Velocity Award is presented to **Kyle Rudder** who consistently achieved operational excellence in pursuit of developing key contracts for The Aerospace Corporation UK Ltd. Serving as the commercial lead for The Aerospace Corporation UK Ltd, his contractual expertise and responsive problem-solving skills were instrumental in resolving incredibly complex international contracting challenges. Through agile leadership, adroit negotiation, and creative collaboration, Mr. Rudder's efforts led to multiple contracts and technical deliveries for our UK government customers.

Growth in Our Value Award



The Integrated Satellite System Team were recipients of the Growth in Our Value Award.

The Growth in Our Value Award goes to the **Integrated Satellite System Team** for its exemplary performance on a ground-breaking space foreign military sales effort involving a key US ally that will significantly impact the national space enterprise. Using a novel approach and working completely virtually, the team presented systems-agnostic, requirements-based solutions in this \$13 million effort. Its overwhelming success and delivery—on time and under budget despite COVID-19 challenges—is expected to drive follow-on business worth approximately \$8 billion for the national defense industry and hundreds of hours of support to Space Systems Command over the next five years.

Team Members: Carl Billingsley, Krikor Geysimonyan, John Heintz, Elizabeth Klein-Lebbink, Garick Lue-Chung, Dolores Madrid-Anzack, Navneet Mezcciani, Dr. Lawrence Miller, Dr. Tien Nguyen, Dr. Paul Stelling

Innovation Award

The winner of the Innovation Award is the **Massless Payloads for Threat Monitoring Team** for its development of the first-ever massless payloads program, enabling detection and characterization of multi-domain threats to protect national security space and civil space assets. By exploiting commercial pLEO data, the program monitors threats without the need for new sensors, hardware, or launch, laying the foundation for faster pivots to address evolving threats. Customers have called the team's pioneering work "mind-blowing" and have expressed interest in leveraging the award-winning program's capabilities for other applications and initiatives.

Team Members: Dr. Rebecca Bishop, Jehosafat Cabrera-Guzman, Peter Cunningham, Steven Johns, Dr. Thomas Kashangaki, Terence Lee, Dr. Steven Lewis, Andrew Melnick, Jessica Qin, Tanner Stevens, Blair Thompson

Shaping the Future Award

The Shaping the Future Award goes to the **NSG Commercial Opportunities Team**, for its technical and policy leadership.

Team Members: Allan Bartolome, Janene Cullen, John Lang, Michael Miyamoto, Frank Wong

Commitment to Our People Award: Safety

The Commitment to Our People Award for Safety goes to the **Innovative Safety Tools Development Team** for the rapid development and deployment of innovative safety tools that effected corporate change. A check-in tool, initially designed for Aerospace's labs where it allowed more than 800 scientists and engineers to continue working safely on-site during the first phases of COVID-19, proved so effective it was deployed company-wide. Another tool is a model of efficiency, capturing key metrics while reducing closure time on safety issues by more than ten times.

Team Members: Thomas Chiu, Joseph Kamkar, Matthew Lum



Commitment to Our People Award: Corporate Citizenship and Community Outreach



The Commitment to Our People Award for Corporate Citizenship and Community Outreach is presented to the **Future STEM Leaders Team** for extending the impact of Aerospace's STEM efforts through the creation and establishment of the Future STEM Leaders scholarship and mentor program. Over many volunteer hours, the team devised a uniquely supportive program that will benefit local communities nationwide, guiding bright students through college and fostering a future industry that is more diverse and inclusive.

Team Members: Deborah Bullet, Brenda Ching, Paul Deaderick, Ricardo Espindola, Lauren Gandara, Dr. Benjamin Hayes, Lianne McGinley, Iris Nunn, Shawné Raiford, Laura Vannozzi, Dr. George Vazquez, Adina Wadsworth

Commitment to Our People Award: Leadership and Mentorship

The Commitment to Our People Award for Leadership and Mentorship goes to **Bernard Jefferson** for significantly improving the culture of Aerospace with a focus on the area of inclusiveness. Through a pilot program Mr. Jefferson led, junior engineers received focused mentorship and real-time feedback while experiencing a greater sense of belonging. And by leading Aerospace’s engagement through the development of a capstone program with Howard University, Mr. Jefferson increased student participation five-fold and expanded participating disciplines, positioning Aerospace as the beneficiary of his efforts.

Commitment to Our People Award: Diversity, Equity and Inclusion

The Commitment to Our People Award for Diversity, Equity and Inclusion is presented to **Angela Couture** for significantly enhancing Aerospace’s commitment to corporate DEI. Through Ms. Couture’s efforts to create a new university relations and recruiting program, the timely development of an on-the-spot job offer process, a revamped intern program, and three new diversity-based fellowship programs, Aerospace has become a true employer of choice and is proud to have significantly increased the number of women and people of color among our staff. By fostering an environment where diverse candidates can see peers who look just like them, Ms. Couture’s efforts benefit Aerospace today and in the future.

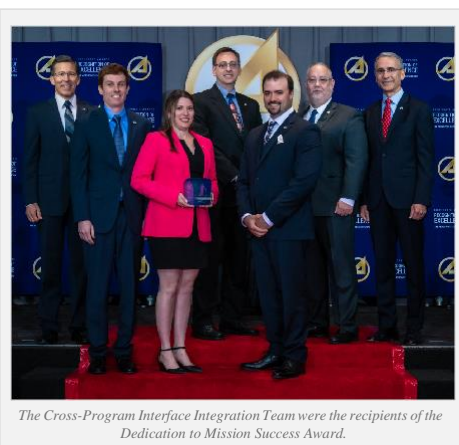
Technical Excellence Award

The Technical Excellence Award goes to the **NASA Orion Heat Shield Team** in recognition of its development of new analytical, test, and inspection techniques supporting design and production assessment of the heat shield on the Orion capsule. After discovering limitations in existing inspection processes, the Aerospace team developed new patented technology, manufactured and calibrated custom inspection hardware, and devised innovative methodologies that revealed dozens of defects on the heat shield’s bond lines, which could have led to mission-ending failure during harsh reentry conditions. The team’s contributions helped return the capsule to acceptable risk for human spaceflight, an expedition that otherwise may not have come to fruition.



