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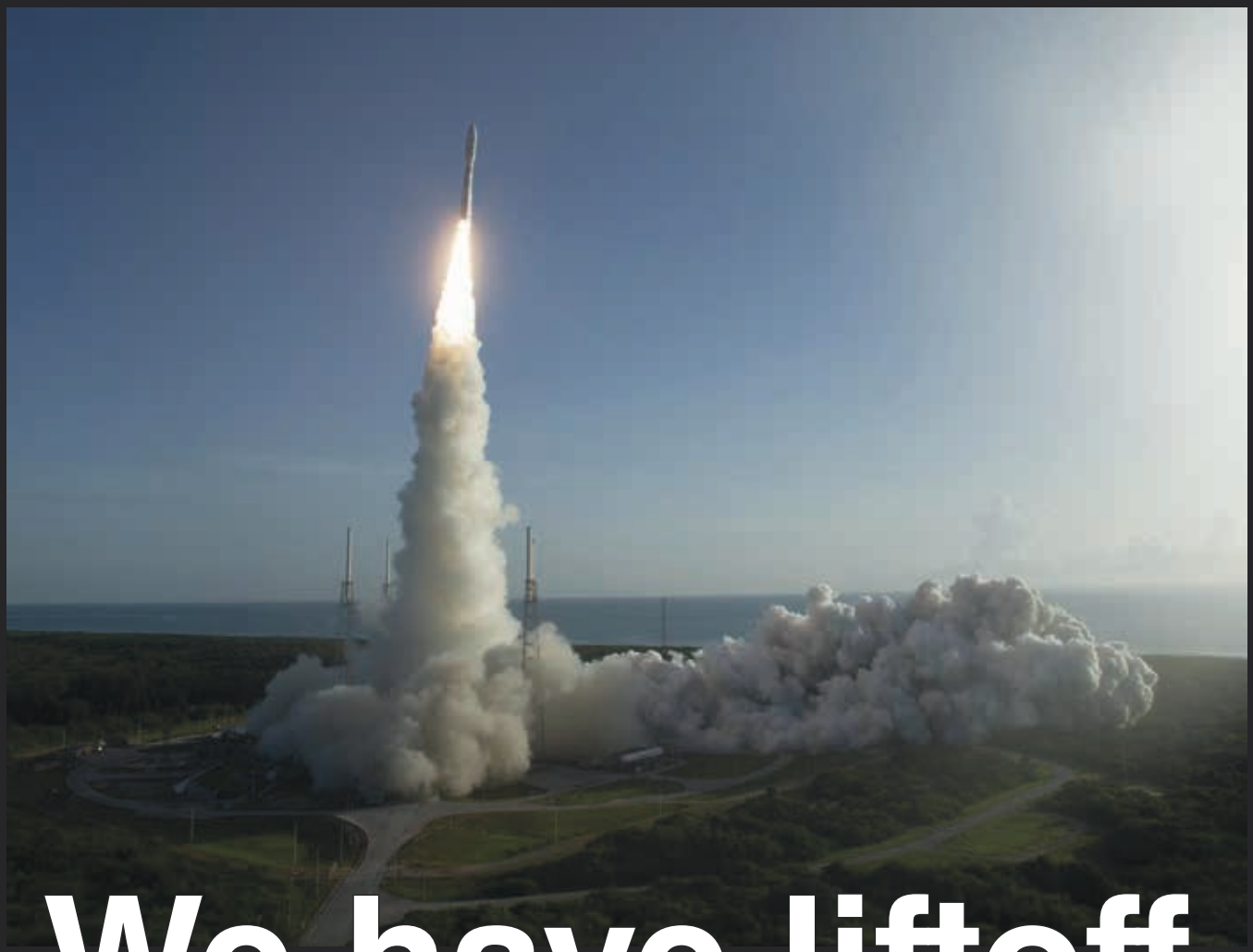

We have liftoff

Mars 2020 Perseverance rover on its way

A United Launch Alliance Atlas V rocket with NASA's Mars 2020 Perseverance rover onboard launched from Space Launch Complex 41 on July 30 from Cape Canaveral Air Force Station in Florida. The Perseverance rover is part of NASA's Mars Exploration Program, a long-term effort of robotic exploration of the Red Planet. See related article on how NASA Armstrong helped assist mission preparations on page 2.

