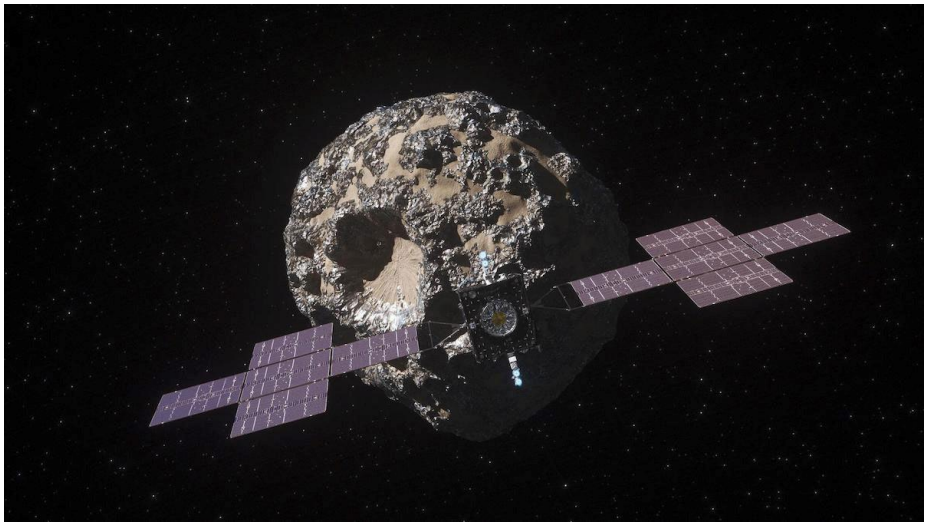
AEROSPACE

ORBITER NEWS

News, announcements, and more.

NASA’s Psyche Mission Could Unlock Secrets to How Planets Are Formed

February 26, 2024



NASA’s Psyche mission recently launched a spacecraft on a 2.2 billion-mile journey to study a giant metal-rich asteroid located at the far edge of the main asteroid belt between Mars and Jupiter. The asteroid, named 16 Psyche, could aid researchers to better understand unexplored building blocks of planetary formation.

The Aerospace Corporation provided support across a breadth of technical activities for the mission, which is led by Arizona State University and NASA’s Jet Propulsion Laboratory.

“What makes 16 Psyche unique is that it’s an all-metal body. Most things in the asteroid belt are either rock or ice, but 16 Psyche is a nickel/iron composition and we think it’s that way because it’s the core of what was an early planet that never formed,” said Kimberly Sover, Senior Member of Technical Staff at Aerospace. “So, while we can’t directly observe Earth’s core, we can take direct observations of this Psyche asteroid.”

The spacecraft is expected to reach 16 Psyche’s orbit in late July 2029 and will fly a payload that can analyze the asteroid’s metallic and silicate constituents, map its elemental composition and interior structure, and measure its magnetic and gravity fields.

Read the full article on Aerospace.org.

Exceptional Engineers: A Week of Celebration

February 21, 2024

Aerospace's ability to lead from the front is due in large part to the diverse talent and perspectives of its scientists and engineers. Their technical expertise not only serves as the backbone of Aerospace, but they also play a critical role in inspiring the next generation of STEM leaders. To recognize their contributions and impact, Aerospace is celebrating Engineers Week (EWeek) this year in a number of ways.

Since 1951, EWeek has sought to inspire future generations of engineers through facilitating outreach and engineering activities for youth in the community. Founded by the National Society for Professional Engineers, EWeek has grown to include hundreds of companies and organizations contributing to the goal of expanding interest in engineering and increasing diversity within the engineering workforce.

Inspiring the Future

Aerospace volunteers will be giving back and uplifting the next generation of engineers in celebration of EWeek by sharing insights about their journey and careers at Gahr High School's Introduce a Girl to Engineering Day.

