Project Apollo, Cold War Diplomacy and the American Framing of Global Interdependence

by

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ABSTRACT

This dissertation examines the distinctive and critical role that space exploration played in American foreign relations and national image making in the 1960s. Proposed by President John F. Kennedy in 1961, Project Apollo was established, in large part, as a means of demonstrating American power and promoting technocratic values in an international landscape defined by the Cold War, the collapse of colonialism, and the emergence of newly independent nations. While existing scholarship has gestured to this geopolitical context, it has tended to examine activity that takes place on American or lunar soil. This dissertation argues that the geopolitical context was not simply a backdrop but instead the main theater of Project Apollo.

By embedding this familiar story back in its global context, this dissertation reinterprets the established narrative of Project Apollo in three significant ways. First, it places greater emphasis on the international stage and the relationship between the US and the world. Second, while the role of the Executive Branch remains essential to this story, this dissertation shifts the focus from engineers and managers, to key actors within the State Department and United States Information Agency, as well as foreign leaders and the world public. Finally, the role of Project Apollo in foreign relations, and public diplomacy in particular, becomes the defining feature of this investigation.

By examining how US government elites promoted and disseminated information about space exploration to support American foreign relations interests, this dissertation offers a lens onto attempts to establish national power by fusing perceived values and strengths of science and technology- like rationality and progress- with the image of the nation’s political system. These efforts, this dissertation demonstrates, were not only aimed at boosting American prestige, but were also strategic attempts to promote an idea of global unity and progress ushered in by American scientific and technological leadership.

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INTRODUCTION
"For All Mankind": Project Apollo and American Public Diplomacy

Shortly after Neil Armstrong and Buzz Aldrin took their first steps on the Moon, and before they planted an American flag into the lunar soil, they unveiled a plaque mounted to the strut behind the ladder of the lunar module and read its inscription: "Here Men from the Planet Earth First Set Foot Upon the Moon, July 1969, A.D. We Came in Peace for All Mankind." The plaque also depicted the Earth’s two hemispheres without national boundaries and the Apollo 11 crew and President Richard Nixon’s names.  
Crafted by National Aeronautics and Space Administration (NASA) and White House staff, this inscription, the outline of the Earth and the signatures, although quite concise, signaled a set of values—openness, progress, religion, masculinity, service, and universality—and fused them with an image of American leadership.

Well in advance of the Apollo 11 mission, NASA’s Head of Public Relations and the Assistant Administrator for International Affairs solicited advice for the plaque from the Smithsonian Institution, the Library of Congress, the Archivist of the United States, the NASA Historical Advisory Committee, the Space Council, Congressional committees, and others.  
Once NASA finalized a draft of the plaque the agency sent it to the White House where President Nixon’s advisors and speechwriters tailored it to fit the interests of the administration. After the Central Intelligence Agency (CIA) notified White House staff that the Soviet Union might land a robotic spacecraft before the Apollo

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11 crew reached the Moon, speechwriter and advisor Pat Buchanan suggested that the plaque read “set foot,” as opposed to “landed.” William Safire, Nixon’s speechwriter, edited the phrase “we come in peace,” to “we came in peace,” in order to disassociate it from “something you’d say to Hollywood Indians.” The insertion of “A.D.” to the date, according to Safire, was a “shrewd way of sneaking God in.”\(^3\) The last phrase on the plaque, “for all mankind,” was in wide circulation before Apollo 11 left the launch pad. This expression, which could be considered the motto of America’s space age, had populated dozens of presidential speeches, international exhibit panels, and congratulatory letters.

Just before midnight President Nixon called the astronauts from the Oval Office after they had unveiled the plaque on the Moon, congratulating them on their accomplishment and conveying a message to the global audience listening to the broadcast that evening. It was a brief conversation but like the plaque, the president’s message signaled the major themes that US government officials had been crafting through years of public diplomacy programming. The Apollo 11 crew positioned themselves in front of a camera and then Nixon articulated the significance of the first lunar landing. After commenting on the historic nature of the phone call Nixon remarked to the astronauts: “Because of what you have done the heavens have become a part of man’s world.” The astronauts, as Nixon noted, had extended the bounds of human experience. The president continued, “For one priceless moment in the whole history of

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man, all the people on this earth are truly one." The astronauts thanked the president, commented on the privilege of representing all mankind, and then spent the rest of their stay on the lunar surface deploying a science package, collecting moon rocks and soil, and taking what would become iconic photographs.

As President Nixon's telephone conversation with the Apollo 11 crew underscored, the lunar landing extended the scope of human experience: humans traveled farther than ever before and came together to witness an event in larger numbers than ever before. A great deal has been written about the former type of experience. Newspapers, astronaut memoirs, historical studies, philosophical essays and popular publications have detailed the astronauts experience on the lunar surface and considered its significance. The experience of unity brought about by global "participation" in the flight, however, although acknowledged in almost every study of Project Apollo, has not received thorough treatment. More humans followed the coverage of Apollo 11 than any

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7 The history of Project Apollo has been written from numerous perspectives and in almost every single account the global enthusiasm for the first lunar landing is commented on although it is not discussed in detail. Some of the most notable examples of these studies include, Marina Benjamin, *Rocket Dreams: How the Space Age Shaped Our Vision of a World Beyond* (New York: Free Press, 2003); Roger E. Bilstein, *Stages to Saturn: A Technological History of the Apollo/Saturn Launch Vehicles* (Washington, DC: National Aeronautics and Space Administration SP-4206, 1980; rep. ed., Gainesville: University Press of Florida, 2002);
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previous event in history. The United States Information Agency (USIA) estimated that over half of the world’s population listened to radio coverage, tuned into the television programming or read about the flight in newspapers. Although these statistics appear in countless histories of Project Apollo, these studies do not address how and why this happened. This extraordinarily large audience was not simply a spontaneous response to lunar exploration.

Like the message inscribed on the Apollo 11 plaque, the experience of global unity and participation in the first lunar landing followed years of planning by a cadre of US government officials to frame Project Apollo as “for all mankind.” USIA, State Department, NASA and White House staff had spent years fostering an international audience for Project Apollo and fine-tuning a discourse that bound the American space program with a vision of global unity. These programs, this dissertation contends, did not simply boost the prestige of the United States abroad. Through the use of symbolic gestures, the organization of communal events and the dissemination of internationalist rhetoric—like the well-known phrase, ‘for all mankind,’—they provided an interpretive framework for the rise of globalization.


GLOBAL INTERDEPENDENCE

The world had been growing increasingly interconnected long before the Apollo 11 flight. Historians maintain that the process of global integration, or what is often referred to as globalization, has roots in early voyages of exploration and commerce. The pace of this interconnectedness intensified in the late nineteenth century with the development of new transportation and communication technologies. This period was also marked by the importance of Europe in world events. Industrialization paired with imperialism ensured Europe’s dominance in international affairs through the early-twentieth century. Although people, goods, and information traveled around the world at a quicker rate than ever before, globalization also exacerbated divides within society, between the powerful and the weak, between the wealthy and the poor, and between the West and the non-West.

As the world became more and more interconnected throughout the twentieth century, the essence of globalization began to change. Two factors distinguished the postwar period from earlier developments in this process. First, the United States took a more assertive role in world affairs. Embracing a newfound position of global superpower, and driven by an interest in containing the spread of communism, the US government actively pursued political and economic influence in addition to the dissemination of American culture abroad. And, second, the postwar period saw a rise in the consciousness of the connectedness of humankind. Millions of people actively

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participated in this process, including people from non-Western nations. Project Apollo, and its role in American foreign relations, was part of this changing character of global interdependence in the second half of the twentieth century. In a recent essay on the rise of global interdependence, historian Akira Iriye contends “transnational awareness had steadily grown after the Second World War, but the moon landing further strengthened it, giving legitimacy, as it were, to the questioning of the primacy of territorial states as the key definer of human affairs.” In what way did Project Apollo contribute to this transnational awareness? The answer, this dissertation argues, requires an investigation of the how and why the United States harnessed human spaceflight for political purposes.

SPACE EXPLORATION AND AMERICAN FOREIGN RELATIONS

A little over ten years before the first lunar landing, worldwide reactions to the launch of Sputnik 1 in 1957 had prompted government officials in the US and the USSR to see spaceflight as the preeminent means for demonstrating power and national values in an international landscape that was upended by the Cold War, the postwar collapse of colonialism, and the emergence of newly independent nations. For these two superpowers space accomplishments, more than weapons or military conflict, came to serve as potent symbols of technological capability, economic strength, and the efficacy of political systems.

Less than four years later, President John F. Kennedy introduced Project Apollo to a joint session of Congress in May 1961. Although only a few months had past since

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Kennedy gave his first State of the Union address as the President of the United States, by late-spring he thought it was imperative to speak to Congress about what he viewed as the nation’s urgent needs. Kennedy started off with a discussion of economic and social progress at home and abroad, and then suggested it was necessary to increase funding for overseas information programs before stressing the importance of military build-up and assistance to US allies, as well as civil defense and disarmament negotiations. Finally, near the end of his speech, Kennedy spoke about the space program:

If we are to win the battle that is now going on around the world between freedom and tyranny, the drastic achievements in space which occurred in recent weeks should have made clear to us all, as did the Sputnik in 1957, the impact of this adventure on the minds of men everywhere, who are attempting to make a determination of which road they should take. 13

Kennedy then went on to propose that the United States should commit itself to sending a man to the Moon and returning him safely back to Earth before the end of the 1960s. He argued that this would be “a most important decision that we make as a nation” and he stressed that the “ultimate meaning” of space exploration was yet to be determined.

Project Apollo, in Kennedy’s address, fit snuggly within a series of programs aimed at advancing US foreign relations interests. The sequencing and context of Kennedy’s introduction of Project Apollo highlights the broader framing of American lunar exploration: similar to aid, public information programs and military assistance, Project Apollo would be part of the nation’s approach to fostering international alliances. 14

In his address to Congress, Kennedy presents Project Apollo as the latest diplomacy program. His concern for the impact of space exploration on the “minds of

14 Ibid.
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men everywhere” and its role in international political alignment underscores the Cold War context of his interest in a moon shot. Project Apollo was an enormous investment. It became the largest peacetime technological program in United States history and, at the time, the greatest open-ended peacetime commitment by Congress. Kennedy, as political scientist John Logsdon established long ago, supported an accelerated space program primarily as a foreign policy response to Soviet space accomplishments and their impact on national prestige. Although many scholars acknowledge this point—namely, that Project Apollo was adopted to serve as a significant instrument in US foreign relations—the full implications of this foreign relations context of Project Apollo, especially its utilization in public diplomacy, warrants much further study.

At its most basic level this dissertation explores the relationship between power, culture and technology. Lying at the intersection of the history of science and technology, foreign relations history, cultural history, and the history of the US in the world, this project explores how Project Apollo gave shape—through crafted rhetoric, symbolism and venues for shared experience—to a new consciousness of global interdependence.

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17 A handful of studies have pointed to the significance of the space program in foreign relations, or have include a discussion of the space program in treatments of broader public diplomacy efforts, but there are very few close examinations the diplomatic use of Project Apollo in particular. The foreign relations role of the American space program are discussed in broader studies of public diplomacy such as Nicholas Cull, The Cold War and the United States Information Agency: American Propaganda and Public Diplomacy, 1945-1989 (Cambridge: Cambridge University Press, 2008) and Kenneth Osgood. Total Cold War: Eisenhower’s Secret Propaganda Battle at Home and Abroad (Lawrence, KS: University Press of Kansas, 2006), as well as political histories of space exploration such as Walter A MacDougall, ...The Heavens and the Earth: A Political History of the Space Age. (New York: Basic Books, 1985).
Introduction

This approach to the history of Project Apollo reorients the narrative of early human spaceflight in four significant ways. First, the relationship between Project Apollo and national power becomes the defining feature of this investigation. Second, it requires placing greater emphasis on the international stage and the relationship between the US and the world, instead of the domestic arena. Third, while the role of the Executive Branch remains essential to this story, it shifts the focus from engineers and managers, to key actors within the State Department and USIA, as well as foreign leaders and the world public. And finally, fourth, the role of image-making and national identity comes to the foreground of this story.

THE HISTORY AND HISTORIOGRAPHY OF PROJECT APOLLO

1. Power

Understanding power—how it functions, how it is gained and lost, how it changes over time, who has it and why—lies at the core of the historiography of foreign relations. When describing the field, Thomas Zeiler has explained that historians of US foreign relations, “privilege transnational actors, linguistic constructs and other measures of the cultural turn,” meshing these interests and sources “with an abiding concern with power—a power that emanates as much from the highest political echelons as it does from contact zones.” How does Project Apollo relate to the story of American power in the twentieth century? What can the history of Project Apollo tell us about how science, technology and culture played in larger Cold War strategies?

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Today, President Kennedy’s framing of Project Apollo would be categorized as a program of soft power. In the aftermath of the Bay of Pigs and Yuri Gagarin’s successful spaceflight in the spring of 1961, Kennedy asked his advisors to find a space program that would be highly impressive to the international public. Image mattered a great deal to Kennedy and even symbolic blows to American power and influence concerned the president. He voraciously read foreign and domestic public opinion polls, and used this information in his policy decisions. The Cold War, as he often explained, was a battle for world opinion and international alignment.20

Although the usefulness of winning hearts and minds has been seen as a political resource for centuries, Joseph Nye Jr., first coined the phrase “soft power” in the early 1990s, amidst debate in the foreign policy establishment over American national strategy and world leadership. Nye outlined three types of power: military, economic and soft power. While military and economic use coercion, soft power uses attraction. Soft power, as Nye defines it, is “the ability to get what you want through attraction rather than coercion or payments.”21 Critics, who have treated soft power as simply the spread of American consumer goods and pop culture, according to Nye, overlook the complexities of how soft power works and its significant national strategy potential. Soft power fosters shared values and helps to legitimize national power and policies. Tools of soft power ranged from ballet performances to humanitarian aid to well-liked domestic policies.22

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22 Ibid.
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The unique pressures of the Cold War, especially nuclear stalemate, elevated the significance of propaganda and other soft power efforts for both the US and USSR.

During the Cold War the yardstick for attractiveness, according to many policy makers in the US and USSR, were impressive large-scale scientific and technological programs.

And so, demonstrations of scientific and technological prowess became key arenas for establishing national prestige as well as associating the perceived values and strengths of science and technology—like rationality and progress—with the image of each nation’s political ideology.23

American government officials harnessed impressive technology, from rockets to high-tech kitchens, to serve as symbols of national strength and the efficacy of the American political system, in order to win the hearts and minds, and in turn the alliance of other nations. The story of Project Apollo is tied to this moment when instruments of soft power are understood as key to winning the Cold War.24

In 1961 NASA Administrator James Webb understood the political significance of what would later be termed soft power, when he wrote to President Kennedy about the impact of the image of space superiority on the political influence of the nation. If the United States was seen as

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24 As Ruth Oldenziel and Karin Zachmann have proposed in their work on the Nixon-Khrushchev kitchen debate, “international exhibitions presented the superpowers with a common, if contested, terrain,” to compete for favor of a world audience. This volume considers how kitchen artifacts, like spacecraft and nuclear missiles, also carried, and were embedded with, political potency. Ruth Oldenziel and Karin Zachmann, “Kitchens as Technology and Politics: An Introduction,” in Cold War Kitchen: Americanization, Technology, and European Users, ed. Ruth Oldenziel and Karin Zachmann (Cambridge, MA: The MIT Press, 2009)
Introduction

first in space, he suggested, it would cultivate shared values and help legitimize American power and policies in the developing world.25

Soft power rests on a nation’s ability to attract, but what constitutes attractiveness varies from time and place. This brings us to the second reorientation in this study of Project Apollo: location.

2. Location

Most histories of Project Apollo take place within the United States: they chronicle discussions at the White House, engineering cultures at NASA centers, the work of contractors, the personal journeys of the astronauts, domestic criticism of space funding and other dimensions of the program carried out on American soil. When the narrative of the program travels outside the boarders of the United States, it usually takes the reader to the Soviet Union or reviews Soviet space accomplishments in contrast to the American space program.26 For years space historiography has been highly nation-centered, which has obscured the history of information flows, transnational communities, and the treatment of space exploration as a process, not a moment.27 This is a surprising trend for a topic that literally involves circumscribing the globe.

25 Walter McDougall, ...the Heavens and the Earth, 344.
26 The action in Walter McDougall seminal study takes place within the United States, the Soviet Union, and in outer space. Walter McDougall ...the Heavens and the Earth (New York: Basic Books, 1985); For a discussion of the domestic critique of Project Apollo see, Matthew Tribbe No Requiem for the Space Age: The Apollo Moon Landings and American Culture (New York: Oxford University Press, 2014); For a discussion of the relationship between Project Apollo and advertising within the United States see, David Meerman Scott and Richard Jurek, Marketing the Moon: The Selling of the Apollo Lunar Program (Cambridge, MA: MIT Press, 2014).
Introduction

This orientation of space historiography is likely tied to the competitive dynamics of the space race. The concept of a race sets up an axis between two competitors while overshadowing the larger context and motivations for the “race.” The Soviet Union and the United States were not simply competing with each other, they were competing for global influence: an essential piece of space history, and Cold War history, that is often gestured to but left uninvestigated. By situating lunar exploration firmly in the context of US foreign relations and Cold War priorities, Project Apollo becomes a history of the relationship between the US and the world, not just between the US and USSR.

This geographic reorientation of the history of Project Apollo reflects the “international turn,” an approach that advocates an understanding of American history as embedded within world history. Since the 1990s historians have become increasingly concerned with situating American history within a broader global context.28 Historian Eric Foner has even argued, “An understanding of America cannot be obtained purely from within America.”29 Our contemporary awareness of globalization, Foner contends, should give us even more incentive and perspective to evaluate the past within a global framework.30

Tied to this rise of the “new international history,” Cold War historians began to shift their emphasis from the traditional US vs. USSR dichotomy, to a more inclusive transnational perspective. In doing so, they have also extended the discussion to include non-state actors and nations that have frequently been excluded from accounts of the

30 Ibid. 3
Introduction

Cold War. In *The Global Cold War*, Odd Arne Westad argued that the superpower competition played out primarily in the Global South, not the European arena. Although Cold War scholarship has expanded to include new actors and areas, the incorporation of the role of science and technology on the Cold War front remains limited in many of these studies.31

The field of the history of science and technology has also experienced a global turn. While most of this work examines the late nineteenth and early twentieth centuries, when advancements in transportation and communication increasingly connected the world, scholars of Cold War science have started embedding their work within a global context.32 Leaving the customary unilateral approach to the Cold War behind, these studies take on the complex international and interdisciplinary dimensions of scientific practice in the postwar era.33 But, as Gabrielle Hecht and Paul Edwards have pointed out, this work usually focuses on the United States, Europe, and the Soviet Union, while leaving out the other sites that played a part in the waging of the Cold War.34 Many Cold War science and engineering projects initiated by the United States had global reach; development projects, cooperative programs and public image making spectacles engaged practitioners and public audiences on each continent.35 Similarly, Project Apollo

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35 For examples of international scientific and engineering cooperation during the Cold War see, Roger Launius, James Fleming and David DeVorkin, eds. *Globalizing Polar Science: Reconsidering the*
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public diplomacy efforts targeted state and non-state actors, and people in Asia, Africa, the Middle East, South and North America, in addition to Europe and the Soviet Union. Understanding the significance of lunar exploration then, requires an expansion of the geographic parameters of space historiography.

This dissertation follows Apollo artifacts and exhibits around the globe, as they touched down in large cities and remote towns, to expose the individual and concrete elements in the process of globalization. How Project Apollo gave shape to a new experience of global interdependence requires an investigation of the mechanisms and rhetoric of space diplomacy as well as a close look at the adoption and adaptation, and at times rejection, of this material. From US government setting up outdoor viewing areas in cities around the world for people to watch the lunar landing together, public affairs officers co-authoring songs with local musicians about space exploration, the astronauts carrying miniature flags from all nations to the Moon along with the American flag—these are just a handful of the gestures and events used to connect foreign audiences to the American space program. This approach offers a lens onto the production and transfer of knowledge, revealing how this malleable, variable process was connected to the local, regional and global, and was not simply a diffusion of Western science and engineering information.³⁶

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3. Actors

This geographic and methodological reorientation of the history of Project Apollo also modifies the group of historical actors are included in the story of the lunar program. Instead of engineers and managers taking center stage, this history of Project Apollo brings USIA and State Department officials into the focus of this story. While the Executive Branch remains important to this account, as do the Apollo astronauts and officials at NASA, it extends the scope of the history of Project Apollo to include the general public, heads of state, the media, and “opinion molders” from around the world. Project Apollo’s role in globalization and the rising awareness of the interconnectedness of the globe was directly tied to the efforts of officials within the USIA and State Department who crafted Apollo programming, as well as the audiences that this programming sought to influence and win over.

The USIA was responsible for the majority of information programming and events overseas and for this reason the agency and USIA officials take on a central role in this dissertation. The Eisenhower administration created the USIA in 1953 as part of an effort to centralize American overseas propaganda efforts. The main objective of the agency, which had an unofficial slogan of “Telling America’s Story to the World,” was to influence world public opinion of the United States and to foster understanding of US foreign policies. In addition to running United States Information Service (USIS) posts in almost 300 cities around the world, the USIA was responsible for the Voice of America (VOA) radio network, magazines, books, pamphlets, setting up libraries in 150 countries, the largest English-teaching program ever created, exhibits on American life and ideas, documentary films and television programs, and student and educator exchange
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programs. The USIA’s programs made up the largest information and cultural effort ever launched to influence the opinions of people around the world. When the United States launched its space program, the USIA administered the nation’s space related public diplomacy programming.37

Numerous studies examine the history of the USIA, public diplomacy and America’s psychological warfare programs, yet the role of science and technology in this history, and Project Apollo in particular, have received little treatment.38 Historian Trevor Rockwell’s work presents one notable exception. In 2012, Rockwell completed a dissertation that compares Soviet space propaganda aimed at American audiences and American space propaganda aimed at Soviet audiences. Although this work offers thoughtful analysis of the rhetoric and symbols used in Amerika and Soviet Life, the American and Soviet publications, it does not include a broader global context. Since the Soviet Union and United States both invested in space exploration to raise their international stature and encourage political alignment, the global audience, in addition to the American and Soviet public, is an essential piece of this history.39

37 In addition to the USIA, the United States Department of Defense (DOD) and the Central Intelligence Agency (CIA) mounted their own, often covert, efforts. Private news services, advertising, educational institutions and corporations also took part in influencing foreign perceptions of the United States. During the 1950s and 1960s these organizations fought to influence the hearts and minds of the world on what was sometimes seen as the ideological battlefield of the Cold War. See, Wilson Dizard, Jr. Inventing Public Diplomacy: The Story of the U.S. Information Agency (Boulder, CO: Lynne Rienner Publishers, 2004) 11-13; Report to the Congress, “Telling America’s Story To The World—Problems and Issues,” United States Information Agency by the comptroller general for the United States, March 25, 1974
39 Trevor Rockwell, Space Propaganda “For All Mankind”: Soviet and American Responses to the Cold War 1957-1977, Dis. (2012): Also see: Trevor Rockwell, “New Frontiers of Knowledge: Science and
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This reorientation of the history of Project Apollo to include the international public not only reflects the "international turn," it also relates to ongoing discussions within the history of technology. By including the role of the media, the public and politicians, historians of technology have explored how diverse networks of actors, institutions and social systems influence the shape and significance of scientific and engineering programs. Scholars like David Nye and Ruth Schwartz Cowan advocate shifting the focus of scholarship away from invention and development and towards incorporation and impact. They have suggested that the meaning of technology stems from use, from how it influences human experience, and how its incorporation shapes ideas and identity.  

Applied to Project Apollo, this approach to the history of technology supports broadening an account of space exploration to include actors outside of NASA centers and cockpits.

This dissertation investigates the dynamics between the government producers and public consumers of the space program, by analyzing crowd reactions to space exhibits. Through the use of oral histories from exhibit organizers in combination with archival material that attempts to represent popular opinion, this study juxtaposes politicians, exhibit designers and the publics’ understandings of space displays and other propaganda material. Although this material has to be approached as a filtered

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41 In addition to the producers of space technology, it is valuable to examine how the consumers of spaceflight have contributed to the meaning of the program. See, Asif Siddiqi, "Competing Technologies, National(ist) Narratives, and Universal Claims: Toward a Global History of Space Exploration" *Technology and Culture*, Vol. 51, No. 2 (April 2010) 439.
representation of popular opinion—one that perhaps reflects USIA officials' impressions more than those of the general public—it can still reveal a great deal about the relationship between the production and consumption of the space program.

Consumerism plays another key role in this story: NASA and USIA officials drew on ideas and techniques fostered within American advertising firms to sell the space program abroad. The development of this approach has deep roots in the growth of consumerism and advertising in the twentieth century. In the 1980s, historian Michael Smith argued that the space program was designed to serve as a new national iconography, one that promoted American technological excellence and power. From its initial planning stages onward, the human space program was “sold,” to use Smith’s terminology, with an elaborate arsenal of media coverage, propaganda, and other forms of marketing. Recently, David Meerman Scott and Richard Jurek also examined Project Apollo through the lens of marketing and public relations. Like Smith, Meerman and Jurek spend little time investigating the global context of Project Apollo and instead focus on efforts to sell space exploration within the United States. What exactly were US government elites trying to sell through the promotion of the space program at home and abroad? What message did they hope to convey to these audiences? Although Smith, Scott and Jurek are concerned with the domestic context of Apollo information programs, their insights apply to national image making on the international stage.

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4. National Identity

Nationalist, revisionist, and realist interpretations of American history have defined diplomatic historiography for years but recent scholarship has offered another framework for explaining the relationship between the United States and the world: ideas, ideology and identity. What are the implications of this new emphasis on discourse for the study of Project Apollo? How did national identity influence America’s space program? As this dissertation will detail, national identity and ideology did not just play a fundamental role in larger Cold War strategies, they were essential to the selection, development and deployment of technology and science as political instruments in waging this war. Project Apollo, space historians maintain was “an agent of national self-definition,” established to sell an image of America as a technologically capable, militarily strong, and economically powerful nation. But, as Asif Siddiqi has observed, “although nationalist narratives (and nationalism) have been essential to the project of space exploration and its retelling, barring a few exceptions, space historians have not critically explored the relationship between spaceflight and national identity.” This dissertation will address this deficit by exploring how US government officials proactively sought to frame American identity through the selling of nation’s space program.

45 Within the field of diplomatic history there has been a move away from a focus on military power and geopolitics to instead an emphasis on “discourses,” including images, visions, and ideologies. See, Akira Iriye, “Environmental History and International History” Diplomatic History, Vol. 32, No. 4 (September 2008) 643.


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In order to understand how nationalism and ideas of national identity factored into the history of Project Apollo, this dissertation examines the message, as well as the methods and mechanisms, US government officials used to promote the benefits of spaceflight abroad. Project Apollo, public diplomats suggested, was an American led effort for the progress of “all mankind.” This framing of spaceflight was part of a broader vision in American postwar politics, which was zealously articulated in modernization theory. Heir to Enlightenment and Progressive thought, modernization theory treated science and technology as universal instruments of social transformation and advancement. Public diplomats took up this discourse in their framing of the meaning of Project Apollo throughout the 1960s. The American space program, according to US government officials, was for the benefit of all mankind.48

In the early 1980s, Benedict Anderson introduced the concept of “imagined communities” as a framework for understanding the emergence of nationalism. Arguing that print-capitalism served as an agent of national identity formation, Anderson reasoned that nations were socially constructed communities.49 Jenifer Van Vleck extends Anderson’s analysis into the twentieth-century by employing the concept of “imagined communities” to investigate how aviation contributed to Americans’ ability to conceive of the world as a single social entity.50 For both Anderson and Van Vleck, discourse plays a central role in the formation of these communities. This dissertation carries this framework another step further by examining US government efforts to use the American

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space program to cultivate a global community aligned with US political interests. I consider the framing of Apollo rhetoric, and its circulation and adoption; the implications of global “participation” in spaceflight through communal events; and efforts to link various local cultures and histories to space accomplishments. This process, I argue, fostered an imagined global community, built on a technocratic rationalist vision of progress. The limitations of this approach to foreign relations, and the idea of progress that it championed, would become apparent as the Space Age wore on.

CHAPTER OVERVIEW

Beginning in the late 1950s, the first chapter, “Sputnik and the Launch of Space Propaganda,” examines how space exploration became instrumental in the Cold War competition for the hearts and minds of the world public. The central role of space exploration in public diplomacy programming was not a given in the 1950s and the expectation that space feats would signal the superiority of the nation’s political system, technological capability and economic resources was not taken as a given. USIA officials proactively worked to create an international audience for space spectaculars. This chapter places these early space information efforts within the context of other programs the USIA and the State Department created to influence world public opinion in the late-1950s. To identify the early framing and rhetoric of space exploration in information programing, this chapter contrasts American space public diplomacy with other public diplomacy events.

Chapter two focuses in detail on the first large scale space exhibition: Friendship 7's “Fourth Orbit.” After astronaut John Glenn become the first American to orbit the
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Earth aboard his Friendship 7 spacecraft, Edward R. Murrow, the Director of the USIA, urged President Kennedy to send the small Mercury around the world to promote the United States, suggesting that a display of hardware would underscore the “openness” of the American space program and in turn the benefits of an “open” society. This approach to exhibiting the American space program was in direct contrast or conversation with Soviet information programming. Unprecedented massive crowds gathered at each stop of the capsule tour. During its three month world tour Friendship 7 visited twenty-seven cities and was seen by roughly 4 million people, while another 20 million people watched television programs about the capsule, which were broadcast from the exhibition sites. USIA officers adjusted their approach to exhibiting the space program in real time, and applied the lessons they learned from this tour to later space displays.

In the mid-1960s, even as the USIA and State Department’s message about space exploration focused firmly on space science and technology, themes of “peace,” “unity” and “international participation” began to populate public information programs. President Johnson’s decision to begin sending astronauts abroad as goodwill ambassadors as well as his belief that space contributed to the formation of a “Great Society,” reflected this shift. The third chapter, “Space Exploration for a “Great Society,” considers the significance of changing approaches to the use of space exploration in public diplomacy. From spacemobiles to small-scale exhibits, the mid-1960s saw a huge upswing in space themed public diplomacy programming designed to address or counteract particular features of America’s image abroad.