Team Members: Pavel Babuska, Dr. Toby Case, Daniel Friedman, Dr. Vinay Goyal, Dr. Shant Kenderian

Dedication to Mission Success Award



The Dedication to Mission Success Award goes to the **Cross-Program Interface Integration Team** for providing forward-leaning vision, innovation, and integrity to ensure national capabilities critical to mission success across a multi-customer enterprise.

Team Members: Dr. Brian Baptista, Robert Barrett, Dr. Nicholas Chapman, Thomas Eden, Dr. Christopher Griffith, Jared Lang, Lauren Perry

Program Recognition Award

The Program Recognition Award is presented to the **Debris Analysis Response Team** for providing exemplary performance on ground-breaking and ongoing critically important work to continue the evolution of the Debris Analysis Response Tool—DART. The Aerospace team employed the latest iteration of DART to conduct hypothetical space debris analysis and assessment to discover the risks, physics, and consequences of key U.S. space operations resulting from on-orbit collisions. The team's exhaustive risk analyses and technical impact assessments aided the nation's senior space leaders in developing

mitigation procedures—measures that would later reinforce decisive mitigation actions that included sheltering the International Space Station astronauts after a real-world collision in space created a significant debris field. The team's outstanding efforts have enabled Aerospace to provide ongoing essential technical support to our customers—enhancing their ability to predict, assess, and respond to collisions in space by better understanding their short-and long-term impacts, enabling safer operations for the United States and our allies.

Employee Resource Group Awards

Aerospace's Employee Resource Groups 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 **James Liao, Michael Auyeung and Ryan Noguchi**.

The Aerospace Black Caucus's Robert H. Herndon Black Image Award recognized **Dr. Leslie King, Lamont Cooper, Shawné Raiford and Ginelle Charles**.

And four people were honored with the Aerospace Women's Committee Women of the Year Award, **Catherine Venturini, Via Van Liew, Shardai Rhodes and Lesli Otake**.

President's Distinguished Achievement Award



The Citra Mission Demonstration Team were among the recipients of the President's Distinguished Achievement Award.

The first President's Distinguished Achievement Award goes to the **Citra Mission Demonstration Team**, for demonstrating a high-value, first-of-its-kind capability to meet a high priority mission for an emerging space customer.

Team Members: Dr. John Hackwell, Deborah Salvaggio, Dr. Lake Singh, Dr. Sean Stuart, David Warren, Dr. Gregory Whittier



The Debris Analysis Response Team were the recipients of the Program Recognition Award.

The second President's Distinguished Achievement Award goes to **Lamont Cooper**, for his exceptional technical leadership in the development of an enterprise Cross Mission Data Transport architecture solution and implementation plan. Mr. Cooper led a joint FFRDC-team through multiple efforts that resulted in the development of an evolutionary resilient command, control and communication architecture plan. The classified approach met warfighter needs for resiliency and supported near-term priorities, while also preserving the ability to evolve the future architecture to fulfill enterprise needs in a contested military space environment. The team's efforts allowed development activity costs for the cross-mission data transport capability to be shared across multiple programs when the development of multiple individual program capabilities would have been unaffordable. Working across competing interests, the team identified technical solutions, on-ramps for technology developments, and funding requirements, meeting a government desire for an enterprise approach that resulted in mission partner-buy-in. Mr. Cooper stepped into this critical program office role while still on staff in ETG and supporting other customers. His work highlighted Aerospace's expertise and technical competencies, while also selecting and integrating "best of breed" technical solution from multiple FFRDCs and contractors to best meet the customers' needs.



Lamont Cooper was also among the recipients of the President's Distinguished Achievement Award.

Trustees' Distinguished Achievement Award



The Whisper Wide Team were the recipients of Aerospace's most prestigious recognition, the Trustees' Distinguished Achievement Award. From left to right: Aerospace Board of Trustees member Jeff Grant (left), Whisper Wide Team members Lee Kenyon and Ted Zogakis, and Isakowitz.

This year's Trustees' Distinguished Achievement Award was presented by Board of Trustees member Jeff Grant. This year's award is presented to the **Whisper Wide Team**.

Team Members: Eugene Grayver, Lee Kenyon, Ted Zogakis

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

“We have much to be proud of, and it is through your tireless efforts that we are able to fulfill our vision as the nation’s trusted partner, solving the hardest problems for the preeminent space enterprise,” said Isakowitz. “We have so many exciting opportunities in front of us to shape the future of space at this dynamic time. I know we will have even more outstanding accomplishments to celebrate at next year’s ceremony.”

Aerospace Employee Awarded NASA’s Highest Honor

June 22, 2022

Aerospace’s collaborative partnership with NASA has been essential to advancing new capabilities and possibilities for space exploration. This would not be possible without the passionate efforts and technical excellence of some of the brightest minds in space creating lasting impact that enable innovations for the future.

Throughout her career, Aerospace’s Sharon Conover has certainly left her mark, having dedicated over 48 years in supporting the advancement of the nation’s continuous human spaceflight capabilities. For her



Aerospace's Sharon Conover received NASA's Distinguished Public Service Medal in recognition for her significant contributions, extraordinary service, dedication, and visionary leadership in program acquisition and partnership management for every NASA human spaceflight program since the Apollo-Soyuz mission.

significant contributions, extraordinary service, dedication and visionary leadership in program acquisition and partnership management for every NASA human spaceflight program since the Apollo-Soyuz mission, NASA recently awarded Conover with its highest honor: the Distinguished Public Service Medal.

“I’m very humbled by this award and I am so thankful to my management for putting me up for an award like this,” said Conover. “It’s a real accolade to my life and career, and for that I am incredibly grateful.”

Conover currently serves as a senior project leader in Aerospace’s Human Exploration and Spaceflight Division. Her primary role is to support NASA’s contracting and commercialization of the International Space Station (ISS). She also works as a contracting officer representative on NASA’s Artemis Exploration Program, the Commercial LEO Destination Program, and the Near Space Network Program.

“I think the role Aerospace plays is pretty vital for NASA,” said Conover. “The continuity that Aerospace provides to this type of work is essential for helping the government. As an FFRDC, I think Aerospace serves as a perfect complement to what government agencies need.”



She added that having been a civil servant working at NASA has helped her gain insight into the diverse

needs and priorities of different customers. This knowledge and experience are essential to supporting programs and helping them get off the ground and into space.