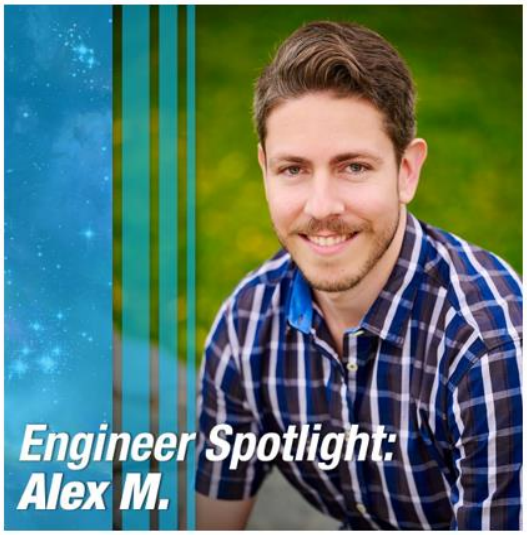
Employees will also be volunteering at EXP's Women in STEM Career Day, where they will talk about the importance of diversity to achieve innovation.

They will also share their experiences with high school girls and non-binary students to talk about what motivated them to become engineers.

EWeek 2024

Getting Social

This year, Aerospace will be sharing the stories of the engineers on the Aerospace team via social media throughout EWeek. By following along on platforms like Instagram, you can learn more about the some of the passionate engineers here at Aerospace and what drives them to excel.




Engineer Spotlight:
Andrew R.


Engineer Spotlight:
Heath M.


Engineer Spotlight:
Ryan W.


Engineer Spotlight:
Victoria R.


Engineer Spotlight:
Michael T.


Engineer Spotlight:
Patrick R.

Aerospace’s 2023 Annual Report: Leading in a Dynamic Era of Space

February 15, 2024

Space today is a transformed domain, remade by both an unprecedented wave of technological innovation as well as serious threats that must be outpaced. At this critical time, The Aerospace Corporation is helping lead the way forward with a focus on delivering end-to-end solutions at speed to strengthen our nation’s security and power a new era of progress.

This year, Aerospace continued to broaden our impact, collaborating across the space enterprise to shape integrated, resilient architectures to rapidly deliver needed capabilities to our partners. We are deepening ties with commercial and international partners to create new opportunities and leverage cutting-edge technologies that support our customers’ missions. We are partnering widely with government, industry and academia to develop emerging ecosystems—such as in-space servicing, assembly and manufacturing and cislunar operations – that will strengthen the nation’s leadership in space, from low Earth orbit to the moon and beyond.

As the leading research and development center for the nation’s space programs, Aerospace’s team of world-class experts is advancing innovative concepts and prototypes ahead of customer need, including in areas like cybersecurity, artificial intelligence and physics-based modeling and simulation. We continue to invest in Aerospace’s differentiating technical and laboratory capabilities, embracing an integrated digital-first approach to bring greater speed and agility throughout the mission lifecycle.

At Aerospace, we recognize that the future success of our industry relies on a vibrant, robust workforce that can leverage diverse perspectives and experiences to tackle the complex challenges we face. We are proud to play a leading role in Space Workforce 2030, a groundbreaking collaborative effort to build and strengthen the pipeline of talent entering our industry. We remain committed to shaping an inclusive culture that empowers all of our people to lead and do their best work in support of our mission.

We invite you to learn more about how Aerospace is shaping this new space age and delivering critical capabilities to our partners in the 2023 Annual Report. It demonstrates the unique value only Aerospace can provide, and our unwavering commitment to fulfill our vision: *The nation’s trusted partner, solving the hardest problems for the preeminent space enterprise.*

Explore the **2023 Annual Report** here.

Press Release: Forbes Names Aerospace One of America's Best Midsize Employers

February 14, 2024

The Aerospace Corporation was named one of America's Best Midsize Employers 2023 by Forbes magazine for the fourth consecutive year. This is Aerospace's eighth year and ninth time overall to be recognized by Forbes.

Aerospace secured a position on the list as a best midsize employer from 2016 until 2019, and from 2021 until 2024 Additionally, Forbes recognized Aerospace as one of the Best Employers for Diversity in 2019.

"We're honored to be on Forbes Best Midsize Employer list for the eighth time," said Heather Laychak, Aerospace's Chief People Officer. "It is a remarkable achievement and underscores our employees' unwavering dedication and commitment to building an exceptional workplace environment."

