PAD 39B RECEIVES NEW FLAME DEFLECTOR
New flame deflector segments installed at Pad 39B

Reinvigorated center greets Pence visit

Service platforms arrive for Space Launch System booster engines

Ground Systems Spotlight - Dave Zeiters

Check out the GSDO 2016 Year in Review at http://go.nasa.gov/2lT52Pe
At Launch Pad 39B at NASA’s Kennedy Space Center in Florida, construction workers position large segments of the support hardware for a new flame deflector in the flame trench. The new flame deflector will be positioned about six feet south of the shuttle-era flame deflector’s position. During liftoff of NASA’s Space Launch System, the rocket’s flame and energy will be diverted to the north side of the flame trench. The north side of the deflector will be protected by a NASA standard coating. The south side of the deflector will not be slanted and will have no lining. The new design will provide easier access for inspection, maintenance and repair. The Ground Systems Development and Operations (GSDO) Program at Kennedy is managing the installation of the flame deflector for Exploration Mission-1, deep space missions, and NASA’s Journey to Mars.

Photo credit: NASA/Kim Shiflett

Segments of the support structures for a new flame deflector were lifted by crane and positioned in the flame trench at Launch Pad 39B on July 20, 2017. The new flame deflector will be positioned about six feet south of the shuttle-era flame deflector’s position. During liftoff of NASA’s Space Launch System (SLS), the rocket’s flame and energy will be diverted to the north side of the flame trench. The north side of the deflector will be protected by a NASA standard coating. The south side of the deflector will not be slanted and will have no lining. The new design will provide easier access for inspection, maintenance and repair. The Ground Systems Development and Operations (GSDO) Program at Kennedy is managing the installation of the flame deflector for Exploration Mission-1, the first test flight of the SLS rocket with Orion atop, deep space missions and NASA’s Journey to Mars.
REINVIGORATED CENTER GREETS PENCE VISIT

During his visit to NASA’s Kennedy Space Center in Florida on July 6, Vice President Mike Pence saw a Florida spaceport poised in the starting blocks to return America’s human launch capability, begin a new era in deep space exploration and capitalize on emerging partnerships with private industry.

Driving through much of the launch and processing facilities spread throughout the 144,000 acres of NASA’s Kennedy Space Center, Pence saw launch pads rebuilt for the needs of privately operated rockets, former space shuttle hangars refit to serve as spacecraft factories and the assembly hall for NASA’s own deep space exploration spacecraft, Orion.

Former astronaut Bob Cabana, Kennedy’s center director, guided the tour for Pence who was making his first stop at the center since becoming vice president. As vice president, Pence will serve as chairman of the newly reformed National Space Council that will set goals and establish policies for the United States’ space efforts.

Remade from a center focused heavily on the government-run Space Shuttle Program, Kennedy now favors flexibility in its operations and infrastructure. The center has become more accustomed to opening its unique laboratory, processing and launch capabilities to private companies that would not have had the chance to use them before.

Practically every location Pence toured showed significant changes from what it had been. The inside of the Vehicle Assembly Building, where Pence spoke to part of the center’s workforce, continues to see installations that will allow it to host the stacking of the massive Space Launch System rocket, a behemoth more than 32 stories tall designed to launch astronauts far beyond Earth orbit on missions that will eventually include destinations past the Moon and on to Mars. Unlike previous structures placed inside the VAB that were set up for one launch configuration only, the new platforms can be moved around and pieces replaced more easily to host many different arrangements of the SLS rocket. That gives mission planners more flexibility and allows the rocket to take the form best for the spacecraft it is launching.

Read the full story at https://go.nasa.gov/2sVppNV
SERVICE PLATFORMS ARRIVE FOR SPACE LAUNCH SYSTEM BOOSTER ENGINES

New service platforms for NASA’s Space Launch System (SLS) booster engines arrived at the agency’s Kennedy Space Center in Florida. The platforms were transported on two flatbed trucks from fabricator Met-Con Inc. in Cocoa, Florida. They were offloaded and stored inside the Vehicle Assembly Building (VAB).

