

**TEACHING WITH ON-LINE PRIMARY SOURCES:  
DOCUMENTS FROM NARA**

**SHEPHERDING THE SPACE PROGRAM: JFK AND LIFTOFF**

Daniel F. Rulli

National Archives and Records Administration

On May 5, 1961, President John F. Kennedy, Attorney General Robert Kennedy, McGeorge Bundy, Vice President Lyndon B. Johnson, Arthur Schlesinger, Admiral Arleigh Burke, and Jackie Kennedy watched the television broadcast of Alan B. Shepard's flight into space from the office of the President's secretary. Shepard was launched on a suborbital flight that carried him to an altitude of 116.5 miles, for 15 minutes, at 5,134 miles per hour, pulling 11 g, to a landing point 303 miles downrange in the Atlantic Ocean.

Getting to this point in the space race between the United States and the Soviet Union was a rocky journey, not only for the Eisenhower and Kennedy administrations but also for the American people. The pioneering event, which devastated and frightened Americans, occurred on October 4, 1957, when the Soviet Union launched Sputnik I, the first artificial satellite in space. Two weeks later, with Sputnik II, the Soviets successfully put a six-ton payload into space. The significance of these events was lost on no one: the Soviets had technological superiority in space over the United States. The cultural and military implications for the Cold War and the space race were both alarming and humiliating. In the next months, a string of American military rocket failures added to the embarrassment and led Congress, with President Dwight Eisenhower's recommendation, to create the National Aeronautics and Space Administration in October 1958.

Eisenhower was not enthusiastic about a manned space program, nor was his successor, John F. Kennedy. Like Eisenhower, Kennedy and his chief space advisor, Jerome Weisner, considered it too risky and a waste of money. He suggested that promoting public relations against the Soviets was its only real benefit. Weisner, in particular, concluded that instruments actually performed tasks more efficiently and reliably in space than humans. However, Kennedy's opposition to manned space flights evaporated on April 12, 1961, when the Soviet Union launched cosmonaut Yuri Gagarin 188 miles into space for 108 hours and 89 orbits. In the aftermath of this Soviet success, a pressured and defensive Kennedy listened as his advisors spelled out the situation: the Soviets probably would put the first crews into space, build the first space station, and put the first humans on the Moon. Kennedy's advisors recommended an accelerated program that would cost \$20 billion and perhaps put an American on the Moon in ten years.

The first significant step for the United States came just a few weeks after Gagarin's flight when Shepard was launched into sub-orbit in the *Mercury 7* capsule. Millions of Americans stopped to watch or listen to the news coverage of the first American-manned space flight. While it did not match what the Soviets had done, Americans did not care; the United States was in the race!

The featured document is a White House photograph of President Kennedy and others, watching Shepard's flight. Like all of America, they were riveted by what was happening and what was to come. In a special message to Congress on May 25, 1961, just twenty days after Shepard's flight, Kennedy asked Congress for funds necessary to put a man on the moon before the decade was out ([www.jkflibrary.org/j052561.htm](http://www.jkflibrary.org/j052561.htm)).

### Teaching Suggestions

#### 1. Focus Activity with Photo Analysis: America in the Space Race

Provide students with a copy of the photograph. A digital scan is available online in the Archival Research Catalog (ARC) on the National Archives website at [http://www.archives.gov/research\\_room/arc/](http://www.archives.gov/research_room/arc/). (The most direct way to access the photo is by typing the identifying ARC #194236 into the keyword box.) The photo may be reproduced in any quantity. Also give students a copy of the photo analysis worksheet at [www.archives.gov/digital\\_classroom/lessons/analysis\\_worksheets/worksheets.html](http://www.archives.gov/digital_classroom/lessons/analysis_worksheets/worksheets.html).

Ask students in pairs to analyze the photo by completing the worksheet. Then guide a discussion based on the prompt questions from the worksheet. Present students information about Kennedy's original position on manned space flight and ask them to discuss how it affects their analysis of the photo.

Note: As an extended activity, help students identify the other individuals in the photo and ask the students to conduct research on the involvement of those individuals in the American space program. Then lead a discussion that considers why those others were present with President Kennedy for this event.