Collaborative initiatives are at the core of our work and underscore a commitment to teamwork and innovation. Our technical experts span every discipline of space-related science and engineering, positioning Aerospace to solve the hardest problems facing our nation's space programs. Aerospace's implementation of a flexible, hybrid work model empowers employees and promotes a strong work-life balance while continuing to meet that mission.

To foster inclusivity, Aerospace has prioritized diversity through robust employee resource groups, providing platforms for varied perspectives, and through the Space Workforce 2030 initiative, which is a collective effort from 30 space companies to improve diversity in the industry and to provide measurable results.

These strategic enhancements reflect Aerospace's dedication to addressing complex challenges, creating a dynamic and progressive workplace, and to shaping the future of the space industry as a whole.

The Forbes America's Best Midsize Employers list was compiled through an independent survey of 50,000 Americans who worked for businesses with at least 1,000 employees. Participants were asked their willingness to recommend their employers and to nominate other organizations. These rankings were based on the number of recommendations each company received.

Four Aerospace Leaders Recognized at the 2024 Herndon Awards Ceremony

February 12, 2024

The 2024 Herndon Award recipients at the celebrations in El Segundo and Crystal City from left to right: Paul Deaderick, Yvette Harris, Briana Davis and Journalia Clowers.

Building a strong collaborative culture that incorporates diverse perspective and expertise enables Aerospace to advance the best solutions. Aerospace fosters a culture where everyone is encouraged to lead by example, bringing their best selves to collaborate on achieving a shared mission. Last week, the Aerospace Black Caucus (ABC) celebrated four individuals at the 42nd Robert H. Herndon Black Image Awards for demonstrating this leadership through their accomplishments within and outside of Aerospace. Briana Davis, Journalia Clowers, Paul Deaderick and Yvette Harris were recognized during the bi-coastal ceremony in El Segundo and Crystal City, with viewing parties hosted at other locations.

The Herndon Award recognizes African American employees who exemplify professional and humanitarian qualities at the individual, corporate, and community levels. It is presented annually during Aerospace's observance of African American History Month (AAHM).

"I strongly believe we do our best and most innovative work when we are able to bring together people with different experiences and different backgrounds," said Steve Isakowitz, President and CEO of Aerospace. "It is this unity and purpose that allows us to build strong diverse teams that can deliver the innovation this nation needs."

Family members of Robert Herndon (left) were some of the many who attended this year's Herndon Awards ceremony.

The Herndon Award was created in 1982 to honor the memory of Robert H. Herndon, an extraordinary Aerospace engineer and manager. The award recognizes individuals' professional achievements beneficial to the corporation, their contributions to the quality of community life at large, and their personal development. The committee may choose up to four qualified African American employees to receive the award based on the established criteria.

"I had the opportunity to meet Mr. Herndon when I was a Second Lieutenant in the Air Force, and he reminded me of my teacher, Mr. Thompson, who got me on the road to becoming an engineer," said Ed Swallow, Chief Operating Officer. "You never know who is going to be an inspiration for your career, but I think you will see with these award winners today that all of them are inspirational and deserve our recognition for their representation of the company, community and what our ideals are." This year's theme is U.N.I.T.Y. – with each letter of the acronym focusing on:

- Celebrating our UNIQUENESS
- Building NETWORKS
- Valuing INCLUSION
- Honoring TRADITIONS
- Being your best YOU

"Let's use the theme to remind us to be undaunting and to seek unity. Because in unity we find strength." said Iris Nunn, who along with Mark McKelvin are the co-presidents of ABC. "We find that we are all connected in some way. Unity encourages us to be the best we can be for ourselves and for others."

Throughout the month of February, ABC is also hosting many opportunities for Aerospace employees to engage and participate in honoring AAHM, including a giving campaign, AAHM Spirit Week and a keynote speaker.

