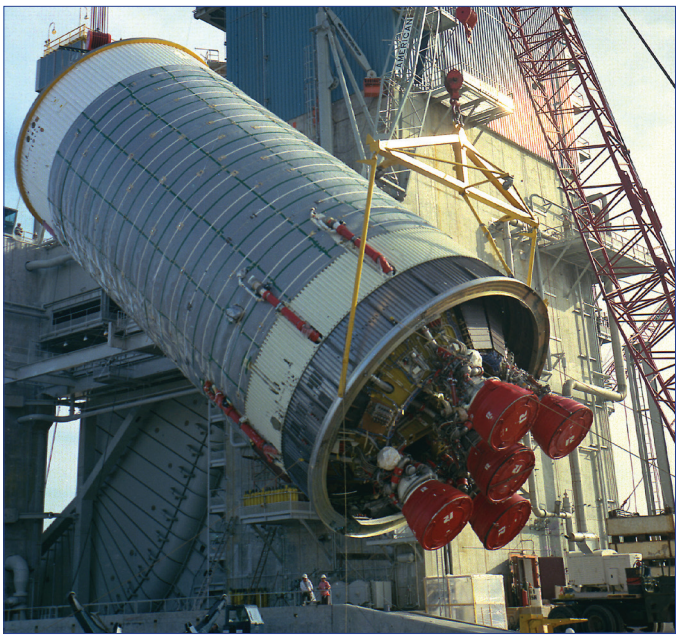
National Aeronautics and Space Administration

65 Years of Excellence

NASAfacts

For over six decades, NASA's Stennis Space Center has operated as the nation's premier propulsion test site. Since the 1960s, the American human space program has flown on rocket systems and engines tested at NASA Stennis. The center now is testing rocket stages and engines that will power the next great era of space exploration, which includes a return to the Moon and eventual travel to Mars. Since the 1960s, NASA Stennis has grown into the nation's largest propulsion test site. It also has evolved into a sprawling federal city, home to more than 50 federal, state, academic, and private organizations, as well as several technology-based companies. The site was known by several names before being designated as Stennis Space Center on May 20, 1988. It has witnessed a number of historic moments, as the following list and photos illustrate.

May 25, 1961	President John F. Kennedy challenges the nation to send humans to the Moon by the end of the decade.
October 25, 1961	NASA announces plan to build a national rocket test site in south Mississippi.
May 17, 1963	Workmen cut the first tree to begin construction of Stennis.
April 23, 1966	NASA Stennis conducts its first test – a Saturn V rocket booster (S-II-T) hot fire.
July 20, 1969	Apollo 11, powered by Saturn V rocket stages tested at NASA Stennis, lands the first humans on the Moon.
March 1, 1971	NASA announces Stennis will test main engines for the new space shuttle vehicle.



A Saturn V stage is lifted onto the A-2 Test Stand at NASA Stennis (1965).

May 19, 1975 NASA Stennis conducts the first space shuttle main engine test.

May 28, 1976 A flag-raising ceremony marks the official move of the Naval Oceanographic Program at NASA Stennis.

April 21, 1978 NASA Stennis conducts the first test of the space shuttle Main Propulsion Test Article, with three main engines in launch configuration and firing simultaneously.

January 18, 1989 Construction begins on NASA Stennis component test facilities, which will grow into the versatile, three-stand, seven-test-cell E Test Complex.

August 20, 1990 For the first time, space shuttle main engine are hot fired on all three large test stands in one day.

December 30, 1991 NASA administrator designates Stennis as the Center of Excellence for large propulsion system testing.

July 24, 1992 Stennis conducts the 2,000th hot fire test of a space shuttle main engine.

May 30, 1996 NASA designates Stennis as the lead center to manage capabilities and assets for rocket propulsion testing.

August 5, 2002 Lockheed Martin, the U.S. Navy, and the Naval Oceanographic Office cut ribbons on new facilities, collectively valued at $60 million.

January 21, 2004 NASA marks 1 million seconds of space shuttle main engine test and flight operations during a Stennis hot fire on the A-2 Test Stand.

August 11, 2005 NASA Stennis celebrates the 30th anniversary of space shuttle main engine testing at the facility.

August 29, 2005 Hurricane Katrina makes landfall on the Gulf Coast, its eye passing directly over NASA Stennis.

