



National Aeronautics and Space Administration



LAGNIAPPE

John C. Stennis Space Center

Volume 16 Issue 9

www.nasa.gov/centers/stennis

September 2020



Moving ahead

See page 4

There I was lying in my good ol' hammock, pondering exactly what to pontificate about this month, when it dawned on me that maybe I should let y'all hear from someone else for a change. Maybe it was time – as my Nana Gator used to say – for me to tais-toi or “shut up.” Ark!

So, this month, listen to a few Stennis folk tell what it means to be a part of the upcoming **Green Run** hot fire test of the **Space Launch System (SLS)** core stage.

For NASA Center Operations Director Mary Byrd, anticipation of the Green Run hot fire defies description. “Mere words cannot express the excitement and energy in anticipation of the Green Run hot fire,” she said. “This is the first stage test in the history of my career, as well as many others here. This test will be the biggest and ‘baddest.’ Imagine – a chance to be involved is to be making history!”

The hot fire will be something Dale Tutor, the Syncom Space Services project manager for the SLS core stage project, never forgets. “I am extremely excited to be a part of such massive undertaking and to play a part in our nation’s return to the moon and Mars,” he said.

For William Stewart, a senior quality engineer with Bastion Technologies Inc., the upcoming hot fire figures to be as exciting as seeing his first space shuttle main engine test at Stennis and first space shuttle launch in Florida. “Every test or launch that occurred made the hair on the back of my neck stand up and brought tears to my eyes, just knowing I had a part in it,” he said.

Stephen Weiss, a quality assurance manager for A2Research, is a second-generation Stennis employee, following in the footsteps of his father, who supported space shuttle main engine testing on site. “Seeing the Green Run will be the most exciting event I’ve ever seen at Stennis,” Weiss said.

Those are just a few of the folks anxiously awaiting the biggest test in more than 40 years at Stennis. How about you? Ol’ Gator would love to hear your thoughts (along with your name, company and title) to ssc-pao@mail.nasa.gov.

And before you say it – yes, my Nana Gator used to pray the day would come when I would find something beyond description and be at a loss of words. Ark!



Lagniappe is published monthly by the Office of Communications at NASA’s John C. Stennis Space Center.

Access monthly copies at: www.nasa.gov/centers/stennis/news/publications/index.html

Contact info – (phone) 228-688-3749; (email) ssc-pao@mail.nasa.gov; (mail) NASA OFFICE OF COMMUNICATIONS, Attn: LAGNIAPPE, Mail code IA00, Building 1100 Room 304, Stennis Space Center, MS 39529

Subscribe at: <https://lists.nasa.gov/mailman/listinfo/stennis-space-center-lagniappe>

