GSDO MONTHLY HIGHLIGHTS

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Check out the GSDO 2016 Year in Review publication at http://go.nasa.gov/2lT52Pe
Members of the news media recently viewed the ten levels of new work platforms inside High Bay 3 of the Vehicle Assembly Building (VAB) at NASA’s Kennedy Space Center in Florida. Work to install the platforms came to conclusion Jan. 12 as the final work platform, A north, was lifted, installed and secured on its rail beam on the north wall of the high bay inside the iconic facility.

“I’m very proud of what our contractor and civil service team has accomplished in transforming Launch Complex 39 from shuttle to supporting the Space Launch System and Orion,” said Kennedy Director Bob Cabana. “A real visual of what we’ve accomplished are the platforms in High Bay 3 of the Vehicle Assembly Building.”

Twenty platform halves will surround NASA’s Space Launch System (SLS) rocket and the Orion spacecraft atop the mobile launcher and allow access during processing for missions, including the first flight test of Orion atop the SLS.

With the goal of being a multi-user facility, the new platforms were designed to be adjusted up and down, and in and out on their rail beams in order to accommodate the SLS and its solid rocket boosters, as well as other vehicles.

“Everything we do here is in support of NASA’s mission,” said Shawn Quinn, GSDO associate deputy director. “The journey for humans beyond low-Earth orbit begins here in the Vehicle Assembly Building.”

Design of the new platforms began in 2010. NASA awarded a contract to modify High Bay 3 to the Hensel Phelps Construction Co. of Greeley, Colorado, in March 2014. Hundreds of NASA and contractor workers were involved in the design, manufacture and installation of the platforms.

The platform levels are A, B, C, D, E, F, G, H, J and K, with the K-level being the lowest and the A-level the highest platforms.

“We are completing the design and development phase, and we’re now getting ready to move into the test phase,” Cabana said. “The Journey to Mars starts here in High Bay 3.”

The mobile launcher will be rolled into High Bay 3 in the fall for multi-element verification and validation testing with the platforms and launch umbilicals.
Andrew Shroble is a project manager with Jacobs on the Test and Operations Supports Contract (TOSC) at Kennedy Space Center. He supports TOSC Program Integration as a project manager and also as a flow manager for the Ground Systems Development and Operations Program.

Shroble is third generation working at Kennedy. His grandfather, Roy (Pete) Shroble, worked on the Atlas-Agena, Gemini, Apollo, and Space Shuttle Programs. His father, Mark Shroble, worked on the Space Shuttle Program for 28 years, and still works at the center as a technician on the Orion Program for Lockheed Martin. “I grew up watching the space shuttle launches and hearing my dad talk about his job,” Shroble said. “You could see the passion and pride he had for his work. I always wanted to be part of the excitement, and I knew an engineering degree would give me the opportunity to make that dream a reality.”

One of his recent GSDO projects is his assignment as flow manager for the Space Launch System Core Stage (CS) Pathfinder planning and operations integration. The test event is scheduled to take place in the fall of 2017. Shroble is responsible for ensuring the GSDO operations teams are ready to go upon arrival of the CS Pathfinder. This will serve as a training opportunity for GSDO teams to prepare them for Exploration Mission 1 flight processing.

He started working in his current position at Kennedy in 2015. Before that, he worked as an operations integration engineer for Millennium Engineering and integration on the Kennedy LX Support Contract (KLXS).

“There are challenges to the work,’ Shroble said, “These include planning out operations while integrating teams across multiple programs, meeting schedules, and keeping up with the constant change of scope and requirements.”

One of his most memorable experiences so far was supporting planning efforts on the GSDO team for Exploration Flight Test 1 Landing and Recovery. “Being a part of that team and witnessing the launch was really amazing,” Shroble said.

Shroble earned a Bachelor of Science in civil engineering in 2009 from the University of Central Florida.

Shroble said it is his hope that the GSDO team will soon be regularly launching NASA’s SLS rocket and Orion spacecraft from Kennedy.

“I’d like to see these exploration missions become reality and to send astronauts into deep space where they will be accomplishing unfathomable missions. To be a member of the workforce that brings excitement and pride back to the American space program would be really special,” Shroble said.

His first car was a 1984 white Jeep Cherokee. He is engaged to Angel Reed. They have a daughter, three-month-old Aviana, and a chocolate Labrador named Bella. Shroble’s hobbies include spending time with his family, surfing, fishing, golfing, soccer and softball.
Lakie Waldon is a software quality engineer on the Engineering Services Contract at NASA’s Kennedy Space Center. She provides support to the Ground Systems Development and Operations (GSDO) Program. Waldon provides hardware and software quality assurance functions. She also supports delivery of high quality products and services to the end-to-end Command and Control Program and provides feedback on processes and associated work products throughout the life of the program.

“The best part of my job is working with some of the best hardware and software engineers in the industry, and being part of the team that is helping NASA prepare for the next stage of exploration, supporting the first integrated flight of the Orion spacecraft and Space Launch System,” Waldon said.