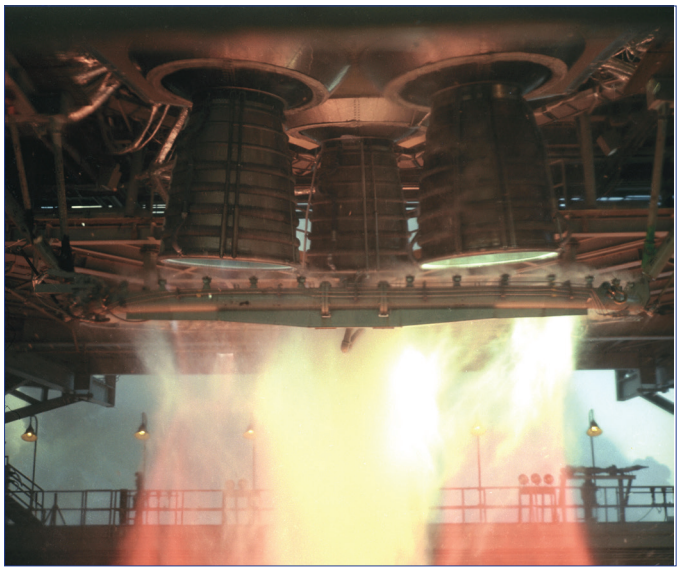
May 8, 2007 NASA announces the decision to build the A-3 Test Stand at NASA Stennis to conduct high-altitude testing of next-generation rocket engines.

October 22, 2008 NASA Stennis conducts a flight certification test on space shuttle man engine No. 2061, the last shuttle flight engine scheduled to be built.

July 29, 2009 NASA Stennis conducts its 2,307th – and final – space shuttle main engine test.

November 10, 2010 NASA Stennis conducts the first successful test of an AJ26 rocket engine for Orbital Sciences Corporation.

July 21, 2011 Space shuttle Atlantis completes the STS-135 mission, the final mission of NASA's Space Shuttle Program. As with all previous shuttle missions, Endeavour is powered into orbit by engines tested and proven flightworthy at NASA Stennis.



Stennis tests the space shuttle Main Propulsion Test Article (1979).

August 24, 2011 NASA Stennis marks transfer of 1.6 million square feet of facility space from the U.S. Army, setting the stage for years of major expansion at the site.

October 25, 2011 NASA Stennis leaders plant a time capsule celebrating the center's 50th anniversary.

April 13, 2012 The INFINITY Science Center opens as the NASA Stennis official visitor center. The 72,000-square-foot facility features space and Earth science artifacts and activities.

July 24, 2012 Engineers conduct a 1,350-second test of a J-2X powerpack, the longest-duration test firing ever in the NASA Stennis A Test Complex.

August 16, 2012 NASA Stennis marks a historic moment with the first instance of two female engineers conducting rocket engine tests on the same day at the facility.

November 5-9, 2012 NASA Stennis records a historic week within its E Test Complex, conducting a total of 27 hot fire tests on three different rocket engines/components on three different test stands.

January 9, 2015 NASA Stennis conducts the first test of an RS-25 rocket engine that will help power NASA's Space Launch System.

March 10, 2016 NASA marks a major milestone in its return to deep space human exploration with the first test of an RS-25 flight engine on the A-1 Test Stand at NASA Stennis.

April 23, 2016 NASA Stennis celebrates its 50th anniversary of rocket engine testing.

June 16, 2016 The Saturn V S-IC-15 rocket stage makes a historic return to NASA Stennis, en route to permanent display at the INFINITY Science Center. The stage first traveled the waterway route to NASA Stennis for testing in 1970.

May 17, 2017 NASA Stennis is awarded NASA's Small Business Administrator's Cup for the best overall small business program, the second time the site has earned the prestigious cup in the award's eight-year history.

Feb. 21, 2018 NASA Stennis tests an RS-25 engine on the A-1 Test Stand at the highest power level ever, reaching 113 percent of original thrust level.

March 21, 2018 NASA Stennis signs its first Commercial Space Launch Act with Relativity Space, a private company developing small rocket launch vehicles. The company later announces plans to build a production facility at NASA Stennis.

Stennis conducts its final space shuttle main engine test (2009).