NASA/Joel Kowsky

Off to Mars

NASA Armstrong helped Perseverance mission

By Jessica Arreola
Armstrong Public Affairs

When the COVID-19 pandemic delayed NASA Earth science missions, the agency's airborne science aircraft such as the C-20 and G-III Gulfstream had a new mission – get the Mars Perseverance 2020 team from California to NASA's Kennedy Space Center (KSC) in Florida to prepare the rover for launch.

The mission was timed for when Earth and Mars were closest to each other and ideal for the rover and the Integrity Mars Helicopter to travel and land on Mars. That is, it took less power to travel to Mars then, compared to other times when Earth and Mars are in different positions in their orbits. NASA's Mars 2020 mission launched June 30, 2020, which avoided the need to wait more than two years for the planets to align again.

The first support flight used the C-20. The aircraft had special scientific equipment removed from the interior and additional seats were installed for crew members of NASA's Jet Propulsion Laboratory (JPL) in Southern California. The aircraft delivered the first group of Perseverance team members to KSC on March 23 and several similar flights followed.

"Getting the Perseverance team and gear safely where they needed to go is just the latest in Armstrong's

AFRC2020-006331 **NASA/Lauren Hughes**

A great example of commitment to the agency mission is the critical work of personnel in the Flight Operations Office at NASA Armstrong. The agency approved use of its G-III (pictured) and C-20 aircraft at Armstrong for transport of mission-critical JPL staff from California to Florida.

affiliation with Mars exploration," said Wayne Ringelberg, chief research pilot at NASA Armstrong. "We hosted Mars Exploration Rover evaluations at Roger's Lake in 2003, and in 2011 we tested the descent radar used on Curiosity's landing in 2012."

Trips began at sunrise with Armstrong's flight surgeon Dr. Dwight Peake performing health screenings and protective equipment fittings. In addition to properly fitting M-95 masks and trainings on their use, JPL staff received aircraft egress training to ensure they knew how to be safe to fly. By sundown in Southern California, the aircraft crew would return home with the mission team members.

"One of the best demonstrations of One NASA I've seen in a while is played out with our Perseverance rover." said Thomas Zurbuchen, associate administrator of the Science Mission Directorate. "Together we are persevering.

Armstrong has also worked closely with a flight crew from NASA's Wallops Flight Facility in Virginia for use of their C-130 cargo plane to transport hardware for the Perseverance rover mission. On May 10, nearly 5,000 pounds (2,270 kilograms) of mission flight hardware, test gear and equipment for the rover were loaded onto the C-130 aircraft and delivered to KSC.

Multiple NASA centers and several different industry organizations worked closely to follow through with critical activities needed to meet the tight launch window. To keep mission costs and risks as low as possible, the Mars 2020 design is based on NASA's successful Mars Science Laboratory mission architecture, including its Curiosity rover and proven landing system.

About the Mission

The Perseverance rover's astrobiology mission will search for signs of ancient microbial life. It will also characterize the planet's climate and geology, collect samples for future return to Earth and pave the way for human exploration of Mars. The mission is part of a larger program that includes missions to the Moon as a way to prepare for human exploration of the Red Planet. Charged with returning astronauts to the Moon by 2024, NASA will establish a sustained human presence on and around the Moon by 2028 through NASA's Artemis lunar exploration plans.

Behnken, Hurley return on SpaceX Endeavour

NASA astronauts Robert Behnken and Douglas Hurley safely completed the Demo-2 mission when the SpaceX Crew Dragon "Endeavour" splashed down in the Gulf of Mexico off the coast of Pensacola, Florida, Aug. 2.