51 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1964.
Chapter four examines Apollo 11 programming. Before the mission, in the summer of 1969, the USIA and State Department produced a barrage of information programs to heighten anticipation and excitement for the mission. This chapter looks at these efforts to reap the greatest diplomacy rewards from the mission, including the establishment of the Symbolic Activities Committee, which was charged with planning the gestures that the astronauts and the President should undertake during the mission. It reviews the mission, the global “participation” in the landing, and reactions to the flight. Letters, telegrams, poems and drawings flooded USIA posts and President Nixon’s mailbox; this chapter interprets the language, symbols and themes incorporated in these messages.

Chapter five emphasizes the connections between Project Apollo and American foreign relations in 1969 by looking at Project Giantstep, the Apollo 11 post flight tour. It follows the planning discussions for the tour, Nixon and Kissinger’s hands-on role in selecting tour stops, and the briefings that State Department and USIA officials gave the astronauts before each stop. This chapter also follows the crew around the world on their journey to thirty cities in twenty-four countries in just thirty-eight days. At each stop the astronauts performed symbolic gestures to link local histories to the narrative of American space exploration. At many of the stops, the international public included the Apollo 11 crew in local customs, historical narratives and dressed them in traditional costumes. These symbolic acts reflected US government officials’ interest in making the lunar landing “for all mankind” and it demonstrates a reciprocal interest abroad in participating in the event.
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After Apollo astronauts returned from the Moon, the rocks they brought back with them became important scientific specimen, political gifts and centerpieces of exhibits around the world. Chapter six shifts the direction of the dissertation slightly by focusing primarily one case study: the exhibition of a moon rock at the American Pavilion in the 1970 World’s Fair in Osaka. By presenting a detailed case study, this chapter is able to discuss the dynamics between public diplomats and the audiences they aimed to influence. This chapter draws on oral histories with audience members, pavilion guides, and the head exhibit designer, and places these within the context of official planning material, reports and correspondence. By focusing on one exhibit in particular, this chapter also presents the opportunity to examine how space diplomacy was fine-tuned and adapted for specific audiences. The story of the post-flight lives of moon rocks also provides an opportunity to consider the division between international and domestic responses to space exploration. While moon rock exhibits drew massive crowds overseas, domestic exhibits were often treated as a vehicle for criticizing government spending and policies.

CONCLUSION

After Project Apollo ended the geopolitical landscape did not reflect the image of the borderless Earth inscribed on the Apollo 11 plaque; the world was still very much parcelled into nation-states and the US and USSR radiated their separate spheres of influence. But, the plaque and other Apollo symbolism and rhetoric reflected, and contributed to, the rising consciousness of global interdependence.
Introduction

Tracing public diplomacy space programming, from the late 1950s through the early 1970s, this dissertation reveals an evolution in the methods and mechanisms utilized by US government officials to capitalize on space accomplishments. In the late 1950s and early 1960s, USIA and State Department officials looked to the space program to demonstrate American technological, scientific and economic superiority on the world stage. Although they incorporated inclusive elements in their rhetoric and programming, the emphasis of this material was rooted in ideas of progress and American national power. But, by the end of the decade, public diplomats' approach to space programming had shifted notably. No longer were space feats employed to primarily highlight American prestige and power; instead the emphasis of programming portrayed space exploration as a global accomplishment, undertaken “for all mankind,” as part of an effort to establish American influence without the look of hegemony. This shift from a demonstration of power to one of inclusiveness, from technological scientific might to one of humanity and unity, was tied to public diplomats attempts to shore up American power in the midst of a shifting geopolitical landscape.

Project Apollo may not have bestowed the United States with unquestioned world authority but a decade of American space diplomacy provided a framework for interpreting the significant changes the world was facing at the end of the 1960s. United States information programming offered a vocabulary to articulate the growing experience of global citizenship and symbolism to express the feeling of interconnectedness. Rooted in Enlightenment values of progress and universalism, Project Apollo discourse, it is important to note, was deeply American. But looking at the evolution of this discourse in detail reveals that it was not static or one-sided. Instead, it
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resulted from a dialogue between American government officials and the populations around the world they sought to influence. The meaning of Apollo was negotiated, and co-produced, through these dynamic relationships between US government officials and the world public.\textsuperscript{52}

\textsuperscript{52} John Krige has drawn the science studies usage of the term “coproduction” in his study of the use of science in foreign relations to accentuate “the creativity of both partners and to the relative plasticity of U.S. policymakers.” John Krige, American Hegemony and the Postwar Reconstruction of Science in Europe (Cambridge: MIT Press, 2006) 4-6.
Soviet Premier Nikita Khrushchev, while visiting Kiev to discuss economic issues, dined with Ukrainian leaders and guests from Moscow in the large hall at the Mariinsky Palace on the evening of October 4th, 1957. Near midnight, after hours of conversation, an aide interrupted the meal and whispered to Khrushchev. He excused himself, took a telephone call in a nearby room and then returned to the dining hall with a smile. A Soviet satellite, he announced, was now orbiting the earth. His son Sergei Khrushchev recalled, “He dreamed of demonstrating the advantages of socialism in actual practice. And now there was such an opportunity.” The dinner guests responded with polite, if indifferent, smiles.

Khrushchev knew that the image of ballistic missile capability directly impacted the balance of power in the Cold War. He also knew that by launching the world’s first artificial satellite, there was a good chance that the international public would view the Soviet Union as the leader in ICBM development. What he did not wholly foresee on the evening of October 4th, however, was the magnitude of worldwide reactions that would follow shortly after the news of the first satellite launch broke. Initially the launch did not make the headlines of Pravda, the leading Soviet newspaper. Coverage of the satellite included facts and figures but no indication of the larger political and social implications.

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Chapter 1: *Sputnik* and the Launch of Space Propaganda

of the path-breaking event. After *Sputnik* received a remarkable amount of attention in the world press, the Soviet paper became more vocal with its praise and celebration of the satellite with the headline: “A Great Victory in the Global Competition with Capitalism.” *Sputnik* became a leading icon of Soviet technological strength a handful of days after it was launched.

*Sputnik* was a huge propaganda victory for the Soviet Union. Eisenhower acknowledged the Soviet accomplishment although he denied the existence of a “space race.” As Kenneth Osgood has demonstrated, however, “The American effort was predicated from the start on the belief that the nation which first successfully launched a satellite would be in a position to reap considerable prestige and psychological benefits—which could then be used as international currency in the struggle between Moscow and Washington.” The satellite’s association with ICBM development, Eisenhower and his advisors recognized, as Khrushchev had, could influence the political alignment of other nations and have significant ramifications in the Cold War balance of power.

**HISTORIOGRAPHY OF THE SPUTNIK SHOCK**

Most scholarship that deals with the launch of the Soviet satellite *Sputnik* focuses on understanding reactions to this small metal sphere. Questions like: “Did *Sputnik* mark or usher in, a change? Was *Sputnik* the shock of the century? Was it a ‘Pearl Harbor?’” have dominated the field. The common narrative goes something like

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this: when the Soviet Union launched *Sputnik* in October 1957, the feat shook American confidence in the nation’s technological superiority, shocked the general public and prompted the space race. Some scholars begin the story of *Sputnik* in the early 1950s, with the planning of the International Geophysical Year (IGY), while others focus primarily on the fall of 1957. The question of whether the launch of *Sputnik* was in fact the shock of the century is not essential to this dissertation. Instead, what is critical to investigate in this chapter is how ideas about *Sputnik* impacted policymaking decisions, served as justifications for United States information programming overseas, and made space exploration a core element of national security strategy.

This chapter examines the origins of the space race-- from early discussions about satellite development to the launching of lunar probes in the late 1950s-- to determine how and why space exploration became deeply intertwined with American grand strategy during the Cold War. In its infancy, the American space program’s role in US foreign relations, and its relationship to American national identity, was still uncertain. In its infancy, the USIA’s mission, and the role that science and technology would serve in

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6 Asif Siddiqi’s account of Sputnik reveals that it was not technologically determined, nor was it a ‘shock’ to American scientists and the media. Scientists, engineers, government officials and the public were at least minimally informed about the space programs in each country. Asif Siddiqi, *The Red Rockets’ Glare: Spaceflight and the Soviet Imagination, 1857-1957* (Cambridge University Press, 2010)
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promoting the image of America abroad, was also still uncertain. The USIA and NASA developed in parallel, and at times symbiotically, over the 1950s. Both agencies had defense counterparts: USIA efforts were complemented by the CIA’s covert psychological warfare programs while NASA’s civilian space shots were supplemented by Advanced Research Projects Agency (ARPA) programs. Both the USIA and NASA were Cold War institutions, founded to establish American power in a new geopolitical landscape. Tracing the relationship between the USIA and NASA throughout the 1950s uncovers how and why space exploration became a significant tool in the United States’ psychological arsenal.

This chapter also demonstrates how United States government officials’ framing of the meaning and significance of American space accomplishments in the 1950s was directly tied to ideas about the “apolitical” nature of science and to the Soviet Union’s approach to propaganda. As one USIA guidance paper explained, “science is neither for nor against, moral nor immoral. It is apolitical.” 7 In the mid-1950s policymakers used the “apolitical” guise of science by launching the space program within the International Geophysical Year (IGY), to pave the way for future reconnaissance satellites. After *Sputnik*, United States government officials hoped to dampen the impact of the Soviet satellite by situating it within a broader narrative of twentieth-century scientific and engineering accomplishments. In response to Soviet space propaganda, United States public diplomats carefully crafted rhetoric and information programs to differentiate the values of American science and engineering from Soviet accomplishments, yet still avoid the image of any competition between the two superpowers. This reactionary approach

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7 “U.S. Information Agency Basic Guidance and Planning, Paper No. 4,” 18 November 1958, Box 12, Policy and Plans: Subject Files, 1958-1972 (hereafter Entry P 243), Record Group (RG) 306, National Archives, College Park, MD (hereafter NARA)
led public diplomats to stress themes like the "openness" of the American space program. Initially taken as a weakness by the likes of CIA director Dulles and others, USIA officials shoehorned the "openness" of the American space program into an attribute.

In the 1950s public diplomats and American politicians questioned the role of science in their society as well as the role it should play in foreign relations and national image making. What was clear to many of these officials was that they were in a new age of science and technology. US government officials frequently referred to the postwar period as the beginning of new scientific revolution, and they debated how best to capitalize on this societal transformation to serve American geopolitical aims. Could science and technology help contain communist influence? What was the best way to employ space exploration to strengthen the United States' geopolitical position? Would medical advancements, basic research or other areas of science and engineering have greater propaganda potential than space exploration? Should psychological impact factors influence national science funding? If the world was in fact in the midst of a new scientific revolution, how should American government officials ensure that the United States steer this transformation? As this chapter will reveal, in the 1950s, popular reactions to Sputnik, public opinion polling and Soviet propaganda informed US government officials’ answers to these questions.

BEFORE SPUTNIK

Discussions within the United States about the utility of launching artificial satellites, and the broader scientific, military and prestige implications of establishing an American space program, preceded Sputnik by over a decade. A 1946 report prepared by
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the Rand Corporation, a think tank that at the time was associated with Douglas Aviation, suggested that launching a satellite would not only have military and scientific implications, but that it "would inflame the imagination of mankind, and would probably produce repercussions in the world comparable to the explosion of the atomic bomb." \(^8\)

RAND prepared another report in 1950, at the request of the US Air Force, which investigated the military and psychological effects of earth satellites even further. Although the primary function of artificial satellites would be reconnaissance, both strategic and meteorological, the report explained, the US government should emphasize the peaceful and scientific uses of satellites as opposed to their military function in order to ensure that the American program was well received around the world. Historian Walter McDougall called this document "the birth certificate of American space policy." \(^9\)

By 1950, US policymakers were enthusiastic about the utility of establishing an artificial satellite program, but the larger foreign relations context of spaceflight still needed to be sorted out before American satellites passed over the territory of other nations. The question of how to establish the legality of overflight, or "freedom of space," proved challenging until the upcoming International Geophysical Year (IGY) supplied a partial solution.

A group of scientists conceived of the idea for the IGY in 1950 over dinner and then chocolate cake at James Van Allen’s home in the suburbs of Washington, D.C. Sixty-seven nations participated in earth science research during the IGY, making it the largest international scientific cooperative program to date. Timed during a period of


\(^9\) McDougall, ...the Heavens and the Earth, 108.
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maximum solar activity, the IGY would run from 1957-1958. During the planning stages for the IGY, the Special Committee for the International Geophysical Year (CSAGI) called for the development of artificial satellites to support geodetic and atmospheric studies of the earth. This announcement gave the United States an occasion to launch a satellite within a scientific context, which could help circumvent any international opposition to the “freedom of space.”

Although the IGY presented a useful non-military pretext for initiating an American space program, the Eisenhower administration was slow to move forward until US government officials began to feel the pressure of being second in space. When the Soviet Union announced the creation of a spaceflight commission on April 16, 1955, US government officials began to take action. Donald Quarles, Assistant Secretary of Defense for R&D, had his staff analyzed the utility of a satellite program from a military perspective. He then passed on his report to Nelson Rockefeller, Eisenhower’s special assistant for psychological warfare, to review. Rockefeller then passed on the report to the National Security Council, along with a memo urging the committee to act quickly in order to ensure that the Soviets did not launch the first satellite. “The sake of prestige,” Rockefeller cautioned, “makes this a race we cannot afford to lose.”

A few days later, on May 20, 1955, the National Security Council (NSC) released a draft of a top-secret report, NSC 5520, recommending that the Eisenhower administration approve the development of a scientific satellite as part of the IGY.

NSC 5520, with Rockefeller’s memo attached to the back, addressed the psychological and military implications of a scientific satellite program. After stating the

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11 McDougall, *...the Heavens and the Earth*, 120.
feasibility of launching a satellite during the IGY, the statement highlighted some of the scientific data that could be collected from a satellite and then noted “considerable prestige and psychological benefits will accrue to the nation which first is successful in launching a satellite.” The significant repercussions could include, the statement explained, the political alliance of other nations, a central concern during the Cold War. The Soviet Union was already underway on its own spaceflight program. If the United States did not act quickly, the balance of power could be at risk, the report warned. NSC 5520 summed up the threat: “The inference of such a demonstration of advanced technology and its unmistakable relationship to intercontinental ballistic missile technology might have important repercussions on the political determination of free world countries to resist Communist threats, especially if the USSR were to be first to establish a satellite.” A small scientific satellite, the committee acknowledged, could also test the “freedom of space,” which was seen as essential to the prospect of any future legality of military reconnaissance programs. The IGY, NSC 5520 suggested, presented “an excellent opportunity,” for the United States to enter the Space Age under the aegis of a peaceful, open, scientific endeavor, clearing the way for other uses of satellite technology. During a NSC meeting a handful of days later, President Eisenhower asked the council if the United States should pursue a scientific satellite program and everyone agreed in the affirmative.

12 The report’s guidelines for a United States scientific satellite program were in line with many of Rockefeller’s recommendations. In addition to not interfering with military ballistic missile and reconnaissance satellite development, the scientific satellite program should demonstrate the United States’ peaceful intentions in space, according to the Council. To accomplish this, the satellites should be launched during the IGY and collect valuable scientific data. National Security Council Report 5520, May 20 1955, FRUS, 1955-1957, Vol XI, United Nations and General International Matters, Document 340; See also: Osgood, Total Cold War, 328-329.
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On July 29, 1955, Presidential Press Secretary James Hagerty issued a statement announcing the White House's approval of a scientific satellite program as part of the United States participation in the IGY. The Stewart Committee, an advisory group formed by Assistant Secretary Quarles, had been meeting since early July to select a proposal for the scientific satellite program. On August 3, 1955 the committee voted for the Naval Research Laboratory's Vanguard program over the Army's Orbiter program.14

A number of key considerations factored into the Eisenhower administration's support of a scientific satellite program and most of them had little if nothing to do with scientific research. The significance of prestige in the Cold War balance of power and an interest in establishing "freedom of space" for reconnaissance satellites drove early space policy. Psychological competition and the utilization of an open scientific program to support the needs of a military space program would continue to underlie space policy through the 1950s.15

THE UNITED STATES INFORMATION AGENCY

In 1955, in addition to assessing the scientific satellite program, the NSC was also examining the effectiveness of USIA information activities on US foreign relations and national security interests. In a number of meetings the committee discussed intensifying all of the USIA's key programs and improving the effectiveness of current programming. During its first few years in operation, the USIA had focused primarily on information

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14 The Vanguard program, committee members hoped, would fulfill NSC guidelines for timeliness, noninterference with military ICBM development and conveying an image of the United States' interest in the peaceful exploration of outer space. McDougall, *...the Heavens and the Earth*, 122; Osgood, *Total Cold War*, 331.

15 A scientific satellite, especially one launched during the IGY, had a better chance of establishing the legality of over flight without opposition, than a military launch.
dissemination. In 1955, as part of a larger reevaluation of basic national security policy, the NSC discussed extending the scope of the USIA’s mission to include a more robust polling and impact assessment program to support changing national security interests.\textsuperscript{16}

The Eisenhower administration established the USIA in 1953 and two years later the mission and approach of the fledgling agency was still taking shape. Eisenhower had developed an appreciation for the role that propaganda and persuasion could play in United States global leadership before he entered the White House. Convinced that psychological warfare figured prominently in the allied victory of World War II, Eisenhower pushed for an elaborate propaganda program to contain the spread of communism. As soon as he took office Eisenhower appointed a special assistant for psychological warfare, gave him charge of the Psychological Strategy Board and created the President’s Committee on International Information Activities to investigate United States psychological warfare programs and to make recommendations for improving and centralizing these efforts.\textsuperscript{17} The President’s Committee submitted a report on June 30, 1953, with forty recommendations including the creation of the Operations Coordinating Board (OCB) within the NSC, to manage the psychological aspects of foreign relations and national security. Eisenhower agreed with almost all of the committee’s recommendations, however he decided to consolidate information activities within a


\textsuperscript{17} Before 1953, a host of government agencies and private institutions took part in propaganda and psychological warfare studies and operations planning. The Central Intelligence Agency (CIA), the Department of Defense (DoD), the State Department and the White House, along with private institutions and universities took part in immediate postwar propaganda and psychological warfare practices. The State Department handled the majority of overt and public propaganda while the CIA organized covert propaganda programming.

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brand new agency instead of under the jurisdiction of the State Department. The CIA continued its covert psychological warfare program and the newly formed United States Information Agency (USIA) took on the organization of the nation's public information activities.18

The USIA grew quickly in the early 1950s. Employing five media divisions—press, radio, television, motion pictures, and the Information Center Service—the USIA disseminated information about the United States to cities and towns in each region of the world. Although the numbers fluctuated throughout the 1950s, by 1960 the USIA ran 218 field posts in 98 countries. Over a thousand Americans managed these posts with the help of over seven thousand locally employed foreign citizens. Individual USIA posts were called the United States Information Service or USIS. A Public Affairs Officer (PAO), working under the direction of the American Ambassador, ran each post. Information Officers who primarily dealt with the local press and radio, and Cultural Affairs Officers who were in charge of working with local educational and cultural leaders, assisted these PAOs. Larger posts were also staffed by Motion Picture Officers, Exhibit Officers, Press, Officers, Book Translations Officers, Radio Officers and Librarians. A significant number of local citizens supported USIS operations. In some of the most populous countries, like India, over 50 Americans worked with nearly 500 local employees, while in countries like Sierra Leone one US public diplomat would work with three local employees. Each USIS post tailored its information programs to support the particular

18 Although the Jackson Committee recommended consolidating information activities under State Department jurisdiction, Eisenhower created an independent agency. The USIA officially came into being on August 1, 1953. Kenneth Osgood, Total Cold War, 54-55, 88-89; Nicholas Cull, The Cold War and the United States Information Agency, 94-96.
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United States political and psychological objectives in that country. This tailoring had a scope that ranged from the audiences a post targeted to the material it distributed.

The USIA also operated 164 libraries in 68 countries, filled with books, magazines and newspapers in both English and the local languages. The magazines included a Russian and Polish language periodical, America Illustrated, distributed in the Soviet Union. Another periodical, Life in America, targeted Arabic audiences while another fifty periodicals in twenty-three languages aimed at other populations around the world. The USIS posts distributed new releases, features and photographs to local newspapers. The Motion Picture Service of the USIA produced and acquired documentaries and newsreels, which ran in nearly ninety countries, in forty-two languages for audiences of some 150 million people a week. To reach rural populations, the USIA sent mobile film vehicles, equipped with kerosene generators to project these films. The USIA showed programs on local television stations and circulated hundreds of exhibits around the world. From Washington, the Voice of America (VOA) broadcast in thirty-five languages, 600 hours a week to an audience of 20 million listeners. The USIA estimated that the Sino-Soviet bloc spent more money jamming the VOA than the agency was spending on all of its international programming. And, USIS posts organized English language courses in fifty-two countries, reaching roughly a million people in the USIA’s first decade.19

During the early years of the Eisenhower administration, the USIA focused on producing information programming that was factual and straightforward. According to historian Kenneth Osgood, “the agency struck a balance between the posture of

19 Thomas Sorensen remarks before the NASA Office of Public Information Staff Conference, June 27 1961, Box 5, Entry P 243RG 306, NARA
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Objectivity necessary to enhance the agency’s credibility and the selectivity and manipulation of information needed to further US objectives."\(^{20}\) In the mid-1950s, with the NSC’s urging, the USIA started incorporating foreign public opinion polling and impact analysis into its mission. The USIA hired foreign firms to conduct interviews to obscure the source of polling sponsorship. The agency interpreted polling data within the context of other markers of foreign public opinion to measure the overall effectiveness of their broadcasts, events and publications. The USIA Director attended a monthly meeting at the White House with Eisenhower to update the president on agency activities and foreign public opinion.\(^{21}\)

By 1957 the USIA had become further integrated into Washington’s foreign policy making process. In February 1957, President Eisenhower made the USIA director a full member of the Operations Coordinating Board (OCB), which was located within the NSC. The USIA director was also a member of the president’s cabinet and the NSC, a distinction only shared by the director of the CIA. Newly appointed USIA director Arthur Larson made the most of this opportunity, attending every cabinet meeting whenever he was in Washington. In January 1957, Larson pushed for incorporating public relations into every department of the government, a plan that received support from the cabinet.\(^{22}\) In the fall of 1957, shortly before *Sputnik*, Larson prepared a new set of guidelines for the agency. He hoped to move the agency away from propaganda to factual reporting. The

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\(^{20}\) Osgood, *Total Cold War*, 98.


\(^{22}\) By April the Postmaster General included a spot in it stamp advisory committee for a representative from the USIA.
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guidelines banned the use of boastful or self-righteous tones, encouraged emphasizing shared interests, and recommended that programs target “opinion formers.”

Although the mission of the USIA became more refined by 1957, and the agency’s influence within Washington had increased, field officers struggled to present a positive image of US policies and American culture abroad. USIA staff spent the summer of 1957 trying to soften the impact of the poor behavior of US servicemen in Asia and counteract criticism of United States nuclear testing. On the heels of this challenging summer for the United States’ image abroad, the Arkansas National Guard blocked nine African American schoolchildren from enrolling at Central High School in Little Rock on 4 September 1957. Eisenhower sent federal troops to Arkansas and the USIA developed programs to offset the negative image of United States race relations. Although the USIA dealt with problems of school desegregation head on, Little Rock became a damaging reference point for international perceptions of American race relations. In the fall of 1957 American prestige was in need of a boost, but what the United States got instead was a deep blow to national self-confidence and a sharp challenge to Americans’ shared belief in the technological and scientific superiority of their nation.

**Sputnik 1**

The Soviet Union launched *Sputnik 1* on a Friday evening. President Eisenhower had already left Washington to spend the weekend golfing in Gettysburg, *Leave it to Beaver* made its television premier and a group of fifty American scientists attended a

reception at the Soviet Embassy in honor of the IGY. Shortly before 7pm, word spread that the Soviet Union had launched the world’s first artificial satellite. A metallic sphere, twenty-two inches in diameter and weighing roughly 184-pounds, had circled the earth twice from a height of roughly 550-miles, before Moscow Radio broadcast the announcement. White House Press Secretary James Hagerty briefed the press corps and assured them that the administration was not caught by surprise, there was no space race and the satellite was “of great scientific interest.” Unfortunately for the Eisenhower administration, the press did not tow this line.

Both domestic and foreign press covered Sputnik I in great detail, many treating the satellite’s launch as the major story of the year. Articles about Sputnik covered the front pages of most Western European newspaper for almost a week. According to USIA analysis, “virtually all of this content centered around three main themes—the scientific achievement that “sputnik” represented, the implications of the Soviet “first” in the battle for the minds of men, and the political and military significance for the West of the recent Soviet advances in missile rocketry.” The press commented that Sputnik was a major propaganda victory for the Soviet Union, especially within the developing world. Surveying over a thousand adults in the United States, the Institute for Social Research at the University of Michigan found that 96% of respondents were aware of Sputnik, a notable percentage that resembled numbers following the atomic bomb explosions in 1945. The majority of those questioned had been surprised by the news of Sputnik, and

27 “The Impact of “Sputnik” Upon the Press of Western Europe,” 18 October 1957, Box 9, Entry P 243, RG 306, NARA
28 Walter McDougall, *...the Heaven and the Earth*, 143.
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were concerned about the satellite’s broader implications. The USIA observed a similar response overseas. The international publics’ awareness of Sputnik, “was almost universal.” Even in remote towns and sparsely populated areas, people had heard of the satellite launch.

After Sputnik’s launch, the USIA’s Office of Research and Intelligence immediately conducted a survey of world opinion. The results were worrisome to US officials. International public opinion viewed the Soviet Union as technologically superior to the United States and its overall prestige was raised. Western Europeans believed that the balance of military power had shifted from the US to the USSR, and the credibility of Soviet propaganda was improved. The “World Opinion and the Soviet Satellite” report warned that the overall impact of Sputnik would be strongest among “those least able to understand it....[the] backward, ignorant and apolitical” populations of the developing world. Newly independent nations might be convinced of the validity of the Soviet system, the report warned, in their thirst for rapid technological and economic advancement.

The authors of the report blamed the United States for intensifying the impact of Sputnik on foreign public opinion. Not only did US officials heavily promote the nation’s plans to launch a satellite during the IGY, officials and the public alike assumed that the country led the world in the field of space science and technology. To make matters

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worse, the Soviet Union capitalized on American anxiety over the small satellite in their propaganda campaign: Soviet media reported on the American public reaction, which fed into Soviet claims of technological superiority. “One moral that might be drawn,” the report reflected, “is that a propagandist cannot have his crow and eat it too.” The report concluded that the “most durable and useful gain” of *Sputnik*, would very likely be the satellite’s contribution to Soviet credibility. Scientific and engineering information were secondary. *Sputnik* initiated a new era, and the Soviet Union, much to US policymakers’ chagrin, could take credit for opening the space age.32

*The NSC Confronts the Sputnik Challenge*

When the NSC met shortly after the USSR launched *Sputnik*, on October 10, CIA Director Allen Dulles briefed the group on the small satellite. He noted that the CIA was not surprised by the launch, he described United States launch capabilities and then explained, “Khrushchev had moved all his propaganda guns into place.”33 In Dulles’s view, the Soviets aimed this propaganda demonstration at audiences in underdeveloped countries, especially in the Middle East, as part of an effort to relate “scientific accomplishments to the effectiveness of the Communist social system.”34 The international impact of the small satellite was “very wide and deep,” Dulles concluded after reviewing reactions in each region of the world.

33 “All his guns” is a reference to the combination of Sputnik and the announcement of an ICBM test as well as a large-scale hydrogen bomb test in Novaya Zemla. “Discussion at the 339th meeting of the National Security Council, Thursday, October 10, 1957,” box 9, folder 339th Meeting of the NSC, Eisenhower Presidential Papers, NSC Series, Eisenhower Library. Allen Dulles quoted from James Schwoch, *Global TV*, 51.
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When Donald Quarles, the Deputy Secretary of Defense, briefed the group on the progress of the US Vanguard satellite program, President Eisenhower inquired if the lower orbit of Vanguard would negatively impact United States prestige; Quarles responded that he did not believe it would. The lower orbit of Vanguard, Quarles noted, enabled the satellite to gather scientific information, an advantage over the Soviet satellite. National Science Foundation (NSF) Director Alan Waterman agreed with Quarles. They believed that the combination of a sophisticated scientific instrumentation package and the open approach to its space program put the United States in a more competitive position.

Near the end of the NSC meeting USIA Director Arthur Larson expressed his concern over the effects of *Sputnik* on foreign public opinion. Although he did not think *Sputnik* should have caused a shock, the cumulative impact of the Soviet accomplishment could be detrimental to the international standing of the United States, Larson worried. He suggested that the United States set sights on an impressive feat—perhaps orbiting a man in space or sending a crew to the Moon—to secure American prestige. National Academy of Sciences (NAS) Director Detlev Bronk proposed that the United States focus on other types of scientific breakthroughs and not simply follow the Soviet lead, but acknowledged that space exploration held a unique appeal.35

Within the next few months, Eisenhower created the new post of Presidential Science Advisor and recruited MIT President James Killian to take the position. Killian established the President's Science Advisory Committee (PSAC), to act as an intermediary between the scientific community and the executive branch. Eisenhower also reinvigorated the nation's public diplomacy program. He made USIA director Arthur

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Larson the President’s special assistant for “international information matters” and asked former Assistant Secretary of State George V. Allen to take over the USIA directorship. 36

**USIA AND STATE DEPARTMENT RESPONSES TO SPUTNIK**

US government officials scrambled to soften the impact of *Sputnik* and adapt much of their programming to suit the new context of the space age. Exhibits were pulled, new pamphlets were produced and officials searched for the best way to secure American influence abroad within the midst of worldwide reactions to *Sputnik*. William Traum, Deputy Director of the US Department of Commerce, wrote to the Director of the USIA about upcoming trade fairs and reflected that *Sputnik*’s “signal, and then the echoes of it, will continue to be irritating and ominous facts for a long time.” The best approach to dealing with the small satellite, in Traum’s view, was to recognize it but then “dilute the impact” abroad. The USIA, Traum stressed, should emphasis the great scientific achievements of the twentieth century, because this approach would put *Sputnik* in its place, as a single event within a larger context of predominantly American achievements. 37

State Department and USIA staff working on the American Pavilion for the 1958 Brussels World’s Fair, also reevaluated their plans in the wake of *Sputnik*. The first fair since World War II, Expo ’58 was meant to usher in a new age where nuclear energy and advancements in science contributed to international cooperation and a renewed

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36 George V. Allen had served as the assistant secretary of state for public affairs from March 1948 to November 1949. In the early 1950s he was an ambassador to Iran, Yugoslavia, and India. From 1955 to 1956 he took on role of assistant secretary of state for Near Eastern, South Asian, and African affairs before becoming an ambassador to Greece in mid-1956. Nicholas Cull, *The Cold War and the United States Information Agency*, 148-149.