Managing Editor – Valerie Buckingham

Editor – Lacy Thompson

Staff Photographer – Danny Nowlin



NASA's MOON to MARS MISSION

Space Launch System Green Run Test Series

Teams complete core stage gimbal test



Engineers have completed the fifth of eight Green Run tests on the core stage of NASA's new Space Launch System (SLS) rocket, continuing progress toward a milestone hot fire test this fall. Operators concluded a test of the stage's thrust vector control system on the historic B-2 Test Stand at NASA's Stennis Space Center near Bay St. Louis, Miss., on Sept. 13. The test provided critical verification of the control system and its related hydraulics as operators gimballed the stage's four RS-25 engines just as they must move during flight to steer the rocket and maintain a proper trajectory. The stage now is set for two more tests – a simulated countdown demonstration and wet dress rehearsal – directly leading to the hot fire of all four RS-25 engines, just as during an actual flight. In the countdown demonstration, engineers will simulate the launch countdown and procedures to validate the established timeline and sequence of events. In the wet dress rehearsal, engineers will conduct another countdown exercise and actually load, control and drain more than 700,000 gallons of cryogenic propellants to ensure all is set for the final test of the Green Run series. The concluding test will activate all stage systems and fire the four RS-25 engines to generate the same combined 1.6 million pounds of thrust that will help launch the SLS rocket when it flies on the Artemis I mission. NASA is building SLS to launch missions for the next era of space exploration. The rocket will serve as the backbone of the Artemis program, powering missions that return humans, including the first woman, to the Moon by 2024. The Artemis program is designed to help establish a sustainable presence at the Moon and to develop technologies and techniques needed for eventual missions to Mars, which also will be powered by SLS. The core stage for the new rocket was delivered to Stennis early this year for a series of Green Run tests designed to verify all systems will operate as needed. Once the Green Run series is completed, engineers will refurbish the rocket and transport it to NASA's Kennedy Space Center in Florida. There, it will be stacked with to other major parts of the rocket and prepped for launch of the uncrewed Artemis I mission. Boeing is the prime contractor for the core stage construction. Aerojet Rocketdyne is manufacturing the RS-25 engines. Green Run testing is being conducted by a combined team of personnel from both companies, as well as the Stennis test team and SLS personnel from the Stages Office at NASA's Marshall Space Flight Center in Huntsville, Ala. [View a video of the gimbal testing here.](#)

NASA's MOON to MARS MISSION

NASA conducts SLS booster test for future Artemis missions

As NASA begins assembling the boosters for the [Space Launch System \(SLS\)](#) rocket that will power the first Artemis mission to the Moon, teams in Utah are evaluating materials and processes to improve rocket boosters for use on missions after Artemis III.

NASA completed a full-scale booster test for the Space Launch System rocket in Promontory, Utah, on Sept. 2 (see accompanying and cover photos. NASA and Northrop Grumman, the SLS booster lead contractor, will use data from the test to evaluate the motor's performance using potential new materials and processes that can be incorporated into future boosters. NASA has a contract with Northrop Grumman to build boosters for future rocket flights.

"Landing the first woman and the next man on the Moon is just the beginning of NASA's [Artemis program](#)," NASA Administrator Jim Bridenstine said. "The SLS flight support booster firing is a crucial part of sustaining missions to the Moon. NASA's goal is to take what we learn living and working on the Moon and use it to send humans on the first missions to Mars."

For a little over two minutes – the same amount of time that the boosters power the SLS rocket during liftoff and flight for each Artemis mission – the five-segment flight support booster fired in the Utah desert, producing more than 3 million pounds of thrust.

NASA and Northrop Grumman have previously completed three development motor tests and two qualification motor tests. Today's test, called Flight Support Booster-1 (FSB-1), builds on prior tests with the introduction of propellant ingredients from new suppliers for boosters on SLS rockets to support flights after Artemis III.

"NASA is simultaneously making progress on assembling and manufacturing the solid rocket boosters for the first three Artemis missions and looking ahead toward missions beyond the initial Moon landing," said John Honeycutt, the SLS program manager at NASA's Marshall Space Flight Center in Huntsville, Alabama. "Today marks the first flight support booster test to confirm the rocket motor's performance using potential new materials for Artemis IV and beyond."



Engines fired as a United Launch Alliance Atlas V rocket with NASA's Mars Perseverance rover onboard launches July 30, 2020 from Space Launch Complex 41 at Cape Canaveral Air Force Station in Florida. NASA's Mars 2020 Perseverance rover mission is on its way to the Red Planet

The SLS boosters are the largest, most powerful boosters ever built for flight. The flight support booster used in the test is the same size and has the same power as the flight version of a five-segment solid rocket booster used for NASA's Artemis missions. The [Artemis I](#) boosters are currently being prepared for launch at NASA's Kennedy Space Center in Florida.

"This flight support booster test is the first motor firing NASA and Northrop Grumman have completed since qualifying the booster design for

the Space Launch System rocket," said Bruce Tiller, SLS Boosters Office Manager at Marshall.

"Full-scale booster tests are rare, so NASA tries to test multiple objectives at one time so we are highly confident that any changes we make to the boosters will still enable them to perform as expected on launch day."