It is the first time a commercially built and operated American crew spacecraft has returned from the International Space Station to complete a test flight, beginning a new era in human spaceflight.

Behnken was a U.S. Air Force Test Pilot School classmate of NASA Armstrong pilots Troy Asher, Jim Less and Tim Williams.

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NASA

A SpaceX fast boat races toward the SpaceX Crew Dragon spacecraft moments before it splashed down in the Gulf of Mexico with NASA astronauts Bob Behnken and Doug Hurley aboard.

Armstrong contractors win top small business honors

The prime contractor and subcontractor of the Center Administrative Technical Support Services Contract (CATSS II) at NASA Armstrong have been recognized with NASA's top small business honors.

NASA's Office of Small Business Programs annually bestows honors to recognize outstanding contributions from small and large businesses to NASA's aeronautics, science and space missions.

The nominees are forwarded by each NASA center for agency consideration. Armstrong chose Logical Innovations of Houston, Texas, a woman-owned business and the prime contractor for the CATSS II contract that provides technical and administrative support of the directorates, programs and offices at NASA Armstrong. Subcontractor Media Fusion of Huntsville, Alabama, also was chosen and is a partner and subcontractor on the CATSS II.

The announcement that Logical Innovations was NASA's agency level Small Business Prime Contractor of the Year for FY2019 was good news to Denise Navarro, company president and CEO.

"Logical Innovations is honored to receive the recognition," Navarro said. "We appreciate the hard work of our Logical Innovations family across NASA and especially thank our customers and amazing Logical team at Armstrong for making this possible. To add to our excitement, our partner at AFRC, Media Fusion, was selected as the NASA's agency level Small Business Subcontractor of the Year for FY2019! We can't thank our entire Logical team at AFRC enough."

Awards, page 8

Courtesy of Denise Navarro

Courtesy of Tim McElyea

***Above**, Denise Navarro, Logical Innovations Inc. president, displays the trophy for contractor of the year. **Below**, Tim McElyea Media Fusion executive vice president for federal programs displays the subcontractor of the year award.*

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Behnken graduated as a flight test engineer, while Asher, Less and Williams graduated as pilots. The Armstrong trio observed Behnken and Hurley's launch on a SpaceX Falcon 9 rocket from NASA's Kennedy Space Center in Florida May 30.

The astronauts arrived at the orbiting laboratory the next day. For 62 days Behnken and Hurley contributed more than 100 hours supporting investigations, participated in public engagement events and supported four spacewalks to install new batteries in the station's power grid and upgrade other station hardware.

These activities are a part of NASA's Commercial Crew Program, which has been working with the U.S. aerospace industry to launch astronauts on American rockets and spacecraft from American soil the International Space Station for the first time since 2011. This is SpaceX's final test flight and is providing data about the performance of the Falcon 9 rocket, Crew Dragon spacecraft and ground systems, as well as in-orbit, docking, splashdown and recovery operations.

The test flight also will help NASA certify SpaceX's crew transportation system for regular flights carrying astronauts to and from the space station. SpaceX is readying the hardware for the first rotational mission that will occur following NASA certification.

The goal of NASA's Commercial Crew Program is safe, reliable and cost-effective transportation to and from the International Space Station. This could allow for additional research time and increase the opportunity for discovery aboard humanity's testbed for exploration, including helping us prepare for human exploration of the Moon and Mars.

Focus on Safety

By Jay Levine
X-Press editor

An untraditional situation requires adaptation and perseverance and that's what was required for NASA Armstrong's Safety Day event to reach employees.

Peggy Hayes, deputy director for Safety and Mission Assurance, moderated the virtual Safety event and a number of speakers brought home the message of safety in a variety of situations at work and at home.

Center Director David McBride said the theme Enhancing Safety by Building Trust and Relationships in a COVID-19 Environment is timely.