Currently, Conover is working on the Habitation and Logistics Outpost (HALO) module, which is the cornerstone of the Gateway component of the Artemis program. HALO and the Gateway will serve as a multi-purpose orbiting outpost that will have power, propulsion and docking ports attached to it, as well as international habitats and the Orion spacecraft.

The program seeks to get boots back on the lunar surface by sending the first woman and person of color to the moon and will research the moon's poles to find water and understand its ecosystems better.

"I am so thankful to have the ability to live my dream and be fulfilled by the work I do," said Conover. "Being a civil servant leader and helping the agency, the country and the world achieve great things is very humbling."

After graduating from Louisiana State University with Bachelor of Science degrees in computer engineering and math, Conover joined NASA's Johnson Space Center as an aerospace engineer.

Over the course of her career, she has worked as a timeline engineer; built code to analyze moon rocks; served as a space shuttle crew trainer on STS-1, developing programming and training other members; and worked as a flight controller. She also worked as a payloads integration and operations manager, integral in developing baseline ISS commercialization plans and negotiated unique NASA Space Act Agreements with commercial and nongovernment agencies for a wide range of human spaceflight initiatives.



In March, Conover was formally presented with the Distinguished Public Service Medal at a ceremony held at NASA's Langley Research Center.

While this honor certainly stands out as one of the most meaningful awards she's received throughout her career, it is her passion and commitment to advancing humankind's understanding and capabilities for space that has always been and continues to be Conover's primary driver.

"I didn't get this award because I'm special," said Conover. "I got this award because I have been dedicated to human spaceflight for more than 40 years and loved every minute of it — and still do. Every one of my colleagues is equally deserving. It's not about me. It's really about human spaceflight."

Congratulations to Sharon Conover!

Aerospace Black Caucus Celebrates Juneteenth and 50 Years at Aerospace

June 20, 2022

The Aerospace Black Caucus (ABC) held its first hybrid event in almost two years to commemorate its 50th anniversary and the Juneteenth holiday. The keynote speaker for the event featured Dr. Wanda M. Austin, former Aerospace President and CEO and the first woman and African American to hold that role.

Watch [Dr. Austin's Speech here](#).



The Aerospace Black Caucus (ABC) celebrated its 50th anniversary and the Juneteenth holiday with Dr. Wanda M. Austin, former Aerospace President and CEO, as the keynote speaker.

The celebration connected individuals in different locations, providing a sense of community and camaraderie.

Juneteenth National Independence Day was designated as a federal holiday in 2021, commemorating Major General Gordon Granger's arrival in Galveston, Texas, to enforce President Lincoln's Emancipation Proclamation. Granger and his troops' enforcement of the President's order by their arrival in Texas on June 19, 1865, freed an estimated 250,000 slaves.

Established in 1972, ABC is one of four Employee Resource Groups (ERG) celebrating 50 years. Aerospace Asian Pacific American Association (AAPAA), Aerospace Latino Members Association (ALMA) and the Aerospace Women's Committee (AWC) are also recognizing this milestone in 2022.

"In honor of our 50th [anniversary], ABC has created a history book," said Dr. Sherrica Holloman, Senior Project Leader in Aerospace's Human Exploration and Spaceflight Division and the National President of ABC. "The history book recounts many milestones, achievements and [features] special excerpts, including comments from our own President and CEO Steve Isakowitz."

A Community for Progress and Success

The theme of ABC's celebratory event was "It Takes a Village," a phrase that embodies the concepts of community, collaboration, connection and support. Hillary Clinton uses these same words to serve as the title of her 1996 book, emphasizing the importance of these ideas and qualities.



Austin, former President and CEO of The Aerospace Corporation, served as the keynote speaker for the celebration.

"[Clinton] wasn't talking about a geographic location on a map," said Tanya Pemberton, Senior Vice President of National Systems Group (NSG) and the Executive Sponsor of ABC. "She was talking about the network of relationships and values that connect us and the community that develops from that. [ERGs] truly are at the core of our Aerospace village. ABC has always had a strong presence at Aerospace since its inception, and together we're making real progress in advancing diversity, equity and inclusion."

Austin, former President and CEO of The Aerospace Corporation, served as the keynote speaker. She first joined the corporation in 1979 and held various roles throughout her Aerospace career, including General Manager of the MILSATCOM Division, Senior Vice

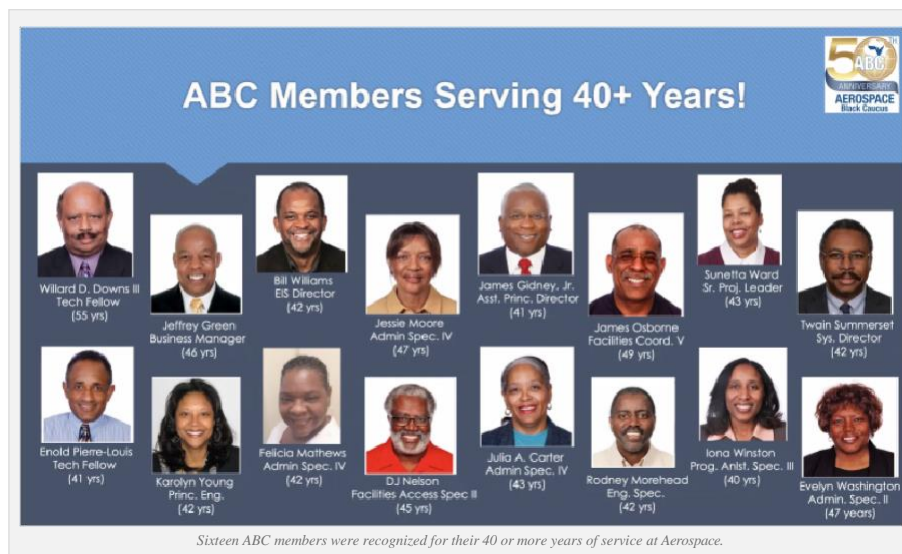
President of the Engineering and Technology Group (ETG) and Senior Vice President of NSG.

“It takes a village to achieve excellence,” said Austin. “When I served as President and CEO, I could feel the village around me and I knew that the village was pulling me, pushing me and sometimes carrying me to ensure our mutual success. And I was extremely grateful for that support and humbled by it. I drew on the village for strength every day.”