37 William Traum letter to Abbott Washburn, 21 October 1957, Box 9, P 243, RG 306, NARA.
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humanism. After Sputnik, the US exhibit team concentrated their efforts on displaying American culture, and shied away from competing directly with Soviet shows of space capability and scientific advancements. As a USIA staff member observed in November 1957, "the advent of Sputnik puts a new face on a lot of things that deal with the image which America needs to present abroad." The United States might not have been the global leader of the space race in 1950s, but pavilion staff knew they could outdo the Soviet Union in fashion, consumer products and displays of "the good life." The fair was set to open in April 1958, leaving little time for American exhibit staff to adapt their displays.

THE RACE CONTINUES

On 3 November, to commemorate the anniversary of the October Revolution, the Soviet Union launched a second, larger satellite. Sputnik 2, weighing six-times the previous satellite, carried a dog named Laika on a one way trip to earth orbit. A few days later during a celebration for the 40th anniversary of the Revolution, Khrushchev exclaimed, "The Soviet sputniks proclaim the heights of the development of science and technology and of the entire economy of the soviet Union." The USIA responded by situating the flight within a larger context of twentieth century technological advances.

38 "Atomium," the major centerpiece of the fair, symbolized this enthusiasm and optimism for the role of science in modern life in the late 1950s. Standing tall above the exposition grounds, the metallic atomic inspired structure housed a restaurant and panoramic tower.


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When positioned alongside breakthroughs in American medicine, physics and chemistry, the satellite would lose much of its symbolic weight, USIA officials hoped.\(^{42}\)

The year ended on a low note for US international prestige. The United States attempted to enter the space age with the launch of a Vanguard satellite in December 1957. In the wake of Sputnik pressure, the Navy scheduled to launch *Vanguard 1* a number of months ahead of its initial schedule. After widespread international publicity announced that the United States would orbit its first satellite on 4 December 1957, a number of technical complications forced a launch delay. Allen Dulles told the NSC that because of the publicity leading up to the launch, the United States was the "laughing-stock of the whole free world."\(^{43}\) Dulles encouraged Eisenhower to consider a new policy that would make all future launches secret until after the spacecraft was successfully in orbit, to avoid further embarrassment.\(^{44}\) The blow to United States prestige that followed the launch delay was nothing compared to what would occur on the day of the launch. On December 6, after reaching a height of only a few feet after takeoff, the vehicle burst into flames while the small payload was tossed to the ground. The front-page coverage in the *London Daily Herald* read, "OH, WHAT A FLOPNIK!"\(^{45}\) Senator Lyndon B. Johnson called the failure "most humiliating." Adding to this humiliation, members of the Soviet delegation to the United Nations offered the United States technical assistance as part of its program of aid to underdeveloped nations.\(^{46}\) Nineteen fifty-eight would be a better year for US self-confidence than 1957, if only just slightly.


\(^{43}\) Quoted from James Schwoch, *Global TV*, 52.

\(^{44}\) Nicholas Cull, *The Cold War and the United States Information Agency*, 150.

\(^{45}\) Harford, *Reconsidering Sputnik*, 87.

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*Explorer I*

On 31 January 1958, at 11:12 p.m., the United States successfully launched the *Explorer I* satellite from Cape Canaveral, Florida. The tube-like payload contained a package of scientific instruments, which collected data that led to the discovery of the van Allen radiation belts. The launch of *Explorer* did not receive the widespread sensational coverage that *Sputnik* had a few months earlier. Newspapers in Europe and Asia primarily focused on the impact of the cylindrical satellite on the United States position in the upcoming summit talks. In France and the United Kingdom, journalists predicted that the United States might change its policy towards the summit talks after the success of the launch and in India commentary suggested that the United States could now act from a position of power and strength in the talks. The balance of power, according to most coverage, had returned to equilibrium. Press in communist countries acknowledged the launch but downplayed its broader significance.\(^{47}\)

The day after the *Explorer I* launch, Saturday 1 February 1958, was an extremely busy day at USIS posts around the world. The number and diversity of public relations efforts undertaken at these posts to capitalize on the satellite’s success is too vast to review here. The work in one country, USIS Germany, provides an example of the on the ground initiatives to promote the first American artificial satellite. The USIS post in Germany created their own promotional campaign for the launching of *Explorer I* in

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January 1958. Leading up the flight, USIS staff reviewed their collection of scientific photographs, updated the captions, and enlarged a selection for exhibits at Amerika Haeuser around Germany. Before the flight, USIS Germany began work on updating two films, “Space Unlimited” and “Geophysical Year,” so that over sixty prints of the films could be distributed shortly after the launch. USIS Germany sent film kits to posts around Germany, each filled with a prepared lecture, articles, posters, leaflets, a chronological chart, and a picture layout of the major figures in space research.

At 3:30 a.m., on 1 February, USIS staff in Germany first heard word that the *Explorer 1* satellite was successfully orbiting the earth. USIS Bonn’s press staff and translators arrived at the Embassy by 8 a.m. to begin covering the launch. Around noon that day the post received President Eisenhower’s official proclamation of the launch. The post immediately translated the proclamation into German and then sent it via Teletype to each consulate along with instructions for the marine guards on duty to notify the public affairs officers (POA) as soon as they received the message. The POAs at each post then distributed the translated announcement to newspapers throughout Germany by late afternoon on Saturday. The USIS post in Bonn also sent the President’s statement to the German wire service, all press correspondents stationed in Bonn, all foreign embassies, the Federal Press Office, the press offices of the four leading political parties in Germany and to the Bundestag and Bundesrat. By the end of the day, USIS Germany staff had also made 920 prints of thirty photographs and produced ten articles on American scientific progress, and distributed these to all the posts in Germany.\(^{48}\)

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\(^{48}\) Nedville E. Nordness letter to USIA Washington, 14 February 1958, Box 9, Entry P 243, RG 306, NARA

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The German press incorporated much of the USIS Germany material into its coverage of *Explorer 1*. In Bremen, for example, forty-one papers carried 900 inches of USIS material as well as twelve pictures, reaching an audience of roughly three million people. Major newspapers and magazines throughout Germany published articles that drew heavily from USIS material, and in some instances directly reprinted USIS articles verbatim. The Voice of America German service broadcast and distributed a report on *Explorer 1* to all West German radio stations. Within a few days, Amerika Haeuser and the German-American Institute produced exhibits on the American space program, which included posters, scientific books, photographs and at the Stuttgart Amerika Haus a movable globe used to show the orbit of *Explorer 1*. These exhibits were complemented by a series of lectures by German scientists, including Dr. Julius Bartels and Richard E. Kutterer, at the Amerika Haeuser. These efforts made by USIA staff in Germany paralleled the work of hundreds of PAOs around the world attempting to make the most of the United States’ first space shot.

**THE NATIONAL AERONAUTICS AND SPACE ACT**

Shortly after *Sputnik*, it became clear to many government officials that the United States needed to strengthen its space exploration efforts. The USIA’s new director, George V. Allen, recommend to the NSC’s Operations Coordinating Board (OCB) that the United States create a standalone civilian space agency. By separating military and civilian space activities, Allen argued, the United States would be in a better

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50 Ibid.
position to regain its prestige losses from Sputnik. At roughly the same time, an emergency committee in the Senate, led by Lyndon Johnson, made similar recommendations. The American Rocket Society and the Rocket and Satellite Research Panel also pushed for a new separate civilian space agency. As a direct response to Sputnik, the United States Congress passed the National Aeronautics and Space Act in July 1958, which led to the formation of the National Aeronautics and Space Administration (NASA) the following October.

The first line of the Declaration of Policy and Purpose of the Space Act reads: “The Congress hereby declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind.” In the current version of the Act the word “mankind” has been replaced with the more inclusive “humankind.” The notion that America’s space program should serve “all mankind” and not simply American citizens, represents an internationalist vision, which had been gaining significant ground since the 1940s. Franklin Roosevelt’s attempt to internationalize the New Deal through the Atlantic Charter reflected the beginning stages of the new position in international affairs, one in which the United States would establish New Deal-style policies and multilateral institutions outside of its national boarders. Although the New Deal laid the groundwork for America’s relationship to the world after World War II, it was the experience of the war, and the way the war ended in particular, that formed the shaped postwar international relations. The unconditional surrender of its enemies “proved that America could defeat evil on a global scale,”

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according to Odd Arne Westad.\(^5\) At the close of World War II, the United States assumed a position of world economic, cultural and military power, and after having fought “the “good war” many Americans became convinced of their nation’s essential goodness, benevolence and duty in world affairs.”\(^6\) Magazine publisher Henry Luce’s 1941 essay “The American Century,” in *Life* magazine, captured the essence of this vision of America’s new role in the world. Infused with an evangelical tone, Luce’s essay warned Americans that they had “failed to play their part as a world power- a failure which has had disastrous consequences for themselves and for all mankind.” Luce offered a cure: “to accept wholeheartedly our duty and our opportunity as the most powerful and vital nation in the world and in consequence to exert upon the world the full impact of our influence.”\(^7\) Luce’s essay embodies the notion of global progress through American leadership that would later be taken up by public diplomats selling the space program, and the promises of democracy, to foreign leaders and the world public.

The 1958 Space Act- negotiating the interests of the administration, the Department of Defense, Congress and the scientific community- has become the core statement guiding United States civil space policy. In addition to giving NASA direction over civilian space efforts, including the research that was undertaken at three former National Advisory Committee for Aeronautics (NACA) facilities, the space act called for a council to advise the president on space exploration, it established the Advanced Research Projects Agency (ARPA) within the Department of Defense, to manage military space activities, and it created a civilian-military liaison committee to coordinate NASA

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and DoD projects. Although NASA was not officially in operation until October 1958, Eisenhower assigned the new agency the task of developing a manned spaceflight program in August 1958. In December, the newly formed Space Council granted Project Mercury “highest priority” status so that the United States could put men into earth orbit by the mid-1960s.\(^{58}\)

**NASA AND PUBLIC DIPLOMACY**

NASA worked closely with the USIA, State Department and White House to ensure that the new civilian space program would serve American national security interests. The USIA became responsible for distributing information abroad about both civilian and military space activities, while NASA took charge of domestic public relations. NASA, the DoD, the Atomic Energy Commission and other agencies involved in space exploration and research supplied the USIA with material for crafting press releases, magazine reprints, pamphlets, photographs, radio and television broadcasts, films and exhibits. The USIA also based a full-time liaison officer at NASA.\(^{59}\)

In late November 1958, over lunch USIA Science Advisor Hal Goodwin and NASA Office of Public Information Director Walter Bonney discussed developing an overall framework for space information programming. The tone and methods the agencies used would be critical, Goodwin and Bonney agreed. It was important to present the American program as proactive and not reactionary. It was also important to frame each US launch as part of a larger program with larger aims, not as individual accomplishments. This approach was in direct response to the impact of Soviet space

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\(^{59}\) “USIA Policy on Space,” Undated, Box 12, Folder “USIA: 1962 Proposals & Suggestions from all elements on Science Prog.” Entry P 243, RG 306, NARA.
feats abroad and the damage that launch failures like Vanguard inflicted on US prestige.

In large part what this plan did was offer an explanation or justification for the slower pace of American space exploration. NASA efforts, the USIA and NASA public affairs clarified, were rational, based on scientific motivations, and shared with all mankind. The USIA would not present space exploration as a race, but instead as a rational pursuit of knowledge. Like research undertaken in a laboratory, space exploration was experimental and not every “experiment” would work. The ultimate goal was what was important, not individual space shots. Goodwin and Bonney’s approach stressed that the schedule of space shots, at least in information programming, had nothing to do with Soviet progress in space. They laid out this framework “in an attempt to define a way in which the public presentation of the civilian space program would be of maximum value to the USIA.”

In 1958, the USIA’s general science program sought to strengthen ties between the United States and other countries by explaining how science and technology factored into American life and progress, not simply the dissemination of scientific and engineering information. Describing how science flourished under the American system, and Americans’ general welfare flourished with the aid of science, USIA programming attempted to demonstrate how American democracy was in line with foreign peoples’ “aspirations for freedom, progress and peace.” Shying away from a focus on space science and technology, the USIA stressed other areas of American scientific accomplishment. In his State of the Union address, Eisenhower called for extending the

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60 Goodwin had also discussed this approach with Glennan and Frank Phillips the week before he met with Benny. Harold Goodwin to Walter Bonney, 26 November 1958, Box 6, Entry P 243, RG 306, NARA.
61 Harold L. Goodwin paper on the USIA science program, 22 June 1958, Box 4, Entry P 243, RG 306, NARA.
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Atoms for Peace program to include other areas of science and medicine. Science for Peace, as the new initiate was named, became a priority theme for the USIA in 1958.62

The Soviet Union, according to the USIA, was using its satellite launches to substantiate claims about the superiority of the communist system. The tendency to equate accomplishments in space exploration with world leadership was only going to increase, thanks in large part to Soviet efforts to foster this correlation. USIA officials emphasized what they perceived as the major difference between American and Soviet science: the integration of science and technology in all areas of life. To make the point, Goodwin explained that in the Soviet Union an ox-cart “may be seen moving on primitive roads in the vicinity of Soviet satellite launching complexes.”63 There were fundamental differences between the use of technology in various economic and political systems, according to the USIA. Economic competition within the United States, as stated by the USIA guidelines, stimulated a diversity of technological developments, which contributed to “the good life.”64

Competition lay at the core of the USIA’s objectives but in approaching science and technology information programming, the USIA made sure to avoid any suggestion that the United States was competing with the Soviet Union. Individual events should not be presented as markers of national superiority, but instead as part of broader long-term objectives, according to USIA guidelines. The universal and international nature of science should be emphasized, international cooperative programs should be highlighted,

63 Harold L. Goodwin paper on the USIA science program, 22 June 1958, Box 4, Entry P 243, RG 306, NARA.
64 “U.S. Information Agency Basic Guidance and Planning, Paper No. 4” 18 November 1958, Box 12, Folder “USIA: 1962 Proposals & Suggestions from all elements on Science Prog.” Entry P 243, RG 306, NARA.
and the areas of science and technology that can be applied to the modernization of underdeveloped nations were particularly meaningful, and should be “presented with understanding, restraint, and a becoming humility.” Expressing a view parallel to Modernization Theory, a 1958 report on the USIA science program explained that “science and technology seem to hold special promise to the people of the less developed nations, since they see in modern science the means of bypassing the historically long, slow route to full realization of their national potential.” The USIA predicted that just as science and technology was developing at an exponential rate, global interest in these fields was also on the rise. For this reason, science and technology must play a central role in USIA programming. After the Soviet Union launched Sputnik, and the elaborate propaganda programs that ensued, the world became aware of Soviet capability. It was the USIA’s job to make sure that the international public was not only aware of American technological and scientific know-how, but also how within the American political system these advances contributed directly to the welfare of people around the globe.

The Space Age in Progress

In 1958 the United States sent five civilian satellites into orbit and two probes into outer space. A year later NASA had successfully launched four more satellites and sent one space probe past the Moon and on to the Sun. In 1959 NASA also began training seven astronauts for Project Mercury and testing Atlas boosters and capsule instruments.

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65 “U.S. Information Agency Basic Guidance and Planning, Paper No. 4” 18 November 1958, Box 12, Folder “USIA: 1962 Proposals & Suggestions from all elements on Science Prog.” Entry P 243, RG 306, NARA.
66 Harold L. Goodwin paper on the USIA science program, pg. 8, 22 June 1958, Box 4, Entry P 243, RG 306, NARA.
to prepare for human spaceflight. Two monkeys, Able and Baker, rode rockets into space and returned to earth alive and well. NASA initiated agreements with foreign nations to set up Project Mercury tracking stations in eight locations around the world.\footnote{Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1959}

By 1959 space exploration was a major feature of USIA material. The USIA’s Press and Publications Service (IPS) produced new stories, speech texts, chronologies, bylined columns, pamphlets, photographs, picture stories, cartoon features, magazine articles and a comic book titled “Man and Outer Space.” USIS posts translated and adapted this material for local audiences tastes and interests. Foreign press drew from this material and in some instances printed USIA news releases verbatim. The USIS posts kept careful track of when and how the foreign press used the media they distributed and reported back to USIA headquarters in Washington. Noting that science and technology information was often more readily used by the foreign press than other material, USIA officials observed that in places like Havana and Caracas “we never have difficulty placing scientific photos.”\footnote{Statement by George V. Allen before the House Science and Astronautics Committee, 22 January 1960, Box 12, Folder “USIA: Background Material from Media for Dir. Allen Appearance before House Science and Astronautics Committee, 1960,” Entry P 243, RG 306, NARA.}

In total, the USIA distributed over a hundred news releases on space activities in addition to over a million pamphlets and posters in 1959. USIS posts received negatives, prints, lithographs and plastic printing plates. These materials were complemented by daily news round-ups, a series of television documentaries, and newsreel clips. The USIA filled its international libraries with books and pamphlets on space exploration.\footnote{President’s Report to Congress on U.S. Aeronautics and Space Activities, January 1 to December 31, 1959}
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A number of USIA exhibits in 1959 also prominently featured space exploration. USIS posts worked with foreign institutions, often arranging for exhibits to be shown in local venues. The kit exhibits on Explorer I, distributed in 1958, remained popular at many posts. In addition, the USIA sent a twelve-foot model of Echo, an inflatable metallic satellite, to the Tangier Fair. NASA’s model of Explorer VI proved to be one of the most popular displays in 1959. Often referred to as the paddlewheel satellite, Explorer VI was shown at the American National Exhibition in Moscow before traveling to USIS posts in Yugoslavia, Italy and England. Additional space models and other components, like a mock-up stratolab gondola and an Aerobe-Hi rocket model, became key pieces of many of the USIA’s exhibits in this period. NASA loaned many of these exhibit pieces to the USIA, but private companies, including Bell Labs and North American Aviation, also contributed to these displays. At the Karachi National Science Fair, the USIA showed the “Space Unlimited, “International Geophysical Year, and “Nautilus” exhibits to the audience of 75,000. A “ladies only,” showing, attracted 2,000 women. These exhibits also drew thousands of people in Helsinki, Madras, Southern Rhodesia, and numerous other locations. In Caracas, the USIS made arrangements to showcase all relevant exhibits at the Museum of Natural Sciences. The United States Department of Defense worked with the Vietnamese Department of Defense to exhibit models of the Nautilus Submarine and the Explorer satellite to groups of Vietnamese military in four locations. According to the DoD’s Psychological Warfare Service, “the soldiers got a great belief in the strength and science of the free world.”

72 Ibid.
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Nineteen copies of the “Space Unlimited,” a photo panel exhibit that included 1500 square feet of floor space covering the history of space exploration, toured around the world. Many other exhibits borrowed elements from “Space Unlimited” to fill out stories of the IGY, science and technology, and other themes. USIS Tel Aviv circulated the exhibit among army camps in Israel, as well as hosting public showings in Tel Aviv and Haifa. USIS Rangoon built an exhibit with material from “Space Unlimited,” and the Air Force’s Pioneer rocket model. The post showed the exhibit for 12-days to an audience of Army, Navy and Air Force Cadet Corps of Burma’s Defense Services Academy. USIS Tehran collaborated with Tehran University authorities to host the “Space Unlimited” exhibit in the university’s science building. Over the course of two weeks, students and well as Iranian Air Force Officers toured the display.

*The Beginning of the 1960s*

By 1960, the USIA determined that the United States had steadily regained prestige although the Soviet Union still outstripped the nation in terms of space exploration. In other words, the Soviet Union was winning the space race. The successful launching of American satellites was no match for the massive esteem the USSR accrued from *Sputnik*, as well as the sizable payloads they sent into orbit. Although space shots were not making front-page headlines anymore, the general interest in space exploration

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73 The USIA produced nineteen copies of this exhibit in 1958 and continued to tour them around the world through 1960. In 1959 “Space Unlimited,” was shown in Italy, Chile, Brazil, Uruguay, Bolivia, Spain, Pakistan, Afghanistan, Israel, Greece, Morocco, Mexico, Guatemala, Cuba, Finland, Denmark, The Hague, Laos, Malaya, Burma, the Philippines, Thailand, Sweden, Norway and Japan. Statement by George V. Allen before the House Science and Astronautics Committee, 22 January 1960, Box 12, Folder “USIA: Background Material from Media for Dir. Allen Appearance before House Science and Astronautics Committee, 1960,” Entry P 243, RG 306, NARA.

74 Ibid.
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abroad had grown steadily. It would continue to grow as the Soviet Union and the United States began to send humans into space in 1961.

The effects of Soviet space accomplishments spread to other fields, including Soviet science and technology, military power and general status. USIA officials believed that the world public saw the Soviet Union in a very different light after *Sputnik*. Before 1957, America took the lead in science, technology and production, according to the USIA; Soviet satellites and robotic probes, evidenced the USSR’s ability to challenge that lead. The United States, according to USIA director George V. Allen, must “push forward vigorously with space exploration,” to maintain international confidence in American leadership. The space race had broad implications, according to Allen; it factored into “almost every aspect” of the relationship between the United States and the world.\(^75\)

NASA and the USIA worked more closely together by 1960. Representatives from the USIA participated in some of the Space Council’s activities, especially meetings that focused on overall policy. The Director of the USIA was a member of the Operations Coordinating Board (OCB) of the Outer Space Working Group as well as the National Security Council.\(^76\) In the late 1950s and early 1960s, the USIA did not have the budget to create an elaborate series of space-focused exhibits so the agency offered NASA its network of USIS posts to distribute NASA material worldwide. Requesting models, drawings and photographs for exhibits, the Exhibits Division of the USIA hoped to

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\(^75\) Ibid.

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distribute this material to posts ahead of NASA launches.\(^{77}\) The USIA and State Department also helped NASA set up tracking stations around the world to support the upcoming Mercury Program.

*Preparing for Mercury*

The Mercury program used over a dozen tracking stations, five of which were on military missile ranges, one was within the United States, two stations were on ships, and the remaining stations were spread across the globe in Bermuda, the Bahamas, Grand Turk Island, Mexico, Canary Islands, Nigeria, Tanzania, the Solomon Islands, Canton Island, Hawaii and two in Australia. These stations provided necessary tracking, telemetry, and voice communications as the capsules traveled overhead. Setting up Mercury tracking stations abroad was a complicated undertaking that required a multi-pronged public relations approach that targeted local populations and government officials. NASA ran into significant difficulty in Africa in particular. US government officials made sure to avoid using the term “tracking station,” because studies had shown that the phrase had a militaristic connotation in Africa.\(^{78}\) The use of military uniforms or titles by US officials, even during the Mercury flights, was prohibited. There was also general concern within the State Department over Western African criticism of American “colonial” presence in the region. Tensions arising from the tracking stations, US government officials feared, could strain the overall US position in Africa. On the other

\(^{77}\) Robert Sivard to Harold Goodwin, 7 April 1960, Box 11, Folder “Space Exploitation,” Entry P 243, RG 306, NARA.

\(^{78}\) USIA to USIS Khartoum, 15 August 1960, Box 5, Entry P 243, RG 306, NARA.
side of the continent, in Zanzibar, communist demonstrations threatened the establishment of a station there.\textsuperscript{79}

To address rising tensions over tracking station agreements in Africa, UISA, NASA and State Department officials made sure to stress the collaborative operation of the tracking stations between NASA and the host government. NASA hired and trained local personnel while the USIA undertook a targeted information campaign, including film screenings, distribution of issues of National Geographic and moderate publicity build-up.\textsuperscript{80} As one official described the situation, the United States government should "ascertain which marginal activities can be Nigerianized in interest vital [to] political factors involved."\textsuperscript{81} Making matters more difficult, Moscow Radio broadcast anti-tracking station features in Africa that suggested the United States was using the facilities as military bases. Peking Radio also contributed to the controversy over the NASA stations, by emphasizing the "military dangers" of such "bases" in broadcasts to East Africa. Many newspapers in East Africa carried news stories about the "secret" American military base.\textsuperscript{82}

THE NEXT SCIENTIFIC REVOLUTION

United States public diplomacy policy underwent an evaluation at the end of 1959. At the urging of his longtime political advisor, Eisenhower formed a presidential committee to assess the USIA and America's global image. Led by Mansfield Sprague,

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\textsuperscript{79} Mr. Duggan to Secretary of State, 27 February 1961, Box 5, Entry P 243, RG 306, NARA. \\
\textsuperscript{80} Department of State to the US Embassy Lagos, 11 January 1961, Box 5, Entry P 243, RG 306, NARA. \\
\textsuperscript{81} Mr. Palmer joint Embassy-USIS message to the Secretary of State, 5 January 1961, Box 5, Entry P 243, RG 306, NARA. \\
\textsuperscript{82} "Project Mercury Installations in Africa: Bloc, Cairo and African Reactions," 15 July 1960, Box 5, Entry P 243, RG 306, NARA.
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the former counsel to the Secretary of Defense, the committee included USIA Director George Allen as well as State Department and Defense Department staff, an international officer from the Ford Foundation, and Eisenhower’s political advisor C.D. Jackson. A notable number of committee discussions revolved around the role of science and technology in American prestige abroad. The team evaluated both the use of media technologies, like radio and television, for information dissemination, as well as the impact of scientific and technological advancements on international standing.

At a meeting in late June 1960, the committee debated the proper relationship between global public opinion and science funding. NSF Director Alan Waterman opposed putting too much emphasis on the “impact factor” of science and pushed for freedom of scientific inquiry. Even so, the committee members went on to discuss a series of potential scientific and engineering programs that could boost the image of the United States abroad, including nuclear-powered aircraft, anti-gravity devices and a satellite that would light up the night sky. Scientists would not embrace any of these ideas, the committee recognized. Instead selecting one of these dramatic displays it was important to find a project that would appeal to both scientists and the international public.

These debates on science and national image filtered into the final report. A substantial section titled “The Impact of Achievements in Science and Technology Upon the Image of the United States Abroad,” examined a number of scientific and engineering programs that could win the United States prestige abroad and appeal to the scientific community, including a wide range of topics from manned spaceflight to the desalination of water to global science education. Scientific and technological prowess, according to
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USIA public opinion data, symbolized both power and progress to overseas audiences. American science also had the benefit of symbolizing American values, including freedom, democracy, and pluralism. The report recommended that the president encourage federal agencies to evaluate the "international political-psychological factors" of scientific and engineering programs when allocating funding. The report stressed that scientific and engineering programs promised a dual benefit for the country: first as "status symbols in the East-West conflict, direct indices of power," and second as "promises of directly meaningful, applicable, useable instruments of progress." 83

The Sprague Committee predicted that the 1960s "may prove to be one of the most convulsive and revolutionary decades in several centuries." Scientific and technological progress lay at the core of this revolution, according to the report. With half of the world's population living "under conditions of hunger, disease and ignorance," and the Soviet Union pressing for global domination, the report stressed that the United States must utilize economic, diplomatic and informational instruments to contain Soviet expansionism and steer this new scientific revolution. 84

To many people within the United States government, the world seemed on the threshold of a scientific revolution. National Academy of Sciences Executive Director Hugh Odishaw compared the space age to the Copernican revolution, and suggested that it could change "man's concepts of man." 85 USIA Science Advisor Harold L. Goodwin had come to see science, and American science in particular, as the defining feature of

83 James Schwoch, Global TV, 53-56.
84 Conclusions and Recommendations of the President's Committee on Information Activities Abroad, December 1960. 1.
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twentieth century society. Equating the postwar era with the Copernican Revolution and the Scientific Revolution, Goodwin called for the agency to promote the identification of the current scientific revolution with the United States. Goodwin prepared a report in 1961, “USIA and the Scientific Revolution,” with the aim of articulating how and why science and technology were essential to American foreign relations priorities. This report drew on polls and informal feedback from member of the National Academy of Sciences and the Science Advisor of the State Department. This report, through Goodwin’s thorough discussion and analysis of the role of science in public diplomacy, reveals the rationalizations of early information programming and encapsulates the immediate post-Sputnik moment as understood by experts in American foreign relations.

The launch of Sputnik, according to Goodwin, established the Soviet Union as the leading power in space exploration. It was this perception of Soviet scientific and technological capability, not actual capability, which threatened US leadership in international affairs. The international public was increasingly equating scientific achievement with the political and social system of a nation. Goodwin distinguished the impressions science and technology were making on people of industrialized nations from those of emerging nations. In the developed world, scientific achievement acted as a yardstick for the shifting balance of power. Space feats and other scientific and technological demonstrations directly impacted developed nations’ political and military

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86 Harold L. Goodwin, “USIA and the Scientific Revolution,” 1961, Box 5, Entry P 243, RG 306, NARA.
87 A similar revolutionary discourse existed in discussions of the impact of nuclear technology on society. Historian Gabrielle Hecht has observed that, “during those first decades of Cold War, the only consensus in public debates was that, for better or worse, nuclear technology had changed the world forever.” Gabrielle Hecht, “Rupture-Talk in the Nuclear Age: Conjugating Colonial Power in Africa” Social Studies of Science, 32, No. 5/6 (Oct.-Dec., 2002), 691.
alignment, as well as the acceptance of general US policies, in Goodwin’s estimation. Emerging nations, on the other hand, looked to science and technology “as magic touchstones, short routes to the achievement of national and personal aspirations.” The United States’ proper role, Goodwin stressed, was as a guide or “helping hand” for the rest of world. Drawing on C.P. Snow’s *Two Cultures*, Goodwin suggested that people in the developing world were increasingly observing the disparity between rich and poor nations. They were going to look to a superpower for help, according to Goodwin, and it was the job of the USIA to ensure that the United States was the chosen leader. The best way to win the confidence of the emerging world would be to demonstrate how the United States was the driving force behind the contemporary scientific revolution.  

