APOLLO 11
Post Flight Handbook

Post Mission Report

Flight Operations Directorate
Operations Division

Basic, Revision C
September 1970

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas

NASA
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Pre Flight - Overview

The primary objective of Apollo 11 was to complete a national goal set by President John F. Kennedy on May 25, 1961: perform a crewed lunar landing and return to Earth.

Additional flight objectives included scientific exploration by the lunar module, or LM, crew; deployment of a television camera to transmit signals to Earth; and deployment of a solar wind composition experiment, seismic experiment package and a Laser Ranging Retroreflector.

Mission Highlights

Apollo 11 launched from Cape Kennedy on July 16, 1969, carrying Commander Neil Armstrong, Command Module Pilot Michael Collins and Lunar Module Pilot Edwin "Buzz" Aldrin into an initial Earth-orbit of 114 by 116 miles. An estimated 650 million people watched Armstrong's televised image and heard his voice describe the event as he took

"...one small step for a man, one giant leap for mankind"
on July 20, 1969.

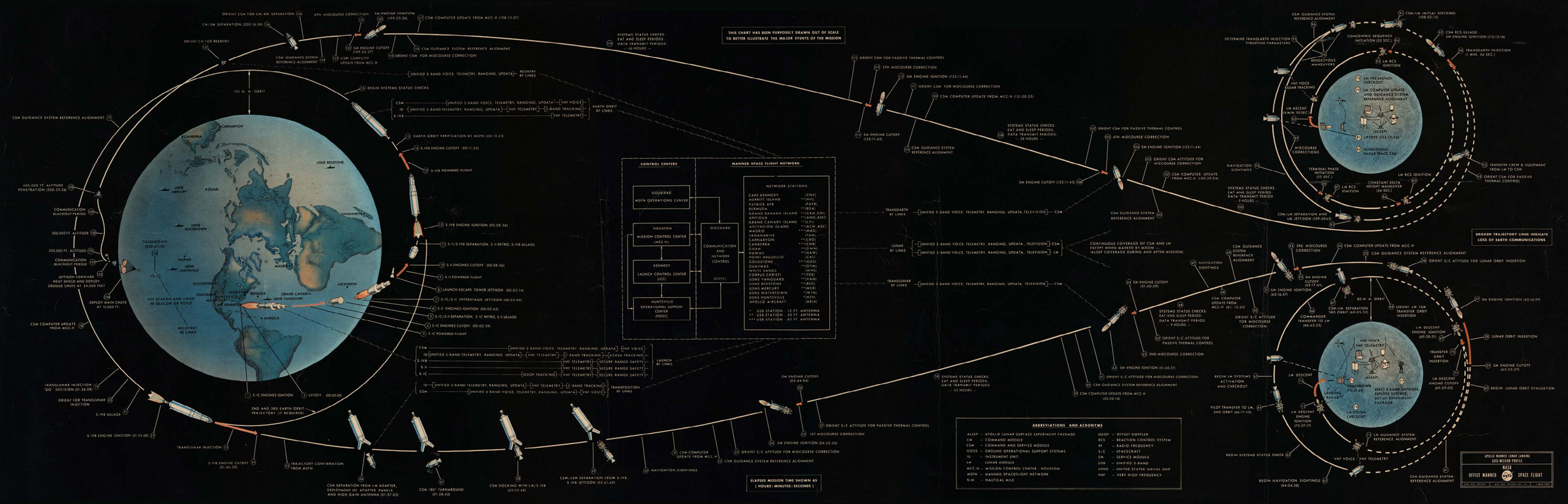
Pre Flight - Launch Location & Time

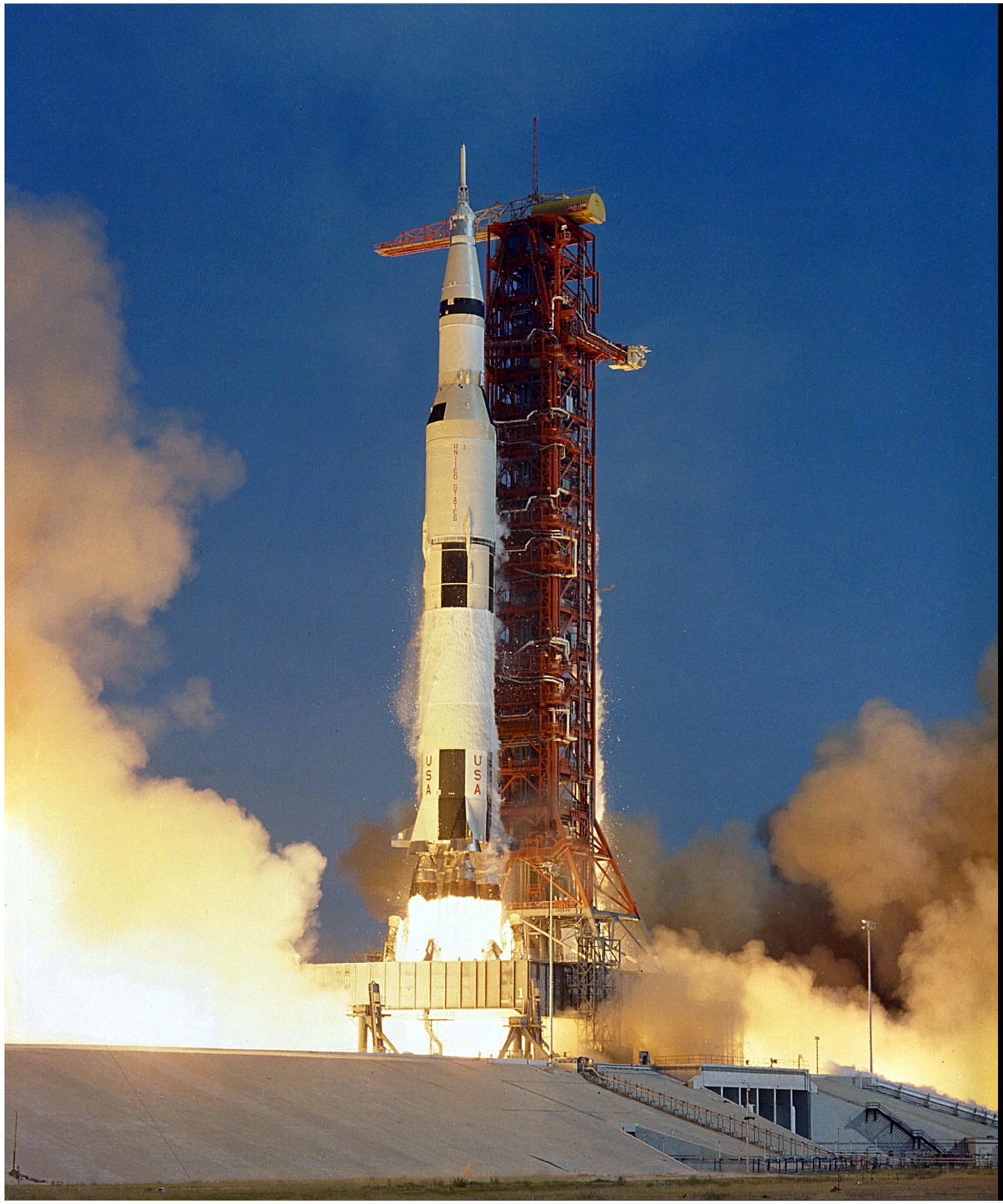
Launch Site

The John F. Kennedy Space Center (KSC, originally known as the NASA Launch Operations Center), located on Merritt Island, Florida, is one of the National Aeronautics and Space Administration's (NASA) ten field centers. Since December 1968, KSC has been NASA's primary launch center of human spaceflight.

The first of two uncrewed flights, Apollo 4 (Apollo-Saturn 501) on November 9, 1967, was also the first rocket launch from KSC. The Saturn V's first crewed launch on December 21, 1968, was Apollo 8's lunar orbiting mission.

