AEROSPACE

ORBITER NEWS

News, announcements, and more.

Aerospace Employees Join Analog Astronaut Ashley Kowalski to Get SIRIUS

February 28, 2023

As human space exploration to the Moon, Mars and beyond loom on the horizon, understanding the physical and mental effects that long duration crewed missions can have on astronauts is essential to advancing the research and capabilities needed for the future.

Analog missions provide simulated environments that enable researchers and experts to obtain this understanding by conducting experiments and gaining first-hand experience of what it's like working and living in space.

Recently, employees had a chance to engage with one of Aerospace's own veteran analog astronauts, Ashley Kowalski, who reflected on her participation in NASA's eight-month-long SIRIUS-21 mission. Kowalski was also a team member in Aerospace's Mars Desert Research Station (MDRS) mission, which concluded in December. The event, "Let's Get SIRIUS: Life as an Analog Astronaut with Ashley Kowalski," which was hosted by the Aerospace Women's Committee (AWC) and Space Systems Group, provided employees an in-person and virtual opportunity to hear more details of her experience and ask questions of their own.

"This is an event I've been waiting for some time," said Aerospace President and CEO Steve Isakowitz, who provided opening remarks and joined Kowalski for the Q&A discussion. "Ashley is one of the most interesting individuals who's done some really exciting work. This is a really interesting topic for all of us. I think we all think we've been in confinement during COVID, but this is the real test."

Kowalski shared an in-depth presentation about the entire SIRIUS-21 mission, including the research conducted by the international crew, the facility, and team dynamics. She also opened up to reflect on her personal experiences dealing with the prolonged isolation, technical complexities, and the psychological and physiological challenges as part of the mission.

"Doing analogs like this really does position Aerospace for being better prepared for questions that come down the line from our customers regarding long duration human space flight," said Kowalski. "And it ensures that Aerospace really has the full complement of skills to know how to plan an analog mission, how to plan experiments, and how to do crew selections, in addition to also giving us the opportunity to increase the [technology readiness levels] of certain experiments by putting them in these extreme environments."

Adapting to New Environment on Another Level

The Scientific International Research In a Unique terrestrial Station (SIRIUS), is a joint effort between NASA's Human Research Program and Russia's Institute of Biomedical Problems. While the mission focused on research, completing a variety of studies, and psychological and physiological tests, Kowalski said that some of the best memories were made outside of the crew's day-to-day work.

From left to right: Aerospace President and CEO Steve Isakowitz, AWC National President Nell Finigan, analog astronaut Ashley Kowalski and AWC National Vice President Erin Hong

"You come into isolation with a certain view of yourself and you say, 'Hey, I'm going to be this type of leader and I'm going to this and this and this.' But you realize that other people don't necessarily react to you the way that you want them to. And so, it took a while to understand the nuances of different people's personalities," said Kowalski. "I think the thing that I learned the most is that you can't change other individuals, you can only change the way that you approach and view the situation and how you react to it."

Kowalski shared about how her favorite day was her birthday celebration, which featured balloons, gifts from their second resupply, and a sublimated "cake" made by her fellow crewmates.

"My crew made me feel so special," said Kowalski. "Hands down that was the best birthday I've had in a long time."

One employee asked if there were any planned twists from mission control. While there were a number of unplanned surprises during the mission, Kowalski shared that there were a few occasions when they were told that there was a request from NASA Johnson that needed immediate action, and of course, the crew scrambled to get it accomplished within the time constraint, only to find out after the mission that it was just a test.

Steve Isakowitz also led a lightning round of questions with Ashley Kowalski.

"It's funny because those kinds of stressful situations still didn't stress us out that much and I think it was because we had so many unplanned stressors in our mission.

None of the researchers or program managers or mission planners could have ever imagined the outside stressors. Those probably desensitized us to the planned stress environments they put on us."

Like with many projects and missions faced in the lab, on Earth or in space, adaptability under pressure is key, something the team had to get good at. "The most important thing to know about analog missions is that things are not going to go the way you think they are," Kowalski said.

Curious About What's After SIRIUS

Shortly after the SIRIUS-21 ended, she decided to take on yet another analog mission, but this time with some more familiar faces – the first-ever all-Aerospace crew for the MDRS analog mission in Hanksville, Utah. Now with both analog missions completed, employees were curious as to what's next for Kowalski. Aside from continuing her work at Aerospace, she said she dreams of one day making her way to space and is particularly interested in going to the Moon.