The vision of a looming scientific revolution would undergird the framing of the space program’s significance and broader meaning for the coming decade. In the 1960s, US government officials would continue to question and reevaluate the impact of space exploration on international public opinion, the role of science and technology in foreign relations, and the best way to achieve geopolitical influence. The meaning of science, and its connection to American national identity in particular, would lie at the core of these conversations. USIA officials saw science as a useful public diplomacy vehicle because, according to one USIA official, it “inherently rouses little or no suspicion and hostility, it can be an effective means for communicating other aspects of the total American

88 Goodwin left the USIA shortly after he prepared this report to become the director of NASA’s Office of Program Development. See, C.P. Snow, *The Two Cultures and the Scientific Revolution* (New York: Cambridge University Press, 1959); Harold L. Goodwin, “USIA and the Scientific Revolution,” 1961, Box 5, Entry P 243, RG 306, NARA
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image." By 1961, as the next chapter will explore, the USIA began emphasizing the scientific aspects of the United States program even more than it had done in the 1950s.

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89 James Halsema to Mr. Wilson, undated (1961), Box 1, Entry P 243, RG 306, NARA
CHAPTER 2
From Spacecraft to Icon: Friendship 7’s ‘Fourth Orbit’

Friendship 7, a space capsule about the size of a small car, once attracted crowds so large that people from around the world waited in line for up to five hours to run their hands along its rough surface. In February 1962, when the capsule that had carried astronaut John Glenn Jr. around the globe three times splashed down in the Atlantic Ocean, Edward R. Murrow, the famed journalist and then director of the USIA, wrote to President John F. Kennedy suggesting that, “We can make a terrific impact abroad by exhibiting Colonel Glenn’s ‘Friendship 7’ space capsule in key countries.”¹ This space capsule display would come to be an important component in the USIA’s cultural diplomacy program to win over the leaders and publics of non-aligned nations, an effort that was seen by many US government elites as essential to winning the Cold War.

Glenn’s flight was an engineering and public relations triumph for the United States’ fledgling human spaceflight program, bringing NASA head to head with Soviet space accomplishments. Murrow saw the exhibition of the capsule that helped the United States challenge the Soviet lead in space as a valuable strategic “weapon” in the psychological battlefield of the Cold War.²

² For a discussion of the significance of the Friendship 7 mission in relation to the early space program, the extensive resources and manpower that went into the flight, the scientific and engineering information gained from the flight, and the flight’s political implications in the context of the Cold War and the space race, see: John Glenn Jr. and Nick Taylor, John Glenn: A Memoir (New York: Bantam Books, 1999); John Catchpole, Project Mercury: NASA’s First Manned Space Programme (Chichester, UK: Springer-Praxis Books, 2001); Philip Scranton, “Behind the icon: NASA’s Mercury Capsules as Artefact, Process and Practice” in Showcasing Space, ed. Martin Collins (London: Science Museum, 2005); Walter McDougall, ...the Heavens and the Earth (New York: Basic Books, Inc., 1985).
Colloquially dubbed 'The Fourth Orbit,' a humorous acknowledgement that the international exhibition would be the fourth time the capsule circled the Earth, the tour of Glenn’s spacecraft was the first large-scale space diplomacy program hosted by the USIA. During its three month world tour Friendship 7 visited over twenty cities and was seen by roughly four million people, while another twenty million people watched television programs about the capsule, which were broadcast from the exhibition sites. 3

This chapter follows the voyage of the capsule to exhibit sites and examines the precedents this major tour set for future approaches to space diplomacy throughout the 1960s. As historian Stuart McCook has proposed, “following something, as it moves around the world, in and out of particular places, and doing a contextually rich analysis of what happens as it moves,” is a methodologically rich tool for doing global histories of science. 4 Following the ‘fourth orbit’ tour provides the opportunity to integrate the history of official planning and decision-making with the experiences of those at whom public diplomacy was aimed. By studying documents collected during the Friendship 7 tour to gauge international popular opinion—including, polls, exhibit exit interviews, newspaper clippings, photographs, films and reports—this chapter seeks to investigate the ways in which politics and culture, through spaceflight and diplomacy, intersected.

As this chapter will establish, public diplomats saw Friendship 7 as an important political tool because, paradoxically, they believed that audiences around the world would view it as apolitical. This tension—namely, serving political objectives with “apolitical” objects—speaks to the curious relationship between science, technology and

foreign relations in the postwar era. With roots in Enlightenment thought, this complicated relationship stems from a dual identity of science and technology as both tied to objective truth and as instruments of progress. In the 1950s and 1960s this view of science and technology was advanced in academic circles and played out in development programs around the world, shaped American foreign policy, and the relationship between in the US and the world, throughout the early postwar period. During the Kennedy administration in particular, in large part through the encouragement of Walter Rostow, a key modernization theorist as well as Kennedy's deputy special assistant for International Affairs, the United States government invested in an elaborate array of modernization programs. The planning and execution, and later evaluation, of the Friendship 7 international exhibition are a part of this larger story of the role and impact of modernization theory on the use of science and technology in US foreign relations.

FREEDOM TO FRIENDSHIP

In late May 1961, shortly after Alan Shepard completed the first American manned spaceflight, the USIA, with the help of NASA and the Department of Defense, sent his spacecraft, Freedom 7, to the International Air Show in Paris and the Electronic...
and Nuclear Fair in Rome. At the exhibit in Paris an impressive crowd of 600,000 visitors saw the craft while in Rome over a million people lined up to view the small capsule. In his report to Congress in January 1962, Kennedy noted that touching Shepard’s spacecraft became a fetish for visitors at the exhibits and that the United States was lauded for the “openness” of its human space program. Overseas audiences, he continued, achieved “a high degree of self-identification with one of the greatest adventures of our time.” Additional requests for the Freedom 7 capsule to visit other international cities flooded the USIA offices. USIS posts in Bonn, Turin, Karachi, Athens, London and Kabul asked the agency to display the capsule in their cities. While foreign audiences were enthusiastic about the capsule display, criticism within the United States swelled. The domestic public and members of Congress criticized NASA for exhibiting the capsule abroad before it was exhibited within the United States. This tension between prioritizing the domestic and foreign audiences was an issue government officials would face for years to come.

Even after the Freedom 7 flight and tour these efforts, a USIA poll conducted in August 1961, noted that Western European nations were confident in the United States’ world leadership but believed in the superiority of the Soviet Union’s military and space program. The success of Shepard’s mission, and the approach to openness in NASA and USIA programming, boosted the image of American space efforts, but in 1961 the United States was still seen as trailing behind a string of Soviet space firsts.

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7 Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1961.
8 Frederic O. Bundy and Harry Kendall to Thomas Sorensen, 15 June 1961, Box 5, Entry P 243, RG 306, NARA.
9 Nicholas Cull, The Cold War and the United States Information Agency, 205.
Chapter 2: From Spacecraft to Icon

The image of American space capability changed considerably around the world, when John Glenn launched into orbit in February 1962 aboard the *Friendship 7* spacecraft. *Time Magazine* heralded the *Friendship 7* mission for putting the United States “back in the space race with a vengeance” and giving “the morale of the US and the entire free world a huge and badly needed boost.” Even the Communists’ peace dove artist, Pablo Picasso, the *Time* article proclaimed, was moved to say, “I am as proud of [Glenn] as if he were my own brother.” The article stressed the importance of the openness of the mission and how everyone from “Queen Elizabeth to Bedouins in the Middle East” could follow the progress of the flight. Voice of America broadcast the flight in Hindi, Russian, Chinese, and a score of other languages. Public diplomats believed that the radio programming of the flight captured the largest audience in the history of radio broadcasting.

Within the United States, and abroad, John Glenn’s orbital flight created a public relations boon for government elites hoping to promote the strength of the American space program. The USIA sent coverage of the *Friendship 7* flight to TV stations in 74 countries; in Italy alone 13 million people viewed the telecast. The *Los Angeles Times* encapsulated the far reaching enthusiasm for the flight was when it noted that convicts at San Quentin’s death row and Pope John XXIII followed the flight while the chambers of the House and the Senate emptied so that members could watch the television coverage. “In Grand Rapids, Mich.,” it noted, “a judge and jury interrupted a trial to watch the latest

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12 In Japan, alone, over 200 radio and TV stations carried coverage of the flight. *Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1962*, 103-4.
13 Ibid.
developments from Cape Canaveral. They watched on a stolen television set that had
been brought to court as evidence in a case."14 In his weekly report to President Kennedy,
Murrow noted that the press, from Africa to Asia, heralded the openness of the American
space program. Emphasizing the central role of the USIA in this prestige boost, Murrow
explained that this heavy coverage was in large part due to the extensive distribution of
USIA material— including a 15-minute documentary, color photo exhibits, press packs,
and motion picture footage for newsreels—before the flight.15 Murrow, seeking to
capitalize on the overwhelming response to the flight, devised his plan for an elaborate,
global tour of Glenn’s capsule.

At first Murrow hoped to display the *Friendship* 7 capsule in a number of
international cities including Moscow, suggesting, “If the Soviets agree, the world will
note their failure to show their capsules even to their own people, whereas we are willing
to show ours even to the Russians.”16 Murrow’s letter not only brings forth the United
States’ competition with the USSR, it indicates how he hoped to differentiate the two
space programs, and in turn boost American international prestige, through the exhibition
of the country’s technological achievements. International audiences would see the
capsule, according to Murrow, as an American effort to share scientific and engineering
information, not as political propaganda. By displaying technological hardware, as
opposed to sending Glenn on a tour “like a trained seal” the American space program
would distinguish itself from Soviet space propaganda, according to Murrow.17 A key
component of the USIA approach to exhibition design throughout the 1950s and 60s was

15 Edward Murrow to John F. Kennedy, 27 February 1962, Box WH-23, “United States Information
Agency 8/15/61-1/25/63,” Papers of Arthur M. Schlesinger, Jr., White House Files, JFKL.
16 Ibid.
17 Ibid.
to shy away from a blatant pro-American message by displaying technological hardware so the ‘facts spoke for themselves.’ Technology, unlike cosmonauts, USIA officials hoped, would not be interrupted as a form of propaganda and could therefore more effectively carry the agency’s political message.18

Echoing enlightenment and modernist scientific and technological optimism, these sentiments shaped much of the USIA’s approach to space programming in the late 1950s and early 1960s. Using its five media divisions—press, radio, television, motion pictures, and the Information Center Service—the USIA promoted American space feats abroad using words such as “openness,” “science,” and “progress,” again and again. Public diplomats at USIS posts adapted this material for local audiences, science writers, newspapers and at times even minstrel singers.19 These depictions of the space program mirror the rhetoric of the colonial “civilizing mission,” which fused understandings of power, authority, and political strength with scientific and engineering projects.20 In his study of American efforts to promote the development of scientific and technological development in Europe after World War II, historian John Krige claims what differentiates these efforts from earlier forms of the “civilizing mission,” is the emphasis placed on cooperation and coercion, as opposed to imposition and direct forms of domination; the goal, however, was the same. American political and industry leaders hoped to assert political influence by using the tools of American led scientific and

19 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1961, 89.
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technological programs.\textsuperscript{21} Although USIA space promotion in the early 1960s differed in many ways from these cooperative scientific and engineering programs, they shared similar rationalizations for the role of science and technology in cementing American leadership and power abroad.

THE "FOURTH ORBIT"

During its three month world tour \textit{Friendship 7} would visit over twenty cities in Europe, Africa, the Middle East, Asia and South America. Four million people saw the small craft on its 'fourth orbit,' while another twenty million people watched television programs about the capsule, which were broadcast from the exhibition sites.\textsuperscript{22} A US Air Force cargo plane emblazoned with the words "around the world with Friendship 7" and a map of the continents the capsule visited that summer, carried the small craft from country to country.\textsuperscript{23} John Williams, a member of NASA’s Cape Canaveral staff and the head of the \textit{Friendship 7} exhibit, accompanied the craft to answer questions from curious audiences around the world.\textsuperscript{24}

United States government elites selected the exhibit locations based on a variety of criteria. The capsule visited countries that were of foreign relations significance to the United States, cities that were near American tracking station facilities, and countries where the little capsule could make the greatest impact. But the selection process was not simply one-sided. Internal correspondence at the Science Museum London, reveals some

\textsuperscript{21} John Krige, \textit{American Hegemony and the Postwar Reconstruction of Science in Europe} (Cambridge, MA: MIT Press, 2006).
\textsuperscript{22} Donald Wilson to James Webb, 9 October 1962, Box 37, Folder “Director’s Correspondence,” Entry A1 1039, RG 306, NARA
\textsuperscript{23} USIA Microfilm Microcopy No. NK-10A, Roll No. 14, USIA Press Releases: Africa, JFKL.
\textsuperscript{24} Microcopy No. NK-10A, Roll No. 1, USIA Press Releases, Far East, JFK Library.
of the foreign interests and motivations for exhibiting *Friendship 7*. At the Science Museum, a staff observed member, “the exhibition should arouse great interest and may be a means of acquiring further material for permanent exhibit.”25 Building a relationship with NASA through the *Friendship 7* exhibit, museum staff hoped, would give the museum greater leverage in the future to acquire space artifacts, which were sure to draw large crowds in the coming years. H. R. Calbert, Keeper in the Department of Astronomy at the Science Museum, wrote to NASA and the USIA requesting the exhibition of the capsule at the museum. The Science Museum staff worked with the USIA to plan an elaborate exhibit that included film screenings, posters, a soundtrack from Cape Canaveral of the lift-off, and a projector with color transparencies.26 Letters from museum staff from around the United Kingdom flooded the Science Museum London mailbox, requesting that the capsule visit their museums as well, acknowledgements of the potential popularity and impact on visitor attendance of the small craft.27 This correspondence, within the Science Museum London and from other museum staff, is an important window onto the dynamic, and often symbiotic, relationship between American information programs and the communities they aimed to influence; it also highlights the intricacies of the interplay of American and foreign interests in the support and execution of spaceflight exhibits.28

27 See correspondence in Nominal File 655, “Special Exhibition: Col. John Glenn’s Capsule,” SML.
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The Science Museum London ended up being one of the first stops on the Friendship 7’s ‘fourth orbit.’ In early May 1962, on the first day the capsule was on display, the museum turned away thousands of people because the huge crowds overtaxed the facilities. The British Broadcasting Corporation’s current affairs program “Panorama” filmed a live telecast from the capsule exhibit, which was watched by ten million viewers. Over the next few days two to three thousand people waited in line at all hours of the day to get a glimpse of the famous capsule before the Air Force plane carried it off to its next stop in Europe.\(^{29}\)

When the USIA exhibited the capsule at the Palais de la Découverte, a science and technology museum in Paris, they had to extend exhibit hours until midnight to accommodate the enthusiastic crowds standing in five hour long lines to view the capsule. Nearly thirty thousand people attended the Paris exhibit in its short two and a half day stopover, a record-breaking number for the well-known museum. All the major Parisian newspapers featured Friendship 7 in their front-page headlines, and radio and television programs covered the space exhibit. The USIA report from Paris noted that the “few spectators recalling Soviet heavier launches [were] quickly silenced by others in [the] crowd who underlined Soviet secrecy and fact space craft exhibited last year USSR exhibit in Paris [was] only [a] model, not [an] actual capsule.”\(^{30}\) As Parisian onlookers

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Rienner Publishers, 2004); Kenneth Osgood. Total Cold War (Lawrence, KS: University Press of Kansas, 2006).


observed, the United States and the Soviet Union were displaying their space accomplishments abroad in very different ways. While the USIA designed exhibits and events to attract the largest crowds possible, and appeal to the general public around the world, the Soviet Union sent cosmonauts to foreign cities to meet with officials and heads of state.\footnote{Edward Murrow to Madrid USITO, 17 May 1962, Box 257, Folder “Outer Space, 14.B.5, Outer Space Exhibits, Jan- May, 1962, Part 2 of 2.” Entry A1 3008-A, RG 59, NARA.}

Another major difference between American and Soviet space public diplomacy in the early 1960s had to do with the content of their space diplomacy events. While the United States sent space capsules around the world and broadcast launches and flights in real time, the Soviet Union organized cosmonaut tours and kept their space capsules and launches out of public view. Yuri Gagarin, the first human space traveler, toured a number of countries but his spacecraft, the \textit{Vostok 1}, was not put on public display; before 1965 only photographs the Vostok veiled underneath a cover were shown to the world. And, historian Cathleen Lewis suggests that the lack of engineering information on the model of first Vostok put on public display, “Represented a deliberate effort to conceal the actual details of the human space-flight program in the Soviet Union by carefully camouflaging details about the design legacy of Vostok and its technical properties.”\footnote{Cathleen Lewis, “The birth of the Soviet space museums: creating the earthbound experience of space flight during the golden years of the Soviet space programme, 1957-68,” in Showcasing Space, ed. Martin Collins (London: Science Museum, 2005) 142-158.} When Glenn’s capsule was put on display during its ‘fourth orbit,’ however, the USIA included engineering diagrams of its interior workings along with other exhibit components. This exhibit, as well as most American space exhibits in this
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period, highlighted scientific and technological advancements, as a demonstration of
openness and a particular image of progress.33

Since Friendship 7's 'fourth orbit,' was the first major US space diplomacy
events, public diplomats continuously adjusted and revised the capsule exhibit over the
course of its tour. After Friendship 7's overwhelming reception in Paris, representatives
from the USIA recommended that at future exhibitions of the capsule, security guards
should be posted to control the crowds, exhibit sites should extend their hours and that a
second viewing platform should be set up parallel with the first, to allow as many people
to see the spacecraft as possible.34 Although curators from the Smithsonian Institution
equated the capsule with the Wright Brothers' plane and strongly urged the USIA to
cover it in a clear plastic casing to preserve the "original, irreplaceable, priceless relic of
history," public diplomats decided to keep the capsule uncovered so that eager onlookers
could touch its coarse surface.35 Public diplomats also tailored information panels,
lecture themes and events at each stop, especially at the tour stops in Africa, where public
diplomats used the Friendship 7 capsule to carry a dual message of American
engineering and racial progress.

SPACE AND RACE PROGRESS

33 See, Loyd Swenson Jr., James Grimwood, and Charles Alexander, This New Ocean: A History of Project
Mercury (Washington, DC: National Aeronautics and Space Administration, 1966), 436; Donald Wilson to
James Webb, 9 October 1962, Box 37, Entry A1 1039, RG 306, NARA.
34 USIS Paris to USIA, 20 May 1962, Box 257, Folder "Outer Space, 14.B.5, Outer Space Exhibits, Jan-
35 USIS Paris to USIA, 20 May 1962, Box 257, Folder "Outer Space, 14.B.5, Outer Space Exhibits, Jan-
May, 1962, Part 2 of 2," Entry A1 3008-A, RG 59, NARA; Philip Hopkins, Director Smithsonian National
Air Museum, to Shelby Thompson, Director Office of Technical Information and Education at NASA, 10
April 1962, Box 38, Folder "General Correspondence Jan.-June, 1962," Entry A1 1039, RG 306, NARA;
Donald Wilson to James Webb, 9 October 1962, Box 37, Folder "General Correspondence," Entry A1
1039, RG 306, NARA.
For the Friendship 7 exhibits in Africa, like many USIA programs in the early 1960s, the agency took it as an opportunity to curb civil rights criticisms and present a more positive image of the United States.\textsuperscript{36} As historians such as Mary Dudziak and Penny Von Eschen have explored, American prestige in many areas around the world was threatened by civil rights tensions in the 1950s and 1960s. The USIA send jazz musicians around the world to mollify negative impressions of American civil rights progress, while US political elites pushed for domestic reforms in part to win over the hearts and minds of the international public.\textsuperscript{37} Friendship 7 made its ‘fourth orbit’ at a time when many African diplomats were forced to live in substandard housing in Washington, DC because white landlords would not rent to them. Just a year before the tour the world was shocked when Alabama Ku Klux Klan members burned a Freedom Rider bus and beat the civil rights activists who rode the bus to challenge segregation. President John F. Kennedy believed that the Freedom Riders were making the United States look bad in the eyes of the world. The USIA reported that the event “had dealt a severe blow to US prestige which might adversely effect its position of leadership in the free world as well as weaken the overall effectiveness of the Western alliance.”\textsuperscript{38} In response to the incident, the Ghanaian Times noted that surely “the Negro problem on the earth as well as the plight of oppressed peoples in Africa and elsewhere demand much

\textsuperscript{36} Nicholas Cull, \textit{The Cold War and the United States Information Agency}. 212.
\textsuperscript{38} Mary Dudziak, \textit{Cold War Civil Rights}, 159.
more serious attention and consideration than the sending of a man to the moon.\textsuperscript{39} To curb some civil rights tensions and present a more positive image of the United States and its space program abroad, the USIA hired African-Americans to work in Africa. Two of these workers were assigned the job of giving lectures on the space program.\textsuperscript{40}

In late May the UISA displayed the capsule in Accra, the capital city of the newly independent nation of Ghana. The USIA estimated that 12,000 Ghanaians viewed the capsule on the first day of the exhibit alone. In addition to the capsule, the exhibit included a large photographic panel displaying general information about the US space program as well the song “Everything is a Go,” an adaptation of “High Life” written in collaboration by a Ghanaian and an American for the event. According to the USIA press release “The crowd reaction in Ghana was strongest each time the speed of the spacecraft was announced in local terms. John Glenn’s ‘friendship-7’ an announcer pointed out “can fly from Accra to Kumasi in 30 seconds. More than 100 miles separate the two cities.” In total over 50,000 people viewed Friendship 7 in Accra, a number that surpassed attendance in London, Paris, Belgrade and Madrid.\textsuperscript{41}

After receiving a very favorable reception in Ghana, the capsule traveled to Nigeria, where the USIA displayed it in both the capital Lagos as well as Kano, a northern city near a NASA tracking facility. In preparation for its stop in Lagos, the USIA took US-Nigerian relations into account when organizing the exhibit. USIA Director Edward R. Murrow explained that it was imperative to show in the exhibit “all American Negro personnel working with white staff on project.” He noted that any other

\textsuperscript{39} Ibid.  
\textsuperscript{40} Nicholas Cull, \textit{The Cold War and the United States Information Agency}. 212.  
\textsuperscript{41} USIA Microfilm Microcopy No. NK-10A Roll No. 14 USIA Press Releases: Africa, JFKL.
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“visually evident African contribution to operation” was important to the exhibit. 42 The opening ceremony in Lagos was televised and during its thirty-hour display the capsule drew a crowd of 19,000 in addition to the thousands that saw it as it was towed through the city.43

In Egypt the Friendship 7’s visit to Cairo convinced skeptics that the flight had really happened and that people were really traveling to space. The Washington Post quoted one onlooker who remarked, “I thought this space flight business was a rumor but now [that] I can see the ship I believe it.” It was important for this observer, as it was for many observers around the world, to see the capsule with their own eyes. In the mid-twentieth century, space exploration had just left the realm of science fiction. The extraordinary idea that a man had orbited the earth was made more tangible when the craft that had carried Glenn could be seen and felt.44 A few months before the exhibit the Al-Akhbar, a daily newspaper, reported “In his endeavors to invade Africa, Kennedy relies on four weapons, namely foreign aid, labor unions, peace corps, and the U.N.” a typical view of the US that Egyptians were expressing at the time. The USIA reports for the exhibition of Glenn’s capsule paint a very different picture, which suggests that the capsule—as the USIA had hoped—appeared more apolitical than Kennedy’s other “weapons.”45 Egypt had been a battleground of Soviet and American aid since the mid-1950s. Since Egypt was a neutral country, Egyptian leaders had played the United States against the Soviet Union for years in order to reap the greatest amount of development

45 Quote from Al-Akhbar. Edward R. Murrow, Director of the USIA, to the President John F. Kennedy, 27 February 1962, Box 91, Folder “USIA, 1/62-6/62,” Papers of President Kennedy, National Security Files, Departments and Agencies, JFKL.
support without committing to political alliance. But, the United States’ support of Israel was widely unpopular in Egypt, which fouled American foreign aid for many people in the country.46

“BREAK-AWAY FROM A HUMDRUM EXISTENCE”

Although the Friendship 7 capsule drew record crowds from Paris and Accra, the most overwhelming response came in Asia.47 In Manila, the New York Times reported, “70,000 Filipinos braved storms and floods to see the United States’ Friendship 7 space capsule.”48 In Karachi the capsule again drew large crowds; the USIA estimated that 55,000 people saw Friendship 7 in Pakistan.49 After leaving Karachi the capsule then flew to Bombay, Rangoon, Bangkok, Djakarta, Sydney, Manila, Tokyo and Seoul before ending its tour at the Seattle Worlds Fair. At every stop of the ‘fourth orbit’ thousands of people waited in line to see and touch the capsule that had carried Glenn around the earth.

In the middle of July, when the capsule finally arrived in India, more than a million Bombay residents welcomed Friendship 7 to their city over the course of the capsule’s four-day exhibition. The USIA’s field office reported “hundreds of thousands lined streets as the capsule trailered into the city from the airport for public display at the city’s Brabourne stadium.” Lines of 50,000 people waited for up to four hours to see the capsule. The major Bombay newspapers dedicated over 2,500 inches of column space to Friendship 7. The USIS report summed up many of the hopes of the tour. It noted,

49 Microcopy No. NK-10A Roll No. 15 USIA Press Releases: Africa, JFKL; Microcopy No. NK-10A, Roll No. 1, USIA Press Releases, Far East, JFKL.
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The fact that America’s manned space program is conducted in the full light of international publicity is highly appreciated among Indians in general and particularly by those who believe in democracy and an open society. While the Russian sputniks initially made a tremendous impact upon Indian public opinion, it is believed that the showing of the Friendship 7 film and John Glenn’s space capsule to the public of Bombay has demonstrated, at least in this area, that American efforts in space exploration are equal, if not superior, to the efforts made by the Soviets. Gagarin’s visit was well publicized, but few Indians had an opportunity to see him. The arrival of and display of the Friendship 7 capsule captured the hearts and imagination of the people of this area and the public turnout exceeded the post’s most optimistic expectations.  

In addition, the report highlighted that this reception was especially significant in light of current press and low public opinion the United States in India.  

When it reached Bangkok, roughly 80,000 spectators, including the crown prince, saw the spacecraft during its three-day visit in the city. According to a USIA report, “a Thai official described the turnout as probably the largest in Thai history to view one object exhibited by a foreign country.” At the exhibit’s opening ceremonies in Djakarta the Chairman of the Indonesian Council for Sciences exclaimed, “We heartily welcome the holding of this exhibit because this event will give the Indonesian people an opportunity to witness an American apparatus which has such a great and important role in increasing our knowledge in the filed of space science and technology.” And, in Manila the Philippine Vice President Emanuel Pelaez noted that the capsule “symbolizes the aspirations of free nations in a break-away from a humdrum existence to a helpful life of progress,” a commentary of the spacecraft’s significance that aligned with the rhetoric of USIA information material. Priests, students, grandmothers and boy scouts wadded through six-inches of rainwater to see the Friendship 7 spacecraft during its first day on

51 Ibid.
display in Manila. The *Philippines Herald* noted that the capsule “represents tangible proof of man’s conquest of space. To the beholder, it is a connecting link that brings him within arm’s reach of the reality of this conquest.” When the capsule landed in Sydney roughly 250,000 people saw it over the course of four days. In addition to NASA officials, Sydney University students stationed at the exhibit answered questions from the eager onlookers.

When *Friendship 7* arrived in Japan in late July the press covered its visit from the moment it was unloaded at the airport. Takashimaya, the leading department store in downtown Tokyo where exhibits were usually mounted in Japan, set up an elaborate display. In the first hour of the exhibit more than 12,000 people saw the spacecraft and by the end of its four-day display more than 500,000 people came to the store to see *Friendship 7* in person, “a crowd” according to the USIA report, which was “exceptional in size even by Tokyo standards.” In comparison, a USIA exhibit on Frank Lloyd Wright that toured four locations in Japan that year was deemed a significant success even though its attendance records were 1/20th of the attendance of the *Friendship 7* exhibit.

Several hundred police and guides were called on to direct the crowd into a line that climbed nine flights of stairs, zigzagged across the roof of the building and then descended back down nine flights of stairs to the first floor where the capsule was on display. The store’s 8th floor exhibit hall was transformed into a movie theater that constantly screened the ten-minute film “John Glenn Orbits the Earth.” The exhibit turned out to be another successful stop on *Friendship 7*’s tour. The exhibit fueled favorable publicity for the United States space program throughout Japan. The USIA

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52 Microcopy No. NK-10A, Roll No. 1, USIA Press Releases, Far East, JFKL.
53 Ibid.
54 USIS Tokyo to USIA Washington, 4 June 1962, Box 18, Entry A1 1039, RG 309, NARA.
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officials were glad to report that the open information policy and desire for international cooperation in space was widely publicized by “every communication media in Japan.” According to the USIA report “the openness of our manned space program which it symbolized was not lost on the Japanese who in several instances contrasted it favorably to the earlier presence of Soviet astronaut Gagarin.”

Although the response in Korea did not rival the response in Japan, within the first nine hours of its display 30,000 people had seen the spacecraft and the half a mile long line showed no sign of thinning. The Korean newspaper Hankuk Ilbo discussed the exhibit and contrasted the Soviet and American space programs, commenting that “while the US government and its agencies have tried to make their space projects widely known throughout the world by means of television communications, tracking stations and other ways,” the Soviet achievements resulted from “extreme secrecy behind the Iron Curtain.” The newspaper went on to suggest, “The mere fact that the vehicle is displayed should be enough to give stimulus to local scientists and experts.” Chairman Park Chung-Hee, Acting President of the Republic, shared a similar sentiment when he commented that the “scientific attitude of the Americans” which allowed the world to follow the flight “demonstrates the deep-rooted spirited of true scientific democracy.” As in many cities the capsule visited, local organizers and events in Korea contributed to the size and scope of the event. The mayor of Seoul, Major General Yoon Tae-Il, oversaw the exhibit while

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56 Microcopy No. NK-10A, Roll No. 1, USIA Press Releases, Far East, JFKL.