"Armstrong has had a pandemic plan for past 14 years, but until this spring we never had to use it," McBride said. I want to thank everybody involved in medical and security who reviewed the plan and helped guide us through uncharted waters. Also, I want to thank the IT staff for making what we do possible. Thanks to all of these efforts we were prepared."

Armstrong Director David McBride

Masks, which are as important as safety goggles or steel-toed boots, and best practices can keep staff members from making each other sick and jeopardizing members of co-worker's families, he added. In addition, staying healthy can help avoid slowing down, or shutting down, a team's work due to suspected cases of COVID-19.

"If you're sick, you have to stay home, or go home if you're sick at work," McBride said. "It's not just for yourself, it's for each other. It's for your colleagues, it's for your

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Ristrim describes his COVID-19 experience

By Jay Levine
X-Press editor

Paul Ristrim explained what it was like for him living with COVID-19. He was one of the speakers at NASA Armstrong's recent virtual Safety Day event.

"I first began to feel some slight sinus inflammation and sneezing on June 17," said Ristrim, an Armstrong quality assurance specialist. "I continued teleworking because I didn't feel I was sick, but two days later I had a fever. It started as a low-grade fever of about 99 F and went to 100.5 F. By Monday, June 22, I was starting to really feel the effects of the fever it went up to 102.9 F later in the week."

The fever wouldn't break, so he consulted with a physician online and explained his symptoms. Following that conversation, he went for drive through testing that afternoon. A nasal swab sample test confirmed he had COVID-19.

Paul Ristrim

Fortunately, Ristrim's family didn't get the virus. He quarantined himself in the master bedroom to protect Mirna Jimenez, his significant

Safety Focus page 6

Graham announces annual Armstrong Safety Awards

The virtual NASA Armstrong Safety Day in July informed employees of challenges and approaches to avoid them. However, it also highlighted the work of two individuals and one team that contributed to making the center safer.

Glenn Graham, director of Armstrong Safety and Mission Assurance, made the announcements.

Todd Shaw was recognized in the civil servant category for identifying a hazard in the parking lots where he saw protruding rebar.

Norbert "Bob" Davis was awarded in the contractor category for of his efforts on the Stratospheric Observatory for Infrared Astronomy, or SOFIA. Davis noticed a SOFIA nose wheel and tire assembly had a main tire instead of a nose tire installed. His actions launched an investigation into the supplier's maintenance practices and ensured it was not installed on the aircraft, averting a potentially dangerous situation.

The Los Angeles World Airports Jet-A Fuel Tank Team of Kay & Associates was recognized for going above and beyond in the team category. On Sept. 21, 2019, several members of the team began working on the secondary containment area of the Jet-A Fuel Tank. Before the preparation work could begin, there were serious hazards that had to be addressed including flammable vapors, live electrical components and confined spaces issues.

The work was very complex and as it continued they came upon several unplanned issues. In each instance they stopped and contacted subject matter experts and even took confined space training to increase their knowledge. They did everything right in their methodical approach to the situations that arose that demonstrated a strong safety culture within the team.

The team includes Jesus Garcia, Dave LaFayette, Jon McCarahan, Jose Martinez, Zack Rock, Gilbert Cisneros, Steven Bobrosky, Dean LeBret, Torin Carlson and Ed Mathieson.

NASA/Doug Wheelock

Astronaut Scott Parazynski, while anchored to a foot restraint, assessed his repair work as the solar array was fully deployed. Astronaut Doug Wheelock (out of frame) assisted from the truss.

KSC-07pd3191 NASA/ Kim Shiflett

STS-120 Commander Pamela Melroy talked following Space Shuttle Discovery's landing at NASA's Kennedy Space Center. Behind her, second from right, is mission specialist Doug Wheelock.

'Wheels' trains astronauts for lunar landing

By Jay Levine
X-Press editor

Astronaut Doug "Wheels" Wheelock spent his NASA career expanding knowledge of living and working in space. His new mission is working to determine the best way to train astronauts to return to the surface of the Moon.