Kowalski stressed the importance of adaptability in a variety of situations.

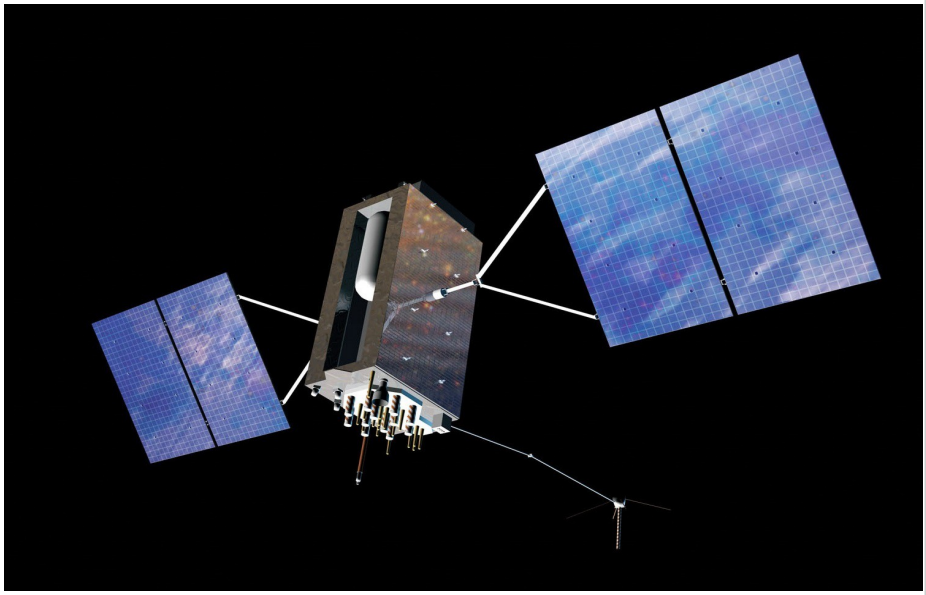
Analog missions provide some of the best ways to gain essential knowledge of what working and living in the extreme conditions of space can be like, and Kowalski is one of the few individuals with such a depth of knowledge in this area. Leveraging unique experiences like Kowalski's will help Aerospace respond quickly and think differently to support the nation's space programs in a rapidly changing domain.

"If Aerospace is going to be a leader in lunar operations, specifically in human spaceflight, then the more experts that we can develop the better off that we can be," said Kowalski.

Aerospace Furthers Advancements in 3D-Printed GPS Satellite Components

February 23, 2023

Continued advancements in 3D printing have accelerated its transition from a once niche technology to what is now an essential application in modern engineering. The technology is increasingly being used in a variety of industries to create ever more complex objects and is now making inroads into fields in which traditional manufacturing methods have been the norm.