#### 2. Cross-Curricular Activity: The Science of Rocketry

Team up with a science colleague and prepare a joint lesson on the American space program by creating a time line of the major events from 1945 to 2005. Ask the students in the science class to research the scientific aspects of each event and the students in the history class to research the social and political aspects. Combining the classes, ask each class to explain the results of their research on each event. Ensure that students consider and understand how science and society affect each other by assigning one event each to pairs of students (one from each class), and asking them to write a short paragraph on the connection between science and society for that event.

**3. Project Documentary: Oral History Interviews**

Ask students working in small groups to identify the most important events in the space race from 1945 to 1970 and then develop a list of interview questions applicable to those events. Prompt them to investigate the impact of these events by interviewing three to five individuals who recall experiencing the event. Ask each group to record the responses on videotape and produce a fifteen-minute video documentary on this topic that includes other images that support the narrative and interviewee responses. Allow class time for each group to present their documentary and share their analysis of the responses with the class. Note: The Smithsonian Oral History Project may be useful at [www.si.edu/archives/ihd/ihda.htm](http://www.si.edu/archives/ihd/ihda.htm).

**4. Cross-Curricular Activity: History through Visual Images**

This photo is merely one example of how pivotal events in American history have been captured visually. Working with an art colleague, identify a number of paintings and sculptures from American history that have captured similar events. Ask each student to select one from the list and research the artistic creation and the historic event. Collaborating with the art instructor, help students artistically analyze the work. Then ask students to analyze the featured document using NARA's photo analysis worksheet in activity #1 above. Conclude this activity by asking the students, through discussion, to compare and contrast their responses from the artistic analysis and the photo analysis.

**5. Small Group Project: Technology and News Delivery**

The photo reveals President Kennedy and others watching the event on television. Divide the class into small groups and assign each group a decade from the 1950s to the 2000s. Ask each group to research their decade to discover the various ways Americans learned about news events. As each group presents its findings, ensure that students observe what changed and what stayed the same. Ask them to consider the issues related to "delivering the news" and how technology has affected those issues.

**6. Brainstorming Activity: Public vs. Private Solutions**

Explain to students that, since the founding of our Republic, there have been lively debates about whether the nation's social, economic, and political challenges should be met by the civilian government, the military, or private institutions. Ask students to study the photograph carefully, and help them identify all of the individuals and the sectors of the government they represent. Encourage students to discuss why they think this particular group had gathered with the President. Then ask one small group of students to conduct research on the development of the U.S. space program from its origin to present, focusing on civilian government, military, and private involvement. Assign other small groups to research other historic issues with the same

focus on civilian government, military, and private involvement. Some examples might be monetary practices, monopolies, child labor, voting rights, pollution, auto and workplace safety, and crime. Provide an opportunity for all groups to report their findings orally. Then ask students, in a class discussion, to brainstorm both private and public solutions to current problems in the United States.

**7. Self-reflective Essay Writing Activity: "What's Out There?"**

Ask students to carefully examine the expressions on the faces of the individuals in the photo, and discuss with them the possible issues, concerns, or other thoughts on the minds of the officials. Share with students the suggestion that throughout history humans have had a need to know what or who is out there: over the next hill or mountain range, across the sea, beyond the desert, or on another planet. In an essay of 2 to 5 pages, ask students to consider why this is so and to support their explanation with examples.

Note: Before the essay is assigned, you might wish to stimulate student ideas by encouraging them to view films such as *Cocoon*, *2001: A Space Odyssey*, or *Contact*.

**NOTE:** The photo is in the holdings of the National Archives at the John F. Kennedy Library; Collection JFK-WHP; White House Photographs, December 19, 1960-March 11, 1964.

Daniel F. Rulli is an Education Specialist at the National Archives and Records Administration in Washington, DC. In addition to conducting video conferences with students, teachers, and administrators, Rulli has presented dozens of workshops to teachers around the country and has written various articles on "teaching with documents" for professional journals. He holds a B.A. and M.A. in political science and has 28 years experience teaching social studies in public high school.