NASA is working to land the first woman and next man on the Moon by 2024. The SLS rocket, [Orion spacecraft](#), [Gateway](#), and human landing

system are part of NASA's backbone for deep space exploration. to search for signs of ancient life and collect samples to send back to Earth. Learn more about the Mars 2020 mission [here](#). For more information about America's Moon to Mars exploration approach, visit [here](#).

system are part of NASA's backbone for deep space exploration.

The Artemis program is the next step in human space exploration as part of America's broader [Moon to Mars](#) exploration approach. Experience gained at the Moon will enable humanity's next giant leap: sending humans to Mars. SLS is the only rocket that can send Orion, astronauts and supplies to the Moon in a single mission.

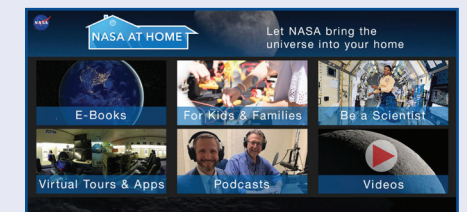
For more on NASA's SLS, visit [here](#).

For the latest on
NASA/Stennis Space Center
status, please access:

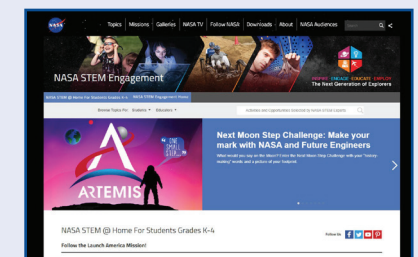
[Stennis Emergency Management web page](#)

[NASA Coronavirus Response Information web page](#)

Other online resources:



NASA at Home



NASA STEM@Home for Students

How to Draw Artemis



MARS 2020 STEM Toolkit

NASA E-Book Downloads

NASA's MOON to MARS MISSION

NASA perseveres through COVID-19 pandemic, looks ahead to 2020, 2021 milestones

With 2020 more than half way through, NASA is gearing up for a busy rest of the year and 2021.

Following the recent successful launch of a Mars rover and safely bringing home astronauts from low-Earth orbit aboard a new commercial spacecraft, NASA is looking forward to more exploration firsts now through 2021. The agency is sending the first woman and next man to the Moon in 2024, establishing sustainable exploration by the end of the decade as part of the [Artemis program](#) while getting ready for human exploration of Mars.

“By putting the health and safety of the NASA team first, we’ve been able to safely navigate the challenges of COVID-19 and keep our missions moving forward as much as possible,” said NASA Administrator Jim Bridenstine. “We will hit several key milestones for Artemis this year, including conducting a major test of our [Space Launch System \(SLS\)](#) rocket. We also plan to grab an asteroid sample and launch an ocean studying satellite to name a few missions ahead. These stunning NASA achievements have been made possible thanks to strong commitments from the President and Congress to fund and support NASA budgets and ushered in a new era of exploration for America’s space agency.”

2020 Perseveres

Among the activities the agency has for the rest of 2020, NASA’s SpaceX Crew-1 mission is targeted for launch from the agency’s Kennedy Space Center in Florida to the International Space Station this fall, following certification of the system by [NASA’s Commercial Crew Program](#). The mission will be the first in a series of regular, rotational flights with astronauts to the orbital laboratory as it marks 20 years of continuous human presence aboard the station Nov. 2. Flying four crew members on Crew-1 will expand the station’s crew to seven, effectively doubling the amount of time for crew members to support research investigations that advance scientific knowledge and prepare for human exploration farther into space. Boeing also is on deck to conduct a second uncrewed flight test for the Commercial Crew Program, before flying a crewed flight test in 2021 to meet program certification requirements. This is an important step in ensuring multiple providers are providing access to the space station from American soil.