Austin shared how the village includes everyone in all corners and at all levels — from family members to Aerospace’s executives, employees, retirees and customers who continue to be invested in the corporation’s success and excellent work. She discussed how the Black experience is different and the challenges and stumbling blocks an individual will encounter on the road to growth and success. She advised attendees to reflect on individuals who encouraged and inspired them, as well as to remember that each person has an impact on their environment and colleagues.

“By drawing on the strength and standing on the shoulders [of the pioneers and employees who preceded us], we can now aim to go farther, faster and get better at delivering our capabilities in the service of our country,” said Austin. “Each of you are the leaders we need to define the future, to develop solutions for the challenges facing our society, and to determine the future of our planet. Be fearless. Be courageous. Be bold. You have the tools to be successful.”

The event also celebrated some of ABC’s longest-serving members: 16 individuals were recognized for their 40 or more years of service at Aerospace. Following the celebration, ABC held a networking social event in the afternoon. Upcoming ABC events include the second African American Townhall with Steve Isakowitz on June 21 and the Third Quarter General Body Meeting on June 22.



Dr. Wanda M. Austin STEM Scholarship

Throughout the month of June, ABC is encouraging donations to the [Dr. Wanda M. Austin STEM Scholarship](#), which provides support and resources to underrepresented students pursuing STEM degrees. The Aerospace Corporation established this scholarship in 2015 in recognition of Austin’s dedication to service and STEM education.

The Aerospace Black Caucus (ABC) is an Aerospace Employee Resource Group (ERG). Membership and participation in all ERGs are open to all employees, regardless of identity. If you’d like to learn more and find opportunities to get involved, please visit the ERG Website.

Six Promising Students Awarded Aerospace Scholarships to Pursue STEM Studies

June 20, 2022

EL SEGUNDO, Calif., June 20, 2022 –

In support of the company's commitment to advancing diversity, equity, and inclusion in the space sector and strengthening the science, technology, engineering, and math (STEM) pipeline, [The Aerospace Corporation](#) awarded scholarships to six students in the regions of its major offices: El Segundo, Calif.; Huntsville, Ala.; Colorado Springs, Colo.; Albuquerque, N.M.; Chantilly, Va.; and Hill, Utah.



Each year, the Dr. Wanda M. Austin STEM Scholarship and up to five Aerospace Future STEM Leaders Scholarships are granted to high achieving students from underrepresented populations who are studying STEM disciplines.

Dr. Wanda M. Austin STEM Scholarship

Bryan Ovidio Chun is the recipient of this year's Dr. Wanda M. Austin STEM Scholarship. It includes a \$10,000 grant per year, renewable for four years, as well as a paid internship at Aerospace. Chun is the 2022 valedictorian for Montebello High School in Montebello, Calif. He plans to continue his studies this fall in mechanical engineering at the University of California, Los Angeles.

"Through his passion, academic excellence and dedication to serving others, Bryan is the type of promising young technical leader our nation will rely on," said [Steve Isakowitz](#), Aerospace president and CEO. "We are proud to support Bryan and all of our scholarship recipients as they continue their academic journeys, and we remain committed to ensuring students from all backgrounds have opportunities to pursue careers in STEM fields and shape the future of space."



Bryan Ovidio Chun is the recipient of this year's Dr. Wanda M. Austin STEM Scholarship.

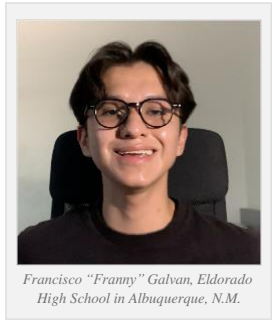
Chun's interest in space began in third grade when he read a book about the planet Neptune, which led to an academic STEM pursuit. He has excelled in rigorous Advanced Placement (AP) courses to become an AP Scholar and helped launch a dual-enrollment program collaboration with a local community college, opening the door to academic opportunities for not only himself, but his peers. His passion for service was exemplified in his participation at local food distribution drives, school beautification projects, and beach cleanup efforts. Chun will be a first-generation college student and hopes to inspire the next generation of STEM leaders through future potential discoveries in astronomy.

Aerospace Future STEM Leaders Scholarship

The Aerospace Future STEM Leaders Scholarship provides professional mentorship from Aerospace employees throughout each recipient's senior year of high school, as well as a one-time \$5,000

scholarship for each recipient's public or private four-year college or university.

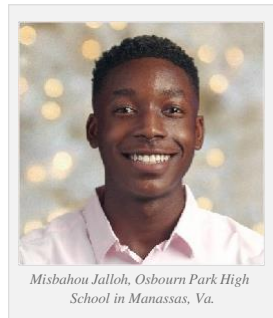
Francisco “Franny” Galvan is a rising junior at Eldorado High School in Albuquerque, N.M. While maintaining an impressively high GPA with Honors, AP, and taking classes at the University of New Mexico, Franny also helps and supports his classmates by ensuring that they all feel included and welcomed. His interests and hobbies include photography, fashion, and coding. He aspires to pursue a career in computer science, robotics, or biomedical engineering, while integrating his passion for art and design.



Pyper Aldrich, Thomas B. Doherty High School in Colorado Springs, Colo.

Pyper Aldrich is a rising senior at Thomas B. Doherty High School in Colorado Springs, Colo. She was elected student body president of her student council and takes part in the National Honors Society, Link Crew, SkillsUSA, Robotics, Science Olympiad, Aerospace Club, and the CONRAD Challenge. She is also on her school's varsity softball team. She plans to study aerospace engineering and atmospheric environmental science in college.

Misbahou Jalloh is a rising senior at Osbourn Park High School in Manassas, Va. He is currently taking physics courses with George Mason University through dual enrollment. He aspires to become a quantum physicist after he graduates high school.



Rianna Cassibry, James Clemens High School in Madison, Ala.

Rianna Cassibry is a rising senior at James Clemens High School in Madison, Ala. She is a current officer of the Society of Women Engineers at her school and mentors in the Girls Who Code Club at Heritage Elementary School. She is interested in pursuing mechanical engineering as a career path.