Wheelock is a veteran test pilot and retired U.S. Army colonel who has accumulated 178 days in space and was a guest speaker at NASA Armstrong's recent virtual Safety Day. During his NASA career he conducted six spacewalks, flew in Space Shuttle Discovery and the Russian Soyuz and served as International Space Station Expedition 25 commander.

He was recently selected by the NASA Flight Operations directorate at NASA's Johnson Space Center in Houston to lead the human lander system joint testing. He also is co-chairman of the joint test panel for the lunar landing project that is part of NASA's Artemis mission to return astronauts for sustainable human exploration of the Moon.

Doug 'Wheels" Wheelock

A broad agency announcement to define, develop and bid on lunar lander platform was the basis of an award April 30 to three companies to design and build human landing systems. The three companies include Blue Origin of Kent, Washington, Dynetics of Huntsville, Alabama, and Space-X of Hawthorne, California.

NASA's Johnson Space Center in Houston asked Wheelock to lead the joint test team, which is essentially looking at training crews to land on the Moon.

"We have these companies that are building landers, but we need to be able to train our crews," Wheelock said. " I am managing the test development and eventual testing and selection of platforms we will use for fixed base mockups, motion simulation and inflight trainers."

It wasn't always space missions and lunar landers for Wheelock. From an early age he said he learned from Neil Armstrong, as he watched as the first man on the Moon showcase qualities he believed leaders should have, such as humility and authenticity.

"I had a chance to ask him a question (when I was a kid), and I wanted to know how he felt as an extraordinary superhero," he said. Armstrong did not view himself in that way, which had an even bigger influence on Wheelock.

"How does an ordinary boy end up standing on the Moon?" he thought. "I later learned that ordinary kids from ordinary places do intersect with the extraordinary.

It wasn't until years later after he had been an astronaut that he recalled what a first grade teacher told him, "You could land on the Moon one day, too." As an astronaut, he remembered that and knows, "Children of all ages look to NASA for redefining what's possible for them."

On Aug. 24, 1998, he was selected as an astronaut and learned how to tackle complex challenges.

"It's like when we have pieces to a 1,000 piece puzzle and all pieces in front of us, but the box was taken away," he said. "We don't know what it looks like, but we look for the corners. Corners are the existence of our hearts, minds, bodies and souls."

The approach applies to a number of challenges.

"What we do in the simulators, or flying test plans, we know what the picture is supposed to look like," Wheelock said. "However, we may be doing something we have never done before, or trying to gain knowledge on a piece of equipment for the first time and that also is a puzzle. If we don't approach it by looking for the corners and connective parts, then we're not going to solve it."

Wheelock said being an astronaut isn't easy and he had to overcome several fears if he was to conquer the skies and space. He had an intense fear of falling and loud noises. Through strength, courage and a commitment to teamwork, he overcame it all and was rewarded for his hard work.

"When I went to space I wanted to rush to the window," he recalled. I wanted to look at the thin blue line of the atmosphere and see from space the small town I came from."

Safety focus... from page 4

teammates and it's for your families. It's (COVID-19) like a spark that can burn a forest down."

Regarding social unrest, he said strong relationships are important on center teams.

"We cannot have racial, gender or other divides that weaken those relationships," he said. "They weaken our team and our overall effectiveness. Do what you can to communicate with each other and help break through any barriers that exist. We cannot and we must not accept unjust behavior on any level."

Many Armstrong employees are assisting with meeting some of the challenges of the pandemic by using their knowledge and skills. A video from the Antelope Valley Task Force highlighted those efforts. The task force is a partnership of Antelope Valley College, Antelope Valley Hospital, Armstrong, the city of Lancaster, the Spaceship Company and Virgin Galactic.

The video showed how life support employees used knowledge of how to get oxygen to a pilot and apply that to delivering oxygen to a COVID-19 patient in a field hospital that would have been set up at the Antelope Valley Fairgrounds if needed. Pressurized helmets that push pure oxygen to COVID-19 patients in distress were designed and developed. Another team designed and built a tent system to place around patients to protect health care workers.

