Space Exploration and the White House

INTRODUCTION

The United States and the Soviet Union (now Russia) fought together with the Allies against Nazi Germany and the Axis Powers during World War II. Soon thereafter, however, the emerging superpowers found themselves in a heightened state of suspicion, tension, and fear—a Cold War. The Cold War, characterized by the nuclear arms race, the space race, opposing post-war ideologies, and the adoption of competitive foreign policies, set the scene as the United States and the Soviet Union turned their focus to asserting global dominance through space exploration. Explore the role of the White House in technological advancement and space exploration.

CONTEXTUAL ESSAY

Americans panicked when the Soviet Union launched Sputnik I, the world's first human-made satellite, on October 4, 1957. See a visual of Sputnik in **Image 1,** to the right. The launch of Sputnik revealed the Soviet Union's impressive advancements in space technology and put the American public and scientific community on edge. Many feared that the satellite signified potential advancements in missile technology, which could be launched from the Soviet Union and target major U.S. cities. On November 7, 1957, President Dwight D. Eisenhower delivered a televised address from the Oval Office, reassuring the public and turning America's attention towards outer space. For the next twenty years, President Eisenhower and his successors embarked upon an ambitious quest for space supremacy with the White House at the center of it all.

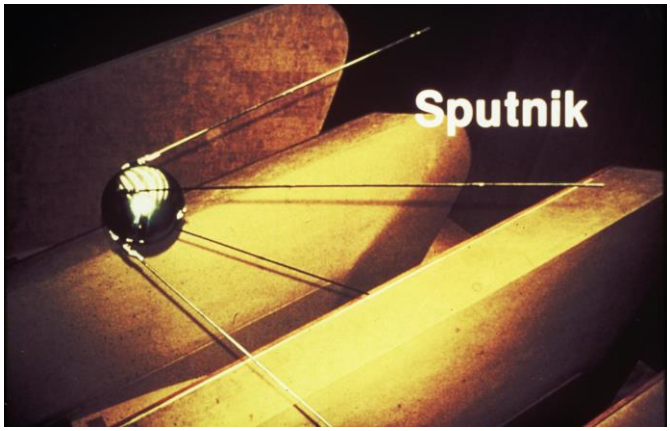

Image 1. Sputnik I, the world's first artificial satellite (1957).

President Eisenhower moved quickly to grow the United States' space program. Within months, Congress passed legislation establishing the National Aeronautics and Space Administration (NASA)

and approved the National Defense Education Act to provide federal funding for the study of science. Refer to **Image 2**, in the chart, to see a photograph of President Eisenhower presenting commissions of office to Dr. T. Keith Glennan as the first administrator for NASA and Dr. Hugh L. Dryden as its first deputy administrator during a White House ceremony in 1958. **Image 3**, also in the chart below, pictures President Eisenhower touring the George C. Marshall Space Flight Center in Huntsville, Alabama in 1960.

Image 5. On May 5, 1961, Alan Shepard launched into space aboard the Mercury Freedom 7, becoming the first American to leave the Earth's atmosphere. President John F. Kennedy, First Lady Jaqueline Kennedy, Vice President Lyndon Johnson, and others watch television coverage of the lift-off from the White House (1961).

On January 31, 1958, the United States launched its first satellite, Explorer I, into Earth's orbit. View **Image 4**, in the chart, to see a photograph of Explorer I. In December 1958, the United States launched its first communications satellite into space. Communications satellites allowed for radio, television, or phone transmissions between Earth and outer space. The satellite transmitted a radio recording of President Eisenhower's voice from outer space to Earth wishing the world "peace on earth and good will toward men everywhere." Although the United States wasted no time in catching up to Sputnik, America fell behind again when Soviet cosmonaut Yuri Gagarin became the first human to go to space on April 12, 1961.

But the United States was not far behind. On May 5, 1961, astronaut Alan Shepard became the first American to go to space aboard the *Mercury Freedom 7*. **Image 5**, above, shows President John F. Kennedy and others watching television coverage of the lift-off from the White House. A few days after his historic flight, President Kennedy presented Shepard with the NASA Distinguished Service Medal during a ceremony at the White House. See a photograph from the ceremony in **Image 6** in the

chart. American presidents were determined to outperform the Soviet Union and put a man on the Moon. In a speech to a joint session of Congress on May 25, 1961, President John F. Kennedy famously stated: "First, I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth." **Image 7**, in the chart, features President Kennedy addressing Congress and the nation in 1961.