Pre Flight - Trajectory



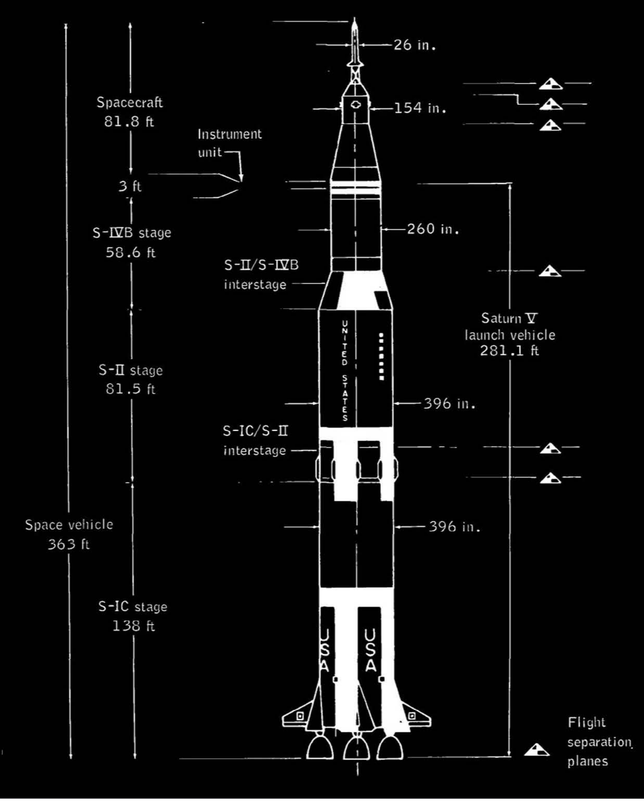


SATURN V

"It was the most powerful rocket that had ever flown successfully"

The Saturn V rocket was 111 meters (363 feet) tall, about the height of a 36-story-tall building, and 18 meters (60 feet) taller than the Statue of Liberty. Fully fueled for liftoff, the Saturn V weighed 2.8 million kilograms (6.2 million pounds), the weight of about 400 elephants.

The Saturn V was a rocket NASA built to send people to the moon. (The V in the name is the Roman numeral five.) The Saturn V was a type of rocket called a Heavy Lift Vehicle. That means it was very powerful. It was the most powerful rocket that had ever flown successfully. The Saturn V was used in the Apollo program in the 1960s and 1970s. It also was used to launch the Skylab space station.



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Personnel - Neil Armstrong

Neil Armstrong was the eldest of three children born to Viola Louise Engel and Stephen Koenig Armstrong, a state auditor. Neil's passion for aviation and flight was kindled when he took his first airplane ride at age 6.

He was active in the Boy Scouts of America and earned the rank of Eagle Scout, the highest rank attainable. He became a licensed pilot on his 16th birthday and a naval air cadet in 1947. His studies in aeronautical engineering at Purdue University in West Lafayette, Indiana, were interrupted in 1950 by his service in the Korean War, during which he was shot down once and was awarded three Air Medals.

He completed his degree in 1955 and immediately became a civilian research pilot for the National Advisory Committee for Aeronautics (NACA), later the National Aeronautics and Space Administration (NASA). He flew more than 1,100 hours, testing various supersonic fighters as well as the X-15 rocket plane.

"Houston, Tranquillity Base here. The Eagle has landed."
on July 20, 1969.

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Personnel - Michael Collins

Michael Collins,
(born October 31, 1930, Rome Italy—
died April 28, 2021, Naples, Florida, U.S.),
U.S. astronaut who was the command module pilot of Apollo 11 the first crewed lunar landing mission.

A graduate of the US Military Academy at West Point, New York, Collins transferred to the air force, becoming a test pilot at Edwards Air Force Base in California. He joined the space program in 1963.

Selected as part of NASA's third group of 14 astronauts in 1963, Collins flew in space twice. His first spaceflight was on Gemini 10 in 1966, in which he and Command Pilot John Young performed orbital rendezvous with two spacecraft and undertook two extravehicular activities (EVAs, also known as spacewalks).

"I knew I was alone in a way that no earthling has ever been before."
on July, 1969.

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Personnel - Buzz Aldrin

Buzz Aldrin, original name Edwin Eugene Aldrin, Jr., (born January 20, 1930, Montclair, New Jersey, U.S.), American astronaut who was the second person to set foot on the moon.

A graduate of the US Military Academy, West Point, New York (1951), Aldrin became an air force pilot. He flew 66 combat missions during the Korean War, where he flew F-86 “Sabre” aircraft as part of the 51st Fighter Wing in Seoul and shot down two MiG-15 jets. Aldrin later served in West Germany. In 1963 he wrote a dissertation on orbital mechanics to earn a Ph.D. from the Massachusetts Institute of Technology, Cambridge. Later that year he was chosen as an astronaut.

Aldrin was selected as a member of NASA's Astronaut Group 3, making him the first astronaut with a doctoral degree. His doctoral thesis was Line-of-Sight Guidance Techniques for Manned Orbital Rendezvous, earning him the nickname "Dr. Rendezvous" from fellow astronauts. His first space flight was in 1966 on Gemini 12 during which he spent over five hours on extravehicular activity.

“Beautiful view...
...Magnificent desolation.”
on 20 July, 1969.

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