Concerning the base perspective Brig. Gen. Matthew Higer, 412th Test Wing commander at Edwards Air Force Base, explained some elements of the COVID-19 response on base.

Safety and protection of people who work or live on the base is a key priority and that is going well, he said. Although he couldn't discuss the specific number of COVID-19 cases on Edwards, he said he feels strongly that in people in the Antelope Valley, with few exceptions, are less likely to become exposed to the pandemic compared to the magnitude of cases in the Los Angeles area.

At the Air Force gates, it is not mandatory to wear a mask and security personnel want to see a person's face to validate his or her identity, Higer explained. However, his guidance to Armstrong employees is to have a mask with them on Edwards. In work situations where a person can't ensure a 6-foot distance, wear the mask, he added.

"I do it because it's the right thing to do," Higer said. "Wildfire applies to the COVID-19 because the virus is looking for a host."

Matt Berry, deputy branch chief of Operations Engineering, introduced a video on Pause, Assess, Communicate and Evaluate, or PACE. PACE is a tool to remember key actions needed during the COVID-19 response.

The Code 400 branch chiefs detailed the value of PACE implementation in re-evaluating center routines as some people begin to return to work on center. Effective communication also is required in safely bringing people back to work at Armstrong.

In another presentation Troy Asher, director of Flight Operations, highlighted lessons learned from operating in the COVID-19 environment so far and amplified the need for clear communication.

Constant and consistent messaging and trust for individual areas to know what the risks are and come up with solutions is a key, he said. The COVID-19 response requires approaches be similar to those used in crisis management, natural disasters or even wartime.

"Give information, enforce rules and combat complacency," Asher said. "Sometimes we have to slow down in order to speed up. There will be starts and stops for a while, but we need to get the best information up the leadership chains and listen to each other – stop and talk about concerns."

Glenn Graham, director of Armstrong Safety and Mission Assurance, asked employees to keep forwarding lessons learned. The lessons are collected and used on the Xnet safety page. There was one lesson learned that he covered at the event.

"Working from home can be great, but it can also be stressful," he said. "We have a great employee assistance program that can help."

Armstrong flight surgeon Dr. Dwight Peake also offered some advice.

"Be extremely cautious because the COVID-19 comes out of nowhere," Peake said. "For some people it is a disaster. If you get it and you can do fine, but someone else dies because they got it from you, that's not going to make you feel well."

Ristrim... from page 4

other, and contacted his niece and nephew about contracting the COVID-19.

Since then he has been tracing his steps in an effort to understand how he contracted the virus. On his day off June 12, he had taken a trip to Gardena to a scaffolding yard, where he was wearing a mask and taking precautions. However, he recalled going into the office to sign an invoice and he thinks it might have been a mistake to sign the invoice with a pen potentially used by others.

Ristrim's next stop was to visit his niece and nephew in Gardena. No one was sick, so he took the opportunity to visit them. He said he did not wear a mask when he was playing with his nephew. The family went to a restaurant and he was wearing a mask to the table. However, he did not wash his hands before eating grilled chicken with his hands. From there he opened the car door for Jimenez, came home and "everything that weekend was fine."

Another possibility could have been grocery shopping and cutting into an unwashed orange and eating it, he said. Regardless of how he contracted it, his symptoms emerged five days from the trip and grocery shopping.

"It was different from the flu with that fever for the whole weekend," Ristrim recalled. "I usually get sick for maybe a day to a day and a half and feel better. I also lost complete sense of taste and smell. Everything tasted like mush."

As virus progressed, he said he became weaker and weaker as a result of the constant fever. In the early morning hours of day 11, he felt different and his temperature returned to normal and he started feeling a little better and stronger. By July 9 he regained some strength, his taste back and he resumed telework."

His advice to others on COVID 19 is simple.

"Don't drop your guard for a second," Ristrim said. It's real, it's out there and it's looking for a host."