In the America’s first asteroid sample return mission, NASA’s [OSIRIS-REx](#) will do a touch, grab, and go move on Bennu in October to collect a small sample to return to Earth.

NASA also continues to make significant progress toward the first uncrewed flight test of SLS and the [Orion spacecraft](#) and plans to conduct a hot fire test by November. This critical milestone known as the [Green Run](#), includes firing up the

rocket’s massive core stage and four RS-25 engines in a test stand. Stacking operations will begin with the solid rocket boosters on the mobile launcher in the late fall after the hot fire and will continue into 2021 when the core stage arrives. Engineers are putting finishing touches on Orion so it will be ready for attachment, making us one step closer to sending astronauts to walk on the Moon.

NASA also will test a suite of lander technologies aboard a



This artist concept shows NASA’s Space Launch System (SLS) rocket on the launch pad. SLS is designed to carry the Orion spacecraft, astronauts as well as important cargo, equipment and science experiments to the Moon, Mars and other destinations. This concept depicts the SLS Block 1 crew configuration that will be used on the Artemis missions to the Moon. NASA is working toward a launch of the Artemis I mission – an uncrewed flight test of the SLS rocket and the Orion spacecraft around the Moon – sometime in the fall of 2021.

commercial spaceflight mission. As the main experiment of the rocket, the technologies tested will support safer and more accurate future landings on the Moon.

Finally, the agency is also expected to launch the Sentinel-6 Michael Freilich satellite in November, which will collect the most accurate data yet on sea levels.

2021 to Bring More Firsts

Next year is shaping up to be one of NASA’s busiest yet.

Following an initial design phase, NASA is expected to announce whether Blue Origin, Dynetics and/or SpaceX are moving forward with their human landing systems, one of which will be the first private company to safely land American astronauts on the Moon in 2024.

future human exploration of the Red Planet.

In late July, NASA will launch the first test for planetary defense. The Double Asteroid Redirection Test, about the size of a small car, will deliberately crash into an asteroid moon in fall 2022 to change its motion. This is just a test, as the asteroid Didymos nor its targeted moon Dimorphos, pose any threat to our planet.

NASA will ship the SLS core stage to Kennedy early in the year for integration with the Orion spacecraft. Artemis I, the first uncrewed flight test of SLS and Orion, is on track to launch on its month-long mission around the Moon by fall. The Orion crew module for Artemis III will be delivered to Kennedy, where the crew module for Artemis II is already undergoing preparations for its mission.

Astrobotic and Intuitive Machines will each launch their first [Commercial Lunar Payload Services](#) flights to the Moon in the fall, delivering a suite of payloads to the lunar surface ahead of future Artemis missions with crew. This will be the first American robotic missions to land on the Moon in 50 years.

In October, NASA will launch Lucy as the first mission to study the Trojan asteroids – remnants of ancient material that formed the outer planets, now orbiting the Sun at the distance of Jupiter. By the end of that month NASA will launch the [James Webb Space Telescope](#), the flagship astrophysics mission exploring distant worlds and studying the first generation of galaxies formed at the beginning of the universe.

In 2021, NASA aeronautics teams will complete construction and prepare for the first flight of the X-59 QueSST, our low-boom supersonic X plane that will provide data that could lead to faster long-distance travel throughout the world. The X-57 Maxwell, the agency’s first all-electric experimental aircraft, will also conduct its first flight next year. The agency’s aero researchers also will launch an effort to advance electric propulsion for large commercial transports with an electric powertrain flight demonstration, helping to develop a fuel- and cost-efficient alternative to traditional jet-engine-powered aircraft.

Also next year, NASA will announce a new class of astronaut candidates, launch a new laser communications demonstration, and send a microwave oven-sized CubeSat to a unique, elliptical lunar orbit where the agency plans to send the Artemis’ [Gateway](#) outpost.

“With our rover landing on Mars, an asteroid protection space test, the Webb telescope launch, and the [Artemis I](#) mission among other activities on the horizon, we have another big, big year ahead for America’s space agency,” said Bridenstine.