Meet the Winners

Briana Davis, Administrative Specialist IV:

Briana was born and raised in Washington, DC. After graduating from high school, Briana was accepted at Florida A&M University and attended for two years, before returning home to support an ill family member. She returned home and applied to Georgetown School of Science and Arts, where she graduated in 1984 with a Child Development Associate (CDA) Credential. Years later, she went back to school and received her bachelor's degree in humanities from University of Maryland University College (UMUC). Briana has been and continues to be an achiever. She joined Aerospace in 2015 as an administrative specialist in the Science and Technology Programs Division, now the Strategic Assessment and Studies Projects Division. Anyone who encounters her in the Crystal City facility appreciates her welcoming personality and gracious administrative assistance. Briana's passion for service began in her church, where she has worshipped for over 50 years serving on several committees, participating in activities and community outreach. This love of service continued on through her dedication in the NAACP/ACTSO Youth Program for 20 years. Additionally, she continues to represent Aerospace during MLK Day of Service and the ABC Holiday food drive.

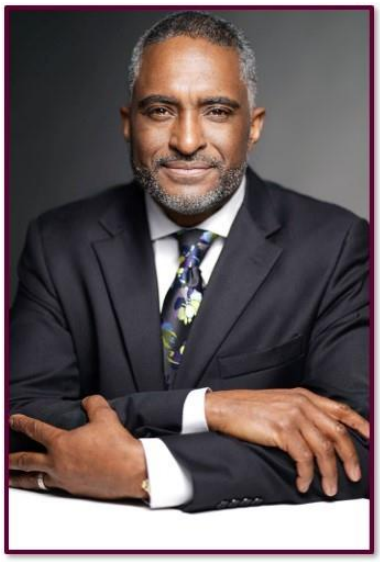
"As an administrative staff member, I stand here on the backs of those who came before me, those who are currently here and those who will come behind me. We pride ourselves on being Aerospace's administrative support system and to quote my family's mantra…'Do Your Best…Be Your Best,' and that is what we strive to do here at Aerospace every day!"

Journalia Clowers, Security Director:

Journalia attended UMUC where she earned a bachelor's degree in psychology. She then continued her pursuit for a graduate degree in the George Washington University Homeland Security master's program. Journalia has over 30 years of experience in the industry, during her career, she set a platform for others in her eld to learn and pass on to the next generation of security and community leaders. Her biggest success is her team, which she adores and speaks highly of as well as her community outreach. Since her mother's diagnosis, she has been a proponent of the Multiple Myeloma Research Foundation. Journalia was selected to be on the George Washington University Selection of Excellence Committee and has led the MLK Day of Service initiative and Adopt a Family Holiday Sharing with Aero Cares since 2014. Journalia understands that her belief in God and family's support are the core foundations to her success.

"As a first-generation graduate in my family, my mother used to say to me, 'No matter what you do in life, go as far as you can. When you think you cannot go any further, keep going because you can!' My mother and Mr. Herndon in their humanitarian spirit and with great resilience, understood that consistent discipline determines our destiny and not just our desire."

Paul Deaderick, Senior Project Leader:



Paul served 30 years on active duty and as a traditional reservist and retired as a Lieutenant Colonel. During this time, he had to balance his military career with a civilian career and his family. Paul earned his bachelor's degree, and, later in life, he returned to school to earn a master's degree. At Aerospace, he provides system test expertise and leadership for the Space Systems Command Space Sensing Directorate Next Generation missile warning programs. Paul is also very active in the Colorado aerospace industry community. Paul serves on the National Academies of Sciences, Engineering and Medicine to promote increased Department of Defense research and development at Historically Black Colleges and Universities, Tribal Colleges and Universities, and Hispanic-Serving Institutions. But most importantly to Paul, he leads Christian men in prayer.

"I have led cross functional diverse teams in military and civilian life. I have experienced the value diversity brings to the workplace. I believe this award possesses the power to inspire a new group of ambassadors that will build and sustain a diverse environment in the workplace and allow Aerospace to emerge as a leader in preparing and equipping underserved communities to choose careers in STEM."