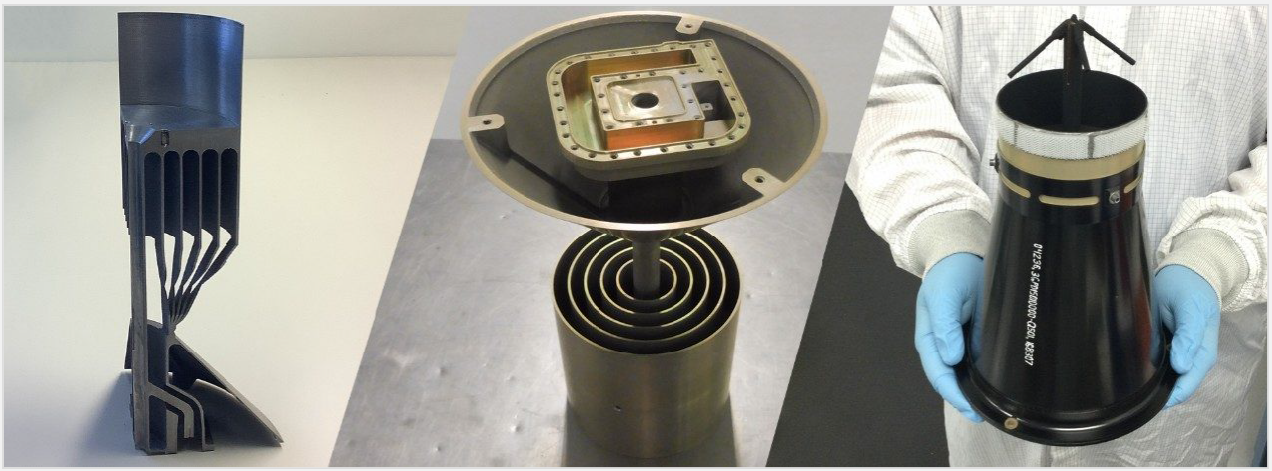


GPS III is the newest generation of GPS satellites designed and built to deliver positioning, navigation and timing (PNT) information with three times the accuracy and up to eight times the anti-jamming capability required of its predecessor. [Credit: U.S. Space Force SSC/CG]

Just a few years ago, the use of 3D-printed satellite components was largely experimental, with relatively few parts being flown in space missions and payloads. Today, nearly all new satellites have at least some 3D-printed components, and satellite manufacturers have embraced 3D printing technology as a means of reducing cost and accelerating production for increasingly capable spacecraft.

While most 3D-printed parts are relatively simple components designed to ensure the integrity of a spacecraft's build, The Aerospace Corporation recently contributed to the qualification of a 3D-printed omnidirectional antenna assembly for telemetry, tracking and command for use on two satellites for the Global Positioning System (GPS), making it the first 3D-printed GPS configuration item to be space-qualified.

"There's a tremendous advantage to producing components using 3D printing," said Benjamin J. Likar, Senior Project Engineer for GPS Satellite Systems. "3D printing can now produce complex parts, without the need for traditional soldering and welding and the structural issues they can factor in. Once you understand the characteristics of the material, you can design for it, make sure it's suitable and can fulfill your structural analysis requirements."



Lockheed Martin's first complex 3D-printed hardware for spaceflight is an omnidirectional antenna for communication relay that has been integrated into a GPS III satellite. (Credit: Lockheed Martin)

This milestone was the culmination of roughly three years of close collaboration between Aerospace and the contractor in support of the government customer, a process that required consensus on the qualification of the printing material and successful critical design review, qualification and acceptance testing of the antennas themselves. Also noteworthy is the fact that there were no industry standards for qualification of 3D-printed satellite hardware prior to Aerospace's involvement in this effort.

To learn more about Aerospace's contribution to the space certification of 3D-printed satellite hardware, read ***the full article on Aerospace.org****.*

Snapshot: The Aerospace Corporation at BEYA 2023 STEM Conference and Career Fair

February 22, 2023

The Aerospace Corporation attended the Black Engineer of the Year Award (BEYA) 2023 STEM Conference and Career Fair, which was held on Feb. 9-11 in National Harbor, MD. With a total of 27 Aerospace employees and Senior Leaders participating in the Conference and Career Fair on Friday and Saturday. BEYA was an opportunity to celebrate our seven award recipients, showcase senior leadership support, and recruit top

talent candidates. Aerospace participated in a number of events throughout the week: ABC East Coast Networking Event, Aerospace BEYA Award Recipient Breakfast with the CEO, Technology Recognition Event, BEYA Workshops and Panel Sessions, Career Fair, and the Stars & Stripes Dinner. Images shown below.

Thank you to everyone who represented Aerospace at all the events, especially those who took time out of the conference to stop by and help recruit!

Image (Left to Right): Allie Garland (ISCD/BEYA Award Recipient), Angela Couture (UR&R), Cheryl Batleman (UR&R), Lori Ramsey (UR&R), Nacer Thomas (VSD), Carah Fukumoto (UR&R), Bernard Jefferson (ESD), Kim Bell (SED), Eric McCary (ISCD), Leard Bell (ESD), Vi Tran (VSD), Niabelle Thelemaque (CTED), Jim Gidney (SED), Sonia Henry (SED)

President and CEO, Steve Isakowitz, talking with candidate about AeroCube11

Aerospace employees reconnecting in person!

Aerospace Panelist Heather Laychak on What Key Principles are Chief Human Resource Officers Utilizing to Prepare Their Organizations for the Future of Work

Aerospace Panelist Sonia Henry on Success Driven Study Habits: How to Increase Positive Study Skills

Aerospace BEYA Award Recipient Breakfast with the CEO and Aerospace Executive Leaders

Aerospace Award Recipients (Left to Right): Dr. Eric McCary, Allie Garland, Dr. Glenn Bean, Niabelle Thelemaque, Leard Bell

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Celebrating Our Engineers: Creating the Future

February 21, 2023

Inspiring the next generation of scientists and engineers is key to ensuring the promising and exciting future of space. Paving the way are the passionate scientists and engineers of today, like those here at Aerospace.

