

MISSION MOON

MEDIA INQUIRIES CONTACT:

Christina O'Connell
(312) 542-2424
coconnell@adlerplanetarium.org
adlerplanetarium.org/exhibits/mission-moon

NASA's Manned Missions to Space

MERCURY MISSIONS

Mercury-Redstone 3:

Mission Date: May 5, 1961
Astronaut: Alan B. Shepard, Jr.
Flight Summary: 15 minutes, 28 seconds
Suborbital flight that successfully put the first American in space.

Mercury-Redstone 4

Mission Date: July 21, 1961
Astronaut: Virgil I. Grissom
Flight Summary: 15 minutes, 37 seconds -
Suborbital flight, successful flight but the spacecraft sank shortly after splashdown.

Mercury-Atlas 6

Mission Date: February 20, 1962
Astronaut: John H. Glenn, Jr.
Flight Summary: 4 hours, 55 minutes, 23 seconds
Three-orbit flight that placed the first American into orbit.

Mercury-Atlas 7

Mission Date: May 24, 1962
Astronaut: Scott M. Carpenter
Flight Summary: 4 hours, 56 minutes, 5 seconds
Confirmed the success of the Mercury-Atlas 6 by duplicating the flight.

Mercury-Atlas 8

Mission Date: October 3, 1962
Astronaut: Walter M. Schirra
Flight Summary: 9 hours, 13 minutes, 11 seconds
Six-orbit engineering test flight.

Mercury-Atlas 9

Mission Date: May 15-16, 1963
Astronaut: L. Gordon Cooper, Jr.
Flight Summary: 34 hours, 19 minutes, 49 seconds
The last Mercury mission; completed 22 orbits to evaluate effects of one day in space.

GEMINI MISSIONS

Gemini III

Mission Date: March 23, 1965
Astronauts: Commander Pilot Gus Grissom & Pilot John Young
Flight Summary: 4 hours, 52 minutes, 31 seconds
First manned Gemini flight; first American two-person crew; Completed three orbits

Gemini IV

Mission Date: June 3-7, 1965
Astronauts: Command Pilot James McDivitt & Pilot Ed White
Flight Summary: 4 days, 1 hour, 56 minutes, 12 seconds
Ed White conducts first American spacewalk; it lasts 20 minutes

Gemini V

Mission Date: August 21-29, 1965
Astronauts: Command Pilot Gordon Cooper & Pilot Pete Conrad
Flight Summary: 7 days, 22 hours, 55 minutes
This mission showed the human ability to adapt to weightlessness then readapt to gravity; First week-long flight; Evaluated guidance and navigation systems for future rendezvous missions

Gemini 7

Mission Date: December 4-18, 1965

Astronauts: Command Pilot Frank Borman
& Pilot Jim Lovell

Flight Summary: 13 days, 18 hours, 35 minutes
Primary objective was to see if humans could live in space for 14 days; This was the first mission to rendezvous with another two-man spacecraft

Gemini 6-A

Mission Date: December 15-16, 1965

Astronauts: Command Pilot Wally Schirra
& Pilot Thomas P. Stafford

Flight Summary: 1 day, 1 hour, 51 minutes
First manned rendezvous with Gemini 7; They could have docked, but were not equipped with the proper equipment; The spacecraft's came as close as 30 cm from each other.

Gemini 8

Mission Date: March 16-17, 1966

Astronauts: Command Pilot Neil Armstrong
& Pilot David Scott

Flight Summary: 10 hours, 41 minutes, 26 seconds
First mission where two spacecraft's docked; While docked, a Gemini thruster malfunction caused a near-fatal tumbling of the spacecraft, but Armstrong undocked, and the crew performed the first emergency landing of a manned U.S. space mission

Gemini 9-A

Mission Date: June 3-6, 1966

Astronauts: Command Pilot Thomas Stafford
& Pilot Eugene Cernan

Flight Summary: 3 days, 20 minutes, 50 seconds
Eugene Cernan performed a two-hour spacewalk

Gemini 10

Mission Date: July 18-21, 1966

Astronauts: Command Pilot John Young
& Pilot Michael Collins

Flight Summary: 2 days, 22 hours, 46 minutes
First mission where an astronaut spacewalked to another spacecraft; Established that radiation at high altitude was not a problem

Gemini 11

Mission Date: September 12-15, 1966

Astronauts: Command Pilot Pete Conrad
& Pilot Richard F. Gordon, Jr.