Yvette Harris, Associate Principal Director:

Yvette graduated from the University of California at Berkeley with a bachelor's degree in chemical engineering. Yvette knew in high school she wanted to be a chemical engineer. She earned her master's degree in engineering management from Drexel University and is currently working on her doctoral degree in business management. Yvette has held multiple Quality Engineering leadership roles where she led global teams. She joined Aerospace three years ago and has focused on improving our quality culture since she arrived. Yvette also gives her time to the community as she led a STEM Day event at Canoga Middle STEM School for more than 100 students last September.

"This year has been phenomenal because STEM IS IN!! More kids are seeing leaders like myself and saying, 'If she can become an engineer I can too.' I would also like to thank my manager and mentors: Ivo Georgiev, Eric Hall, and Marilee Wheaton. Since my time at Aerospace, they all have shared and exemplified the Aerospace culture and technical excellence."

BEYA Award Recipients 2024

- Congratulations Yvette Harris, Journalia Clowers, Arthur McClellan, Bill Williams, Darin McNeal, and Jermaine Brinson on your selections as **2024 Science Spectrum Trailblazers**.
- Congratulations Karr Aguwa, Nikisa George, Jordan Fuse, Jordan Howie, and Karel Marshall on your selection as **2024 Modern Day Technology Leaders**.

AAHM Events

Spirit Week: Feb. 12 to 16

ABC is leading Aerospace's celebration for AAHM Spirit Week, encouraging participation in wearing specific attire for each day of the week.

Keynote Speaker: Feb. 27 at noon PST / 3:00pm EST

- Mr. Ellington Graves, Associate Vice Provost for Inclusion and Diversity and Director of African Studies at Virginia Tech
- Hybrid Event: AGO A8/Cafeteria and ZoomGov

2024 AAHM Giving Campaign

During February, the Aerospace Cares Giving Campaign will feature three Black-founded nonprofit organizations. Any donations to this giving opportunity will be split evenly between the causes listed below:

- National Urban League works to provide economic empowerment, educational opportunities and the guarantee of civil rights for the underserved in America.
- National Society of Black Engineers supports and promotes the aspirations of collegiate and precollegiate students and technical professionals in engineering and technology.
- Black Mental Health Alliance promotes a holistic, culturally relevant approach to the development and maintenance of optimal mental health programs and services for African Americans and other people of color.

Donation Link: https://aerocares.benevity.org/campaigns/533

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.

Tech Expo Showcases Aerospace's Technical Excellence to Defense Partners

February 07, 2024

Aerospace's unwavering commitment to delivering innovative and integrated solutions to solve the most difficult problems facing the national security space community was showcased during its recent Tech Expo for Department of Defense (DoD) Space. The inaugural event invited senior leaders across DoD offices to see some of Aerospace's research and development portfolio firsthand, ask questions, and engage in a dialog with each other and Aerospace about future priorities and partnerships.

In response to rapid changes in the space domain caused by the emergence of new threats, cutting-edge technologies and a shifting industry landscape, Aerospace's internal research and development is playing an essential role in addressing ongoing challenges and delivering capability. Furthermore, Aerospace is actively prioritizing its investments to deliver distinctive capabilities and bridge the gaps between commercial providers and the U.S. government's most difficult problems in space.

Aerospace President and CEO Steve Isakowitz welcoming participants to inaugural event.

"We have focused our dollar investments through the Office of the Chief Technology Officer (OCTO) to make sure that we're strategically going after the most critical things that are important for the future, as well as the prototypes that we develop and how we conduct business," said Steve Isakowitz, President and CEO of Aerospace. "In recent years, there has been a lot of investment in technology we'll be discussing today, such as artificial intelligence (AI), machine learning (ML), autonomy, robotics, laser communications and quantum. These are really exciting things that are challenging to us, and we have to leverage these capabilities as best we can because if we don't, our adversaries will."

Leveraging Investments for Future Threats

The event outlined the role investments in technology and Aerospace's capabilities have played in addressing and defeating threats, and the impact of these advancements in securing and advancing the nation's warfighting capabilities was highlighted.

“To be prepared for future conflicts, we have to look into the future so we can start working on the technology today,” said Marty Whelan, Senior Vice President of Aerospace’s Defense Systems Group. “With regards to warfighting, all of our services are linked to space. Because of that reliance on space, we must have resilience, and we derive that resilience from technological advancements.”