For more than 70 years, Engineers Week (EWeek) has sought to expand interest in engineering careers and increase diversity in the engineering

workforce. Since being founded by the National Society for Professional Engineers in 1951, more than 70 education and engineering societies, and more than 50 corporations and government agencies, including Aerospace, have joined together to celebrate EWeek and inspire future engineers through a variety of outreach events and activities.

During EWeek, which is happening Feb. 19-25 this year, Aerospace is celebrating all our engineers and their impact by highlighting several of our colleagues from across the company, their valuable work and passion for STEM. Join the festivities through Aerospace's social media channels and STEM events.

Our Engineers Get Social

Across Aerospace social media channels, 32 engineers are being featured this EWeek highlighting the diverse backgrounds, passions and stories behind the Aerospace team. On Instagram and LinkedIn engineers from around Aerospace will be sharing their journey to engineering and giving advice to future engineers preparing to take their place in space.

Engineers Week 2023

Aerospace at the Museum

On Feb. 25, Aerospace's K-12 STEM Outreach team is partnering with the Columbia Memorial Space Center and the American Institute of Aeronautics and Astronautics to host a panel discussion on the NASA Dart Mission at the Columbia Memorial Space Center. Engineers from Aerospace and NASA, along with the writer and producer of the film Asteroid Hunters will sit on the panel. Entrance to the museum in Downey, Calif. will be free for the day and the special EWeek event will feature hands-on STEM activities to enjoy all afternoon.

Aerospace in the Community

During EWeek, Aerospace engineers from across the country are teaming up and giving back in their local communities to inspire the next generation. In Colorado Springs and Huntsville, employees are participating in classroom visits, working with students and sharing with them the power of engineering.

Engineers from Aerospace will participate in Friday's event.

Later this week on LinkedIn, Aerospace engineers are sharing advice for the next generation:

"Always stay curious and keep asking questions," said Niabelle Thelemaque, a member of technical staff in the Communications Payload Command & Telemetry Department. "Find things that interest you and don't be afraid to try new things. Even if it's something you're not familiar with, find someone who is and don't be afraid to ask for help."

“If you ever feel like the odd one out in a room, whether it be as the only women or person of color, etc. remember that those rooms actually need you,” said Amber Perez, a member of technical staff in the Parts Materials and Process Department. “Diversity drives innovation. You are doing pioneering work.”

“Find good mentors that align with your interests, passions, and future vision of yourself to help guide you towards the person you want to be,” said David Macaraeg, an associate member of technical staff in the Software Process, Modeling, & Measurement Department. “Be open to change, exploration, and experimentation because engineering is always a rapidly changing field of fun and innovative ideas.”

Three Awardees Selected to Honor Herndon’s Legacy

February 16, 2023

During the 2023 Robert H. Herndon Black Image Awards, the Aerospace Black Caucus (ABC) recognized three employees, Shardai Rhodes, David Jackson and Leard L. Bell Jr., who each exemplify Herndon’s professional and humanitarian character.

The winners were recognized at the ceremony in El Segundo, part of ABC’s month-long celebration of African American History Month (AAHM), which saw more than 200 people gathered virtually and in-person, including Jessica Herndon Newton, the granddaughter of Robert Herndon, and her family. The theme for this year’s AAHM celebration is “Resilience: Thriving Amid Adversity,” which represents the challenges many have faced in recent years, with “Be the Change You Want to See” as the call to action. This year’s winners truly embody this call to action and Herndon’s legacy as they have accomplished and contributed so much at Aerospace and in their communities.

Jessica Herndon Newton (center), the granddaughter of Robert Herndon, and Aerospace President and CEO Steve Isakowitz (right) were some of the many who attended the Herndon Awards ceremony for the first time in person since 2020.

“What sets Mr. Herndon apart, and the legacy we honor today, is not just the technical achievements. Mr. Herndon led by example and, to paraphrase this year’s call to action, embodied the change he wanted to see in the world around him,” said Steve Isakowitz, President and CEO of Aerospace. “Mr. Herndon was a tireless champion for his fellow Black colleagues and advocated on their behalf throughout his career. He was a compassionate and thoughtful leader and mentor. And he helped ensure the pathways he opened would continue to provide opportunities for generations to come.”