On February 20, 1962, John Glenn successfully orbited Earth three times aboard the *Mercury Friendship 7*—bringing the United States one step closer to landing on the moon. In the following days, President Kennedy toured NASA's facilities in Cape Canaveral, Florida and presented Glenn with the NASA Distinguished Service Medal. **Image 8**, to the right shows President Kennedy speaking with Glenn on the steps of the North Portico of the White House after his successful mission to orbit the earth. Refer to **Image 9**, in the chart, to see John Glenn and his wife, Annie, waving to crowds of onlookers during a parade held in his honor. On July 23, 1962, another United States satellite, Telstar 1, broadcasted the first live transatlantic television feed, which included an address by President Kennedy to Europe.

Image 8. President John F. Kennedy speaks with astronaut John Glenn on the steps of the North Portico on February 26, 1962.

President Kennedy was assassinated before the United States flag was planted on the Moon, but President Lyndon B. Johnson pledged to continue advancing the space program and renamed the NASA Launch Operations Center, which included Cape Canaveral, the John F. Kennedy Space Center in honor of his contributions. **Image 10**, in the chart below, features President Johnson watching the launch of the fifth Saturn I rocket in the Oval Office in 1964. The Saturn rockets were

important milestones in landing the first humans on the Moon. President Johnson also continued Kennedy's tradition of inviting astronauts to the White House to communicate the success of the space program to the American public and the world.

On July 20, 1969, just six months into President Richard Nixon's first term, American astronauts Neil Armstrong and Edwin "Buzz" Aldrin landed on the Moon aboard the Apollo 11 Lunar Module. At 11:45 p.m., President Nixon placed a phone call to the Moon from the Oval Office: "Hello, Neil and Buzz. I'm talking to you by telephone from the Oval Room [Office] at the White House, and this certainly has to be the most historic telephone call ever made." Millions of people around the world watched as the United States became the first nation to place humans on the Moon. **Image 11**, in the chart, is a photograph of President Richard Nixon welcoming the Apollo 11 astronauts inside the Mobile Quarantining Facility back to Earth.

Image 12. Photograph of President Gerald R. Ford holding the Soviet Soyuz spacecraft model from a model set depicting the 1975 Apollo-Soyuz Test Project, an Earth orbital docking and rendezvous mission involving crewmen from the U.S. and the U.S.S.R. (1974).

The Apollo missions, focused on Moon landings, continued for several years resulting in five additional Moon landings. In 1975, the United States and the Soviet Union joined forces for the Apollo-Soyuz Test Project (ASTP)—the first joint international human spaceflight. Despite Cold War tensions, the two rival nations decided they could work together in pursuit of scientific knowledge to better humanity. On September 7, 1974, three American astronauts and two Soviet cosmonauts visited President Gerald Ford in the Cabinet Room of the White House to discuss the particulars of the mission. **Image 12**, to the left, is a photograph of President Ford meeting with U.S. and Soviet crewmen in the White House. On July 15, 1975, the crewmen completed the first joint international space flight. President Ford talked to the crewmen via radiotelephone while they orbited

Earth and called to congratulate them for their success afterwards. See a photograph of President Ford watching footage of the Apollo-Soyuz Test Project on television from his desk in the Oval Office in **Image 13** in the chart.

Space exploration was dangerous, however, and not all missions were successful. On January 27, 1967, a fire broke out inside the Apollo 1 spacecraft during a test on the launchpad. All three astronauts perished in the fire. Two decades later, on January 28, 1986, the United States experienced a shocking disaster when the Space Shuttle *Challenger* exploded 73 seconds after launch. President Ronald Reagan was among the millions of people watching coverage of the tragic explosion that killed all seven of the crew members aboard, seen in **Image 14** above. One of these seven crew members was Christa McAuliffe, a high school teacher who had been selected as part of NASA's "Teacher in Space" program. President Reagan delayed his State of the Union address, which was to be delivered later that day, in order to address the catastrophe instead. He said, "I know it is hard to understand, but sometimes painful things like this happen. It's all part of the process of exploration and discovery. It's all part of taking a chance and expanding man's horizons. The future doesn't belong to the fainthearted; it belongs to the brave. The Challenger crew was pulling us into the future, and we'll continue to follow them." Tragedy struck again on February 1, 2003, when the Space Shuttle *Columbia* broke up during re-entry to the Earth's atmosphere, killing all seven crew members aboard, including Ilan Ramon, the first Israeli astronaut in space.

Image 14. President Ronald Reagan and his staff on January 28, 1986, as taped coverage of the tragic explosion of the Challenger space shuttle is relayed to those in the room.