Brighton Farr is a rising senior at the DaVinci Academy of Science and the Arts in Ogden, Utah. He is excited to take college courses and work toward earning a degree in mechanical engineering starting in the fall of 2022



Both the Dr. Wanda M. Austin STEM Scholarship and Aerospace 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 Aerospace Corporation

The Aerospace Corporation is a national nonprofit corporation that operates a federally funded research and development center and has more than 4,500 employees. With major locations in El Segundo, Calif.; Albuquerque, N.M.; Colorado Springs, Colo.; 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).

Press Release: Stephen W. Preston Elected to Aerospace's Board of Trustees

June 16, 2022

EL SEGUNDO, Calif., June 16, 2022 – The Aerospace Corporation (Aerospace) has elected the Honorable Stephen W. Preston, former general counsel of the Department of Defense (DoD) and the Central Intelligence Agency (CIA), to its Board of Trustees.



“At a time of unprecedented growth across all sectors of space, Stephen’s familiarity with and understanding of our customers’ needs across both the defense and intelligence communities will help ensure we fulfill our role as a trusted partner to the nation’s space enterprise,” said Steve Isakowitz, Aerospace president and CEO. “Stephen brings extensive legal and national security expertise to our board that will be very beneficial as Aerospace navigates this pivotal moment in the space industry.”

Preston is the first person to have held both Senate-confirmed positions of general counsel of the DoD and, prior to that, general counsel of the CIA. He has also served as general counsel of the Navy and in other positions at the Pentagon and the U.S. Department of Justice. He is currently a partner at WilmerHale and chair of the firm’s Defense, National Security, and Government Contracts practice. His work includes investigations, litigation, federal procurement, civil fraud, foreign investment in the United States, cybersecurity, strategic counseling, and crisis management. He has also written and spoken widely on topics relating to law and national security, and he has testified before Congress on several occasions.

“We’re thrilled to welcome an individual of Stephen’s distinguished caliber and expertise to Aerospace’s Board,” said Stephanie O’Sullivan, chair of the Board of Trustees. “His experiences across the defense, intelligence, cybersecurity, and legal sectors will bring invaluable strategic insight and stewardship to the efforts of this organization.”

Aerospace’s Board of Trustees has 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.

ABOUT THE AEROSPACE CORPORATION

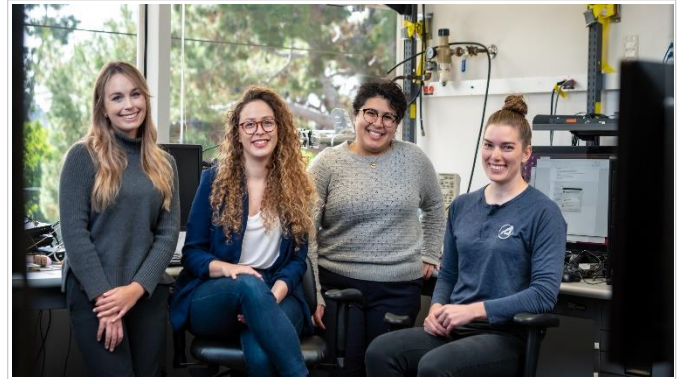
The Aerospace Corporation is a national nonprofit corporation that operates a federally funded research and development center and has more than 4,500 employees. With major locations in El Segundo, California; Albuquerque, New Mexico; Colorado Springs, Colorado; and the Washington, D.C. region, Aerospace 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).

Shaping the Future of Space with Data Science & Artificial Intelligence

June 14, 2022

The space domain's rapid expansion has emphasized the need to operate faster and with broader awareness to stay ahead in an increasingly complex environment. As a result, interest in new technologies and approaches, such as artificial intelligence and machine learning (AI/ML), continues to increase as organizations consider how innovative capabilities can be meaningfully incorporated to augment mission success.

Through its innovative development of cutting-edge end-to-end solutions and cultivation of top technical experts, The Aerospace Corporation is well-positioned to work effectively with the nation's space agencies and partners to address pressing challenges.



The all-women leadership team is leading innovation while also prioritizing the creation of a comfortable environment for all—building a brighter future for Aerospace and STEM. (From left to right: Liz Davison, Celeste Manughian-Peter, Silvia Chavarin, and Panna Felsen.)

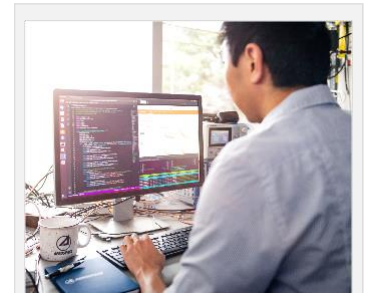
Aerospace is actively identifying opportunities to leverage data science and AI/ML applications and methodologies to improve efficiency and close gaps throughout the mission lifecycle.

“The work that we do is quite varied since the customers we interact with reflect Aerospace’s diverse contributions across the space enterprise,” said Liz Davison, Director of the Data Science and Artificial Intelligence Department. “The value Aerospace brings is in supporting our customers to understand the best uses of new technologies, create prototypes and conduct testing, and help users through that implementation process.”

A Team of Teams

Aerospace’s Data Science and Artificial Intelligence Department, which is led by an all-women leadership team, is organized into three sections to address different focuses and needs. The Data Science Applications team examines how data science can offer solutions. Technical staff develop models, tools and other applications on a quick-turnaround timeline to contribute to high-impact customer areas.

The Data-driven Research and Algorithms section operates with a longer-term focus and adopts a more exploratory approach by conducting research and investigating new technologies.



Interest in data science and AI/ML is continuing to rise, and The Aerospace Corporation is investigating how the field can improve efficiency and close gaps.



Aerospace’s Data Science and Artificial Intelligence Department, led by an all-women leadership team, is organized into three different teams to address different focuses and needs prevalent in the space enterprise.

Working closely with these two departmental teams, the Machine Learning Engineering section is geared towards shifting models into production, often one of the most challenging steps in ML development. Personnel assist with the transition of research products and applications. This three-pronged approach illustrates Aerospace’s commitment to growing and maintaining knowledge across multiple aspects of data science and AI/ML, as well as the promising potential it holds to benefit the space enterprise.

“Computers can process and parse data faster than a human can,” said Panna Felsen, Manager of the Data-driven Research and Algorithms team. “Embracing that speed and utilizing data science

and AI techniques is advantageous for the human in the loop. Data science applications can shorten the time it takes to reach a critical decision-making period and can also improve the value of information being conveyed to human decisionmakers.”