When NASA’s [Perseverance](#) rover lands on Mars in February, the robot astrobiologist/geologist will search for signs of ancient life and collect rock and soil samples. As part of the mission, NASA also will deploy the Ingenuity helicopter from the rover in the first-ever demonstration of a rotorcraft on another planet. The space agency also will attempt to produce oxygen from the Martian atmosphere – a critical step for any



NASA announces new educational website

For almost 20 years, astronauts have lived and worked on the International Space Station, testing technologies, performing science, and developing the skills needed to explore farther from Earth. NASA's Office of STEM (Science, Technology, Engineering and Math) Engagement is kicking off a Celebrating Station Science series, which will provide an opportunity to connect students and educators to 20 years of space station experiments

and research through monthly themes with K-12 science, technology, engineering, and mathematics resources. Each month during the 2020-2021 school year, educators will have readily available lesson plans, activities, information on space station science experiments, and other resources to excite the Artemis Generation of explorers. All of this information is accessible via a recently launched website found [here](#).

NASA in the News

NASA awards services contract

NASA has selected CBF Partners Joint Venture of Reston, Virginia, to provide secretarial and administrative support to all levels of offices and organizations at NASA's [Stennis Space Center](#) near Bay St. Louis, Mississippi, and NASA's Johnson Space Center in Houston. The Dual Administrative Support Services (DASS) contract is a single award indefinite-delivery/indefinite-quantity contract with firm-fixed-price task orders and has a value of approximately \$50 million. The performance year begins Nov. 1, with a five-year base period. The services contract will provide general office services, data management services, time and labor collection, property coordination, move coordination, training coordination, information services coordination, and special events coordination. Stennis Space Center was established in the 1960s and has grown into the nation's largest propulsion test site. It has tested engines and rocket stages for the Apollo Program and Space Shuttle Program. It currently is testing engines and the first flight core stage for NASA's new [Space Launch System](#) rocket, which is designed to carry humans to the Moon and, ultimately, on to Mars.

Orion Program completes key review

NASA's [Orion Program](#) has completed the System Acceptance Review and Design Certification Review to certify the Artemis I spacecraft is fit for flight, ready to venture from Earth to the lunar vicinity, and return home for landing and recovery. The review examined every spacecraft system, all test data, inspection reports, and analyses that support verification, to ensure every aspect of the spacecraft has the right technical maturity. In effect, the review gives the stamp of approval to the entire spacecraft development effort and is the final formal milestone to pass before integration with the Space Launch System rocket. In addition to spacecraft design, the review certified all reliability and safety analyses, production quality and configuration management systems, and operations manuals. Orion, the Space Launch System, and Exploration Ground Systems programs are foundational elements of NASA's Artemis program, which will send the first woman and next man to the Moon. [Artemis I](#), the first integrated flight test of Orion and SLS, will launch next year. Artemis II will follow as the first human mission, taking astronauts farther into space than ever before.

Engineer has dream job as Green Run test conductor

When Ryan McKibben interviewed with a Pratt & Whitney Rocketdyne (now Aerojet Rocketdyne) representative at an Atlanta job fair 13 years ago, he had no experience in rocket engine work or testing, obvious areas of interest for the space propulsion company.

As it turned out, though, McKibben's background in automotive air induction and powertrain systems was deemed a good fit to qualify him to transition into the world of rocket engine testing. Add to that his strong interest in turbopumps and some experience in design and testing, and it is not surprising that McKibben now finds himself living a propulsion testing dream.

McKibben currently serves as the NASA test conductor for the Green Run test series on the agency's new Space Launch System (SLS) core stage, underway at the B-2 Test Stand at Stennis Space Center. As far as he is concerned, the role represents a once-in-a-lifetime opportunity.