57 “30,000 Koreans View ‘Friendship 7’ Exhibit,” 7 July 1962, Microcopy No. NK-10A, Roll No. 1, USIA Press Releases, Far East, JFKL.
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the National Academy of Sciences of Korea sponsored a scientific conference in conjunction with the event.\(^{58}\)

AFTER THE “FOURTH ORBIT”

In October 1962, Donald Wilson, the Acting Director of the USIA, told James Webb, NASA Administrator, that everywhere the display of Friendship 7 “dramatized our willingness to make known the facts about our program to explore space, in contrast to the secrecy which surrounds the Soviet efforts in this field.”\(^ {59}\) Within just three months, he pointed out, the capsule was seen and frequently touched by roughly four million people. Wilson noted that due to Friendship 7’s “fourth orbit,” “Colonel Glenn’s epic orbit and US progress in space have been etched more deeply upon the world’s consciousness.”\(^ {60}\) The extent to which the idea of US progress was etched upon the world’s consciousness is impossible to measure.\(^ {61}\) USIA officials were acutely aware of the difficulties and complexities of determining the effectiveness of their work in influencing foreign public opinion of the United States; Murrow was known to say that no cash register rung when people’s minds were changed, highlighting the difficulty of adding up the impact of USIA programs.\(^ {62}\) The USIA evaluation studies and reports determined whether or not products reached their intended audiences, the size of the audience, if the products were of interest to the audience and recommendations on how to


\(^{59}\) Donald Wilson to James Webb, 9 October 1962, Box 37, Folder, “General Correspondence,” Entry A1 1039, RG 309 NARA

\(^{60}\) Ibid.

\(^{61}\) Ibid.

improve distribution, but they did not ascertain the impact of the products on these audiences.\textsuperscript{63}

This chapter also cannot determine the effectiveness of the exhibition of the \textit{Friendship 7} capsule on the world’s consciousness. Based on the extraordinary turnout at all the exhibit sites, the extensive coverage in the press and the enthusiastic comments that appeared in the USIA reports and in local press, it is clear that the display of \textit{Friendship 7} was a significant event. Although the USIA reports are undeniably positive, they should be read with a critical eye. Even though these reports do not discuss any opposition to the exhibition of \textit{Friendship 7}, it does not mean that none existed.

President Kennedy’s report to Congress on US space activities for 1962 highlighted the significance of Glenn’s flight and the subsequent capsule tour. The USIA distributed a television show about the flight to TV stations in seventy-four countries in English, Spanish and a number of other languages; according to the report Glenn’s flight was likely the most covered story in the history of broadcasting; the USIA distributed a short documentary on the flight to 106 countries in thirty-two languages followed by another hour long documentary distributed to seventy-one countries in all the major languages; and USIS posts received eight-panel poster exhibits about Project Mercury. Describing the ‘fourth orbit,’ the report noted that, “At every stop the public impact was impressive, particularly upon young people. Audiences included many chiefs of state

\textsuperscript{63} Although the agency was criticized for not devising a satisfactory way to measure its influence, no sufficient measures had been taken within the first twenty years of its operation to change this fact. See, Report to the Congress, “Telling America’s Story To The World—Problems and Issues,” United States Information Agency by the comptroller general for the United States, 25 March 1974.
who were given detailed explanations by accompanying NASA space scientists. Millions of people filed by to touch and examine the spacecraft.  

Compared to the USIA’s previously most popular exhibit, a series of displays designed to complement President Dwight Eisenhower’s Atoms for Peace Program in the early 1950s, the Friendship 7’s “fourth orbit” was an astonishingly major event. The 217 exhibits that the USIA mounted around the world to change the way people viewed the word ‘atom,’ explained the potential peaceful uses of atomic energy with model reactors, illustrated panels, guides and films, all while emphasizing the United States’ significant role in this development. They were attended by unprecedented numbers of people, with some visitors waiting in lines up to two hours long to enter. A public diplomat in Bonn commented that “by now it has become virtually trite to report that the Atoms for Peace exhibit achieved a greater impact ... than any other project undertaken ... by the US Information Service.” Although impressive and record breaking in the 1950s, the attendance numbers for the Atoms for Peace exhibits paled in comparison to the numbers for the brief ‘fourth orbit.’ The audiences that attended both exhibits commented on their openness and factual approach and found them to be educational, not political. The USIA press releases for both exhibits were written in a “journalistic style” that “masked the agency’s messages, which were hidden in quotes by ordinary people, newspapers, and government officials.” USIA officials concluded that both the Atoms for Peace and Friendship 7 exhibits were successful because they drew huge crowds, prompted significant news coverage and provoked positive comments from the audiences.

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64 Report to the Congress from the President of the United States, United States Aeronautics and Space Activities, 1962.
65 Quoted from Kenneth Osgood, Total Cold War, 176.
66 Kenneth Osgood, Total Cold War, 170-180.
Although these observations may not provide us with an unbiased picture of the reception of these exhibits, it is clear that they became popular events where people came together and were exposed to American scientific and technological information.

FROM SPACECRAFT TO ICON

After his flight astronaut John Glenn Jr. wrote to McGeorge Bundy, President Kennedy’s National Security Advisor, explaining that the Friendship 7’s ‘fourth orbit’ tour, “stressed the fact that [the American space program] was not just a propaganda effort before the world, but a well-thought-out scientific program that could eventually benefit all peoples of the world as the scientific exploration it is.” He went on to note that Russian exhibits highlighted personal appearances of cosmonauts while the United States emphasized scientific information via the capsule’s display. According to Glenn, America’s greatest advantage over the Soviet Union’s space program was “the almost complete freedom to share experiences and new information.” He suggested that the openness of the American program—as represented by the display of the Friendship 7 spacecraft—stood in for the nation and its political ideology: when the Friendship 7 capsule was laid bare before the eyes of people from around the world it gave the impression that the United States space program was real, benign, apolitical and designed for the collective benefit of all mankind. 67

The Friendship 7 was in public view and under public scrutiny before, during and after the flight. This very display and openness of the mission was a key component of American success on the international stage. Newspapers around the world hailed

67 John Glenn, Jr. to McGeorge Bundy, 4 November 1963, Box 308, Folder “Space Activities, General 10/63-11/63,” Papers of President Kennedy, National Security Files, Subject Files, JFKL.
openness of the flight and democratic ideals in the same phrase. In an almost ironic turn the openness of the United States’ display won the country political ground because this openness was interpreted as an indication of the apolitical nature of its space program. By displaying technological hardware, American officials had hoped to fuse positive perceptions of the values and strengths of science and technology with American identity and the American political system. As one public diplomat explained, “We are striving to present the view that in an overall sense US scientific accomplishments are second to none and that US science has contributed more to the development of the world and the scientific development of newly emerging nations.” What sets these efforts apart from say Perry’s Japan expedition or World’s Fairs, was the political utilization of cultural attitudes about the apolitical nature of technology. The ramifications of this tactic were far-reaching: we can observe its impact on the types of engineering programs the US government funded and in the transformation of artifacts from these programs into symbolic icons employed to sway the world public during the Cold War.

The Friendship 7 spacecraft was not a traditional instrument of power: its power lay in a particular interplay between US government officials and world publics, between producers and consumers of American cultural diplomacy. And the spacecraft’s display value was not simply tied to the function it was designed for—-it mattered that the capsule carried Glenn around the earth but it also mattered that the capsule was then laid before people’s eyes, for many of the people who came to see the small craft.

68 Harold McConeghey to Mr. Battey, 17 October 1962, Box 12, Folder “USIA: 1962- Proposals & Suggestions from all elements on Science prog,” Entry P 243, RG 306, NARA.
CONCLUSION

USIA space programming in the early 1960s centered on capsule tours and educational lectures, an approach meant to distinguish the American space program from Soviet space accomplishments. Many early documents point to a hesitancy on the part of US officials to participate in astronaut tours because they feared it would appear that the United States was simply trying to copy Soviet cosmonaut tours and that it would be another sign that the country's space program was trailing behind the Soviet Union's impressive set of firsts. President Kennedy suggested that United States' policy of "openness," as illustrated by the capsule tours, and its approach to space information dissemination "strengthened" the image of the country. In this period public diplomats used words such as 'openness,' 'science,' and 'progress,' again and again.

But by the mid-1960s, as the following chapter explores, officials in the State Department, at the USIA and NASA, revising the Kennedy administration's approach to astronaut tours, reasoned that if American astronaut tours were primarily scientific in nature, if the astronauts visited nations around the world to share scientific and engineering knowledge, then these tours would come across differently than the Soviet propaganda tours. Unlike Soviet cosmonauts, USIA and State Department officials stressed, the American astronauts would not make mass public appearances unless they were specifically designed to spread space scientific information, which would ensure that the astronauts did not turn into "the kind of ballyhoo salesmen for space that the

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70 Department of State memo, 17 August 1965, Box 28, Folder “SP 10 Astronaut Travel,” Entry P 243, RG 306, NARA
71 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1961. 89.
Soviet cosmonauts have become. Despite officials emphasizing that these tours were organized to share scientific and engineering discoveries with the world public, in internal correspondence, officials were explicit that "the purpose [was] to support American foreign policy in specific situations." Along with scientific information, the astronauts would become the next vessels for carrying the promises of American technology and leadership to the world public.

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72 Simon Bourgin report on Astronaut overseas tour, 1 September 1965, Box 28, Folder “SP 10 Astronaut Travel,” Entry P 243, RG 306, NARA.
73 Department of State memo, 17 August 1965, Box 28, Folder “SP 10 Astronaut Travel,” Box 28, RG 306, NARA; Simon Bourgin report on Astronaut overseas tour, 1 September 1965, Box 28, Folder “SP 10 Astronaut Travel,” Entry P 243, RG 306, NARA; Burnett Anderson to Donald Wilson, 4 December 1963, Folder “SP 10 Astronaut Travel,” Entry P 243, RG 306, NARA.
In late February 1966, shortly before the Gemini 8 mission, astronaut John Glenn, the first American to orbit the Earth, visited Rangoon during the “American Progress in Space Science and Technology” exhibition. With these “twin United States attractions,” according to a USIS field message “the American “image” looked more positive and glowing in Rangoon newspapers” than it had since the Revolutionary Government of the Union of Burma (RGUB) assumed power in 1962.1 Glenn’s appearances and the space exhibit drew more than 250,000 people in just a handful of days: an impressive crowd even according to Burma’s anti-American press.2 An enthusiastic telegram from the American Embassy in Rangoon to the Secretary of State in Washington described the reason for the success of Glenn’s visit:

Glenn’s discussion of space exploration de-emphasizing “space race,” complimenting USSR for its achievements, depicting exploration as [an] adventure for all mankind, relating exploration to Burma—has been most effective here where more heavy-handed trumpeting of US achievements could have alienated neutralist-minded Burmese.3

Glenn, even in the mid-1960s, was an astute politician; he sold American space exploration by downplaying competition with the Soviet Union, emphasizing the theme of unity, and explaining the local relevance of space exploration to the Burmese people. This approach not only promoted an idea of American led progress, it also navigated the strict restrictions on information dissemination in Burma.

1 USIS Rangoon to USIA Washington, 4 March 1966, Box 25, Entry 243, RG 306, NARA.
2 U Win Tin, Editor of The Mirror, in USIS report by Peter Boog, Associated Press Bureau Chief Burma, Box 5, Entry A1 1039, RG 306, NARA.
3 US Embassy Rangoon to the Secretary of State, 25 February 1966, Box 3153, RG 59, NARA.
Chapter 3: Space Exploration for a "Great Society"

The RGUB's severe control of foreign propaganda necessitated low-key, education themed events. All the material that the USIS distributed to local newspapers required the RGUB's stamp of approval before it could be printed. The RGUB allowed the space exhibit and Glenn's visit because, according to one American Public Affairs Officer, "the United States exhibit was apolitical. Its soft-sell contents appealed to the RGUB's reviewing committee which noted the complete absence of anti-Soviet and anti-Chinese propaganda pictures."4 In each of his lectures, Glenn praised the Soviet Luna 9 spacecraft, a gesture that encouraged neutralist leaders to allow Burmese press to cover the event in full detail. In both Glenn's presentations and in the USIA's programming, the focus on global benefits, the dissemination of scientific and engineering information, and use of inclusive rhetoric not only projected a particular image of American space accomplishment, but also enabled the United States to sponsor a propaganda program in a country that it otherwise had extremely limited access to.

CHANGES IN APPROACH

In the mid-1960s, USIA and State Department space themed programming began to emphasize themes of "peace," "unity" and "international participation." Although a narrative of scientific and technological development and American capability still structured much of this programming, this period marked a shift in how space exploration was used in American foreign relations. President Johnson's attention to the benefits of space exploration bringing "peoples of many nations closer together," and his decision to

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4 Garland C. Routt to USIA Washington, 4 March 1966, Box 25, Entry P 243, RG 306, NARA.
begin sending astronauts abroad as goodwill ambassadors, reflected this shift. The United States government placed high priority on international cooperation, with eighty-four nations cooperating with the US on space activities by 1967. At the ratification of the “Outer Space Treaty,” in October 1967, Johnson stressed that space exploration was an agent of peace, “a frontier common to all mankind and it should be explored and conquered by humanity acting in concert.”

The Gemini program provided the USIA with a number of exciting space feats to herald in its programming, but public opinion polls in the mid-1960s revealed that the Soviets were still viewed as winning the space race. USIS posts continued to distribute information, screen films, host space exhibits, and work with local newspapers to ensure that space feats were covered in the press. Even though the Soviet program led the space race, US officials realized that they could still co-opt the popularity of space feats to promote an image of American interest in “peace” and “unity,” two themes that became increasingly hard to sell to foreign audiences after the escalation of the Vietnam War and race riots in dozens of American cities.

Johnson and other government officials folded space exploration into the administration’s larger project of building the Great Society. As Vice President Hubert

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5 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1964.
6 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities 1967.
7 Lyndon Johnson quoted in Report to the Congress from the President of the United States on United States Aeronautics and Space Activities 1967, 69.
9 Human space exploration continued to dominate USIA space programming and capsule exhibits continued to draw large crowds, with lines stretching for hours long. By 1967 the USIA organized large space exploration themed exhibits in 17 countries around the world, with another ninety exhibits on constant tour between the three-hundred USIA outlets, drawing a crowd of over ten million people. The American Pavilion at Expo '67 in Montreal featured space and attracted another nine million people. Report to the Congress from the President of the United States on United States Aeronautics and Space Activities 1967.
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Humphrey articulated, “an adequately funded, well-directed space program is an integral part of our nation’s commitment to its future, to its greatness.” He added, “we can put a man on the moon at the same time as we help to put a man on his feet,” stressing that the space program was consistent with civil rights and social concerns, not in opposition to them. Spaceflight, officials hoped, could symbolize civil rights progress, counter the nation’s growing warmongering image after the further Americanization of the Vietnam War, and serve as a much-needed positive arm of American foreign relations. As the United States invested more and more into fighting the Vietnam War, the promotion of the space program abroad focused more and more on “peace” and “unity.” As civil rights tensions within the United States swelled, public diplomats emphasized the inclusiveness of the space program and stressed that it was in the service of “all mankind.” Much of the USIA and State Department’s information efforts took on an increasingly humble tone in this period as well. In the mid-1960s, public diplomats placed images of rocket failures alongside social demonstrators to symbolize the United States’ openness and willingness to share successes as well as failures with the rest of the world. These efforts encouraged empathy and identification with American interests in general, which are fundamental elements of soft power.

This chapter moves chronologically through the Johnson administration. The first section examines the United States government’s efforts to dull negative impressions of American civil rights conflict by sending African-American space lecturers to Africa. These lecturers where charged with disseminating information about space exploration, personifying opportunities in a democratic society, and facilitating US tracking stations.

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and cooperative programs. The second thematic section deals with the astronaut ambassador tours in Europe, Africa, Asia, and South America, which were a notable reversal of the Kennedy administration’s policy. The third part focuses on discussions within Washington in the mid-1960s about the significance and effectiveness of space propaganda programming.

By the 1960s the psychological battlefield of the Cold War had moved from the fronts of Western Europe to the newly independent nations in the developing world. The USIA increasingly targeted African, Asian, and Latin American publics. As historian Thomas Borstelmann has observed, “In the United States as well as in the Third World, Johnson tried to keep civil rights activists and anticolonial nationalists identified with the liberal, Western reformist model of his Great Society.”

This chapter, by investigating space exploration and foreign relations activities in Africa, Asia, and South America, will offer a lens onto some of the ramifications of the reorientation of the Cold War front and a corrective of claims that science played a minimal role in the Johnson administration’s foreign policy.

13 Ronald Doel and Kristine Harper note that, “scholars who have examined science policy within the Johnson administration generally argued that science played a limited role in U.S. foreign policy in the mid and late 1960s. See, Ronald E. Doel and Kristine C. Harper, “Prometheus Unleashed: Science as a Diplomatic Weapon in the Lyndon B. Johnson Administration,” Osiris, 21, no. 1 (2006): 66. Studies that treat the political history of Project Apollo and situate it within the context of other 1960s government programs established to achieve “good ends,” focus primarily on the domestic implications of the broadening of U.S. government power. Walter McDougall’s history of space exploration is one notable example. Walter A. McDougall, ...The Heavens and the Earth (New York: Basic Books, 1985; See also, Roger D. Launius, “Interpreting the Moon Landings: Project Apollo and the Historians” History and Technology, 22, no. 3 (Sept, 2006): 225-255.
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LBJ & THE GREAT SOCIETY

After John F. Kennedy was fatally wounded in Texas on Friday 22 November 1963, Vice President Lyndon B. Johnson assumed the presidency. In the coming months Johnson would shoulder and modify many of the programs and policies that Kennedy had set in motion during his abbreviated term in office, including Project Apollo and US information efforts. Like Kennedy, Johnson believed that the image of America abroad was critical to the nation's geopolitical standing and political alliances. Like Kennedy, Johnson also believed that the space program would enhance the America’s image and contribute to economic and social advancement.14

Johnson’s commitment to the political applications of science and technology had roots in his experience with New Deal development projects. When he was elected to the House of Representative in 1937, Johnson pushed for federal funds to dam the Colorado River to supply power to central Texas.15 During his presidency, Johnson was enthusiastic about exporting the New Deal model for the Tennessee Valley Authority to the Mekong Valley and was surprised when Ho Chi Minh did not take him up on the offer.16 Johnson’s dedication to the political value of science and technology carried through his tenure as the Senate majority leader, as the Vice President, and then as the President of the United States. Programs that could both support United States national security and improve the standard of living were of particular interest to him.17


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Shortly after the Soviet Union launched Sputnik 1 and 2 in 1957, while he was the Senate majority leader, Johnson pushed for building up an aggressive space program centered on closing the “missile gap,” explaining to the Senate Democratic caucus, “control of space means control of the world.”\(^\text{18}\) Although at first his interest in space focused on military security, Johnson quickly came to appreciate the soft power potential of the American space program.\(^\text{19}\) When he became Vice President in 1961 Johnson also became the chairman of the Space Council. When Kennedy asked him to survey US space standing and recommend a “space program which promises dramatic results in which we could win,” Johnson advocated for a manned lunar mission because of its potential to win “control over… men’s minds.” He explained that space capability would “determine which system of society and government [would] dominate the future… In the eyes of the world, first in space means first, period; second in space is second in everything.”\(^\text{20}\)

According to historian Robert Dallek, four priorities drove Johnson’s space policy: national security, personal political gain, social advancement, and budgetary limitations. Space exploration became a multifaceted political instrument in Johnson’s hands. In addition to supporting national security, Johnson’s support of space exploration was tied to his faith in liberal internationalism; he expected that a robust space program would contribute to global economic and social progress. Johnson also expected that NASA centers in the American South would strengthen his party’s political hold on the region. The American space program, along with civil rights, Medicare, federal aid to

education, the war on poverty and other reforms, would lead to the Great Society Johnson envisioned. In his 1971 memoirs, Johnson reflected: "Space was the platform from which the social revolution of the 1960s was launched. We broke out of far more than the atmosphere with our space program... If we could send a man to the moon, we knew we should be able to send a poor boy to school and to provide decent medical care for the aged. In hundreds of other forms the space program had an impact on our lives."²¹

SPACE FOR RACE

In 1964, with no manned missions on NASA's agenda for at least a year the USIA focused on promoting the significance of the photographs taken by lunar probe Ranger 7 as well as emphasizing the applications of communication satellites. Ranger 7 returned more than 4,300 pictures of the moon back to earth, some taken from as close as 1.6 km above the lunar surface.²² Within a week of the Ranger 7 flight in late July 1964, USIS posts placed photographs taken during the mission on their walls. A few weeks later NASA produced pamphlets and a television to circulate among posts.²³ The United States government presented special volumes of Ranger 7 photographs to foreign heads of state and leading scientists around the world in ceremonies that were heavily covered by local

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²² NASA established Project Ranger in December 1959. The program was plagued by a series of failures but on 31 July 1964 the Ranger 7 spacecraft successfully photographed the moon before a planned crash into the lunar surface. These images became important to scientists planning the Apollo missions and in geological studies of the moon. Don E. Wilhelms, *To a Rocky Moon: A Geologist's History of Lunar Exploration* (Tucson, AZ: The University of Arizona Press, 1993) 94-101.

²³ The USIA also produced a film on Ranger 7, which was shown to high acclaim to university students in Pakistan. The American Embassy in Karachi observed, "it is believed that films such as this appeal to all groups, particularly the young, and make a lasting impression of U.S. leadership in the field of space research. US Embassy Karachi to State Department, 13 November 1964, Box 3147, Entry 1613, RG 59, NARA; Report to the Congress from the President of the United States on United States and Aeronautics and Space Activities, 1964."
journalists and television crews. President Johnson included a letter along with the photographs that he gifted to foreign leaders. "The people of the United States hope that this knowledge," he explained, "will work to the ultimate benefit of mankind in all lands." A worldwide opinion survey taken a few months before *Ranger 7* indicated that the USSR still led the space race. In September 1964, the USIA’s survey of British public opinion determined that "the “space-gap” between the two powers which has existed in the minds of the British since the first Sputnik has nearly been closed." Public diplomats believed that this swing in opinion was largely due to recent space accomplishments that lent themselves to visual presentation, including the *Telstar* broadcasts and *Ranger 7*’s image of the moon. When the Soviet Union launched the multi-passenger *Voskhod* in October 1964, which again demonstrated Soviet program’s heavy lift capability, the United States fell behind again in foreign public opinion polls. According to the USIA, "the capacity of the Soviets to launch larger spacecraft in manned flight remained the negative factor affecting foreign opinion of US space activities."

In addition to Soviet launch capability, US government officials faced another challenge to worldwide opinion of the United States in the 1960s: civil rights conflict. When Edward R. Murrow's failing health forced him to resign from the USIA, Johnson

24 Lyndon Baines Johnson to Rear Admiral Ramon Castro Jijon, 6 August 1964, Box 3147, Entry 1613, RG 59, NARA.
25 For the most part, respondents in nineteen countries and major cities believed that Soviet Union space activities, nuclear strength and scientific development outpaced that of the United States. The one exception was in Turkey, where US superiority held. Dean Rusk to Hubert Humphrey, 29 April 1965, Box 9, Entry 3008D, RG 59, NARA.
26 The USIA commissioned the British Gallup Poll to add a few questions about the space race onto one of their periodic public opinion surveys. “British Public Opinion on World Leadership in Space, 1964,” Research and Reference Service, United States Information Agency, Box 21, Entry P 243, RG 306, NARA.
27 *Voskhod 1*, launched on 12 October 1964, carried three crewmembers, which made it the first multi-passenger human spaceflight mission. *Report to the Congress from the President of the United States on United States and Aeronautics and Space Activities, 1964.*
asked Carl Rowan, an African American journalist and ambassador to Finland, to take on the post. Johnson explained the motivation behind the appointment: “I want a nigrah in the cabinet but I haven’t got a place.” Johnson was anxious to demonstrate his support of civil rights and appointing an African American to a senior government post, even if it was not a cabinet position, could help him do this. In 1964 the United States made great strides towards racial equality with the passage of the Civil Rights Act. Johnson presented this effort as an important legacy of the Kennedy administration, asking the Congress and the nation to “[L]et us here highly resolve that John Fitzgerald Kennedy did not live—or die—in vain.” An elaborate series of USIA programming, including television features, VOA broadcasts, photographs and civil rights information for its overseas posts followed the passage of the Civil Rights Act. A violent backlash, especially in the American South, also followed the passage of the Act. Although the Johnson administration and nation edged towards civil rights reform racial tension and urban unrest still plagued the country and received critical coverage in the foreign press.

Space exploration became an important political instrument for carrying a dual message of American scientific and racial progress. For the space themed programming in Africa, like many USIA programs in the early 1960s, the agency hired African-Americans as lecturers to blunt civil rights criticisms and present a more positive image of the United States in strategically significant countries. When Elton Stepherson, Jr., an African-American USIA Public Affairs Officer (POA), spoke to an audience of

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30 Mary Dudziak, *Cold War Civil Rights*, 203-216.
Guinean intellectuals and leaders, according to a USIA report, the Governor of Pita commented that Stepherson was living proof that "science is not the reserved domain of members of one race only."\(^{32}\) Stepherson had grown up in Los Angeles and then traveled to Europe to study French language and African studies at the University of Paris. He joined the USIA in 1963, at age twenty-nine, to give lectures about the US space program in French-speaking African countries.\(^{33}\) Arthur Bardos, another POA, explained Stepherson's popularity in Guinea beyond the Governor's comments. Race, he said, "undoubtedly had some part in the warmth with which this attractive young Negro American was received everywhere."\(^{34}\) Stepherson's visit to Guinea was similar to the experience of other African-Americans who traveled abroad as part of USIA and State Department programming in the 1950s and 1960s. Whether they went overseas to give lectures on the space program or jazz performances, African-American diplomats were sent to demonstrate racial equality and universal opportunities of democracy in the United States, in addition to their official duties.\(^{35}\)

In the 1960s USIA and NASA conducted two different types of space themed education programs: one for "industrialized societies" and one for the "Third World." In European countries and other industrialized societies, the USIA made sure that local science writers and scientific organizations had access to information about the American space program. In contrast, USIA/NASA liaison Harry Kendall recalled, "in most Third World countries materials had to be more refined." For these countries, the USIA produced press articles, films, radio, and television programs to distribute directly to

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\(^{32}\) Arthur Bardos to USIA Washington, 7 July 1964, Box 29, Entry P 243, RG 306, NARA.


\(^{34}\) Arthur Bardos to USIA Washington, 7 July 1964, Box 29, Entry P 243, RG 306, NARA.

foreign audiences. USIA programming in Africa required an even “more direct approach,” according to Kendall. Consequently, the spacemobile program would become the backbone of space themed propaganda in Africa.36

In 1962, NASA began sending spacemobiles overseas and by 1966 the lecture-demonstration vehicles had visited thirty-six countries. National committees for space research or educational institutions in each country sponsored spacemobile visits for roughly three months at a time. NASA equipped each spacemobile with models of spacecraft and launch vehicles, space-science demonstration equipment, motion picture projector equipment, a series of 16-mm documentary films, and information about local space activities in the particular host country. NASA also sent a representative to the host country for four weeks to train two local lecturers to run the vehicle. The host institution took responsibility for publicity, scheduling and covered the salaries of the local lecturers while NASA paid for shipping the vehicle from and then back to the United States.37

NASA ran the spacemobile program somewhat differently in Africa than it did in other parts of the world. John Twitty, an African-American USIA lecturer based in Africa, ran the African Spacemobile Program there.38 Under Twitty’s direction the USIA financed the African spacemobile fleet.39 Jet, a Chicago based weekly magazine aimed at

36 Spacemobiles were large vehicles outfitted with displays and educational tools. Harry Kendall, A Farm Boy in the Foreign Service: Telling America's Story to the World (Bloomington, IN: AuthorHouse, 2003) 110.
37 Arnold Frutkin to Robert Packard, 1 March 1965, Box 10, Entry 3008D, RG 59, NARA.
38 Ibid.
39 Under agreement with NASA, the USIA ran the spacemobile program for English-speaking African nations, including Sierra Leone, Northern and Southern Rhodesia, Nyasaland, Tanganyika, Kenya, Ethiopia, Somali Republic, and Uganda. William F. Hausman, Deputy Assistant Administrator for International Affairs NASA to Ambassador Jens Boyesen, President of the Committee for Space Activities in Norway, 2 November 1966, Box 3146, Entry 1613, RG 59, NARA.
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African-American readers, carried news about Twitty's position.40 This press coverage is just one example of the feedback loop for public diplomacy efforts; the press often exposed American audiences to stories about public diplomats working overseas, international audiences at USIA exhibits and programs to promote the space program abroad. American press coverage of foreign audience interest in the United States space program became especially prevalent during the Apollo 11 mission in 1969, which chapter four will examine.