Flight Summary: 2 days, 23 hours, 17 minutes –
This mission flew 851 miles above earth

Gemini 12

Mission Date: November 11-15, 1966

Astronauts: Command Pilot Jim Lovell
& Pilot Buzz Aldrin

Flight Summary: 3 days, 22 hours, 34 minutes
Mission showed that astronauts could work efficiently outside of the spacecraft; Aldrin demonstrated the feasibility of extravehicular activity by performing a 2 hour and 20 minute spacewalk, which can be credited to the new training technique, underwater training (View the spacecraft in the next room)

APOLLO MISSIONS

Apollo 1

Mission Date: January 1967

Astronauts: Command Pilot Gus Grissom,
Pilot Ed White & Pilot Robert Chaffee

Flight Summary: Planned to be in space for 14 days, but the crew perished in a pre-launch fire

Apollo 7

Mission Date: October 11-22, 1968

Astronauts: Command Pilot Wally Schirra,
Pilot Walt Cunningham & Pilot Donn Eisele

Flight Summary: 10 days, 20 hours, 9 minutes
First live American TV broadcast from space;
Final manned launch from the Cape Kennedy Air Force Station

Apollo 8

Mission Date: December 21-27, 1968

Astronauts: Command Pilot Frank Borman,
Pilot Jim Lovell & Pilot Bill Anders

Flight Summary: 6 days, 3 hours, 42 seconds
First manned mission to leave Earth's orbit and orbit the Moon; Broadcast live on Christmas Eve; First flight to launch from the Kennedy Space Center; The crew was named Time Magazine's men of the year

Apollo 9

Mission Date: March 3-13, 1969

Astronauts: Command Pilot James McDivitt,
Pilot David Scott & Pilot Russell Schweickart

Flight Summary: 10 days, 1 hour, 54 seconds
Tested several aspects critical to landing on the moon; Performed the first-manned flight of a Lunar Module; First space docking of two vehicles with an internal crew transfer between them

Apollo 10

Mission Date: May 18-26, 1969

Astronauts: Command Pilot Thomas Stafford,
Pilot John Young & Pilot Eugene Cernan

Flight Summary: 8 days, 3 minutes, 23 seconds
“Dress Rehearsal” for the Apollo 11 mission;
Spacecraft set the Guinness World Record for the highest speed attained by a manned vehicle;
Crew flew Lunar Module down to 50,000 feet from Lunar Surface

Apollo 11

Mission Date: July 16-24, 1969

Astronauts: Command Pilot Neil Armstrong,
Pilot Michael Collins, & Pilot Buzz Aldrin

Flight Summary: 8 days, 3 hours, 18 minutes
First flight to land on the moon; Neil Armstrong takes first step on the moon

Apollo 12

Mission Date: November 14-24, 1969

Astronauts: Command Pilot Pete Conrad,
Pilot Alan Bean & Pilot Dick Gordon

Flight Summary: 10 days, 4 hours, 36 minutes
First precision Lunar Landing; First color television camera on the Lunar surface

Apollo 13

Mission Date: April 11-17, 1970

Astronauts: Command Pilot James Lovell,
Pilot Jack Swigert & Pilot Fred Haise

Flight Summary: 5 days, 22 hours, 54 minutes
Traveled 248,655 miles from Earth—further than any other humans

Apollo 14

Mission Date: January 31 – February 9, 1971

Astronauts: Command Pilot Alan Shepard,
Pilot Stuart Roosa & Pilot Edgar Mitchell

Flight Summary: 9 days, 1 minute, 58 seconds
Used the planned landing site from aborted Apollo 13 mission; Shepard hit two golf balls on the Lunar surface with a makeshift club, he brought from Earth; Mitchell and Shepard spent 33 hours on the moon

Apollo 15

Mission Date: July 26 – August 7, 1971

Astronauts: Command Pilot David Scott,
Pilot Alfred Worden & Pilot James Irwin

Flight Summary: 12 days, 7 hours, 11 minutes
First mission where a lunar roving vehicle was used; Scott and Irwin spent three days on the moon; Our moon rock is from this mission

Apollo 16

Mission Date: April 16-27, 1972

Astronauts: Command Pilot John Young,
Pilot Ken Mattingly & Pilot Charlie Duke

Flight Summary: 11 days, 1 hour, 51 minutes
Young and Duke collected 211 lbs. of lunar samples to return to Earth; On the return, Mattingly performed a one-hour spacewalk to retrieve several film cassettes from the exterior of the service module

Apollo 17

Mission Date: December 7-19, 1972

Astronauts: Command Pilot Eugene Cernan,
Pilot Ronald Evans & Pilot Harrison Schmitt

Flight Summary: 12 days, 13 hours, 51 minutes
First scientist to ever go to the moon, Geologist Harrison H. Schmitt; Cernan and Schmitt spent just over three days on the lunar surface; The mission broke several records set by previous flights, including the longest manned lunar landing flight; the longest total lunar surface extravehicular activities; the largest lunar sample return; and the longest time in lunar orbit