Hidden no more

NASA Headquarters renamed for Mary W. Jackson

By Bettina Inclán
NASA AA for Communications
and Matthew Rydin
NASA Press Secretary

NASA Administrator Jim Bridenstine announced in June that the agency's headquarters building in Washington, D.C., will be named after Mary W. Jackson, the first NASA African American female engineer.

Jackson started her NASA career in the segregated West Area Computing Unit of the agency's Langley Research Center in Hampton, Virginia. Jackson, a mathematician and aerospace engineer, went on to lead programs influencing the hiring and promotion of women in NASA's science, technology, engineering, and mathematics careers. In 2019, she was posthumously awarded the Congressional Gold Medal.

"Mary W. Jackson was part of a group of very important women who helped NASA succeed in getting American astronauts into space. Mary never accepted the status quo, she helped break barriers and open opportunities for African Americans and women in the field of engineering and technology," said Bridenstine. "The Mary W. Jackson NASA Headquarters building appropriately sits on 'Hidden Figures Way,' a reminder that Mary is one of many incredible and talented professionals in NASA's history who contributed to this agency's success. Hidden no more, we will continue to recognize the contributions of women, African Americans, and people of all backgrounds who have made NASA's successful history of exploration possible."

NASA

Mary Winston Jackson (1921–2005) successfully overcame the barriers of segregation and gender bias to become a professional aerospace engineer and leader in ensuring equal opportunities for future generations.

The work of the West Area Computing Unit caught widespread national attention in the 2016 Margot Lee Shetterly book "Hidden Figures: The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race." The book was made into a popular movie that same year and Jackson's character was played by award-winning actress Janelle Monáe.

In 2019, after a bipartisan bill by Sens. Ted Cruz, Ed Markey, John Thune, and Bill Nelson made its way through Congress, the portion of E Street SW in front of NASA Headquarters was renamed Hidden Figures Way.

"We are honored that NASA continues to celebrate the legacy of our mother and grandmother Mary W. Jackson," said, Carolyn Lewis, Mary's daughter. "She was a scientist, humanitarian, wife, mother, and trailblazer who paved the way for thousands of others to succeed, not only at NASA, but throughout this nation."

Jackson was born and raised in Hampton, Virginia. After graduating high school, she graduated from Hampton Institute in 1942 with a dual degree in math and physical sciences, and initially accepted a job as a math teacher in Calvert County, Maryland. She would work as a bookkeeper, marry Levi Jackson and start a family, and work a job as a U.S. Army secretary before her aerospace career would take off.

In 1951, Jackson was recruited by the National Advisory Committee for Aeronautics, which in 1958 was succeeded by NASA. She started as a research mathematician who became known as one of the human computers at Langley. She worked under fellow "Hidden Figure" Dorothy Vaughan in the segregated West Area Computing Unit.

After two years in the computing pool, Jackson received an offer to work in the 4-foot by 4-foot Supersonic Pressure Tunnel, a 60,000 horsepower wind tunnel capable of blasting models with winds approaching twice the speed of sound. There, she received hands-on experience conducting experiments. Her supervisor eventually suggested she enter a training program that would allow Jackson to earn a promotion from mathematician to engineer. Because the classes were held at then-segregated Hampton High School, Jackson needed special permission to join her white peers in the classroom.

Jackson completed the courses, earned the promotion, and in 1958 became NASA's first Black female engineer. For nearly two decades during her engineering career, she authored or co-authored research numerous reports, most focused on the behavior of the boundary layer of air around airplanes. In 1979, she joined Langley's Federal Women's Program, where she worked hard to address the hiring and promotion of the next generation of female mathematicians, engineers and scientists. Mary retired from Langley in 1985.

In 2019, President Donald J. Trump signed the Hidden Figures Congressional Gold Medal Act that posthumously awarded the honor to Jackson, who passed away in 2005, and her "Hidden Figures" colleagues Katherine Johnson, Dorothy Vaughan, and Christine Darden.