When NASA had trouble setting up a tracking and space communications facility in Madagascar the USIA sent African-American lecturer Elton Stepherson to foster positive public attitudes towards the station. In 1960 the United States had made an agreement with the United Kingdom to locate a data acquisition and communications station in Zanzibar, a British protectorate of islands off the coast of Tanganyika. NASA also signed a lease with the Government of the Sultan of Zanzibar to establish two stations in Tunguu and Chwaka. This agreement would be short-lived. The islands gained independence from Great Britain in 1963, the Government of Zanzibar was overturned in a revolution in 1964, and Zanzibar merged with Tanganyika to eventually become the United Republic of Tanzania. NASA quickly evacuated station personnel before any injury or loss of life and made arrangements with the Government of the nearby Malagasy Republic to relocate the tracking facility to a site near Tananarive.41

40 Another issue of Jet noted, "Traveling in Nigeria as an USIA space science lecturer, ex-newsman John Twitty confessed to the press he was single. Result: an avalanche of material proposals from newspaper readers. "Never again," said Twitty. "Ticker Tape USA," Jet, 30 May 1963, 13; For the initial coverage of Twitty's management of the African spacemobile program, see "Ticker Tape USA," Jet, 31 May 1962, 13.
41 Report to the Congress from the President of the United States on United States and Aeronautics and Space Activities, 1964. 72.
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Although the Malagasy government had already given its support to the station, the general public still needed to be won over, much like the early stages of tracking station establishment discussed in chapter one. The arrival a US Air Force plane carrying electronic gear for the tracking station presented USIA officials with their first challenge. To disassociate the station with American military interests and to cut off any suspicion of secretive activity, USIA officials decided to play up the arrival with a two-day “press party.” The staff invited local press to visit the airport, explore the inside of the Air Force plane and visit the tracking site. As one USIA staff member observed “it was all completely open, informative, impressive. (And we got a lot of other good talk in during the waiting periods between unloading moves, about everything from the meaning of freedom to why American automobiles are so big!).” Stepherson arrived in Madagascar shortly after the electronic equipment. He had lectured in Madagascar before and was already widely known and liked there.42

In preparation for Stepherson’s visit, USIS staff had amassed a number of space models, displays and pamphlets. With Stepherson’s help the USIS arranged a space-themed exhibit in the Tananarive Chamber of Commerce called “Les Engins Spatiaux” (“space machines”). They selected this location because they hoped to attract the attention of government officials in addition to teachers and students. To promote the exhibit, and in turn support the presence of the tracking station, USIS staff blanketed the city with six hundred promotional posters in French and Malagasy, Stepherson gave interviews on the radio and to newspapers, the American ambassador invited two-hundred local leaders to an opening reception, and the USIS screened a French version of the film “America in Space.” During its seventeen day run the exhibit attracted over

42 USIS Tananarive Field Message No. 18, undated, Box 29, Entry P 243, RG 306, NARA.
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30,000 visitors, seventy-five percent of which were considered target individuals. A USIA report enthusiastically observed that the location of the exhibit minimized “the shuffling in of illiterates unable to comprehend what was on display,” yet was still within easy access of government functionaries, businessmen, teaches and students.43

Following the opening of the “space machines” exhibit, the American Ambassador led President Philibert Tsiranana and his entourage around the tracking facility, along with a full force of press, radio and newsreel staff. Stepherson joined the party to explain how the tracking station would be used. Visitors were given open access to the entire facility and USIS and NASA staff gave “straightforward answers” to their questions, important elements in their efforts to instill an image of openness, inclusiveness and peaceful intensions. At the station NASA had President Tsiranana use the radio-telephone facility to speak with the Malagasy Ambassador in Washington. “The result,” USIS staff reported, “was not only abundant news media coverage but strong reassurance that here was something which the Malagasy could derive great pride and satisfaction to be participating in.”44 United States government officials expected that this public demonstration would ensure that the Malagasy people would not only accept the tracking facility but also interpret it as an important factor in the progress and development of their country. This tracking station, US officials tried to make clear, not only served American interests, it served Malagasy interests too, and that cooperation with the United States in general was good for their nation.45

For the next few weeks Stepherson gave lectures twice a day to pre-arranged groups made up of students, young officers of the Malagasy Army, and government

43 Ibid.
44 Ibid.
45 Ibid.
officials. Stepherson began the lectures at the exhibit, where he would explain how the NASA station functioned using models and photos, and then he escorted the group onto a bus to take them to the tracking station. After touring the group around the facility he would bring them to the USIS cultural center for a screening of a film on space exploration, like “America Space,” Project Telstar,” and “Ranger VII.” When the group left the screening USIS staff handed them pamphlets on space exploration and the upcoming United States election. This pairing of pamphlets may seem incongruous but it was standard USIA procedure to co-opt the popularity of the space program to disseminate information about other areas of United States politics, economics and culture. The USIA staff member who enthused that he was able to discuss the “meaning of freedom and why American automobiles are so big” during the press tour of the airport, is another illustration of this strategy.  

After this series of information programs ended, the USIS station in Madagascar concluded that “it is safe to say that... no one in Madagascar who reads the papers, listens to the radio or goes to the movies was unaware of the fact that the United States has an excellent space-exploration program going, that the nature of this program is scientific, peaceful and beneficial to all, that Madagascar in making its geography available is contributing importantly to the success of the program—and in the process stands to gain substantially both economically and in terms of technical and scientific know-how.” Coverage of the NASA facility in the communist press cut back on “sniping at NASA” and instead gave factual reports. The USIS considered this change in tone of

46 Ibid.
47 Ibid.
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the communist press to be “the best kind of evidence of the effectiveness of all concerned.” 48

THE “NEW EXPLORERS”

The most significant evolution in space diplomacy programming during the mid-1960s was Johnson’s decision to begin sending American astronauts on goodwill tours. Modifying the Kennedy administration’s approach to astronaut tours, officials in the State Department, at the USIA, and NASA developed a rationalization for astronaut tours that would reap political dividends while still differentiating the American and Soviet space programs. The astronauts visited cities around the world as science ambassadors, not heroic showman, as US officials believed the cosmonauts were doing. The astronauts’ speeches, programming and rhetoric emphasized scientific and engineering information gained from the American space program, the United States interest in peace, and that space exploration was “for all mankind.” Johnson and other government officials were very enthusiastic about this latest arm of foreign relations and would continue to champion these tours through the end of the administration. 49

It is unclear who initially came up with the idea of sending the astronauts on diplomatic missions. A number of people, including John Glenn, USIA Science Advisor Simon Bourgin, and Lyndon Johnson, considered the potential foreign relations impact of such tours in the early 1960s. As Johnson tells the story, Gemini 4 astronauts Walter McDivitt and Ed White dinned at the White House on 18 June 1965, during the same week that the Paris Air Show was taking place on the other side of the Atlantic. When

48 Ibid.
49 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1965.
Johnson looked at the astronauts and their families sitting in his living room. He thought, “What finer representation, what greater ambassadors, what more appealing personalities could this country send out to the world than these astronauts?” Inspired, Johnson asked the astronauts to fly to Paris that very night to represent the United States at the opening day of the Air Show. Since the astronauts and their wives had only planned for a dinner at the White House and not a trip to Paris, they had not packed the necessary clothing. Lady Bird Johnson solved this problem by taking the astronauts’ wives to her and her daughters’ closets where she gathered up enough dresses and gowns for their trip. William Taub, a NASA photographer, was called in to the White House to take pictures for impromptu passports. The astronauts’ five children stayed behind and slept at the White House, swam in the president’s private pool and watched Disney movies in the White House theater. The astronauts and their wives boarded a 3 a.m. flight to Paris and, according to Johnson, “performed a very valuable service to their country.”

The Soviet Union had already made arrangements for cosmonaut Yuri Gagarin to attend the Paris Air Show. According to satirist Art Buchwald, “the belief here in Washington is that the president made his decision [to send the astronauts to the Air Show] because the Russians had sent cosmonauts Titov and Gagarin to Paris and this put the Russians ahead of us in ground travel.” A model of the Vostok capsule accompanied the cosmonaut, marking the second time the Soviet Union revealed substantial information about the spacecraft to the general public. As noted in the last chapter, before 1965 the Soviet Union released extremely minimal information about its

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51 “A conversation about the U.S. space program with former President Lyndon B. Johnson as broadcast during the CBS News coverage of “Man on the Moon: The Epic Journey of Apollo,” CBS Television Network, 21 July 1969, Box 4, Entry A1 42, RG 306, NARA.
space program and space crafts. The Vostok model on display in Paris was not meant to educate the audience about the technical details of Soviet spaceflight. The model was a pared down, simplified version of the capsule. In interviews, Gagarin stressed that the new Voskhod spacecraft was “of [an] entirely different design,” a misleading statement meant to suggest that the Voskhod was the product of major technological advances. The Voskhod, however, was a Vostok retrofitted to carry an additional two people into space.\(^3\)

Large crowds greeted the Gemini 4 astronauts and their wives, along with Vice President Hubert Humphrey, when they arrived at the Le Bourget Airport on the morning of 19 June 1965. The astronauts spent the day speaking to the press, attending a large reception hosted by the American Ambassador and meeting with French President Charles de Gaulle.\(^4\) The French press gave extensive coverage to the astronauts’ spontaneous visit to the Paris Air Show, and ruminated over the broader potential political ramifications on Franco-US relations.\(^5\) The success of this brief visit prompted President Johnson to support an expanded astronaut tour program. Shortly after the Gemini 4 crew’s Paris trip, Johnson sent Gemini 5 astronauts Gordon Cooper Jr. and Charles “Pete” Conrad Jr. on a more elaborate two-week long goodwill tour.\(^6\)

Two years earlier, in June 1963, John Glenn vacationed in Japan with his family. After serving as a voice communicator between Gordon Cooper on board *Faith 7* and a Project Mercury tracking ship stationed off the coast of Japan, Glenn met his family for

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\(^4\) *Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1965*.

\(^5\) US Embassy Paris to Secretary of State, 19 June 1965, Box 3153, Entry 1613, RG 59, NARA.

\(^6\) *Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1965*. 

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the ten day vacation. Even though Glenn was on professional leave he participated press conferences, interviews, television appearances, and met with students. American Ambassador Edwin O. Reischauer observed that Glenn and his family "were [an] effective demonstration of typical American virtues." He believed that "many seemed, for [the] first time, to appreciate [the] openness of the US space program as compared to [the] Russian [program]." The American press made similar observations. An associated press article noted: "There was one marked contrast between Glenn's visit and that of Maj. Yuri Gagarin... [Gagarin] was kept under close wraps... Glenn traveled casually. He [Glenn] was accessible to almost anyone who wanted to ask him a question." Nihon Keizai Shinbun, a leading Japanese financial paper, also contrasted Gagarin and Glenn's visits. Gagarin wore a military uniform while Glenn dressed in a civilian suit and bowtie. Gagarin's "actions and speeches gave the impression that he was under some restrictions" whereas "everything about [Glenn] was openly candid." The one aspect that marred the visit, according to Ambassador Reischauer was that Glenn "paid commercial air fare from Houston to Tokyo for [his] family to join him for vacation," when he was clearly serving his country. Reischauer recommended that President Kennedy be briefed on "Glenn's fine contribution to US-Japan relations." Johnson would likely have been briefed on the trip as well, and the positive feedback from Ambassador Reischauer could have impacted Johnson's support of astronaut tours two years later.

57 US Embassy Tokyo to Department of State, 24 June 1963, Box 4188, Entry 1613, RG 59, NARA.
58 US Embassy Tokyo to Department of State, 1 June 1963, Box 4188, Entry 1613, RG 59, NARA.
61 US Embassy Tokyo to Department of State, 1 June 1963, Box 4188, Entry 1613, RG 59, NARA.
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Many United States embassies enthusiastically embraced President Johnson’s decision to send astronauts abroad in 1965. In countries with tracking stations, like Nigeria, embassy staff explained how these tours could be “unparalleled” public relations events for the national governments that hosted these stations. The government of Nigeria, the United States Embassy in Lagos explained, could “gain credit [for] their participation [in] space scientific program thru [the] Kano tracking station.”62 In Kenya, US Embassy staff described how an astronaut visit to Nairobi would “have a great impact on Kenya and East Africa showing that US recognizes importance of this part of the world at the highest level,” and that it “would get more attention in black Africa than any other combination of programs or events imaginable.”63 The United States Embassy in Manila, vying for an astronaut visit, pointed out that it would “provide [a] considerable psychological boost to Philippine ego and do much to counter Philippine attitude that [the] US always take Fils for granted. Visit might also distract attention from inconclusive civair negotiations presently subject much critical comment.”64 The United States Embassy Ankara presented their case to the Secretary of State for scheduling an astronaut visit to Turkey in August 1965. The “psychological impact,” of such a visit would be “extremely useful [for] this NATO partner which directly confronts USSR, and which since Cyprus dispute has experience some frustration with NATO.” The Embassy explained that an astronaut visit to Turkey could counteract the successful improvement of Turkish-Russian relations since the Prime Minister’s recent visit to Moscow.65

62 US Embassy Lagos to Secretary of State, 27 August 1965, Box 3153, Entry 1613, RG 59, NARA; See also, US Embassy Rio de Janeiro to Secretary of State, 31 August 1965, Box 3153, Entry 1613, RG 59, NARA.
63 US Embassy Nairobi to Secretary of State, 11 September 1965, Box 3153, Entry 1613, RG 59, NARA.
64 Ibid.
65 Ibid.
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United States Embassy staff throughout the world anticipated a number of positive political outcomes of astronaut tours: (1) they would foster support of the local government’s relations with the US, facilitating international alliances; (2) they would demonstrate American interest in particular countries; (3) they would offset negative reactions to other US foreign policies and international interventions; and (4) the astronauts would demonstrate the ideal virtues of American citizens.

In September 1965, Gemini 5 crew Gordon Cooper Jr. and Charles Conrad Jr. spent two weeks visiting Athens, Thessaloniki, Izmir, Istanbul, Ankara, Addis Ababa, Tananarive, Nairobi, Lagos and a handful of smaller cities in Nigeria, and Las Palmas. They spoke to scientists and engineers at the International Astronautical Federation Congress, met with cosmonauts in Athens, appeared on television programs, were received by foreign heads of state, appeared before large crowds of people, and visited NASA tracking stations. Favorable reports on the tour flooded the State Department mailbox, like one from the United States Embassy in Addis Ababa that informed the Secretary of State, "[the] visit resulted in happy glow here. Key segments of community... well covered." A presidential aide reported to Johnson that the response to the astronauts in African countries was especially positive.

When the astronauts visited Nigeria, public diplomats attempted to make “the Nigerian mass aware that the US considers Nigeria of sufficient importance” to schedule the longest stay of the tour in their country. During this stop, the astronauts visited cities

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66 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1965.
67 US Embassy Addis Ababa to Secretary of State, 23 September 1965, Box 3153, Entry 1613, RG 59, NARA.
68 Hugh Robinson to President Lyndon B. Johnson, 12 October 1965, Folder “Astronauts-Contracts-Life, etc.” RN 12917, Robert Sherrod Apollo Collection, National Aeronautics and Space Administration Headquarters, History Office, Washington, DC (hereafter NASA)
throughout the country, received elaborate gifts including ostrich feather fans and hand-embroidered robes, gave countless lectures on spaceflight, appeared on television shows, learned the popular West African “Highlife” dance, and met with Nigerian officials. At the tour stop in the Northern Nigerian city of Kano, a location of one of the United States tracking stations, the party "received tumultuous welcome, reminiscent of 13th century feudal celebrations, given by Emir of Kano. Waves of horsemen carrying spears swept across open courtyard in traditional salute... for half a mile up to gates of palace." This stop played an important role in ensuring continued cooperation with Nigeria in running a tracking station from Kano. US officials asked the astronauts to “take every opportunity to thank Nigeria for its contribution to the success of US space exploration. To underline this “partnership,” they were asked to share the scientific results of space exploration with the educated Nigerian elite." As the public diplomat’s use of quotation marks suggest, Government officials viewed the “partnership” as more theoretical than literal.

While the Gemini V crew toured Europe and Africa their spacecraft toured Latin America. The capsule spent six-weeks at each of three countries, including Brazil, Argentina, and Mexico. At its exhibition in Buenos Aires the USIA set up the capsule underneath a brightly colored tent near the Costanera. After waiting in line typically for over an hour visitors would pass through another exhibit arranged by the Argentine Air Force, followed by photographic panels taken during Gemini missions and objects like space food, a space suit, and human waste disposal equipment. According to a USIA report, “this panorama of people [visiting the exhibit] represented the humble and the

69 US Embassy Lagos to Secretary of State, 9 October 1965, Box 3153, Entry 1613, RG 59, NARA.
70 US Embassy Lagos to Secretary of State, 28 September 1965, Box 3153, Entry 1613, RG 59, NARA.
71 US Embassy Lagos to Secretary of State, 9 October 1965, Box 3153, Entry 1613, RG 59, NARA.
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great,” from mailmen to nuns to Arturo U. Illia, President of Argentina. During the exhibit, USIA/NASA liaison Harry Kendall gave prepared slide lectures, which he described as “pure Cold War rhetoric, reflecting Washington’s determination to convince the world that the United States was way ahead of the Soviet Union, not just in space but also in every aspect of science and technology.” Kendall decided to temper the propaganda tone of the lecture and include more technical information about the planned lunar landing.

A month later, in October 1965, John Glenn Jr. toured a series of European cities. NASA, the Department of State, and the USIA organized Glenn’s travel arrangements based on requests from American embassies. The President’s Report to Congress observed that Glenn’s tour “gave a real boost to public and official support in Western Europe for the US space effort.” USIS Naples commented that Glenn was a “continual lesson in diplomacy.” The Italian paper Il Giornale d’Italia suggested that Glenn’s “human appeal is irresistible, almost contagious... he is an unpretentious man, but a first rate man with an exceptional, almost rare technical background.” American Ambassador Margaret Tibbetts enthusiastically reported that the visit “contributed to a bettering of US image in Norway, particularly indirectly offsetting some of reverses we have had here lately stemming from [the] Viet Nam issue.” After the tour, USIA Director

72 The USIA co-sponsored the exhibit with the Argentine Air Force. Argentina covered a large portion of the expense, the exhibit was located at the Air Force Base, and the Air Force provided 24-hour security as well as personnel to manage crowds. John P. McKnight to USIA Washington, 29 March 1966, Box 2, Entry A1 1039, RG 306, NARA.

73 Harry Kendall, A Farm Boy in the Foreign Service (Bloomington, IN: AuthorHouse, 2003)


75 G. A. Ewing to the Department of State, 11 November 1965, Box 3153, Entry 1613, RG 59, NARA.
Leonard Marks assured President Johnson that he would continue to program astronaut tours with NASA whenever possible.\footnote{Leonard H. Marks letter to President Lyndon B. Johnson, 26 May 1966, Box 75, National Security File: Agency File, Lyndon Baines Johnson Library (hereafter LBJL).}

 Officials from the State Department, the USIA, and NASA had to work together to plan and execute these tours. At times tensions ran high between agency representatives. Hugh Robinson, Army Assistant to the Armed Forces Aide to the President, diplomatically reported to Johnson after the Cooper and Conrad tour that “the respective roles of NASA and the State Department should be clearly defined, and clear instructions should be issued to all countries to be visited reference participation of party members. This will prevent friction between NASA and State.” In the margins, at the bottom of this letter, someone wrote in blue pen that there was “no remark by Robinson as to the Scheer-Bourgin tussle on a plane in Greece.”\footnote{Hugh Robinson to President Lyndon B. Johnson, 12 October 1965, Folder “Astronauts-Contracts-Life, etc.” RN 12917, Robert Sherrod Apollo Collection, NASA.} Julian Scheer ran NASA’s PR campaign while Simon Bourgin organized the USIA’s science programming. The issue of which agency should pay for the tours, or portions of the tours, proved contentious as well. NASA Administrator James Webb argued that his agency did not have the budget for such tours. The State Department could cover many of the costs but transportation often proved to be too expensive. In a number of instances the Department of Defense or the White House stepped in and financed transportation.\footnote{Joe Califano, memorandum for the record, 22 January 1966, RN 12917, Robert Sherrod Apollo Collection, NASA.}

 In 1966 Gemini 7 astronaut Frank Borman and Gemini 6 astronaut Walter “Wally” Schirra Jr. toured Asia, and Gemini 8 astronaut Neil Armstrong and Gemini 11 astronaut Dick Gordon crisscrossed South America with NASA Manned Spaceflight
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Center’s Deputy Director George Low. After his trip, Borman sent President Johnson a first hand account of his experience. He recounted that crowds and individuals received them warmly. In a number of private conversations, government officials expressed their support for American policy in Vietnam. Borman felt that the trip was so successful that “interest in the American space program… might be great enough to attract additional visits to countries with which we do not enjoy the same friendly climate that we do with the eight countries our trip included.”

In a weekly memo for President Johnson, USIA Director Leonard Marks wrote to President Johnson to let him know that he was “convinced that the programming of astronauts is the best way to call attention to our superiority in science.” After the tour Secretary of State Dean Rusk sent a letter thanking NASA Administrator James Webb for allowing the astronauts to take time away from training to support United States foreign relations. Rusk used this letter as an opportunity to stress the political significance of the upcoming astronaut tour of South America, pointing out that “the importance of that area [South America] to our space program and that its development into an economically viable region, friendly to the United States, continues to be one of our major foreign policy objectives.”

George Low kept a travelogue during Neil Armstrong and Dick Gordon’s tour of South America. In one entry he enthusiastically commented, “I have no doubt whatsoever that our accomplishments in space have a profound influence on our relations with South America and how we are viewed by the South American people and their governments. This impact far exceeded my expectations and is perhaps a most powerful tool that the

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79 Frank Borman to President Lyndon B. Johnson, 31 March 1966, RN 12917, Robert Sherrod Apollo Collection, NASA.
81 T. Nesbitt to Herman Pollack, 14 April 1966, Box 23, Entry 3008D, RG 59, NARA.
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United States had in our international relations, pursued for the purpose of peace.”

Before each lecture on the trip Low gave an opening statement about how the group were the official representatives of President Johnson sent to South America to share scientific and engineering information. Low recalled that in private conversations following these talks he learned that “during a visit to South America by the Soviet cosmonauts, the heroic efforts of the cosmonauts in space were hailed; our visit, on the other hand, was looked upon as an official visit by a team of scientists as well as space heroes.” This was an important distinction to Low, as it had been to public diplomats since the launch of Sputnik in 1957. Although he observed that it might not make a difference to the general population of South America, government officials, scientists and the press applauded this distinction.

Low had been particularly impressed by Armstrong’s performance in South America. Before the tour Deputy Assistant Secretary for Inter-American Affairs Bob Sayer briefed Armstrong and Gordon on the political, economic and social context of South America. Country Directors then briefed them on the history, ideology, economics and culture of each particular country. Armstrong put extra time into learning Spanish, as well as some Guarani for their stop in Paraguay, he incorporated local history into his speeches, and he studied encyclopedias to learn about the countries he would be visiting. These gestures, Armstrong biographer James Hansen has suggested, may have been influential in 1969 when Armstrong was selected to be the first man on the moon.

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83 Ibid.
84 James Hansen, First Man, 300.
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toasts and when getting medals, in response to questions of any kind, and in each of those speeches he never failed to choose the right words."85

The astronauts presented letters from the president to each of the Chiefs of State of the countries they visited. The Letter for Armstrong and Gordon’s South American tour highlighted the United States’ interest in sharing knowledge gained from space exploration with the “world scientific community."86 Many of their speeches emphasized national connections, sharing space information, and frequently used the word “we.” These symbols of inclusiveness, like Armstrong’s efforts to link his mission with local heroes or history, became increasingly important features of astronaut tours.87 These gestures of cultural unity were not one-side. At many stops people integrated the astronauts and the space program into their culture and historical narrative through speeches, gifting of keys to cities, including the astronauts in the lyrics of traditional songs and numerous other gestures. For instance, during their stop in Panama the astronauts were given a colorful mola (applique) made by Panama’s Cuna Indians. The mola depicted their Gemini spacecraft.88 These small gestures and exchanges from both the astronauts as well as the populations they visited were part of a larger process that fostered an idea of interconnectedness. The astronaut tours emphasized commonality, shared history, and global unity through American led space exploration: fundamental elements in the United States’ cultivation of an idea global interdependence.

86 Walter Rostow sent the President a draft of the letter. Each letter was slightly different, given cooperation, etc. with the country, but each included sentiments about sharing information with the world scientific community. Walter Rostow to Lyndon Johnson, 4 October 1966, Box 1, National Security File: Special Head of State Correspondence File, LBJL.
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The USIA produced a film on the Latin American tour titled “The New Explorers,” in English, Spanish and Portuguese, a title that hints at the colonial subtext of much of the space themed public diplomacy programming. The film began with a narrator recalling 16th century Spanish expeditions to “the new world,” where across uncharted waters these explorers arrived in “the newly discovered lands of the Americas.” These Spanish explorers “opened up the Western Hemisphere and doubled the size of the world as man knew,” the narrator enthused. This introduction positioned space exploration, as well as the astronauts’ tour of Latin America, as contemporary examples of 16th century colonial expeditions. The narrator went on to emphasize the unity of the Western Hemisphere. The astronauts, he explained, did not see national boundaries from space, and when they visited Latin America they came to learn as much as they came to teach. The title, as well as the content of this film, exposes what government officials meant by the word “unity” and the phrase “for all mankind.” Similar to the suggestion that the tracking station in Nigeria was a “partnership” in quotes and not a partnership, the word “unity” in the context alludes to a vision of the world united under American led, and defined, globalism. In her study of the history of American aviation, Jenifer Van Vleck unpacks this vision: “a global imaginary that represented the world as one but also endowed the United States with exceptional national characteristics and unique entitlements to global power.” Although this ideology was not reserved for space information propaganda alone, and it fact was the main ideology of US foreign policy in the twentieth century, space exploration created fertile ground for public diplomats and astronauts to promote this vision of the globe.

89 Simon Bourgin to William Green, 12 July 1967, Box 26, Entry P 243, RG 306, NARA.
90 Jenifer Van Vleck, Empire of the Air, 11.
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NASC REVIEW OF THE IMPACT OF SPACE EXPLORATION ON FOREIGN RELATIONS

In the mid-1960s, officials within the State Department worried that the United States was not doing enough to take advantage of the potential impact of the space program on the country's international standing. When Vice-President Hubert Humphrey was about to take on the Chairmanship of the National Aeronautics and Space Council (NASC) in 1965, Secretary of State Dean Rusk urged him to have the council assess the United States space program from the viewpoint of foreign policy objectives. He explained, "we have not yet recovered from the blow to our prestige and the burden imposed upon our diplomacy by the early Soviet sputniks and the continuing Soviet lead in manned space flight." According to the Secretary of State the international standing of American science and technology hinged on the standing of the nation's space program, and American military credibility hinged on the image of the nation's science and technology capability, making future planning of space activities critical to maintaining the nation's international posture. He argued, "The credibility abroad of our will to assure our own national security, and to assist effectively in preserving the security of the Free World, rests on the belief that we will not again fail to match major technological breakthroughs in space." The United States had to demonstrate a robust space capability, even if these programs had very little to do with the actual military balance of power. Rusk was concerned that the United States was not investing enough in the types of space
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research and activities for long-term foreign relations dividends and he urged the Vice
President to assess the topic in the next NASC meeting.  

On 13 April 1965 at 2 p.m., Humphrey held his first Space Council meeting. The
meeting did not have an official agenda, but the council had been told ahead of time that
Humphrey wanted to discuss the international aspects of the space program. He
suggested that Secretary of State Dean Rusk lead off with some prepared remarks. Rusk
reviewed the ways that space activities were supporting national interests, including
military stature and opportunities for international cooperation. His talking notes
explained, “the mutuality of these cooperative projects, and the opportunities they present
to further identify the interests of others with our own, constitute a new asset in our
foreign relations.” This statement pinpoints the complexity of the space program’s role in
foreign relations. Space exploration activities not only demonstrated American power and
prestige, they could also, if utilized properly, “increase the identity of foreign interests
with our own [and] strengthen the fabric of common action based on mutual interest and
commitment.”  

Rusk articulated an elemental feature of what made the postwar process
of globalization distinct: the promotion of the consciousness of the unity of humankind.  

Space exploration, Rusk argued, could cultivate an idea of global interdependence in
direct support of American foreign relations interests.

91 Rusk noted that staff within the State Department viewed advanced space technology—space vehicle
propulsion, the exploration of nearby planets and the extension of space applications—as key to serving
long-term foreign relations objectives. Dean Rusk to Hubert Humphrey, draft, 18 March 1965, Box 9,
Enter 3008D, RG 59, NARA.
92 In 1965 the Space Council consisted of Vice President Hubert Humphrey as Chairman, Secretary of State
Dean Rusk, Secretary of Defense Robert McNamara, NASA Administrator James Webb, and Atomic
Energy Commission Director Glenn Seaborg. Herman Pollack to Dean Rusk, 9 April 1965, Box 9, Entry
3008D, RG 59, NARA.
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During the meeting Humphrey told the Council that he had a handful of questions on the international aspects of the space program, which he would distribute to members for their reply. Humphrey had eight questions for the Council. The first inquired about public opinion polls and how to improve the United States' standing in space activities relative to the Soviet Union. The Vice President was also interested in enhancing international cooperation in space and the effectiveness of the policy regarding the release of information about space activities. He wanted to know if NASA themed exhibits had been "increasing understanding of our space program abroad?" and "what [were] the plans for improving this part of the program?" Humphrey was concerned about improving foreign understanding of the nature of US military space programs. His final question reflected Dean Rusk's March memo: "What space programs should be emphasized in our current planning so that the United States does attain and maintain a world leadership position in the future?" 94

The USIA's 1965 worldwide survey concluded overall the Soviet Union still led the human spaceflight race, which was consistent with earlier polling. Like other USIA surveys, local survey organizations conducted the interviews without obvious reference to American interests or funding. Questions ranged from general feelings about the United States, reactions to US foreign policies, who was the strongest world power at the present, who would be the strongest power in 1990, and whether or not landing on the moon was important. Polling agencies asked a sample size of over 17,000 people worldwide a handful of questions about the space race. They wanted to know which country was ahead in space developments, who was going to land on the moon first, and

94 E. C. Welsh to Dean Rusk, Robert McNamara, James Webb and Glenn Seaborg, 14 April 1965, Box 9, Entry 3008D, RG 59, NARA.
which program was dedicated to the benefits of mankind. The space section of the survey ended with “the fundamental question of overall philosophy—is the game worth the candle or is there many more important things to do with the resources required to land a man on the moon.” Respondents in most countries said that the lunar landing would be important but opinions were split in Rio de Janeiro, Nigeria, Dakar, and Japan.95

Dean Rusk submitted the State Department’s responses to the Vice President’s questionnaire in late April 1965. Based on reactions abroad, Rusk’s report concluded that the United States must successfully complete Project Apollo to counter the Soviet lead in space. The United States government must also enlarge its space-themed public relations efforts and invest in international cooperative programs. Increasing NASA participation in events abroad like the Paris Air show, broadening the number of space exhibits and spacemobiles, expanding the National Academy of Sciences sponsored international NASA lecture program, and organizing astronaut tours, would have a significant impact on the image of US space capability abroad, and in turn the geopolitical standing of the country, he argued. Even when the United States trailed the Soviet Union in space feats, public relations could emphasize the significance of the “openness, breadth and purpose,” of the American space program. Rusk concluded by explaining that cooperative space programs would also serve foreign relations interests, by encouraging foreign identification with American space efforts and offering another, and perhaps more

95 In Western Europe and Santiago the majority of people questioned said the lunar landing was not important. Sixty-five percent of those questioned in Great Britain, the largest percentage recorded, thought landing a man on the moon was, “not so important.” “U.S. Standing in Worldwide Public Opinion, 1965,” Research and Reference Service, United States Information Agency, Box 21, Entry P 243, RG 306, NARA.
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credible, avenue for foreign publicity. Rusk’s main message was that all agencies should be doing more, not less, to utilize the American space exploration in foreign relations. 96

1967: THE CHALLENGE OF OPENNESS

Media coverage of the space race often referred to the “openness” of the United States space program. Vienna’s Neues Oesterreich exclaimed, “From Cape Kennedy not even a white mouse can be launched without the nation and the world learning about it a few minutes later. Cape Kennedy symbolizes democracy.” 97 The State Department viewed the policy of openness and information dissemination of civilian space activities as “desirable from the viewpoint of our foreign relations.” 98 According to a USIA report, openness “provided the main peg for contrasting the US and Soviet political and social systems.” Throughout Latin America in particular, praise for the openness of the American space program spilled over and became praise of the United States’ open democratic system. 99

On the evening of 27 January 1967, during a pre-launch test of an Apollo command service module, astronauts Virgil “Gus” Grissom, Ed White and Roger Chaffee perished in a fire. NASA not only faced a tragedy, the agency faced the challenge of experiencing this loss in front of the public. The State Department the USIA programming following the Apollo 1 accident highlighted the astronauts’ courage, their confidence in the scientific and technical personnel working at NASA, and included a

96 Dean Rusk to Hubert Humphrey, 29 April 1965, Box 9, Entry 3008D, RG 59, NARA.
98 Dean Rusk to Hubert Humphrey, 29 April 1965, Box 9, Entry 3008D, RG 59, NARA.
99 United States Information Agency “World Press Reactions to Gemini IV Space Flight,” 11 June 1965, Box 25, Entry P 142, RG 306, NARA.
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quoted statement from Grissom: “it is worth it to risk one’s life for the sake of space exploration.”