Throughout his career Robert H. Herndon worked hard to provide better opportunities to others in the field, a legacy still carried out today. After graduating High School at 15, Herndon went on to become the first Black student to graduate Cum Laude in engineering at the University of Portland. Herndon was also the first Black engineer hired by North American Aviation, later joining Aerospace in 1961. Over the years, he rose through Aerospace where he eventually became group director of the Advanced Mission Analysis Directorate where he was responsible for carrying out the Aerospace systems studies for NASA. He also played a key role in Aerospace's early development of equal opportunity practices and policies. These efforts made him stand out as a trailblazer, mentor and a humanitarian, truly making a great impact on the lives of so many around him.

"For more than 40 years Aerospace has honored over 60 of its African American employees by recognizing those who exemplify Mr. Herndon's exceptional work ethic, humanitarian spirit and tireless dedication to the community with the same qualities in their outstanding work for The Aerospace Corporation and the community at large," Sonia Henry, National President of ABC.

Meet the Winners:

Shardai Rhodes graduated from California State University, Dominguez Hills where she received a bachelor's degree in Business and Administration. In 2017, she received a Facility Management Professional Certificate and is currently on track to receive a master's degree in Management and Leadership from Western Governor's University in 2023.

Shardai Rhodes, Security Specialist in Special Access Programs

Rhodes was introduced to Aerospace at an early age. Her parents both joined the corporation in the 1970s and she grew up around the company before officially joining the Aerospace team as an intern in 2009.

Throughout her time at Aerospace, she has worked in numerous positions with her career taking off once joining the Facilities, Operations and Maintenance division. She now works as a security specialist with the Special Access Department. Over her time at Aerospace, she has won numerous awards, including the Woman of the Year award in 2021. In her community, Rhodes has been involved with the Relay for Life Cancer Walks with the American Cancer Society for more than 10 years. She is also involved with OneLegacy and Donate Life and creates care packages for women who are breast cancer survivors.

Rhodes was joined by her mother and brother at the ceremony and the memories of her grandparents and her father, David Rhodes, who won the Robert H. Herndon Black Image Award in 2007.

"Although this is my moment, this wouldn't be my moment without giving my dad his praise," said Rhodes. "This moment wouldn't be my moment without acknowledging and giving praise to my grandparents for they laid the foundation of all foundations that allowed me to stand here today. I am thankful to the Herndon family for their continuous support, my ABC family, the selection committee. I would also like to say congratulations to the other recipients."

David Jackson, Senior Engineer Specialist in the Propulsion Department

David Jackson graduated from the University of Alabama in Huntsville with a degree in Aerospace Engineering. He later attended Stanford University, where he received a master's degree in Mechanical Engineering.

In 2006, he interned at Aerospace in the Propulsion department as a National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) scholar. Since then, he has taken on roles of increasing responsibility in the department where he now works as a senior engineering specialist. He has also played a key role in maintaining and growing Aerospace's expertise in dynamic data analysis, liquid rocket engine pump vibration and related propulsion topics.

Jackson has been honored as an invited lecturer at the United States Air Force Academy and numerous conferences across the country. He has won individual and team awards at Aerospace and has contributed to dozens of successful national security space launch missions. He was awarded a Modern Day Technology Award at the 2020 Black Engineer of the Year Awards (BEYA).

Growing up, Jackson built model rockets with his father and was inspired to give back by serving as an instruction for the neighborhood youth program's STEM program where he developed and taught middle school level rocketry and engineering lessons. He has also served as a volunteer at the E.E. Just Marine Biological Laboratory teaching telescope and astronomy classes for young students.

"It truly is an honor to be presented with this award remembering the legacy of Robert Herndon, and I'm grateful knowing that at least in a small way, my contributions here at Aerospace and within my community are living up to his great example," said Jackson.

Leard L. Bell Jr. earned his bachelor's degree in science and engineering specializing in electrical engineering from California State University, Northridge before receiving his Master of Business Administration degree from the University of California, Los Angeles. He first joined TRW before working at Northrop Grumman and joining Aerospace in 1987 where he moved into management.

While at Aerospace, Bell has played a key role in mission success for a number of different National Security Space and missile systems programs. Bell has also served three terms as the general chair and co-chair of the Aerospace sponsored Space Power Workshop, which is considered one of the premier annual conferences in space power. Bell also led the Aerospace Electromagnetic Compatibility (EMC) team in a collaborative effort with industry subject matter experts in the development of the American Institute of Aeronautics and Astronautics EMC Standard.