An Environment for Excellence

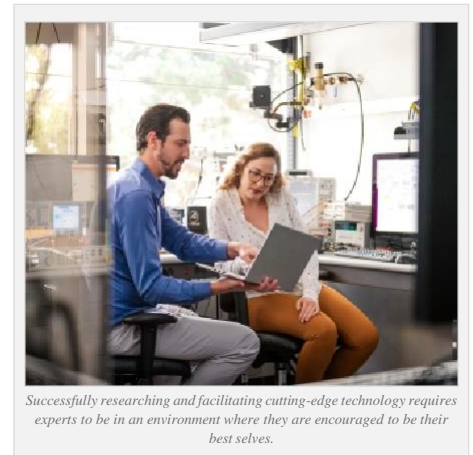
Pursuing the research and facilitation of cutting-edge technology is at its most effective when experts are encouraged to be their best selves—objectively bringing forth and sharing ideas, problem-solving skills, and creativity. This requires not only the attraction and retention of talented bright minds, but also a sustained work environment in which team members are actively engaged to identify and develop impactful solutions.

Each team leader has their own style in how they build an empowering and inclusive environment, providing activities that encourage professional development and connection with peers. Managers also support their team members in understanding personal strengths. By doing so, personnel have a launchpad to be strong voices that ultimately guide Aerospace in innovation, objectivity, and mission success.

“I have been very fortunate to have many mentors that have really cared what I’ve been doing and have advocated for me throughout my whole career,” said Silvia Chavarin, Manager of the Machine Learning Engineering team. “Mentorship is absolutely valuable and it’s critical to keep identifying ways to give back not just to the Aerospace community but also in general.”

By developing their teams, these leaders are shaping a brighter future for Aerospace and the broader STEM field. In turn, these nurtured individuals are driving Aerospace’s capability in pushing the boundary of what’s possible and advancing the space enterprise.

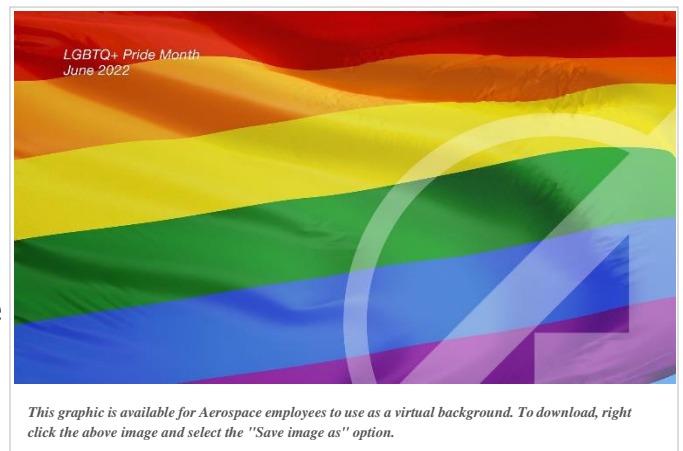
“It’s really important to have an example of someone you can kind of see yourself working towards,” said Celeste Manughian-Peter, Manager of the Data Science Applications team. “Having this all-female team sends the message that Aerospace is a place where diverse candidates can come work and be successful.”



Celebrating LGBTQ+ Pride Month at Aerospace

June 08, 2022

June is Pride Month, which is celebrated each year across the nation in recognition and support of the LGBTQ+ community. At Aerospace, Pride Month provides employees a great opportunity to 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.



This year, the Aerospace Lambda Alliance (ALA) is hosting several events throughout June in honor of Pride Month and has curated a list of external events to encourage outreach with the broader community.

“One of the important goals of ALA is to reach out to employees and their family members who are emotionally vested in LGBTQ+ issues and may be struggling or feel uncomfortable sharing with coworkers,” said Angela Triplett, National President of ALA. “Aerospace values creating an inclusive environment where employees can be their best selves, and a big part of achieving that goal is through allyship.”

In addition, ALA is also kicking off its inaugural LGBTQ+ Book Club, which will periodically provide book recommendations and opportunities for Aerospace employees to get together and discuss. The first book selected is critically acclaimed comedian Hannah Gadsby’s memoir, *Ten Steps to Nanette*. Her memoir chronicles growing up in Tasmania, where homosexuality was illegal until 1997, as well as her early forays into comedy and later-in-life diagnoses of autism and ADHD.

“We hope to use this forum to introduce and elevate LGBTQ+ authors and stories, particularly those at the intersections of identities,” said Kelly Collett, National Vice President of ALA. “We’ll keep a running list of recommended books on our website and select new ones every so often for discussion. Employees are welcome to share suggestions on authors, books or topics they’d like covered as part of the book club.”

Participate in LGBTQ+ Giving Campaign

ALA has also partnered with [Aerospace Cares](#) and the Aerospace Committee for Equality (ACE) to host a giving campaign throughout the month of June that is focused on local outreach to LGBTQ+ Centers, especially those near some of the company’s regional offices.

ALA selected organizations that provide a safe space and life-saving support to members of the community, including food, shelter and healthcare access. While the COVID-19 pandemic lingers, many LGBTQ+ community members continue to lack access to needed resources as they continue to fight for equal rights and demand for an end to hate crimes and violence.

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. If you’d like to learn more and find opportunities to get involved, please visit the ERG Website.

NASA Honors Aerospace’s Goyal, Babuska, and Keough for Outstanding Contributions

June 02, 2022

Over the years of productive partnerships, NASA often requests Aerospace’s assistance on some of their toughest space problems. NASA will recognize Aerospace’s latest achievements with three awards to be conferred in the coming months.

Dr. Vinay Goyal will be presented with **NASA's Exceptional Public Service Medal** in April, which is a prestigious medal awarded by NASA to any non-government individual for sustained performance that embodies multiple contributions to NASA projects, programs, or initiatives.

The award is in recognition for Goyal's "outstanding engineering analysis, methodology development, and structural engineering support to safety of flight assessments that are of critical interest to NASA and its missions."

With over 15 years of dedicated service and involvement with NASA projects and programs, Goyal is being honored for his exceptional dedication to resolving structural design technical issues and applying analysis and test methods to numerous critical spaceflight activities.