"We are all learning and adapting together as a team to check out the largest most powerful rocket built," explained McKibben, a native of Alpharetta, Georgia, and resident of Mandeville, Louisiana. "We are the first ones to get the opportunity to hot fire the vehicle and have a chance to work together with our contractors to 'test drive' the integrated systems."

McKibben has come a long way from the 4th grade student who watched the first space shuttle flights following the Challenger tragedy in 1986. "It was clear that traveling to space was difficult, but the vehicles and engines that can take man to space were truly amazing," McKibben recalled of those experiences.

Following his job fair interview, McKibben was offered a position with Aerojet Rocketdyne at Stennis. He worked as a test engineer for the company before migrating to the NASA team as a mechanical operations engineer and as deputy chief of mechanical operations.

Then came the chance to work on the SLS core stage front line. NASA has designed SLS as the largest rocket ever built by humans. It will serve as the backbone for the agency's Artemis program, which focuses on returning humans, including the first woman, to the Moon by 2024, and preparing for eventual missions to Mars.

NASA is testing the RS-25 engines, which will help power the launch of SLS, on the A-1 Test Stand at Stennis. In addition, before the rocket flies its maiden mission, the agency is testing the first flight core stage at the site. The

Green Run series features eight integrated tests of the stage's sophisticated systems, culminating with a hot fire of its four RS-25 engines, just as during an actual launch.

"This project has taken an extraordinary amount of flexibility and a larger test crew than what we typically see on a test program

at Stennis," McKibben said of the Green Run series. "Despite a pandemic and challenges from the weather, the test team has stayed laser focused on achieving our mission and properly testing the vehicle on an aggressive schedule."

The concerted effort is a direct reflection of the Stennis workforce, McKibben said. "Working at Stennis is like being part of a family. People treat each other with respect. We are all continually learning and helping each other out. It is a wonderful place to work, and everyone is enthusiastic about being part of the effort to get this rocket tested before it journeys to the Moon and beyond."

For McKibben and others at the site, the dream-come-true opportunity will not end with the core stage activity. Stennis also has been charged with testing the SLS exploration upper stage, and a new series of RS-25 tests is set to begin this fall.

"We cannot wait to see this powerful rocket take flight, expanding our capabilities in space," McKibben said. "This vehicle and its missions are truly something that we can be proud of as a nation."



NASA Green Run test conductor Ryan McKibben (center) stands with astronauts Butch Wilmore (l) and Steve Bowen when they visited the A Test Complex Test Control Center following an RS-25 test.

1970 – Stennis survives end of Apollo Program



Note: NASA's John C. Stennis Space Center has played a pivotal role in the nation's space program. The following offers a glimpse into the history of the space program and the rocket engine test center.

On September 15, 1969, the Space Task Group, a group appointed by President Richard Nixon, issued a report on the space program post-Apollo.

The task group's purpose was to shape the future of the space program. At first, the Mississippi Test Facility (MTF), now Stennis Space Center, was not in those plans for the future.

MTF Manager Jackson Balch saw the problem and began looking for ways for the Mississippi facility to stay relevant. Not many people paid attention to him at first. The space race was continuing, and everyone had stars in their eyes. They were not concerned with where or how MTF would fit into NASA's plans.

Balch felt that MTF owed the people of the Mississippi Gulf Coast more. The taxpayers had paid for the facility. People also had given up land to build the facility, while others had given up their jobs and lives in other places to move and work at the south Mississippi site.

In 1970, an added problem nearly sealed the fate of MTF – budget cuts. With the Apollo era coming to a close, MTF was dangerously underutilized. Staff dwindled to under 2,000 as contractors cut positions when funding began to dry up. Everyone was looking for an exit strategy, but not Balch and not the legislatures and congressional representatives of Mississippi and Louisiana.

U.S. Sens. James Eastland and John C. Stennis of Mississippi and Sens. Russell Long and Allen Ellender of Louisiana, along with Reps. Sonny Montgomery, Bill Colmer,

and Hale Boggs, began focusing their efforts in Washington on keeping MTF open and building up the programs there. There was quite a paper war going on about it, letters heating up Washington, NASA, and MTF.