Leard Bell, Jr., Director of the Electronics and Power Systems Department

During his time at Aerospace, Bell has received numerous corporate performance recognition awards. He has also been involved with ABC for years where he served as the West Coast regional vice president in 2021 and 2022, and he currently serves as the vice president of Recruitment. He also works closely with Howard University on a capstone project where he provides mentoring and support to students involved with the project.

In the community, Bell has been actively involved as a baseball and football coach and has supported a variety of causes, including breast cancer awareness walks. He has also volunteered by feeding the homeless and serving as a panelist for a variety of STEM panels for college students.

“I am humbled, appreciative and extremely proud to join the ranks of the Robert H. Herndon Black Image Award recipients,” said Bell.

Congratulations to Shardai Rhodes, David Jackson and Leard L. Bell Jr., the 2023 Robert H. Herndon Black Image Award winners.

Steve Isakowitz joined Robert H. Herndon Black Image Award winners Shardai Rhodes, David Jackson and Leard L. Bell Jr., and Jessica Herndon Newton and her family at the 2023 ceremony.

“Each of you has made a meaningful impact on Aerospace, our mission and our people,” said Isakowitz. “With this award, you join an amazing legacy of excellence, dedication and service to others that stretches back more than 40 years to the first Herndon award. I trust that each of you will play a vital role helping carry forward that legacy for years to come.”

A Month to Celebrate

Throughout the month, ABC hosted a variety of events and opportunities for employees to get involved and celebrate AAHM. On Feb. 1, ABC hosted a Professional Development session as part of the Black Engineers Network (BEN) Technical Engagement Series: “Compositional Modeling for System of Systems Engineering” presented by Dr. Mark McKelvin Jr., Principal Engineer, Space Systems Architect Division.

On Feb. 23, ABC hosted a fireside chat featuring Ms. Joylette Hylick, the eldest daughter of the late Katherine Johnson, NASA mathematician whose life and technical contributions to the space industry were recognized in the 2016 film Hidden Figures. The event was moderated by Dr. Wanda M. Austin, former President and CEO of Aerospace.

African American History Sprit Week

This year marked ABC's first year celebrating African American History Spirit week, which took place Feb. 13-17. The week provided an opportunity to honor Black culture and excellence through a variety of events, themed days, sharing of history and celebration of culture.

- Monday: Black Excellence – Proudly wear black as a symbol of unity, class, excellence, and power.
- Tuesday: African Heritage – Kente/Dashiki attire emerged in the US market during the late 1960s as a symbol of the Black American Afrocentric identity.
- Wednesday: HBCU Pride – Represent your favorite HBCU. There are 104 colleges in the US identified as HBCUs by the department of education.
- Thursday: Greek, Professional Society, ERG, etc. Showcase – Represent your favorite Greek, professional, ERG or other affiliated organization.
- Friday: Black Culture – Proudly wear attire that represents Black culture – music, art, inventors/scientists, and other positive Black expressions

2023 Engineers' Council Awards

Also in February, **Karolyn Young** was presented with the Distinguished Engineering Achievement Award by the Engineers' Council at their 68th annual honors and awards banquet. Congratulations Karolyn!

AAHM Giving Campaign

Throughout the month of February, ABC hosted a giving campaign in partnership with Aerospace Cares focusing on human rights, mental health awareness and wellness and K-12 STEM. The campaign supports the following organizations:

- Black Girls Code, Inc. — Is a national nonprofit organization dedicated to teaching girls ages 7-17 about computer programming and technology.
- National Center for Civil and Human Rights Foundation, Inc. — Provides an experience that connects the U.S. Civil Rights Movement to today's human rights challenges.
- 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.

The Aerospace Black Caucus (ABC) is an Aerospace Employee Resource Group. Membership and participation in all ERGs are open to all employees, regardless of identity. If you are interested in joining an ERG, please click here for more information.

Snapshot: Congratulations to Aerospace's BEYA Winners!

