



ArAA Celebrates Moon Walk Anniversary

In a speech to Congress on May 25, 1961, President John F. Kennedy outlined his Apollo program, a plan to send an American to the Moon by the end of the decade. The program succeeded on July 20, 1969. Apollo 11 was the triumph of an enormous infrastructure, requiring the cooperation of many thousands of dedicated individuals.

From the beginning...

On Jan. 27, 1967, a fire swept through the Command Module (CM) during a preflight test for Apollo 1, which was scheduled to be the first manned Apollo mission. Virgil Grissom, Edward White, and Roger Chaffee lost their lives.

The Apollo 7 mission (Oct. 11–22, 1968), commanded by Walter M. Schirra, was a confidence builder. The Apollo hardware and all mission operations worked without any significant problems, and the engine that would place Apollo in and out of lunar orbit made eight nearly perfect firings.

The Apollo 8 mission (Dec. 21–27, 1968) proved the ability to navigate to and from the Moon. The astronauts were the first human beings to venture beyond low-Earth orbit. Apollo 8 entered lunar orbit on the morning of December 24, and for the next 20 hours, the astronauts circled the Moon.

Apollo 9 (Mar. 3–13, 1969) was the first space test of the Apollo Lunar Module (LM). The astronauts tested all three vehicles in Earth orbit, undocking and redocking the lunar lander with the CM. Russel Schweickart and David Scott performed a spacewalk, and Schweickart checked out the new Apollo spacesuit with its own life support system.

Apollo 10 (May 18–26, 1969) was the dress rehearsal for actual Moon landing. Shortly after leaving low-Earth orbit, the LM and the CM separated then redocked,

separating again upon reaching lunar orbit. Astronauts Thomas Stafford and Eugene Cernan checked out the LM's radar and ascent engine, and surveyed the Apollo 11 landing site in the Sea of Tranquility.

Mission Accomplished

Apollo 11 (Jul. 16–24, 1969) saw the achievement of Kennedy's goal. At 4:17 p.m. Eastern Daylight Time on July 20, Neil Armstrong piloted his LM to a touchdown on the Moon. Six hours later, he took "one giant leap for mankind." He and Edwin "Buzz" Aldrin spent two-and-a-half hours on the Moon's surface. They left behind scientific instruments, an American flag, and a plaque bearing the inscription: "Here Men From Planet Earth First Set Foot Upon The Moon. July 1969 A.D. We Came In Peace For All Mankind."

Apollo 12 (Nov. 14–24, 1969) marked the second lunar landing. Astronauts Charles "Pete" Conrad, Jr. and Alan Bean took two Moon walks, collecting rocks and setting up experiments that measured the Moon's seismicity, solar wind flux, and magnetic field.

Apollo 13 (Apr. 11–17, 1970) proved the program's ability to weather a crisis. The crew's radio message to Mission Control was "Okay, Houston, we've had a problem here." An oxygen tank in the Service Module (SM) exploded. The three astronauts had to use the LM for the return home.

During the Apollo 14 mission (Jan. 31–Feb. 9, 1971), Alan Shepard and Edgar Mitchell took two Moon walks, using a "lunar rickshaw" to carry equipment. On the way back to Earth, the crew conducted the first materials processing experiments in space.

Apollo 15 (Jul. 26–Aug. 7, 1971) was the first to include the lunar rover, in which David Scott and James Irwin rode more than 27.36 kilometers. They brought back one of the trophies of the program, a sample of ancient lunar crust nicknamed the "Genesis Rock."

A malfunction in the LM's propulsion system nearly caused Apollo 16 (Apr. 16–27, 1972) to be scrubbed. However, John Young and Charles Duke spent three days exploring the Descartes region. Their collection included a 11.34-kilogram chunk that was the largest rock returned by Apollo astronauts.

Mission Complete

Apollo 17 (Dec. 7–19, 1972) was the final mission in the program. Jack Schmitt and Eugene Cernan collected 108.86 kilograms of rocks during three Moon walks. The crew left behind a plaque attached to their lander, which read: "Here Man completed his first exploration of the Moon, December 1972 A.D. May the spirit of peace in which we came be reflected in the lives of all mankind."

(Text for this article taken from <http://history.nasa.gov/ap11-35ann/index.htm>)

Discoveries of the Apollo program

1. The Moon is an evolved terrestrial planet with internal zoning similar to that of Earth.
2. The Moon is made of rock that has been melted, erupted through volcanoes, or crushed by meteorites.
3. The youngest Moon rocks are virtually as old as the oldest Earth rocks.
4. The Moon and Earth are genetically related, formed from different proportions of common materials.
5. The Moon is lifeless; it contains no living organisms, fossils, or native organic compounds.
6. All Moon rocks originated through high-temperature processes with little or no involvement with water.

In the Spotlight: Blackbird AirPark



See the story on the back for more information.

Don't miss the return of the U.S. Navy Blue Angels!

Plus performances by:

Red Bull Air Force Wingsuit Flyers
Greg Colyer, Lockheed T-33 Shooting Star "Ace Maker"
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Bill Braack, Smoke-N-Thunder Jet Car
Air Force Heritage Flight Foundation F-86 Sabre Jet



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National Spotlight: Blackbird AirPark

Blackbird AirPark, an annex of the Air Force Flight Test (AFFT) Museum at Edwards AFB, was dedicated on September 27, 1991. It is the world's only display of a Lockheed SR-71A together with its predecessor A-12, along with the once ultra-secret D-21 drone and the only remaining U-2 "D" model in the world.

The AirPark was established to preserve the heritage of the Blackbird family of military aircraft. Through the restoration, preservation, and display of these unique aircraft, it provides the visiting public with an interesting and educational experience.

The Blackbird Heritage Courtyard brick exhibit commemorates designers, crew members, and others associated with Blackbird aircraft's development and mission execution. Visitors are welcome to purchase bricks, inscribed with their name or the name of someone they wish to honor, to be placed amongst the names of Blackbird pioneers such as Lockheed's Clarence "Kelly" Johnson, CIA's Allen Dulles, U-2's first flight pilot Tony LeVier, A-12's first flight pilot Lou Schalk, and SR-71's first flight pilot Bob Gilliland.

Included in the Blackbird AirPark collection are:

- * U-2D spy plane
- * A-12 CIA reconnaissance aircraft
- * SR-71A USAF reconnaissance aircraft
- * D-21 drone
- * J57 engine (used on U-2's)
- * J58 engine (used on SR-71's)

The Blackbird AirPark is open Friday through Sunday, 11:00 a.m. to 4:00 p.m., subject to volunteer availability and weather. Admission is free.

Visit the park at 2503 E Avenue P, Palmdale, CA

AirPark Phone Number: 661-274-0884

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