Recently, she worked as the Launch Control System quality assurance representative on the team that successfully completed test objectives at Marshall Space Flight Center (MSFC) in Huntsville, Alabama, while testing the GSDO advanced hardware launch control system emulator and the portal work stations in the Systems Integration Lab. During the test, the team was able to send system software and test configuration identifier updates from the Firing Room 3 Master Console at Kennedy to the control system emulator at MSFC.

Another project was the successful completion of the Launch Control System Firing Room 2 Set. She served as the quality assurance representative during the 6-week verification test on user applications and requirement buy-offs using simulated vehicle and ground support equipment.

One of her most memorable moments was participating in the design, development, deployment and maintenance of software using the Ground Operations Aerospace Language, or GOAL. “The language was used to write tests and procedures to certify that the space shuttle vehicle was ready for launch in Firing Room 1,” Waldon said. “Another memorable moment was STS-8, the first night launch.”

Waldon first became interested in space when she was in college. One of her instructors, who had an affiliation with NASA, sparked her interest in automation and things related to space exploration.

Waldon has worked at Kennedy for many years in a variety of positions. She worked on the Checkout and Launch Control System for the Space Shuttle Program, on NASA Payroll, NASA Procurement, Kennedy’s Electronic Documentation System, and other mainframe applications for the KSC Base Operations Contract.

She advises students to pay attention in science and mathematics classes. “Learning the basics will help you gain analytical skills and provide the foundation to expand your skills and knowledge into transferable skills,” Waldon said. “It is important to plan, but many skills and experience are easily rewritten.”

Her expectations for NASA is that the agency will exceed expectations on the next stage of exploration. Waldon considers Orlando, Florida to be her hometown. Her first car was a 1978 white Ford Mustang. Her hobbies include working with young adults and serving as a mentor for the Future Generation Science Technology Engineering and Mathematics Academy Inc. (FGSTEM).

“Founded in 2010, FGSTEM’s mission is to enhance the development of our next generation of leading innovators, technology professionals and entrepreneurs by offering an education curriculum to stimulate and nurture aspiring young students’ interest in science, technology, engineering and mathematics,” Waldon said.
Prentice Washington is the Command, Control and Communications project manager for the Ground Systems Development and Operations (GSDO) Program at NASA’s Kennedy Space Center in Florida. His responsibilities include serving as the project manager of the Communications Office, which manages all of the transmissions, voice and video projects for the GSDO Program.

Washington started working at Kennedy in 2000 in the IT ODIN Office. Before that, he worked for Cooper Tire and Rubber Company. Throughout his career at NASA, he had the opportunity to expand and gain experience as a special assistant to two deputy center directors, Dr. Woodrow Whitlow and Bill Parsons, and spend a year at Glenn Research Center in Cleveland, Ohio, as deputy chief information officer.

“The coolest part of my job is looking for new and innovative systems to reduce costs for the program. The achievement I’m most proud of is working with several colleges to bring students into NASA to work on exciting, innovative projects,” Washington said.

After working as a special assistant for Whitlow and Parsons, in 2005 and 2006, respectively, he was asked by Ruth Gardner, manager of the Constellation Ground Systems Project Division, to apply for a technical assistant position under her in the Constellation Program. From there, he transferred into the GSDO Program in 2012.

“I’ve always been interested in the space program. It’s been my dream to work here since I was in eighth grade in a small town in southern Arkansas. From the time my parents bought me a telescope for a birthday present and I was able to see the rings around Saturn, I knew I wanted to work at Kennedy Space Center,” Washington said.

His hometown is Hamburg, Arkansas. He attended the University of Arkansas in Fayetteville, and earned a Bachelor of Science in computer engineering in 1992.

The advice he would give to students interested in pursuing a career in a field similar to his is to never stop learning. “The way technology changes so fast, there is nothing you can’t reach and innovate,” Washington said.

His first car was a 1974 red Toyota pickup truck. “It was so ugly we called it Yoda,” Washington joked.

He has been married to his wife, Angela, for 23 years. They have three children, Joel, 27, Kara, 19, and Jesse, 13. They also have three dogs.

Washington’s main hobby now is managing the careers of Kara and Jesse, who are models and actors.
A crane positions the bracket for the Orion Service Module Umbilical (OSMU) for installation March 13 on the mobile launcher tower at NASA’s Kennedy Space Center in Florida. The mobile launcher tower will be equipped with a number of lines, called umbilicals, that will connect to the Space Launch System rocket and Orion spacecraft for Exploration Mission-1 (EM-1). The OSMU will be located high on the mobile launcher tower and, prior to launch, will transfer liquid coolant for the electronics and air for the Environmental Control System to the Orion service module that houses these critical systems to support the spacecraft. EM-1 is scheduled to launch in 2018. The Ground Systems Development and Operations Program is overseeing installation of the umbilicals. Photo credit: NASA/Bill White