February 13, 2023

Congratulations: Seven Aerospace employees were honored with the Black Engineer of the Year Award (BEYA) on Feb. 9-11 at the 2023 BEYA STEM Conference. **Alexandria Garland**, **Michael Roberts** and **Niabelle Thelemaque** were the recipients of the Modern-Day Technology Leaders Award; and **Dr. Eric McCary**, **Dr. Glenn Bean**, **Leard Bell** and **Twain Summerset** were the recipients of the Science Spectrum Trailblazers Award.

Congratulations to all awardees!

Press Release: Forbes Names Aerospace an America's Best Midsize Employer for Third Consecutive Year

February 15, 2023

EL SEGUNDO, Calif., Feb. 15, 2023 – The Aerospace Corporation (Aerospace) was named one of America's Best Midsize Employers 2023 by Forbes magazine.

This is Aerospace's third consecutive year and seventh year overall to be recognized by Forbes as a top midsize company. Aerospace claimed a spot on the list as a best midsize employer from 2016 until 2019, and from 2021 until 2023, and was also recognized in 2019 by Forbes as one of the Best Employers for Diversity.

"We are honored to be recognized by Forbes for yet another year, and I want to thank our employees for partnering with us to create an award-winning workplace that we can all be proud of," said Heather Laychak, vice president and chief people officer. "We're dedicated to growing and maintaining an

environment where our team can excel and make a difference for our nation."

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.

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 4,700 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.

Record-Breaking Back-to-Back Successful National Security Space Launches

February 08, 2023

Combining agility with its disciplined approach and dedication to mission success, Aerospace worked closely with the United States Space Force executing two key launches within a span of less than 62 hours, successfully delivering the USSF-67 and the Global Positioning Systems (GPS) III-6 payloads to orbit.

On Jan. 15, a SpaceX Falcon Heavy rocket lifted off at 5:56 p.m. EST aboard from Launch Complex-39A at NASA's Kennedy Space Center, Florida, successfully delivering the USSF-67 payload to orbit. (Credit: SpaceX/Flickr)

On Jan. 15, Space Systems Command (SSC) with the support of its mission partners, successfully delivered the USSF-67 payload to orbit, lifting off at 5:56 p.m. EST aboard SpaceX's Falcon Heavy rocket from Launch Complex-39A at NASA's Kennedy Space Center, Florida.

This was the second National Security Space Launch (NSSL) mission on a Falcon Heavy and reused the same side boosters from the USSF-44 mission that was successfully launched on Nov. 1, 2022.

The GPS III-6 mission used a booster recovered and refurbished after the NASA Crew-5 Dragon Endurance mission to the International Space Station in October 2022, which was the first reuse of a booster that was not previously flown on a NSSL mission.

"We had another fantastic launch today on a Falcon Heavy, just two months after our first National Security Space Launch mission using this launch system, and while the launch itself was impressive, I am most proud of the fact that we placed important capabilities into space that help our nation stay ahead of very real and growing threats," said Maj. Gen. Stephen Purdy, program executive officer for Assured Access to Space at SSC.

On Jan. 18, a Falcon 9 rocket lifted off from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station at 7:24 am EST and successfully delivered the sixth GPS III satellite to its intended orbit. (Credit: SpaceX/Flickr)

USSF-67 included two key payloads in SSC's Continuous Broadcast Augmenting SATCOM (CBAS)-2 and the Long Duration Propulsive ESPA (LDPE)-3A.

Parallel to this effort, a separate launch campaign for GPS III Space Vehicle 06 (GPS-III-SV06) was also underway. On Jan. 18, a Falcon 9 rocket lifted off from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station at 7:24 am EST and successfully delivered the sixth GPS III satellite to its intended orbit.

As with prior NSSL missions, The Aerospace Corporation provided the independent and objective assessments that gave the USSF and Aerospace leadership the confidence to proceed with the launch.

"What is not evident in the successful payload deliveries is the behind-the-scenes work the team did with the USSF, NASA, and SpaceX to leverage the NASA mission assurance for the reused Crew-5 booster, create efficiencies from past NSSL launches, team with payload providers on late-breaking changes that impacted loads, and develop and execute contingencies to ensure a steady flow and pressure of the supply gases needed to support the rockets. The team's agility in responding to change was essential to getting several national security payloads into orbit," said Kevin Bell, senior vice president of Space Systems Group at Aerospace.

The early foresight and groundwork to implement improved efficiencies in the mission assurance process were instrumental in the team's ability to overcome-late breaking issues and execute the tight mission timeline for these two nearly parallel mission campaigns.