NASA highlighted Goyal's insights and leadership in the validation of the Orion's heatshield design by engaging the broader technical community, resulting in the development of novel, non-destructive evaluation techniques that are now part of the standard Orion heatshield processing flow. In addition, NASA highlighted his technical guidance that allowed the program to consider alternative approaches for validation of the structural integrity and flight safety for the heatshield.

"This is an incredible honor and demonstrates our team's extraordinary ability to produce innovative solutions to some of the most critical issues NASA faces," said Goyal, Technical Fellow in the Launch Systems Division. "Specifically, on the Orion heatshield design, our team first showed NASA an inspection issue, Shant Kenderian and Toby Case designed and deployed a state-of-the-art non-destructive evaluation software that played a critical role in detecting over dozens of defects in the first builds, while Pavel Babuska and Daniel Friedman developed innovative methods to assess these defects."



Aerospace's Dr. Vinay Goyal (left) and Pavel Babuska (right), along with Matthew Keough (not pictured), are recipients of NASA NESC Group Achievement Awards.



Dr. Vinay Goyal will be honored with the Exceptional Public Service Medal, which is NASA's highest form of recognition awarded to any non-government individual for sustained performance that embodies multiple contributions to NASA projects, programs, or initiatives.



Matthew Keough, Senior Project Leader in WSF-M Space Systems.

Goyal, along with Aerospace colleagues Pavel Babuska and Matthew Keough, will receive the **NASA NESC Group Achievement Award** for leading the effort to revise the Special Publication, NASA-SP-8007 "Buckling of Thin-Walled Circular Cylinders". Leveraging Aerospace's extensive expertise, the team led a collaboration with experts from NASA, industry and the United States Army to revise this document, which is internationally used in aerospace vehicle designs and provides valuable weight-reduction analysis and test methods to prevent buckling.

Finally, Babuska and Goyal were selected as part of a team for a separate **NASA NESC Group Achievement Award** for their leadership role in the investigation and determination of the root cause of the Arecibo Observatory collapse in Puerto Rico. The effort involved significant collaboration across organizations and their work explained contributing factors and probable causes for the failure and provided recommendations to prevent similar failures in

the future. The work has been presented to members of Congress; to the National Academies of Sciences, Engineering, and Medicine (NASEM) committee; while a formal report was issued by NASA, and portions of the work have been published in the literature and technical bulletins.

“I really enjoy the relationship Aerospace has with the NASA NESC because it serves a similar function to the NASA agency as Aerospace does to its customers. Because of this, the technical interchanges are deep, productive, and the objectives are really understood between the organizations,” said Babuska, Engineering Specialist in the Structures Department.

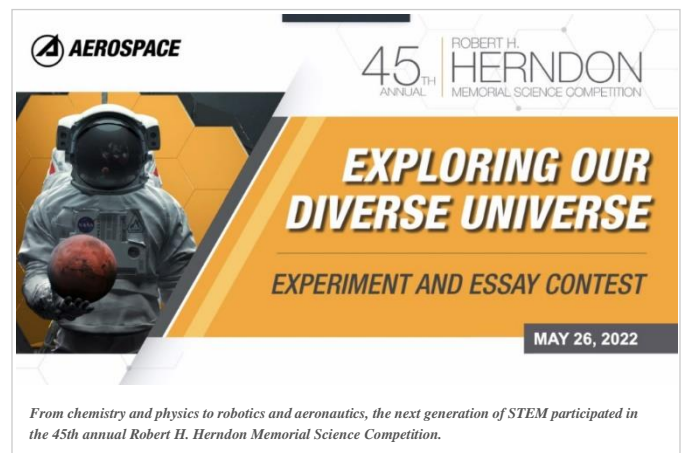
These NASA awards highlight the special relationship between NASA and Aerospace’s deep expertise across disciplines. The awards will be presented at formal award ceremonies in March and April at NASA Langley Research Center.

Congratulations to Dr. Vinay Goyal, Pavel Babuska and Matthew Keough!

Students Demonstrate Curiosity and Innovation at the 45th Herndon Science Competition

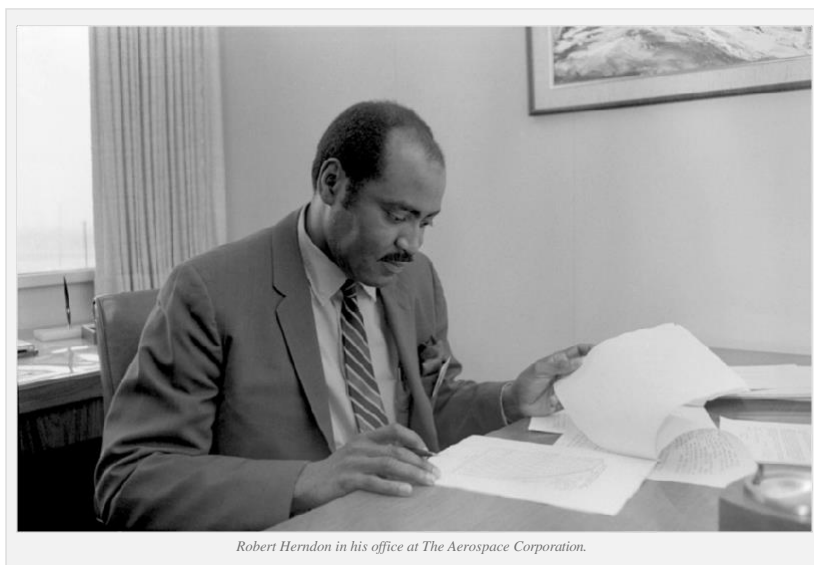
June 02, 2022

The future of STEM participated in the 45th annual Robert H. Herndon Memorial Science Competition. Brought back this year, the experiment contest challenged student teams to demonstrate their innovation across a variety of science disciplines — from chemistry and physics to robotics and aeronautics. This year’s science essay competition theme aligned to the space domain’s increasingly rapid development, asking bright middle and high school students to submit works that delved into the topic of Exploring Our Diverse Universe.



“The theme this year is diversity, emphasizing that a diverse approach is vital to continue learning about our universe,” said Dr. Gretchen Lindsay, General Manager of Aerospace’s Communications Technologies and Engineering Division, during her welcome remarks. “As aspiring scientists, each of you has the power to design new technology, solve challenging problems and answer questions about our world that will shape and reimagine our future in space, on this planet and maybe even other planets like Mars.”