NASA Public Affairs Officers were bombarded by critical questions from the domestic press. The international response to the accident, however, was less critical. USIA Science Advisor Simon Bourgin reported to NASA Public Relations Director Julian Scheer, “The accident at the Cape has brought us no problems—only sympathy and compassion.” In response to the letters of condolence he received, Johnson thanked foreign leaders for their support and reflected: “These men were truly envoys of mankind. In their memory we rededicate ourselves to the task of achieving, together with all nations, an understanding of our common space environment and its successful exploration for the mutual benefit of all peoples of earth.”

This divide between domestic and international responses to the American space program would increase by the end of the decade. In 1969 the United States would finally take the lead in the space race and international public opinion polls at the same time that the space program provided fodder for Americans to criticize government policies and spending.

Whether employed to demonstrate American interest in civil rights or offer opportunities to meet with foreign leaders, the American space program had come to play a complex role in American foreign relations and national image making by 1967. The primarily role, as this chapter illustrated, was as an instrument of “nationalist globalism.”

Once NASA started launching Apollo missions in 1968, the State Department and the USIA amplified their message of global unity brought about by the American space

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100 Trevor Rockwell, Space Propaganda “For All Mankind,” 153.
102 Simon Bourgin to Julian Scheer, 3 March 1967, Box 26, Entry P 243, RG 306, NARA.
103 Draft of Presidential reply to message of condolence for death of astronauts Grissom, White and Chaffee, 30 January 1967, Box 18, National Security File: Files of Charles E. Johnson, LBJL.
program. As the next chapter will examine, images taken of the earth by the Apollo crews, broadcasts from space, and an array of public programming offered American diplomats an opportunity to enhance this message.
“The fact that Apollo 8 was an American undertaking is probably the single most widely known fact about this effort,” observed Stanley Moss, a public affairs officer based in Nairobi during the spring of 1969. In Kenya, as in many countries around the world, the USIA organized screenings of *Apollo 8: Journey Around the Moon*, at Ambassadors’ residences, in movie theaters, in universities, in museums, and in USIA auditoriums. Part of a series of space themed films, *Apollo 8* dramatized the 1968 orbital flight around the Moon, and became part of the USIA’s onslaught of programming leading up to the first lunar landing. Although the film was generally well received in Kenya, Moss explained that “When the narrator intoned words like “product of American skill and American sweat” or the camera panned to a close-up of the flag or the letters “USA” on the space craft an embarrassed laugh would run through the audience.” This critical commentary captures the growing antipathy towards demonstrations of American power among USIA audiences, and the adjustments public diplomats were undertaking to ensure that the space program would continue to win over the hearts and minds of the world public. As Moss observed, the agency’s current objective was to draw their audience in, to make them identify and empathize with the space feat. Any emphasis that Project Apollo was an American accomplishment was coming across as chauvinistic. If the space program was going to have political potential, Moss advised, it had to be for all mankind.¹

¹ Stanley Moss to Simon Bourgin, 7 March 1969, Entry 243, Box 28, RG 306, NARA.
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USIA officials recognized that the Apollo 11 mission “offered the Agency its greatest opportunity in its 16-year history to inform the world about America’s scientific genius, industrial and technological skills and the personal courage that made it all possible.” In order to make the flight an effective instrument of US foreign relations, government officials downplayed nationalistic discourse, stressed that the mission was “for all mankind,” established an infrastructure to encourage global “participation” in the flight, and employed a rhetorical framework that linked unity and progress with American science, technology and global leadership.

This principally narrative chapter follows two intertwined activities: the promotion of Apollo 11 abroad and Americans’ exposure to the worldwide audience viewing the mission. In addition to selling a particular image of America to the world through the space program, the USIA and American news media also gathered information about how the world public viewed the United States. Earlier chapters have explored this trend by considering public opinion polls and their use within policy discussions. This chapter adds to this analysis by also including US news coverage of foreign public reactions, which streamed into the homes of millions of Americans as they watched the Apollo 11 mission on TV. Countless studies have dedicated pages and chapters to the first lunar landing but they gloss over a core feature of how Americans’ experienced the first lunar landing. In order to follow the flight, people in every corner of the United States turned to television programs and newspapers that gave technical descriptions of spaceflight, gave detailed updates on the astronauts’ position, and highlighted the international publics’ response to the American mission. The idea of

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2 “USIA 32nd Report to Congress 1-6/1969,” Box 1, Reports to Congress (hereafter Entry P 180), RG 306, NARA.
global unity promoted through years of spaceflight information programming was not projected out onto the world, it filtered back into how Americans experienced and articulated the significance of the space program as well.\(^3\)

At first glance the number of examples in this chapter may seem redundant or excessive but it is this very excess that this chapter tries to convey. Simply listing the number of exhibits or hours of VOA programming would dampen the impression of just how far reaching and elaborate US government efforts became to capitalize on the Apollo 11 flight. For this chapter, as well as this dissertation, the proactive and deliberate instrumentalism of human spaceflight lies at the core of explaining how and why Apollo 11 was a global phenomenon. To understanding the significance of the first lunar landing, this chapter maintains, requires understanding the magnitude of this public relations infrastructure.\(^4\)

**APOLLO 8, EARTHRISE AND THE SYMBOLISM OF GLOBAL UNITY**

As NASA edged closer and closer to landing a man on the Moon, USIA material left behind images and messages of American dominance in science and technology, and instead focused on the deeper implications of the lunar program on humanity and human

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\(^4\) In his essay on Project Apollo, Michael L. Smith argues that the “media coverage of Apollo was the event... never before had so ambitious an undertaking depended so thoroughly on its public presentation for significance.” Building on Smith’s observation for Project Apollo media coverage within the United States, this chapter sets out to examine public presentation of the flight within a global context. Michael L. Smith, “Selling the Moon: The U.S. Manned Space Program and the Triumph of Commodity Scientism” 177.
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experience. No mission embodied and emboldened this message more than Apollo 8, a lunar orbital flight that took place at the end of a tumultuous year, marked by the Tet Offensive, the assassinations of Robert F. Kennedy and Martin Luther King, Jr., race riots and political upheavals in Chicago, China and Czechoslovakia. Frank Borman, the Commander of Apollo 8 and later advisor and friend to President Nixon, understood his flight and then later promotion of the space program abroad as part of his service to the country, not as a purely scientific pursuit. And so, when he was asked to come up with an appropriate message to read during the planned Apollo 8 Christmas Eve telecast, he contacted the USIA Science Advisor Simon Bourgin for guidance. Even though the telecast was planned for Christmas Eve, Bourgin thought it would be a “mistake to do the Christmas tree thing. It would degrade the image of the mission.” Instead, he encouraged the Apollo 8 crew to read the first ten verses of Genesis from the Old Testament. Bourgin and his friend Joe Laitin, Assistant to the Director of the Bureau of the Budget, selected this passage for its universal relevance to the estimated quarter of the world’s population who would be tuning into the telecast. Bourgin urged Borman not to “be preachy, say it in your own way, say what has universal appeal.” Reactions to the telecast were unprecedented, and the USIA won a significant public diplomacy victory with the carefully chosen, inclusive wording of the Christmas Eve address.  

As the spacecraft circled the moon, astronaut Bill Anders grabbed a camera and took a photograph of the Earth seemingly rising above the lunar horizon. This photograph, Earthrise, graced the front page of newspapers around the world and became

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5 Simon Bourgin to Frank Borman, 15 December 1968, Box 7, Simon Bourgin Collection, Boston University Archives, Boston, MA (hereafter BUA).
6 Frank Borman, Oral History interview, December 2012; Simon Bourgin to Frank Borman, 15 December 1968, Box 7, Simon Bourgin Collection, BUA.
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one of the most iconic images of the space age. As President Johnson was about to leave office, Walter Rostow encouraged him to send farewell letters to Heads of State and Chiefs of Government, along with a copy of the Earthrise photograph. LBJ agreed and told Rostow to “get some personal touches in there.”

Johnson’s letter, composed by the State Department, encapsulates the thrust of late sixties Apollo discourse:

As the enclosed photographs of our recent lunar flight suggest, this this shrinking globe is rapidly becoming a single neighborhood. Even the most distant nations now live closer to each other than villages in a single nation did only a few centuries ago. Countries are learning that we all must work together for common ends if any are to survive and prosper in the new world of interdependence which science and technology are helping to create.

Rostow also suggested that Johnson send the Apollo photographs along with a personal card to all Chiefs of Government including “Mao, Castro, and all.” He explained, “the idea is that the astronauts saw our planet as one world.” Yugoslavian President Josip Tito sent a response to Johnson’s farewell letter, expressing to the former American president, “I fully share your opinion that the countries of our globe are rapidly becoming a single neighborhood thanks to the extraordinary progress of science and technology.” Amazed by the positive response, Johnson later recalled, “even in May after I’d returned here to the ranch there came a letter from Ho Chi Minh thanking me for sending him this picture, and expressing his appreciation for this act. I think the appreciation of our space

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7 Robert Poole, Earthrise: How Man First Saw the Earth (New Haven, CT: Yale University Press, 2008) 34.
8 Walter Rostow to Lyndon Johnson, 6 January 1969, Box 1, National Security File: Special Head of State Correspondence File, LBJL.
9 Ibid.
10 Ibid.
11 Josip Broz Tito to Lyndon Johnson, 19 February 1969, Box 3012, Entry 1613, RG 59, NARA.
effort is universal." The Earthrise photograph played an important role in visually symbolizing global unity vis-à-vis American progress in space, as well as creating an opportunity to demonstrate Johnson’s message of ‘peace’ and ‘unity’ before he left office.

Frank Borman also promoted the idea of ‘one world’ united through the American space program in press conferences, lectures, film screenings and dinners on his whirlwind diplomatic tour of European cities after the Apollo 8 flight. Before he left for the tour in February 1969, Borman met with the United Nations Security Council. After UN Secretary-General U Thant, a strong critic of US involvement in Vietnam, described Borman and his crew as “the first universalists,” Borman responded, “Apollo 8 was a triumph for all mankind.” In addition to incorporating certain themes and phrases into public diplomacy material, USIA officials also monitored the adoption of these rhetorical devices by the audiences they hoped to influence. When judging the impact of Borman’s tour of Europe, Bourgin noted positively that the “vocab [was] thoroughly absorbed.” A foreign leaders’ inclusion of the phrase “for all mankind,” or a newspaper article that described a space feat as part of a greater good, evidenced the effectiveness of USIA and State Department programming, to many USIA officials.

Although the space program was winning the United States important political ground, a series of public opinion polls taken in the United States throughout the 1960s revealed continually declining popular support of the country’s space program. At the beginning of the decade 63% of those surveyed by Gallup thought it was important to

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13 Robert Poole, Earthrise, 33-34.
14 Simon Bourgin notes on the Apollo 8 tour, 1969, Box 4, Simon Bourgin Collection, BUA.
win the space race. After the threat of Russian space superiority waned Americans became less supportive of the human spaceflight program. A February 1967 Gallup Poll showed that 60% of Americans did not think landing a man on the moon should be a national priority. In general, Americans criticized the extensive costs of Project Apollo. Polls taken by Louis Harris and Associates paralleled the Gallup Poll results: when asked in January 1969, if they opposed the aim of landing a man on the Moon only 37% of Americans interviewed were enthusiastic about the upcoming lunar mission. By July, this percentage increased sharply to 51% in anticipation for Apollo 11 flight later that month. Commenting on these public opinion polls, a USIA report concluded even though Americans questioned many of the benefits of space exploration it was still “seen by many as a necessary element of national leadership which can become a powerful force for international friendship and cooperation.” Although the cost of sending men to the Moon seemed too great to many Americans, and spinoff benefits appeared limited, there was an awareness of the broader foreign relations implications of the space program.15

Richard Nixon’s Inaugural Address, given less than a month after Apollo 8, referenced the mission and the Earthrise image, but with the hurdles of Vietnam, the need to improve relations with the Soviet Union and China, balancing the Federal Budget, and domestic unrest, facing him as he took office, space exploration was not the top priority on his policy-making agenda. Nonetheless, Nixon appreciated the diplomatic weight of the Apollo program and he inserted the Earthrise moment into his address: “In that moment of surpassing technological triumph, men turned their thoughts toward home and humanity – seeing in that far perspective that man’s destiny on earth is not

15 “Impact of U.S. Space Program on Domestic and Foreign Opinion,” 20 August 1969, Box 4, Entry A1 42, NARA.
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divisible.”

Nixon, and the USIA’s message, about space exploration at the dawn of the 1970s, left the technological enthusiasm rhetoric of the early 1960s behind. Instead of framing the space program as a key to modernization and technological and scientific progress, public officials sold Project Apollo as an inclusive, spiritually uplifting program. As NASA prepared for the launch of Apollo 11 in July 1969, the USIA, State Department and White House prepared their public relations strategies to ensure the United States reaped the greatest possible foreign relations rewards from the lunar landing.

PREFLIGHT BUILD-UP

Framing

Months before the first lunar landing senior staff within the USIA discussed the best way for the agency to capitalize on the upcoming flight. Irving Wechsler, a senior public diplomat, jotted down his thoughts at “white heat” after a conversation with Deputy Assistant Director for Policy and Plans, Arthur Bardos. “We seem fully aware of our need to internationalize the deed and nourish the sense of all mankind’s participation,” Wechsler observed. “Our openness,” he continued, “has permitted our space activities to give audiences a vicarious role in the adventure far beyond any enjoyed by Soviet activities.” Wechsler’s articulation of the political advantages of fostering a sense of shared experience and international “participation” in lunar exploration can be seen in the agency’s official approach to Apollo 11 programming. Wechsler argued that “what seems called for is a speech that will mark new perspectives,

make the flight a benchmark for a new era and new modes of thought and communication about human affairs.” Like other public diplomats and government officials, Wechsler foresaw an imminent revolution. Apollo 11, many officials asserted, presented the USIA and the United States with an unprecedented opportunity to shepherd the direction and define the shape of this new era.17

Public diplomats stationed around the world also anticipated that the lunar landing could have significant political dividends. Project Apollo had already offered many public diplomats a unique opportunity to connect with foreign leaders and publics who otherwise were critical of the United States and unreceptive to many other types of diplomatic gestures. For the USIS post in Iran, “space on the basis of popularity and broad interest, [was] the number one subject that USIS [had] to offer in Iran.”18 A USIS post in Turkey reported that they were having “difficulty communicating persuasively with some of [the] important elite groups in Istanbul including those who control most public media in Turkey and generate much of [the] anti-American poison being spread around this country.” Project Apollo missions were “luckily… one US activity in which these groups have displayed intense interest and this gives us an opening to them.” The USIS Istanbul post asked USIA headquarters for help developing a plan to take advantage of this rare political opening in Turkey.19

Recognizing that the upcoming Apollo 11 mission would be a major event, and perhaps “one of the stories of the century,” the USIA set out a series of guidelines for the agency’s coverage and handling of the mission. Public diplomats knew that commercial

17 Irving R. Wechsler to Arthur Bardos, 11 June 1969, Box 4, Entry Al 42, RG 306, NARA.
18 USIS Iran to USIA Washington, 3 June 1969, Box 17, Entry P 243, RG 306, NARA.
19 American Consulate, Istanbul to the Secretary of State, 23 June 1969, Box 17, Entry P 243, RG 306, NARA.
and foreign media would cover the mission in great detail, and that they would look to the USIS for material to draw on, which would give the Agency a major role in framing the broader significance of the achievement. The USIA created six official guidelines for their lunar landing treatment: (1) treating the mission as an accomplishment of all mankind, (2) emphasizing that exploration is an essential component of great nations, (3) explaining how Project Apollo was built on the innovations of scientists from around the world, (4) identifying the astronauts as “the envoys of mankind in outer space,” (5) “Apollo holds a promise—legitimately raising man’s hopes that eventually he can use technology to resolve some of the long intractable problems that face him here on earth,” and, (6) that the mission was undertaken by the United States should not be promoted. Like the public diplomacy framing of American space exploration throughout the 1960s, Apollo 11 programming emphasized Enlightenment values of universalism and progress through science.  

John E. Reinhardt, an Assistant Director of the USIA, supplemented the official guidelines in a memo he sent to USIA public affair officers on the proper treatment of the lunar landing mission in agency programming: “the moon landing will be such a massive achievement, and attract such wide regard and admiration, that to blow a horn about it could hurt the US abroad.” He clarified that he was not suggesting that the posts should do nothing about the event. “The caveat,” he explained, “[was] about tone.” Posts should provide access to information about the space program, support local news media and ultimately “set the entire feat in perspective and interpret its significance to mankind.” Reinhardt’s statement not only provides an example why public diplomats decided to frame the first lunar landing the way they did, it also illustrates how officials understood

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20 USIA to All USIS Posts, 13 May 1969, Box 18, Entry P 243, RG 306, NARA.

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this process of framing as part of their political duty to support American foreign
relations interests.  

In the White House, NASA and at the State Department, officials discussed what
types of symbolic gestures should be carried out by the astronauts and the president to
reap the greatest political rewards from the lunar landing. The NASA Administrator set
up a Symbolic Activities Committee to ensure that the Apollo 11 mission would signal
that the lunar landing was “an historic forward step of all mankind that [had] been
accomplished by the United States.”  

Under Secretary of State, U. Alexis Johnson, urged
that an American flag should not be planted on the Moon because it might be perceived
as a demonstration of territorial possession. He explained to NASA Director Thomas
Paine, “we are concerned primarily, as I am sure you are, that we take full advantage of
this accomplishment both to enhance our posture abroad and to encourage other countries
to further identify their interests in the exploration of space with our own.”  

Numerous politicians echoed these sentiments, including Charles Mathias, Jr., a United States
Senator, who emphasized to Secretary of State William Rogers, that the Apollo 11 would
be “the most persuasive ambassador ever dispatched,” and that “we must signal clearly to
the world that Apollo 11 will carry through space not only America’s pride of
accomplishment, but also America’s bright offer of hope and progress for all the world.”

Mathias suggested that the astronauts carry miniature flags from each nation of the world,

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21 John E. Reinhardt to USIA Public Affairs Officers, 10 June 1969, Box 18, Entry P 243, RG 306, NARA.
22 Willis Shapley to George Mueller, 19 April 1969, Document II-70 in Exploring the Unknown: Selected
Aeronautics and Space Administration, 2008) 730.
23 U. Alexis Johnson to Thomas Paine, 8 June 1969, Box 3013, Entry 1613, RG 59, NARA.
which could be presented to Heads of State after the flight as a gesture of inclusion in the mission.24

In February 1969, David Hitchcock, USIA Area Director for East Asia and the Pacific, wrote to Bourgin arguing that the moon landing “should be internationalized, at least symbolically. We should now be thinking how this could be done.” He proposed a few potential gestures including taking the traditional role of the Moon in Asian cultures into account by leaving a “time box” full of signatures, poems, and prayers on the Moon.25 After conferring with area directors, the USIA suggested that in order to “neutralize the effect of the American flag” planted on the moon the astronauts should raise a United Nations flag beside it. Bourgin, on the other hand, felt that a UN flag should not be planted on the Moon because the “UN did not participate in Apollo, it does not represent all mankind, and that for the US to “reach for it, when in fact it frequently ignored the UN would be unfitting and inappropriate.” The USIA supported carrying small national flags on the mission for later presentation to heads of state.26

In late June 1969, NASA invited heads of state to compose messages of goodwill, which the Apollo 11 crew would place on the moon. Many of these messages expressed sentiments that reflected the inscription on the LEM plaque. NASA Administrator Thomas Paine believed this effort “greatly enhances the sense of international participation in the Lunar Program.”27 NASA etched these messages onto a small silicon disc alongside statements made by President Eisenhower, Kennedy, Johnson and Nixon; the names of leaders in Congress and a list of members of the four committees of the

24 Charles McC. Mathias, Jr. to William P. Rogers, 19 June 1969, Box 3013, Entry 1613, RG 59, NARA.
25 David Hitchcock to Simon Bourgin, 12 February 1969, Box 18, Entry P 243, RG 306, NARA.
26 Simon Bourgin to Mr. Ryan and Mr. Bardos, 14 April 1969, Box 18, Entry P 243, RG 306, NARA.
27 Thomas Paine to U. Alexis Johnson, 11 July 1969, Box 3013, Entry 1613, RG 59, NARA.
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House and Senate who participated in the National Aeronautics and Space administration legislation; and the names of NASA past and present Administrators, Deputy administrations and other high level managers. 28

The Symbolic Activities Committee final plans for Apollo 11 included the plaque discussed in the introduction of this dissertation, the microfilm messages, fifty small US State flags, a United Nations flag, small flags of each of the countries that belong to the United Nations as well as a large American flag to plant in the lunar soil. During the flight the inclusion of national flags on the mission made headlines. For example, a story on the Ghanaian flag taken to the moon made the front-page of a major newspaper in Accra. 29 The Apollo 11 crew also carried mementos from the three astronauts and two cosmonauts who had perished. When astronaut Frank Borman visited Russia shortly before the mission he was given medals from Vladimir Komarov and Yuri Gagarin to include on the upcoming lunar flight. 30 The message that the Apollo 11 mission would convey was debated, and carefully crafted, with the potential to make the world public ‘participants’ in the flight, at the forefront of many officials’ minds.

PREPARING AN AUDIENCE FOR APOLLO 11

The USIA established the Apollo Task Force and the Apollo Operations Center to manage agency Apollo 11 themed programs. The Task Force kept track of the progress of programming while the Operations Center sent reports to top USIA officials as well as USIS posts around the world. 31 In order to support foreign newspaper coverage of the

28 Thomas Paine to U. Alexis Johnson, 11 July 1969, Box 3013, Entry 1613, RG 59, NARA.
29 John Reinhardt to Hewson Ryan, 25 July 1969, Box 20, Entry P 243, RG 306, NARA.
31 Ben Posner to William H. Weathersby, 31 October 1969, Box 15, Entry P 243, RG 306, NARA.
launch, the USIA in cooperation with NASA established an Apollo News Center (ANC) in Paris, which handled telephone and in-person inquiries, distributed printed material and hosted media correspondents from countries where live television coverage was not available.\(^{32}\)

USIA pre-launch coverage of Apollo 11 was particularly extensive because the agency knew that the commercial media would not focus on the mission until just before the launch. Altogether, the USIA and State Department produced a barrage of information programs to heighten anticipation and excitement for the mission, sparing no expense to take advantage of this public relations opportunity.\(^{33}\) The USIA alone spent millions of dollars on Apollo 11 programming, a large percentage of the agency’s annual budget.\(^{34}\) Leading up to the flight, the Voice of American broadcast 365 features and documentaries on space exploration in all regions of the world, films on space ran in hundreds of theaters and on television, and USIS posts and American Embassies distributed over 30,000 posters, charts and maps. Newspapers in each region of the world ran stories and photographs provided by the USIA, many on their front pages. The USIA also supplied material to support locally produced exhibits; in Bonn, for instance, the USIS post gave information packets to two large German department store chains, which dedicated 180 window displays throughout the country to the story of Apollo 11.\(^{35}\)

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\(^{32}\) Frank Shakespeare to John L. McClellan, 28 August 1969, Box 4, Entry A1 42, RG 306, NARA.

\(^{33}\) Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA; Henry Dunlap to Harry Loomis, 18 November 1968, Box 4, Entry A1 42, RG 306, NARA.

\(^{34}\) “USIA 32\(^{nd}\) Report to Congress 1-6/1969,” Box 1, Entry P 180, RG 306, NARA.

\(^{35}\) Apollo 11 Operations Office to Mr. Shakespeare, 27 June 1969, Box 3, Entry A1 42, RG 306, NARA.
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_Hundreds of “Space Information Centers”_

All individual USIS posts became small-scale local space resource centers. The USIA sent posts kiosk exhibits, space food samples, Apollo 11 themed buttons, over 900 models of the Saturn V rocket and the Apollo spacecraft, 10,000 lunar maps, 275 manned lunar landing charts, 240 16-inch moon globes and countless publications.36 The USIS post in Taipei became a particularly key reference service for the Taiwanese media, by organizing interviews with scientists, distributing pamphlets and articles and acting as an Apollo 11 clearing house. The USIA Press and Publications Service created background articles, features, photos and pictures stories to distribute to foreign newspapers. The foreign media, according to USIA reports, picked up and published much of this material.37 In Ethiopia, the USIS post distributed a selection of astronaut food, including soup, chicken and crackers, for the news media to sample.38 The USIS post in Tunisia covered its façade with large-scale photo murals of astronauts, the Moon and Earth in addition to a large sign that renamed the post: “Space Information Center.”39 Through these posts the USIA distributed millions of pamphlets, brochures, photographs before the Apollo 11 astronauts left the launch pad.40

In addition to printed information, the USIA distributed thousands of Apollo souvenirs.41 The popularity of Apollo buttons alone illustrates the scale of USIS pre-flight souvenir distribution. The USIS in downtown Belgrade reported that more than

36 The kiosk exhibits included a 6-foot tall, three-sided structure outfitted with blinking lights, music, photogelatin transparencies, and posters. Henry Loomis to William Rogers, 30 June 1969, Box 1, Office of Policy and Plans: Subject Files, 1966-1971 (hereafter Entry P 12), RG 306, NARA; Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1969.
37 “USIA 32nd Report to Congress 1-6/1969,” Box 1, Entry P 180, RG 306, NARA.
38 Apollo 11 Operations Office to Frank Shakespeare, 23 July 1969, Box 3, Entry A1 42, RG 306, NARA.
39 John Reinhardt to Hewson Ryan, 25 July 1969, Box 20, Entry P 243, RG 306, NARA.
40 “USIA 32nd Report to Congress 1-6/1969,” Box 1, Entry P 180, RG 306, NARA.
41 Ibid.
10,000 people had visited the center, with the majority requesting Apollo 11 buttons. Each button depicted a graphic lunar module superimposed on the face-piece of an astronaut’s helmet with the word “APOLLO” written in bold. The buttons came in the colors of the American flag—red, white and blue—but they did not include any direct reference to the United States. After the post’s supply of buttons ran out POAs printed thousands of photos of the astronauts to hand out as a substitute. The post in Warsaw distributed 100,000 buttons by the 21st of July. A Washington Post correspondent reported that thousands of people wore the buttons around the Polish capital.42 In Japan, the popularity of the buttons prompted a commercial firm to request permission from the US government to mass produce the souvenirs and distribute them at no cost to the US government.43

Space Exhibits

Nearly a million people in Japan alone visited the thirty-six Apollo 11 exhibits scattered around the country leading up to the lunar landing. For an exhibit in Delhi the Agency constructed a full-scale model of the lunar module, which drew an average of 13,000 visitors a day.44 At the First International Fair in the Democratic Republic of Congo, the United States joined twenty-seven other nations from mid-June through mid-July. Project Apollo, the major focus of the United States pavilion, was featured alongside a Department of Labor sponsored exhibit on nation building. Attendance reached nearly 300,000 people, including Congolese President Mobutu Sese Seko who

43 US Embassy Tokyo to USIA Washington, 8 August 1969, Box 18, Entry P 243, RG 306, NARA.
44 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
visited the American display three times over the course of the fair. During the Apollo 11 flight, locally-trained Congolese narrators fielded questions from the audience. The Apollo portion of the pavilion included models of spacecraft, space food samples, and films on other missions while the nation building exhibit included displays of American poultry, wheat and rice.

On the other side of the globe another large-scale exhibit, the American pavilion at the Djakarta International Fair, focused on the Apollo lunar landing. Space themed exhibits included a 25-foot-high model of the upper stage of a Saturn V, scale models of spacecraft and launch vehicles, a space suit, photo transparencies, and films. During the Apollo 11 mission, the pavilion streamed live radio coverage and screened video telecasts. Over a million people visited this pavilion in downtown Djakarta, including President Suharto and other high-ranking Indonesian officials. A leading Indonesian science commentator gave two presentations on space exploration at the exhibit, which were recorded and broadcast by the Indonesian government owned television station. In addition, thirteen Indonesian college students and graduates, trained by the USIA as guides, fielded questions from visitors.

Both of the United States pavilions in Djakarta and Kinshasa were split in two parts: half of the display was devoted to the American space program while the other half was dedicated to commercially-oriented development exhibits. The later half of these pavilions relied on the sponsorship of American private firms. Both of these pavilions, like other American exhibits abroad, recruited and trained local students to work as

45 “Special International Exhibitions 7th Annual Report FY 1969,” Box 3, Entry P 173, RG 306, NARA.
guides in the US pavilions. The Project Apollo displays became a useful technique for drawing crowds to the pavilions and exposing foreign audiences to non-space themed programming. Many public diplomats knew that spaceflight, especially in the summer of 1969, would guarantee large crowds. Pairing spaceflight exhibits with other content became a useful means for promoting more general US products and policies abroad.

**Film and Television**

Leading up to the flight USIA films on earlier Apollo missions ran in movie theaters around the world while television stations broadcast space-themed features in over a hundred countries. In advance of the flight, the US produced 5,000 prelaunch tapes and scripts for foreign media to draw on in their coverage of the flight. During the two weeks before the launch a Santiago TV studio produced six shows featuring Project Apollo. A Spanish-speaking USIA Information Officer and the director of a local NASA tracking station appeared on the programs.