The platforms will be used for processing and checkout of the engines for the SLS’ twin five-segment solid rocket boosters for Exploration Mission-1 (EM-1). The boosters, in combination with the rocket’s four RS-25 engines, will produce more than 8 million pounds of thrust at liftoff.

The first SLS mission, EM-1, will launch an uncrewed Orion spacecraft to a stable orbit beyond the Moon and bring it back to Earth for a splashdown in the Pacific Ocean. The mission will demonstrate the integrated system performance of the rocket, Orion spacecraft and ground support teams prior to a crewed flight.
David Zeiters is a senior systems engineer and manager with SGT Inc. on the Engineering Services Contract (ESC) at NASA’s Kennedy Space Center in Florida. He serves as the technical lead for the ESC Viz Works.

He supports the Ground Systems Development and Operations Program (GSDO) by conducting concept designs for GSDO ground support equipment using 3-D computer-aided design (CAD) modeling. He also develops and models operations flows, supports GSDO trade studies, and produces CAD-generated visualization images.

Zeiters has worked at Kennedy since October 1989. Prior to working at the center, he was an officer in the U.S. Air Force at Patrick Air Force Base from 1985 to 1989. He previously worked at Kennedy for McDonnell Douglas, Boeing, ASRC, and now for SGT. Zeiters initially worked in operational planning for shuttle payloads, then with the Advanced Studies Group conducting studies of lunar/Mars missions and future launch vehicles. He has worked in CAD modeling/visualization since 1993.

Zeiters says the best thing about working at Kennedy is making history.

“I get to work with outstanding people, helping design and visualize humanity exploring space,” Zeiters said. “I look forward to seeing the first person on Mars someday and saying I had a small part of helping that happen.”

Growing up, Zeiters was fascinated with the Apollo program. In high school, he had a wonderful teacher and planetarium director who inspired him to want to work in the space program.

Zeiters’ hometown is Harrisburg, Pennsylvania. He moved to Florida in 1985 when he was stationed at the air force base, working as a cost analysis officer supporting the Eastern Test Range.

Zeiters earned a Bachelor of Science in operations management from Pennsylvania State University at University Park in 1985. He also earned an associate’s degree in mechanical engineering from Penn State in 1983. While at Penn State, he varsity lettered in track and field, running sprints and hurdles.

The advice he would give to students interested in a career similar to his is to work hard at being good in math, science and writing. “Many engineers do more writing of reports than math calculations and need to be good writers,” Zeiters said. “And to be a good engineer, it is important to learn how to build things. It helped make me be a better engineer.”

When he was a kid, he built plastic model airplanes, he worked on projects made out of wood, and he helped his father fix things around the house. Zeiters said those activities helped him learn how things are made and put together and were the basis for his engineering skills.

His first car was a light blue 1972 Toyota Corona Mark II. “It was a small, ugly, boxy, four-door car with a four-speed stick shift, but it got me around during high school and my freshman year in college,” Zeiters said.

Zeiters has a 21-year-old son, Michael, who is a senior at the University of South Florida in Tampa. He also has a 29-year-old stepdaughter, Natalie, who lives near West Palm Beach. He is very close to his family in Florida and in Pennsylvania. He enjoys spending time with his friends.

Zeiters’ hobbies include reading books and articles on history, space and science. He enjoys playing golf and softball, target shooting, traveling, watching movies, going to concerts and playing strategy board games.
Hear the sounds and view the progress made by the Ground Systems Development and Operations Program to transform NASA's Kennedy Space Center into a multi-user spaceport and be ready to support the agency’s deep space missions, including the Journey to Mars.

Check out the Heartbeat of Exploration video at
https://www.youtube.com/watch?v=CaZuAK8cfJk