June-July 2018 A combined team of NASA, Defense Advanced Research Projects, Aerojet Rocketdyne, Boeing, and Syncom Space Services personnel achieve an unprecedented accomplishment in late June to early July by conducting 10 hot fire tests of an AR-22 rocket engine in a 240-hour period.

November 2018 NASA caps a six-year process to prepare the B-2 Test Stand and related support facilities for testing the first core stage of the agency's Space Launch System rocket.

April 4, 2019 A successful hot fire test culminates four-plus years of testing for RS-25 engines that will send the first four Space Launch System rockets into space. The hot fire completes acceptance testing of all 16 former space shuttle main engines that will help launch the first four missions and concludes 51 months of testing that demonstrated RS-25 engines can perform at the higher power level needed for the new rocket.

January 21 - 22, 2020

NASA sets the stage for Green Run testing of the first Space Launch System core stage as the flight article is lifted and installed on the B-2 Test Stand at NASA Stennis. The stage will be used to launch the Artemis I mission. The Green Run test series represents the first top-to-bottom integrated testing of the stage prior to its maiden flight.

March 18 - May 11, 2020

NASA suspends core stage testing activity on the first Space Launch System core stage in response to the spread of the COVID-19 virus. Limited teams return to the B-2 Test Stand on May 11 to continue Green Run testing of the core stage, as conditions allow.

January 16, 2021

NASA and a blended team of test operators conduct an initial hot fire of its first Space Launch System core stage on the B-2 Test Stand at NASA Stennis. All four RS-25 engines ignite successfully for the test before the core stage experiences an automated shutdown after 67 seconds.

January 28, 2021

NASA conducts the first hot fire in a new RS-25 single-engine test series on the A-1 Test Stand. The test of developmental engine No. 0528 marks the beginning of a seven-test series to provide data to Aerojet Rocketdyne for production of new RS-25 engines.

March 18, 2021

NASA and a blended test team conduct a full-duration test of the first Space Launch System core stage on the B-2 Test Stand. The test culminates a series of eight Green Run tests of the stage and its integrated systems, conducted during a year marked by the COVID-19 pandemic restrictions and a recordbreaking hurricane season.

April 12, 2021

Aerojet Rocketdyne conducts the final scheduled hot fire test of an RS-68 engine on the B-1 Test Stand, culminating a Commercial Space Act testing partnership of more than 20 years with the south Mississippi center. The RS-68 was the first engine to be both assembled and tested at NASA Stennis.

Stennis tests the first core stage of NASA's Space Launch System rocket, firing its four RS-25 engines simultaneously on the B-2 Test Stand (2021).

October 18, 2022	Relativity Space announces expansion plan to test its Aeon R engines.
November 16, 2022	Artemis I successfully completes the first mission in a series of complex missions that will enable human exploration at the Moon.
November 4, 2022	NASA Stennis and Rocket Lab USA conducts ribbon cutting on a new agreement for the company to locate its engine test complex at the propulsion test site.
August 3, 2023	Crews complete successful lock system project.
September 7, 2023	NASA Stennis and Relativity Space announces a lease agreement for the company to operate the historic A-2 Test Stand.
March 4, 2024	SpaceX Transporter-10 mission launches carrying multiple satellites, including a Sidus Space LizzieSat-1 that carries NASA Stennis' first-ever in-space mission - ASTRA.
September 26, 2024	NASA Stennis completes a key test complex water system upgrade.
May 8, 2025	NASA Stennis releases its first-ever open-source software.
April 1 - 10, 2026	Artemis II completes a historic mission as the first crewed flight marking a key step towards long-term return to the Moon and future missions to Mars.
October 2025 - September 2026	NASA Stennis conducts Liquid Oxygen/Methane test series to quantify the explosive yield at Eglin Air Force Base in Florida.
June 30, 2026	In support of the agency's directive to strengthen core competencies, 125 employees are sworn in as the first set of contractor to civil servant employees at NASA Stennis.
July 24, 2026	NASA Stennis enters into an agreement with Blue Origin to support testing their New Glenn Rocket in support of the Artemis program.
July 31, 2026	NASA Stennis enters into an agreement with Cowboy Space to test rocket components in the E Complex.

Launch of Artemis II (2026).