The competition is named after the late Robert H. Herndon, who served as an engineer, manager and mentor to many at Aerospace. Herndon was the first Black engineer at North American Aviation. He joined Aerospace as a structural engineer in 1961 and eventually became a group director of the Advanced Mission Analysis Directorate.



Robert Herndon in his office at The Aerospace Corporation.

The annual event was established for middle and high school students in Los Angeles County in 1977, and an East Coast counterpart for the Washington D.C.-area began in 2000. The competition's guiding objective is to spark and encourage interest among unrepresented students in science, engineering and technology, and increase diversity across the aerospace sector.

Recently, Aerospace had the opportunity to judge four regional science fairs in the Washington D.C.-area. In addition to giving community awards at each event, Aerospace invited 79 student projects to participate in the Herndon Science Competition. A total of 25 different schools from the West and East Coasts were represented in this year's competition.

The Essay Evaluation Committee judged 11 works based on a set of criteria, which included the quality of analysis and demonstrated technical depth according to the writer's grade level. For the experiment contest, judges reviewed 29 abstracts and selected the top entries for final judging. Prior to their live presentations, finalist teams could request support from an Aerospace advisor.

This year's keynote speakers were Ashley Carpenter, 2019 Dr. Austin STEM Scholarship recipient, and Itzel Sanchez, the 2020 awardee of the same scholarship and a former Herndon Science Competition participant.

"I want to congratulate all of you for competing in Aerospace's longest- running science competition," said Carpenter. "And I applaud you for challenging yourselves and pursuing extra activities that will help you find your passion. Having passion and believing in yourself are both very important and will sustain you as you reach for your dreams. I encourage all of you to dream big."



Ashley Carpenter, 2019 Dr. Austin STEM Scholarship Recipient.



Itzel Sanchez, 2020 Dr. Austin STEM Scholarship Recipient.

Both shared their journey in finding and pursuing STEM, challenges they faced and overcame, and key figures that provided guidance, including high school teachers and Aerospace mentors. For Itzel, participating in her high school's robotics club helped her find a place of belonging and set her on her STEM path.

"I was so amazed at what these students were doing, and I felt like I was missing out on a cool experience," said Itzel. "It was a challenge to explore this new extracurricular, especially because I had no experience in robotics."

Over time, I have grown and learned. I realize now that the high school robotics club was much more than competing in tournaments. This was a network of students of color who were changing the image of my hometown through STEM.”

2022 Herndon Science Essay Competition Winners:

2022 Herndon Science Essay Competition Winners				
Category	Place	Name	Title	School
High School	First	Alyssa Mastro	Alternative Energy Sources in Space	Woodson High School
High School	Second	Kristen Sayano	Coronagraphic Spectrometry: A New Method for Exoplanet Detection and Classification	West High School
High School	Third	Caelan Hagopian	Investigating the Future of Energy: the Conundrum of Limitless Resources for Space Exploration	Woodson High School
Middle School	First	James Sayano	Re-imagining the Future	Jefferson Middle School
Middle School	Second	Aanya Tripathi	Robots Change Space Exploration	Bert Lynn Middle School
Middle School	Third	Humza Khan	Digging Deep into Our Vast Universe	Bert Lynn Middle School

2022 Herndon Experiment Competition Winners				
Category	Place	Name	Title	School
High School	First	Alison Stosser, Jordan Tritasavit, Max Zhang and Tinh Nguyen	The Seahorse	El Segundo High School
High School	Second (tie)	Ravin Joshi	Constructing a Reusable Solid-fuel Rocket Capable of Propulsive Landing	Academies of Loudon
High School	Second (tie)	Shaunak Sinha	PAMN: A Novel Cooperative Modular Neural Network to Accurately Predict and Optimize Electrical Energy within Heaving Point Absorbers	George C. Marshall High School
High School	Third	Justin Pokrant	The Effect of Seawall Design on Flood Prevention	Westfield High School
Middle School	First	Errine Park, Yuha Lim and Gavin Sarmiento	Arduino Package Protector	Rudecinda Sepulveda Dodson Middle School
Middle School	Second	Alex Zakrewski, Sebastian Muniz, Desmond Sparks, Andrea Menendez and Gavin Wilson	Filtering Harmful Coliform Bacteria from Lake Water Using Wood	Dana Middle School
Middle School	Third	Gema Solorzano and Michelle Salgado	Solar Engine	Montebello Intermediate School

June 2022 Obituaries

June 01, 2022

Sincere sympathy is extended to the families of:

- Timothy Bell, office of technical support, hired June 24, 1985, retired Feb. 1, 2021, died March 27, 2022
- James Emerson, office of technical support, hired Jan. 5, 1987, retired April 1, 1992, died April 3, 2022
- Richard Farrar, member of technical staff, hired June 4, 1962, retired Oct. 1, 1996, died April 27, 2022
- Edward Feigenbaum, member of technical staff, hired Sept. 3, 1975, retired Dec. 1, 2001, died April 28, 2022
- John Gebhard III, member of technical staff, hired Sept. 8, 1964, retired Oct. 1, 1996, died March 21, 2022
- Beverly Hawking, office of technical support, hired Oct. 13, 1970, retired April 1, 2000, died April 23, 2022
- Douglas Heydon, member of technical staff, hired Nov. 3, 2003, retired Jan. 1, 2010, died April 15, 2022
- Carmelita Hohenstein, office of technical support, hired Jan. 23, 1978, retired Feb. 1, 1994, died April 27, 2022
- Michi Ishii, office of technical support, hired Feb. 22, 1971, retired Jan. 1, 1992, died April 20, 2022
- Robert Lee, member of technical staff, hired Feb. 15, 1981, retired Nov. 1, 1988, died March 2, 2022
- Wallace Lee, member of technical staff, hired Aug. 6, 1984, retired Nov. 1, 2003, died March 17, 2022
- Gary Mason, member of technical staff, hired Oct. 15, 1979, retired Dec. 1, 1999, died April 23, 2022
- Phyliss Mason, member of administrative staff, hired Jan. 19, 1978, retired Oct. 1, 1998, died July 9, 2021
- Richard Schneidmiller, member of technical staff, hired March 3, 1974, retired July 1, 1991, died March 17, 2022

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