"I am very pleased with our team's effort. In particular, the integrated team demonstrated a reduction in depth of effort leveraging the re-flight of a previously flown SV configuration and use of the recovered Crew-5 booster for the GPS III-6 mission to evolve our mission assurance processes while

satisfying spaceflight worthiness to meet NSSL standards," said Akhil Gujral, general manager at Aerospace.

Aerospace's collaboration and teamwork with the USSF that enabled these efficiencies was recognized and applauded by USSF leadership.

"With the successful delivery of GPS III SV06, I am pleased to report we set a new launch record in our space history," said Col. Erin Gulden, senior materiel leader at Assured Access to Space – Launch Execution Delta.

Aerospace's 2022 Annual Report: Fostering an Integrated Vision for Modern Space

February 01, 2023

At a pivotal moment for the space domain, shaped by significant challenges and immense opportunities, we at The Aerospace Corporation are accelerating our innovation and expanding our impact across a growing set of partners to drive integration throughout the space enterprise.

Working alongside our government partners, Aerospace is shaping the next generation of resilient space systems, with a focus on speed and agility to outpace the threats facing our nation and ensure integrated capabilities are reliably delivered across warfighting domains.

Aerospace also played key roles supporting flagship civil space missions, while enabling future ecosystems that will support a new era of space exploration and commercialization.

We invite you to explore the 2022 Annual Report to learn more about how Aerospace is responding to meet the evolving needs of our partners and further U.S. leadership in space. It speaks to our unwavering commitment to deliver on our vision: The nation's trusted partner, solving the hardest problems for the preeminent space enterprise.

*Explore the **2022 Annual Report here**.*

February 2023 Obituaries

February 01, 2023

Sincere sympathy is extended to the families of:

- **Timothy Cockroft**, member of administrative staff, hired Aug. 27, 1979, retired April 1, 2009, died Dec. 15, 2022
- **Cam Davies**, office of technical support, hired Feb. 24, 1964, retired Nov. 1, 1991, died Jan. 3, 2023
- **Robert Franchino**, member of technical staff, hired Sept. 14, 1965, retired July 1, 1994, died Jan. 3, 2023
- **Robert Leatherman**, member of technical staff, hired Nov. 7, 1960, retired May 1, 2012, died Dec. 27, 2022
- **C.H. Llewellyn Jr**, member of technical staff, hired April 4, 1983, retired June 1, 1992, died Jan. 13, 2023
- **Robert Mann**, member of administrative staff, hired July 2, 1962, retired Nov. 1, 1995, died Sept. 7, 2022
- **Stuart Melvin**, member of technical staff, hired Sept. 31, 1981, retired May 1, 1996, died Jan. 3, 2023
- **James Novak**, member of technical staff, hired Dec. 28, 1992, died Jan. 21, 2023
- **Joseph Ouellette**, member of technical staff, hired April 9, 1979, retired May 1, 1994, died Dec. 20, 2022
- **Carolyn Paulsen**, office of technical support, hired April 28, 1979, retired April 1, 2008, died Nov. 18, 2022
- **John Penna**, member of technical staff, hired Sept. 30, 1963, retired March 1, 1992, died Dec. 5, 2022
- **Lucille Peters**, office of technical support, hired Dec. 5, 1960, retired Dec. 1, 1983, died Nov. 20, 2022
- **John Pitre**, member of technical staff, hired Feb. 3, 1967, retired Nov. 1, 1991, died Dec. 6, 2022
- **Jacques Renau**, member of technical staff, hired July 17, 1967, retired April 1, 1990, died Jan. 26, 2023
- **Margaret Sazani**, member of technical staff, hired Dec. 1, 1986, retired Jan. 1, 2018, died Nov. 15, 2022
- **Alvin Simon**, office of technical support, hired Sept. 7, 1982, retired May 1, 1999, died Sept. 18, 2022
- **Terrell Thompson**, member of administrative staff, hired Nov. 30, 1981, retired Feb. 1, 2010, died Jan. 16, 2023
- **Theresa Tomazin**, office of technical support, hired Aug. 22, 1960, retired March 1, 2004, died Nov. 18, 2022
- **Williams Wetmore Jr**, member of technical staff, hired Nov. 17, 1960, retired May 1, 1984, died Dec. 21, 2022
- **Stephen Young**, member of technical staff, hired Jan. 25, 1971, retired Sept. 1, 2016, died Dec. 5, 2022

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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