Several technical sessions were held during the event, the first of which spotlighted gamechanging space capabilities made possible by Aerospace research and development, such as highly efficient, additively manufactured mirrors and a proposed space debris mitigation and disposal plan that addresses gaps in cislunar space-safety standards and policies. The event also included a session devoted to Dynamic Space Operations (DSO), highlighting the distinctions between positional and reactive operations, the use of dynamic operations to mitigate threats and accomplish missions, and the role of Aerospace investments in enabling this future.

Audience members engaged directly with panelists during the Making Transformational Investments panel.

A session centered upon artificial intelligence for automation, data analytics, and exploitation in the space enterprise was also held. This session addressed Aerospace’s research in developing advanced techniques for data exploitation, including projects related to mission management and orchestration, the development of data analytics capabilities for autonomy, the co-funding of joint efforts to explore ML operations in space with NASA’s Jet Propulsion Laboratories, and generative AI.

The event also included a panel discussion regarding transformational investments, followed by ash talks, classified briefings, and exhibits of advanced concepts at Aerospace’s Experiments Lab (xLab) and Physical Sciences Laboratories (PSL), such as the Lasercomm crosslink terminal, quantum, and photonics, and prototypes and in-space testbeds, such as Moonlighter, Edge Node and Paladin.

Investing Today for a Secure Tomorrow

Aerospace’s corporate strategy focuses on aligning capabilities to meet the evolving needs of its government partners to stay ahead of a dynamic space domain. A key pillar of that strategic approach is to continue broadening and deepening Aerospace’s technical expertise.

“We’ve put our resources into our priority investments and split our portfolio across that breadth and depth of technical expertise,” said Dr. Debra Emmons, Vice President and Chief Technology Officer of Aerospace. “Much like our investments in our modernization and digital future, investments in architectures, policy, and end-to-end capabilities will further secure our role as the nation’s trusted partner delivering mission success across the space enterprise.”

Aerospace investments are playing a crucial role in driving innovation and advancements for the nation’s space capabilities, and the corporation remains committed to strategically growing its capabilities and expertise to shape the future.

February 2024 Obituaries

February 1, 2024

Sincere sympathy is extended to the families of:

- **Vijay Agarwal,** member of technical staff, hired Nov. 20, 1978, retired Dec. 1, 2004, died Jan. 4, 2024
- **Frank Donivan Jr.,** member of technical staff, hired Sept. 15, 1997, retired March 1, 2015, died Nov. 18, 2023
- **John Feyk,** member of technical staff, hired April 30, 1962, retired Jan. 1, 2011, died Oct. 15, 2023
- **Robin Friedheim,** member of administrative staff, hired July 9, 1984, retired May 1, 1992, died Sept. 13, 2023
- **George Grosz,** member of technical staff, hired March 5, 1962, retired June 1, 1997, died Dec. 18, 2023
- **Juanita Lyle,** office of technical support, hired Aug. 12, 1971, retired Dec. 1, 1985, died Dec. 26, 2023
- **Keven MacGowan,** member of technical staff, hired July 19, 1999, died Jan. 10, 2024
- **James Roeber,** member of technical staff, hired May 22, 1961, retired April 1, 2000, died Nov. 2, 2023
- **Ernst Stampfl,** member of technical staff, hired Sept. 21, 1965, retired July 1, 1994, died Jan. 14, 2024
- **Sandra Taylor,** office of technical support, hired Jan. 12, 1981, retired Sept. 1, 2009, died Jan. 1, 2024
- **Linda Valachovic,** member of technical staff, hired May 21, 2001, died Aug. 6, 2023
- **Duane Wikholm,** member of technical staff, hired Nov. 3, 1966, retired Sept. 1, 1990, died Aug. 30, 2023
- **Terry Wilmot,** office of technical support, hired Feb. 6, 1978, died Dec. 7, 2023
- **Francis Zampino,** member of technical staff, hired Nov. 2, 1965, retired Aug. 1, 1989, died Jan. 8, 2024

To notify Aerospace of a death and have it included in the Orbiter, please contact People Operations at (310) 336-5107.

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