In 2017, then 99-year-old Johnson was there to dedicate a new state-of-the-art computer research facility the bears her name at Langley. Johnson, another original member of the West Area Computing Unit, also was honored as a trailblazer and given the Presidential Medal of Freedom in 2015. In addition, Johnson was part of the group honored with the Congressional Gold Medal, and NASA's Independent Verification and Validation facility in Fairmont, West Virginia, also bears hername.

"NASA has worked to honor the work of these Hidden Figures and celebrate their legacy," added Bridenstine. NASA is dedicated to advancing diversity, and we will continue to take steps to do so."

Elizabeth Baca wins Exchange scholarship

By Jay Levine
X-Press editor

Elizabeth Baca is creative and artistic. She believes matching that with her skills in mathematics and engineering will enable her to pursue a career where she can make a difference.

"When I think up ideas, I can put pen to paper and draw it," she said. "My goal is to take these ideas and use engineering knowledge to develop new real-life cutting-edge technologies and medicines that will advance and benefit mankind. With my degree, I want to help develop new treatments and maybe even a cure for cancer."

Baca, a 2020 graduate of Saugus High School in Santa Clarita, is the winner of the NASA Armstrong Employee Exchange Council 2020 Joseph A. Walker Memorial Scholarship. The scholarship is available to sons and daughters of NASA Armstrong employees and offers $2,000 per year for up to four years contingent on full-time enrollment and a 3.0 GPA.

"I am extremely excited and grateful to win this scholarship to help me get one step closer to my dream," she said.

Elizabeth Baca is the daughter of John and Christy Baca of Santa Clarita. John Baca is branch chief of the NASA Armstrong Engineering Systems and Technology Division, where he is responsible for overseeing flight instrumentation and systems integration work.

NASA

Elizabeth Baca, at left, won the NASA Armstrong Exchange Scholarship. Armstrong Center Director David McBride, right bottom, and her Dad John Baca congratulate her.

"I was excited when I found out she had won," John Baca said. "She is a great person and always strives to do her best. She had a really tough senior year and it's great for to see these positive things happening for her."

To take her a step toward her goal of curing cancer, Baca plans to study biomedical engineering at The Ohio State University in Columbus, Ohio. The university awarded Baca the Buckeye Scholarship for her outstanding work.

"My dad has shown me that engineering is the key for creating, designing and integrating solutions that turn ideas into reality. I want to apply engineering principles to develop new technologies and let my creative side meet my analytical side."

Robbin Kessler, NASA Armstrong Exchange Council Scholarship chairwoman, said she looks forward to watching Elizabeth Baca embark on her journey.

"Congratulations," Kessler said. "On behalf of the Exchange Council it's going to be a great experience to watch you go through college for the next four years."

Baca finished high school with a 4.36 (3.96 unweighted) GPA and took a slate of honors classes biology, math, chemistry, English and anatomy and physiology, as well as advanced placement European history. She was part of the senior honor scholars and the junior honor scholars for having a GPA over 3.75. Baca was a presidential scholar in 2016 for a cumulative 4.0 GPA through junior high school.

Her fine arts awards include the Rising Star Award, best musical solo, third place for musical scene in two competitions. During high school she was in theater, where she was involved in multiple productions of musicals, plays, and competitions in her high school and in her community. She worked on Santa Clarita Community Theater productions.

The Exchange Scholarship is named for Walker, who was chief research pilot at the NASA center. He made the first NASA X-15 flight and flew the research aircraft 24 times, achieving the fastest speed and highest altitude. He won a number of top honors in aviation, but he was fatally injured June 8, 1966, in a mid-air collision between an F-104 he was piloting and the XB-70 research aircraft.

Awards... from page 2

The news was also welcome to Tim McElyea, Media Fusion executive vice president for federal programs.

"NASA was our first federal customer after we opened in 1995 and today NASA is our largest customer," McElyea said. "We are honored to support the NASA mission and be a part of the AFRC community and the Logical Innovations team."

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