Today, the United States continues to explore outer space to advance scientific knowledge. In 1998—seven years after the dissolution, or ending, of the Soviet Union—the United States, Russia, and

several other countries came together to build the International Space Station (ISS), requiring cooperation rather than competition. View **Image 15**, in the chart below, to see a photograph of President Bill Clinton touring an ISS training facility. The White House remains at the center of space exploration as presidents remain attentive not just to NASA projects, but also to the growing private space industry and the promotion of cooperative international missions to advance technological knowledge.

IMAGES

Click on web link to access online and for larger viewing

Source	Title	Date	Created By	Courtesy Of	Thumbnail	Web Link
1	Sputnik, Early Rocket	1957	Unknown	National Aeronautics and Space Administration		https://images.nasa.gov/#/details-9248168.html
2	President Eisenhower Meets with NASA Administrators	1959	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113352.jpg.info
3	Dwight D. Eisenhower Tours NASA's Marshall Space Flight Center	1960	National Park Service	Dwight D. Eisenhower Presidential Library, Museum and Boyhood Home		https://www.eisenhowerlibrary.gov/sites/default/files/styles/image_optimization_1200px/public/research/audiovisual/images/nasa/72_3549_37.jpg?itok=Ld4jMxly
4	Explorer I Launching from Cape Canaveral, Florida	1958	Unknown	National Aeronautics and Space Administration		https://images.nasa.gov/#/details-ksc-68p-1.html
5	President John F. Kennedy Watches Lift-off of Astronaut Alan Shepard	1961	Cecil W. Stoughton	National Aeronautics and Space Administration		https://www.jfklibrary.org/Asset-Viewer/Archives/JFKWHP-ST-116-9-61.aspx
6	President Kennedy with Astronaut Alan Shepard	1961	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113350.jpg.info

7	President Kennedy Speaks to Congress about the Space Program	1961	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113353.jpg.info
8	President Kennedy with Astronaut John Glenn	1962	Warren K. Leffler	Library of Congress		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113351.tif.info
9	John Glenn Gives a Thumbs Up to Onlookers	1962	Warren K. Leffler	Library of Congress		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113347.tif.info
10	President Johnson Watches Saturn Rocket Launch	1964	Abbie Rowe	National Archives and Records Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Presidents/Lyndon%20B%20Johnson/5556.tif.info
11	President Nixon Greets the Returning Apollo 11 Astronauts	1969	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113354.jpg.info
12	President Ford with Apollo-Soyuz Astronauts and Cosmonauts	1974	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113355.jpg.info
13	President Ford Speaks with Apollo-Soyuz Crew	1975	Unknown	National Aeronautics and Space Administration		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Events/1113356.jpg.info

14	Ronald Reagan Watches Coverage of the Explosion of Space Shuttle Challenger	1986	Unknown	Ronald Reagan Presidential Library and Museum/ NARA		https://library.whitehousehistory.org/fotoweb/archives/5017-Digital%20Library/Main%20Index/Presidents/Ronald%20Reagan/2882.tif.info
15	President Clinton Visits Johnson Space Center	1998	Unknown	National Aeronautics and Space Administration		https://images.nasa.gov/#/details-98_05025.html

ADDITIONAL RESOURCES

- Article: "Lyndon B. Johnson: Forgotten Champion of the Space Race" by the White House Historical Association. Click here.
- Gallery: The White House and the Space Race by the White House Historical Association. Click here.
- Video: "Eisenhower Speech, Science and National Security, 11/7/1957" from the National Archives and Records Administration. Click here.
- Video: "President Ronald Reagan's Speech on Space Shuttle *Challenger*, January 28, 1986" from the Ronald Reagan Presidential Library. Click here.

SUGGESTED ACTIVITIES

For all learners:

- Research a current event about space exploration and consider how that event connects to the White House or the president.

For older learners:

- In December 1958, the United States launched its first communications satellite into space. The satellite transmitted a radio recording of President Eisenhower's voice from outer space to

Earth wishing the world "peace on earth and good will toward men everywhere." Imagine you lived during 1958. Write a diary entry about how you felt upon hearing the first radio recording transmitted by a space satellite. Draw from the contextual essay and your own knowledge of the Cold War.

- Using the contextual essay, create a timeline of significant events from the United States' space program.
    - Conduct further research on NASA's website to add additional dates/events to your space program timeline. Click here.
    - Add political context to your timeline using the "President's Timeline" by the White House Historical Association. Click here.

For younger learners:

- Create a time capsule to inform future populations on different planets about how the United States got to space and the role of the White House in it. Pick five things that best explain the journey.