The end of the Apollo Program meant no more Saturn V engine and rocket stage tests at MTF. NASA acting Administrator George Low came to the facility, accompanied by NASA's top managers from both Headquarters and Marshall Space Flight Center, to give the employees a “pat on the back” and a “job well done” in supporting the program.



MTF Manager Jackson Balch (l) walks with U.S. Sen. John C. Stennis (center) and then-NASA acting Administrator George Low during a visit to the south Mississippi site Nov. 9, 1970.

However, during the visit, bigger things were happening behind the scenes. Balch, Stennis, Colmer, Mississippi Gov. John Bell Williams, community leaders and heads of at least 10 different federal agencies located onsite or considering locating to MTF attended the employee ceremony to let Low know how important MTF was to the government and local community.

During the day, behind closed doors, Balch, Stennis, Colmer, and their team challenged the NASA administrator and his team with some heavy politicking. Colmer was quoted as saying, “Sen. Stennis is noted to

be a gentleman, and you may not understand his message, but I am telling you now that if NASA fails to support MTF, we will withdraw our support for NASA.”

MTF and the employees had reached a turning point. Without the support of Stennis and Colmer in the U.S. Senate, NASA faced a budget cut. Programs already in the works, like the space shuttle, possibly would never materialize. As a result, MTF stayed open.

Less than two years later, the Space Shuttle Program was officially announced by President Nixon, and NASA decided the engines for the new spacecraft would be tested in Hancock County Mississippi.

Hail & Farewell

NASA bids farewell to the following:

Ronald Bald
Timothy White

Attorney Adviser
AST, Engineer Project Management

Office of the Chief Counsel
Engineering and Test Directorate

Office of Diversity and Equal Opportunity

The power of inclusion in the workplace

Inclusion is a vital component in 2020 and beyond. For diversity programs and initiatives to be successful, organizations must be inclusive. Diversity does not exist without inclusion.

When employees feel included, they feel a sense of belonging that drives increased positive performance results and creates collaborative teams who are innovative and engaging.

Employees that feel included are more likely to be positively engaged within the organization.

Higher employee engagement drives higher levels of productivity, retention, and a company's overall success. Without inclusion, diversity efforts will not succeed.

Some ways to create an inclusive environment include:

- Educating staff and its leaders.
- Listening and communicating effectively.
- Embracing employees to be their full authentic selves.

It is crucial to embrace an employee's full authentic self. Persons are at their best when they are their own authentic selves. In order to be one's authentic self, one must feel included.

Inclusion refers to the degree to which diverse individuals can:

- Use their voices.
- Participate in the decision-making processes within a group.
- Increase the amount of power they have within

the group.

- Feel like they belong.

Jeff Waldman, who previously wrote a blog post on the importance of diversity and inclusion on employee engagement, stated, "In fact, diverse and inclusive workplaces boosts employee engagement. You could even argue that the impact on employee engagement and

diversity are exactly the same. ... Employee engagement is a strategic business imperative, so it only makes sense to include diversity and inclusion in the conversation."

It is also now fair to add that not only is employee engagement and diversity crucial, but so is inclusion. Inclusion creates employee engagement and a sense of

belonging. For organizations to have successful talent, they must embrace and encourage engagement.

Along with employee engagement, organizations need to make sure that they are diverse and have an inclusive environment. Employees should feel a sense of belonging. Engagement, diversity, inclusion, and belonging all coincide with one another.

A positive inclusive environment embraces diversity, engagement, and belonging. Inclusion will continue to be an ever-present ideology. Organizations must embrace its employees to be their full authentic self. One must feel included which, in turn, creates authenticity.

From: "The Importance of Inclusion in the Workplace" by Anthony Paradiso. Find article at: <https://bit.ly/35zU6Pz>.