USIA organized outdoor viewing areas, from public squares to sports stadiums, allowing people who did not have their own televisions to view the pre-flight screenings of films and television shows as well as the Moon landing coverage. For example, the USIS post in Seoul set up a projection system with a 19'x16' screen fastened to a building and streamed USIA space films for ten days before the Apollo 11 flight. USIS Delhi showed the Apollo 10 film on an outdoor screen to over 68,000 during a series of

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49 “USIA 32nd Report to Congress 1-6/1969,” Box 1, Entry P 180, RG 306, NARA.
50 Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1969.
51 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
evening screenings.\textsuperscript{52} In addition to the large-scale public film screenings, USIS posts organized private invitation-only film showings for local leaders, journalists and academics. Some of these were held in the homes of American Ambassadors or USIS officers. At times, foreign leaders asked for these screenings to be held in their homes. Newly appointed Venezuelan President Rafael Caldera invited a public affairs officer to his mansion to screen space themed films and offer detailed narration for his cabinet.\textsuperscript{53}

\textit{Radio}

VOA began planning for the Apollo 11 mission in April 1969. After treating the Apollo 10 flight as a public relations test run for determining staffing needs and language service requirements, it quickly became apparent to VOA staff that the scale of Apollo 11 coverage would be significantly larger than the May 1969 Apollo 10 flight or any of the other projects undertaken by the VOA in its twenty-seven year history. VOA sent two pre-launch teams of language service staff specializing in the major VOA languages to Cape Canaveral and Houston to work with foreign reporters. In June the Agency began its pre-launch promotion programming. In addition to sending prerecorded programs to VOA stations, the agency supplied foreign national networks and radio stations with over 5,000 individual items. As part of pre-launch activities, the VOA asked posts to mount publicity campaigns for the upcoming Apollo 11 coverage by putting up posters and placing advertisements in local press and magazines. USIS centers, like USIS Singapore designed their own posters encouraging people to “Follow Apollo Over VOA” and distributed them to shops that sold radios, schools, community centers and other

\textsuperscript{52} Ibid.
\textsuperscript{53} Ibid.
locations. In the weeks before the flight, newspapers from Lagos to Kabul contained
advertisements promoting Apollo 11 and VOA coverage.\(^{54}\)

The VOA broadcast over 300 features and documentaries on space exploration to
augment the news coverage of launch preparations. These features included interviews
with astronauts and NASA personnel.\(^{55}\) VOA tailored programs for particular regions and
mailed them in advance of the mission while VOA stations around the world created
features to encourage local interest in the upcoming flight.\(^{56}\) The VOA Swahili-language
broadcast in East Africa announced an essay contest on Apollo 11 four-weeks before the
flight. Nearly 500 people sent in essays to compete for sets of encyclopedias.\(^{57}\)

ENSURING GLOBAL TELEVISION COVERAGE

The television coverage of Apollo 11 became the first global broadcast in history.
President Kennedy had asked Congress to support the development of a worldwide
satellite communications network in the same address he first introduced Project Apollo
in May 1961. The following year Kennedy signed a bill for a public-private satellite
communication partnership, which would be overseen by the president.\(^{58}\) The
Communications Satellite Act of 1962 created the American Communications Satellite
Corporation (COMSAT), which would construct, manage and operate a commercial
communications satellite system in cooperation with businesses and foreign governments.

When it became clear that COMSAT could not turn a profit without larger government

\(^{55}\) "USIA 32\(^{rd}\) Report to Congress 1-6/1969," Box 1, Entry P 180, RG 306, NARA.
\(^{56}\) Arthur Bardos to Henry Loomis, 24 July 1969, Box 4, Entry A1 42, RG 306, NARA.
\(^{57}\) Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
investment, the NASA contract for the Apollo communication service went to COMSAT instead of the Department of Defense. This decision provided important revenue for COMSAT and supported the extension of the network to Asia, Africa and Latin America.\(^\text{59}\)

In the early 1960s, there were a series of national television networks that broadcast television programs, which were either beamed from a satellite or shown from a tape or film relay. John Glenn's 1962 flight was shown live on American television sets but audiences in Europe and other parts of the world only had access to prerecorded tapes and film.\(^\text{60}\) COMSAT, in cooperation with ten other nations, formed INTELSAT in August 1964, a constellation of geosynchronous satellites. Nations interested in broadcasting INTELSAT feeds, could set up large earth stations with dishes aimed at one of the satellites. This system allowed continuous feeds, without the earlier issue of relays ending abruptly when a satellite travelled beyond the horizon. The primary objective of INTELSAT satellites was to provide coverage for the upcoming Apollo missions.\(^\text{61}\) INTELSAT launched Early Bird in 1965, a commercial geosynchronous satellite for transatlantic television transmission. Thanks to Early Bird, North Americans and Europeans could watch Pope Paul IV's visit to the United States, coverage of the Gemini program, news and sports.\(^\text{62}\) Senator John Pastore (D., R.I.), chairman of the communication subcommittee of the Senate Commerce Committee, reflected that Early Bird...
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*Bird* "can become the show window through which America can and will be seen throughout the world. And indeed it will be the mirror of our own image." 63

NASA organized a series of Intelsat II satellites to support the communication requirements of Project Apollo as well as commercial communications. With the growth of the INTELSAT network, live coverage of spaceflight missions started reaching audiences in Asia as well as Europe. National networks ran many space-themed broadcasts because, according to one USIA assessment, science was viewed as politically neutral. In Indonesia "space films [are] especially popular, probably a continuing hangover from days when that was the only material they dared use. [It is] still too soon for use of controversial political clips," reflected a USIA report in 1967. 64

In the late 1960s NASA launched another set of satellites, Intelsat III. The third satellite in the Intelsat III series was placed over the Indian Ocean, providing the first coverage for this region. This satellite went into operation on 15 July 1969, less than a week before the first lunar landing. The lunar lander *Eagle* transmitted signals to the Parkes Earth Station in southern Australia. Parkes then relayed this transmission to the Moree Earth Station in eastern Australia, which in turn relayed it to an Intelsat III satellite placed over the Pacific Ocean. The live coverage of the lunar landing was then transmitted to a global audience using two Intelsat III satellites as well as an Intelsat II satellite and the *Early Bird* satellite that had been put back into operation for coverage of the mission. 65

64 James Schwoch, *Global TV*, 149.
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Public diplomats knew that the commercial media was going to cover the Apollo 11 mission in detail. Aware that duplicating this coverage would be of little political value to the United States, the agency instead focused much of its attention on reaching audiences outside of the established global communications network. USIA worked with foreign television networks to ensure that live coverage of the lunar landing would reach every potential TV set. In areas where live coverage was not available, the USIA shipped foreign television networks copies of TV clips of the major phases of the mission as well as a final wrap-up after splashdown.

In 1969 Venezuela did not have a satellite ground station to receive the live television coverage of the lunar landing. Private stations in Venezuela as well as Colombia invested $230,000 to rent a portable ground station while the USIA, along with help from the US Air Force, transported the station and equipment to Maracaibo. This collaboration between private industry and the USIA ensured that 1,500,000 television sets in Venezuela and Colombia could pick up Apollo 11 coverage, making the lunar flight the first international event to be seen live by these audiences.

FLIGHT

Liftoff

The Apollo 11 crew began preparing for launch at 6:00 AM on the morning of 16 July 1969. Once they were suited up they left the Manned Spacecraft Operation Building and headed to launch pad 39A. At 9:32 AM over seven million pounds of thrust lifted the massive Saturn V rocket in the air and set it on its way to the Moon. Over 800 members

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66 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
67 Ibid.
68 “USIA 32nd Report to Congress 1-6/1969,” Box 1, Entry P 180, RG 306, NARA.
of the foreign press had descended on Cape Canaveral for the launch while another sizable group went to Houston to report from mission control. USIA staff provided local support and translators in each location. At the Cape a USIA officer fluent in Japanese worked with the 120 members of the Japanese press and an officer fluent in Spanish worked with press from Latin America and Spain. USIA also recruited members of the local foreign-language clubs to volunteer as escorts and interpreters.69

The “Apollo News Center” in Washington coordinated the VOA English-language coverage by using two-way communications between Cape Canaveral and Houston. Four news anchors and two NASA experts ran the center. The VOA also had an Apollo Desk in their News Division, which was staffed by space news writers. During the mission the Apollo Desk prepared a new 30-line story each hour. Correspondents around the world helped provide a constant flow of news to their audiences and communicated foreign reaction reports back to Washington.70

Official VOA Apollo 11 coverage had already begun on 15 July with a special one-hour show broadcast to Europe and the Middle East. Parts of this show were also re-broadcast to stations in Latin America and Asia. The following day, for the launch of Apollo 11, the VOA broadcast live coverage in fourteen languages, including Burmese, Georgian, Urdu and Estonian. During the next 400 hours of the mission the VOA included detailed updates and advertised the upcoming “main events”: the lunar landing, the extravehicular activity (EVA) and the lift off from the moon. At noon on 20 July the English Division of the VOA began its live continuous broadcast in all areas of the world.

69 Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1969.
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This feed was complemented by coverage in other languages throughout the globe. Whenever notable mission events occurred during scheduled broadcasts the VOA would interrupt planned programming to update their audiences on the astronauts’ latest movements. In total the seven major VOA languages—Arabic, Chinese, English, French, Portuguese, Russian and Spanish—broadcast more than 165 hours of live coverage during the mission.

Television and radio stations around the world asked USIS officials to be guest experts on Apollo themed broadcasts. Two USIS officers appeared nightly on each of the Colombia television channels. According to a report, a USIS officer showed up to the studio in a space suit and almost suffocated on camera when the helmet stuck to the suit. The USIS post in Bogota also arranged for Dr. Martin Klein, who had worked on the Saturn V at NASA, to act as a technical advisor for each of the Colombian television stations during the Apollo 11 mission. In the Philippines the USIS post Apollo specialist spent forty-six hours on Manila television. The Arabic-speaking PAO in Algiers became a space commentator for the Algerian television network. In Chile an USIA officer along with a NASA tracking station director, both fluent in Spanish, appeared on television for hours during the flight to comment on the mission and to answer call-in questions. Another USIA officer became an anchorman for the 13-hour television broadcast in Hong Kong.

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71 Ibid.
72 Ibid.
73 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
74 Apollo 11 Operations Office to Frank Shakespeare, 3 July 1969, Box 3, Entry A1 42, RG 306, NARA.

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A Feedback Loop

The worldwide viewership of Apollo 11 broke records but it still paled in comparison to the high percentage of Americans following the flight. Ninety-four percent of American television sets tuned into Apollo 11 coverage. Although all three American networks followed the mission, more Americans watched CBS than ABC and NBC combined. Even President Nixon, the White House reported, watched CBS coverage of the mission. Since the majority of Americans watched CBS, examining this network's elaborate programming in detail can offer insight into how Americans experienced and viewed the first lunar landing. A central feature of this coverage focused on foreign reactions to Apollo 11. With anchors stationed around the world, CBS showed Americans how the world responded to their space program.75

During continuous thirty-two hour coverage of Apollo 11, CBS new anchor Walter Cronkite received reports from correspondents in London, Rome, Paris, Amsterdam, Manila, Tokyo, Saigon, Belgrade, Bucharest, Mexico City, Montreal, Lima, Buenos Aires and the International Arrivals Building at New York's John F. Kennedy Airport. Requiring the largest foreign and domestic remotes coordination effort in CBS history, the network had to set up a separate control room in New York to handle the increased number of television feeds from abroad.76 Reporting from London, Correspondent Mike Wallace explained to the American audience tuning into CBS, "the traditionally stolid British seem to be as captivated by the fact and implications of the flight of Apollo 11 as we Americans." The correspondent in France noted that Parisians

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had a mood of "relaxed anticipation," but, "as everywhere else, the French press is dominated by Apollo 11, and what if Armstrong should encounter living beings." 77 Daniel Schorr, a CBS Correspondent in Amsterdam, noted that national television network audience was estimated at 80% of the Netherland's total population of 12 million. Schorr reported back to American audiences other evidence of Dutch enthusiasm for the flight: "Gas stations in Holland are distributing moon maps, instead of road maps." 78

Audiences in Bucharest, one American television correspondent explained, "have become "space bugs" overnight... The average Rumanian thinks of Apollo 11 a little bit as his own personal adventure—his link to the marvels of the West...Apollo 11, they keep telling the visitor, is for everyone, for all mankind." President Nixon's upcoming trip to Romania, the correspondent explained, likely impacted this response to the flight and affected the government's leniency of Apollo 11 coverage in the country. President Nixon's upcoming trip might also have affected the correspondent's decision to describe Romania as a "maverick East European country" where Apollo 11 gave the average Romanian "another reason for his feeling good about his increasing independence in the East." This depiction of an Eastern Bloc country would likely have been comforting to many American who were aware of the critique abroad of their nation's foreign policies. In general the CBS correspondents stationed around the world emphasized enthusiasm for Apollo, a sense of shared experience and unity, and foreign admiration of the American space feat. 79

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78 Ibid. 62.
79 Ibid. 63.
Sunday Night, 20 July 1969

Television and radio crews had a handful of hours to fill between the lunar landing at 4:17 PM EDT and the EVA, which would begin at roughly 9:00 PM EDT later that evening. Shortly after Armstrong announced that “the Eagle had landed,” and before the two astronauts left the LEM to explore the lunar surface, British Prime Minister Harold Wilson reflected on the significance of the event during a short speech given from his study in London. CBS broadcast the speech to its audience in the United States. “I suppose,” the Prime Minister said, “it’s an achievement which incorporates all of the work, all of the discoveries of the mathematicians, and the scientists and the space experts, almost from the earliest days of mathematics and science. An incorporation that acknowledges the experience of many nations.” Although Wilson uses the word “incorporation” as opposed to the American propagandists’ preferred term “participation,” the sentiment he expressed was analogous to US public diplomats framing of the mission.80

CBS anchor Walter Cronkite asked correspondents in London, Amsterdam, Paris, Rome, and Belgrade to report on foreign reactions to the lunar touchdown. Audiences in London and Amsterdam watched quietly and then gave a “sigh of relief,” according to reporters. A woman interviewed in Paris said, “I think this is a very important day and a wonderful day as far as the whole universe is concerned, because it’s the landing on the moon.” CBS correspondent Winston Burdett reporting from Rome added that Pope Paul VI watched television coverage from the Vatican Observatory after spending much of the evening viewing the Moon through a telescope. Bill McLaughlin, reporting from

Belgrade, suggested, “Yugoslavia has adopted the three American astronauts as its own heroes.”

After making sure the television camera was working properly, Neil Armstrong descended the lunar module ladder at 10:56 PM EDT and pronounced: “that’s one small step for [a] man, one giant leap for mankind.” This statement echoes the nationalist globalism rhetoric of public diplomats’ framing of Project Apollo throughout the 1960s. A few minutes later Buzz Aldrin joined Armstrong on the Moon. The astronauts moved the camera to a tripod a few dozens yards from the lunar module so that the global audience could watch them raise an American flag, unveil the plaque on the LEM, speak with President Nixon, deploy a handful of scientific experiments and collection lunar samples. The entire EVA lasted just over two hours.

During Neil Armstrong and Buzz Aldrin’s lunar EVA, power companies throughout the world recorded an unprecedented upsurge in power consumption. The VOA covered the EVA in thirty-six languages for an audience of roughly 750 million. In comparison, the VOA coverage of John Glenn’s flight in 1962 broke records with an estimated world audience of 300 million people; the Apollo 11 audience was over twice that size. Another estimated 650 million watched the live television broadcast. Five million of Switzerland’s total population of 6 million, are reported to have watched

81 Ibid. 63, 86-89.
82 David Meerman Scott and Richard Jurek, Marketing the Moon, 69.
84 VOA broadcast live coverage of the flight in English, Portuguese, Spanish, Russian, Arabic, French Greek, Japanese, Turkish, Chinese, and additional languages. Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1969; Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
86 “General Wrap-Up From USIA Apollo 11 Center,” 22 July 1969, Box 4, Entry A1 42, RG 306, NARA.
mission coverage on their television sets. The BBC’s domestic and foreign services, thirty-seven other national networks, and around 2,000 individual radio stations in Latin America relayed and rebroadcast VOA programs, an important indicator to the USIA of the significance and impact of the Agency’s Apollo 11 coverage and framing of the mission. All-India Radio relayed VOA pre-recorded programs and dedicated over twelve-hours of airtime to the live VOA broadcast, reaching an estimated audience of over 85 million. Radio Djakarta kept the their radio station open late to broadcast VOA coverage, a break in their decade long refusal to broadcast VOA programs. Over 3,600 foreign television and radio stations broadcast relayed transmission of the lunar landing to audiences in over sixty non-Communist countries.

The Hotel Negresco in the South of France held an elaborate gala on the evening of 20 July, to celebrate the lunar landing. Dozens of television sets tuned into live flight coverage were scattered around the banquet room, patrons dinned on an Apollo 11 themed menu and danced “the LEM,” a special step created for the event that resembled the “Lindy Hop,” which had become popular after Charles Lindbergh’s 1927 transatlantic flight. The USIA reported, “People danced in the streets of Santiago ... School children in Bavaria and students in Mexico were excused from classes [the next] day...church bells rang out to announce the moon landing in various Latin American cities... Laplanders followed the flight on their transistor radios while pasturing their reindeer.

A couple in the capital of Somalia gave birth to a baby boy and decided to name him

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87 Patrick Buchanan to the White House, 23 July 1969, Box 3, Entry A1 42, RG 306, NARA.
88 Arthur Bardos to Henry Loomis, 24 July 1969, Box 4, Director’s Subject Files, 1968-1972, RG 306, NARA.
89 Ibid.
90 Report to the Congress from the President of the United States, US Aeronautics and Space Activities for 1969.
91 American Consulate Nice to the State Department, 31 July 1969, Box 3014, Entry 1613, RG 59, NARA.
92 “General Wrap-up from USIA Apollo 11 Center,” 22 July 1969, Box 4, Entry A1 42, RG 306, NARA.
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Armstrong Abdurahman Osman after the first man on the moon. The US Embassy in Mogadiscio explained: “This little sidelight defying Muslim tradition and publicized over the radio and in the press, had the coffee house devotees buzzing.”93 Babies born in other corners of the world on 20 July, including Lebanon, Scotland and Tanzania, were also named after the Apollo 11 crew.94

In regions where television sets were unavailable, the VOA transmitted live radio broadcasts over loudspeakers, screened Apollo films, and organized public lectures on space exploration throughout the duration of the mission. The USIS post in Addis Ababa attracted a crowd of 10,000-15,000 people watched Apollo films projected on the side of their building. In a Kinshasa public square the VOA broadcast live coverage while projecting space themed films.95 In downtown Seoul, the USIS post estimated that 150,000 people gathered together to watch the videotape replay of the lunar walk on an outdoor screen.96 Given the popularity of the event the Korean government extended the city curfew by three hours.97

Cities and towns throughout the world also set up their own communal viewing areas. Thousands of people in places like Montreal and Brussels who could have stayed home to watch the coverage on their own televisions sets filled parks and squares to view the lunar landing with others. A New Yorker who stood with thousands of other people in

93 US Embassy Mogadiscio to State Department, 24 July 1969, Box 3013, Entry 1613, RG 59, NARA.
94 “General Wrap-Up From USIA Apollo 11 Center,” 22 July 1969, Box 4, Entry A1 42, RG 306, NARA.
95 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
97 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
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Central Park during a rainstorm to watch coverage on a gigantic Eidophor screen explained, "Well, it was something that we wanted to see together with a lot of people."98

An early morning television press conference featured Prime Minister Sato praising the landing as "epochal in the history of mankind."99 Other foreign leaders around the world expressed their congratulations to the astronauts and the United States using the global rhetoric cultivated by years of information programming. In Venezuela, a USIS officer organized an Apollo film screening prior to the moonwalk for President Caldera and his Cabinet. The Venezuelan president was enthusiastic about the flight and like Prime Minister Sato appeared on national television after the lunar landing to congratulate the United States on the accomplishment.100 During a speech Romanian President Ceausescu deviated from his prepared remarks to comment on the Apollo 11 mission. The achievement, he reflected, was "in the interest of all mankind." This phrasing mirrors US government officials framing of the space program and its benefits. The Algerian representative on the U.N. Security Council used similar language when he congratulated the American delegation. The lunar landing, he said, "is to the glory of man, above all."101

In addition to providing live coverage of the flight, the USIA’s Motion Picture and Television Service worked quickly to create clips of phases of the flight, transmit them via satellite to Tokyo where they were made into prints and then distributed to

98 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA; CBS News and CBS Television Network, 10:56:20 PM EDT 7/20/1969, 94.
101 Arthur Bardos to Henry Loomis, 24 July 1969, Box 4, Entry A1 52, RG 306, NARA.
television stations throughout Asia. Foreign television networks drew on USIA material, including older television clips, to fill out their live reporting on the lunar mission. Television news anchors often used USIA and American Embassy supplied visual aides, including charts, models, moon globes and space suits. The walls of the Prague television studio were covered with American Embassy supplied space photographs and posters, Czech television anchors used the USIA’s models during their telecasts, and NASA press kits proved to be a useful source of information for the station. Austrian television broadcast twenty-eight hours of continuous moon landing coverage, which drew on USIS films, models, photographs, a space suit and USIA text material.

"Moonday"

Leaders of Venezuela and Chile, among other countries, announced national holidays on the day following the lunar landing. Many people expressed their enthusiasm and congratulations to local Embassy and USIA officials. USIS Rabat reported, “we continue [to] receive countless phone calls praising [the] successful Apollo journey…as well as visits from individuals offering congratulations.” USIS reports from some countries even noted that American expats were stopped on the street and congratulated. In Warsaw people laid bouquets of flowers on the Lunar Module model on display at the United States Embassy and in Tokyo people left paper cranes at the

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103 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
104 US Embassy Caracas to State Department, 21 July 1969, Box 3013, Entry 1613, RG 59, NARA; US Embassy Santiago to State Department, 18 July 1969, Box 3013, Entry 1613, RG 59, NARA.
105 John Reinhardt to Hewson Ryan, 25 July 1969, Box 20, Entry P 243, RG 306, NARA.
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United States Embassy for good luck. Many nations, including the Congo and Algeria, released Apollo 11 stamps. Letters, telegrams, poems and drawings flooded USIA posts and President Nixon’s mailbox. The USIS post in Tokyo reported, “one somewhat misguided youth thought his message would carry more meaning if written in blood.—it was!—it did!”

On 21 July, Tel Aviv’s Maariv newspaper asserted, “this is the first global scientific and social revolution which the entire human race is participating by the most sophisticated means of communication…it is a revolution whose depth we have yet to grasp.” This idea of a revolution was summed up by the headline of Beirut’s an-Nahar on 21 July: “MOON AGE—FIRST DAY.” There were many firsts that took place on 20 July including the first time that Laotian radio listeners heard news about a world event as it was taking place. Milan’s paper Corriere della Sera carried the headline: “Man is on the moon. The whole world lived this historic event…” while in another corner of Italy, Rome’s Messagero called the mission “not only a victory for three men or a victory for one country, but it is a victory for all mankind because man rather than machine has won.”

CBS morning programming started off with a feature on the reactions of American soldiers in Vietnam who were pleased with the landing. Mike Wallace in

106 Apollo 11 Operations Office to Frank Shakespeare, 23 July 1969, Box 3, Folder “INF 2-3 Weekly Reports to Director,” Entry A1 42, RG 306, NARA; Embassy Tokyo to Secretary of State, 22 September 1969, Box 3015, Folder “SP 10 US 9/1/69,” Entry 1613, RG 59, NARA.
107 Apollo 11 Operations Office to Frank Shakespeare, 10 October 1969, Box 3, Entry A1 42, RG 306, NARA.
108 US Embassy Tokyo to Secretary of State, 22 September 1969, Box 3015, Folder “SP 10 US 9/1/69,” Entry 1613, RG 59, NARA.
110 Ibid.
111 Ibid.
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London read newspaper headlines to the American audience and told them, “it seems everybody you talk to in London watched television all night through.” Reports from Amsterdam, Belgrade and Rome conveyed similar stories of people glued to their television sets and elated by the feat. The rest of the morning coverage featured discussions about future space missions, the relationship between NASA and military applications, and the potential of cooperating with the Soviet Union in space. The astronauts lifted-off the Moon’s surface at 1:54 PM EDT and began their journey back to Earth.  

Splashdown

Early in the morning on 24 July, the aircraft carrier USS Hornet moved to position in the Pacific Ocean to recover the Apollo 11 spacecraft. Shortly after noon Apollo 11 entered the Earth’s atmosphere and splashed down into the ocean roughly nine miles from the aircraft carrier. When the Apollo 11 crew reached the Hornet a band played “Columbia, the Gem of the Ocean” and President Nixon waved to them. President Nixon was “exuberant, really cranked up, like a little kid,” recalled his Chief of Staff. Speaking to the crew through the window of the mobile quarantine facility, Nixon told the astronauts that the White House had already received over a hundred congratulatory messages from foreign heads of state. These messages, he explained, “represent over two billion people on this earth—all of them who have had the opportunity through television to see what you have done.” After telling the astronauts that he had spoken with their wives and had arranged a State Dinner in Los Angeles, President Nixon exclaimed “this

is the greatest week in the history of the world since the Creation. Because as a result of what happened this week, the world is bigger infinitely, and also... the world has never been closer together before.” That afternoon Nixon left the aircraft carrier to begin his diplomatic tour of Asia and Europe.114

When Nixon arrived in Guam later that day, on his first stop of his aptly named “Moonglow” tour, he gave remarks at a press conference that would later come to be known as the Nixon Doctrine. The United States, Nixon explained, would supply arms and assistance to threatened nations but would expect that these nations supplied their own manpower for military defense.115

Throughout the rest of his trip—which took the president to the Philippines, Indonesia, Thailand, Vietnam, India, Pakistan, Romania, and the United Kingdom—Nixon drew on space themed discourse to couch larger foreign relations issues, especially the United States’ role in Vietnam. During a speech in Manila, Nixon reflected, “As we think of that great venture into space, as we think of the first man setting foot on the Moon, we realize the meaning that it has, clearly apart from the technical achievement, we realize that if man can reach the Moon, that we can bring peace to the Earth. And that should be the great lesson of that great space journey for all of us.”116 In Djakarta, referring to Apollo 11, the president remarked, “It is not important what country the men came from who performed this act—what is important is that they represented all

mankind.” In Pakistan, Nixon compared the lunar landing with local modernization efforts. Both, his speech argued, were “manifestations of that same human spirit.”

When he arrived in Romania, Nixon suggested, “This significant moment in the history of relations between our two countries coincides with a great moment in the history of the human race.” By associating the popular lunar landing with broader foreign relations themes, Apollo 11 served an additional soft power function for the Nixon administration.

Splashdown coverage in Argentina prompted crowds to break a rope barrier to get a closer look at television sets at a USIS Buenos Aires space exhibit at the railroad station. To mark the end of the mission, Mauritius’s para-military group placed torches on the mountaintops surrounding the city of Port Louis and fireworks rained down from the sky. In Nice, the Mayor ordered the firing of a cannon and the decoration of the Municipal Building in French and American colors to mark the return of the Apollo 11 crew.

THE IMPACT OF APOLLO 11

“For a period of eight days, Morocco held its collective breath ... never in all my years in the service of the United States abroad have I witnessed an event with anything like the psychological effect of [the first lunar landing],” exclaimed Ambassador Henry Tasca in the summer of 1969. Apollo 11 “was a unifying experience,” captivating

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117 Arrival Remarks for Djakarta, undated, Box 50, President’s Personal Files: President’s Speech File, RNPL.
118 Toast at Pakistan Dinner, undated, Box 50, President’s Personal Files: President’s Speech File, RNPL.
119 Bucharest—Statement of Arrival, undated, Box 50, President’s Personal Files: President’s Speech File, RNPL.
121 US Embassy Port Louis to Department of State, 2 August 1969, Box 20, Entry P 243, RG 306, NARA.
122 American Consulate Nice to the State Department, 31 July 1969, Box 3014, Entry 1613, RG 306, NARA.
everyone in Rabat, from the "King and the street beggar," to the young and old. Perhaps overconfidently, Tasca believed that there was "no doubt that the international position of the United States in all its aspects has been deeply" and he hoped, "irreversibly changed." He predicted a host of potential effects, including the perceived superiority of "the American system and values," the prestige of the American educational system, the erasing of "any image of weakness" resulting from Vietnam, a widespread identification with the lunar landing in the global south, and that the West's reactions to American policies and leadership would become more unified in the future. 123

"Worldwide reaction to the Apollo 11 mission has been unprecedented," another public diplomat explained, making it difficult to select just a few examples to encapsulate the intensity of the global public's response to the lunar landing. More people followed the coverage of Apollo 11 than any previous event in history. The lunar landing made front-page headlines in most newspapers around the world, most local radio stations broadcast the VOA's coverage, and wherever it was technically feasible the first steps on the Moon were televised. 124 An American Embassy report from Chad commented on the effectiveness of the approach to the lunar landing, explaining that, "We feel that the psychological success of Apollo in Chad is largely due to Washington's decision to stress the fact that Project Apollo is a venture of all mankind and not just of Americans." This "soft-pedaling of nationalistic sentiments" according to the report, "succeeded in
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establishing American's technological supremacy and in adding to our overall national prestige much more effectively than a "hard sell" ever could have."125

Flight Coverage in the International Press

The USIA reported record-breaking use of the agency’s press material by foreign newspapers and publications. In each region of the world USIA articles appeared in print. USIS Hong Kong reported extensive use of press packets and wireless features in all of the local newspapers. Of the thirty-nine articles sent to Hong Kong, newspapers printed thirty-two. The agency estimated that in India between 70-80% of all photographs and articles were sourced from USIA material. The Moroccan press “ran virtually all items sent” while one of the major Belgrade papers used material from the USIA for five of the six pages of its special color supplement on space exploration.126

The USIA also kept track of instances when agency rhetoric filtered into the foreign press or speeches. In Rome, the title of one of the USIA pamphlets, “L’Uomo sulla Luna,” became the title of most Italian media special inserts as well as radio and television programs on space. Although this titled, translated into English as “Man on the Moon,” did not contain the political underpinnings of other USIA material, the act of adoption demonstrated the potency of agency material on the framing of non-agency lunar exploration coverage.127

In order to measure the impact of the flight on Haitians, the USIS Port-au-Prince advertised a contest for the best essays on the topic of the significance of Apollo 11 for

125 US Embassy Fort Lamy to Department of State, 31 July 31 1969, RG 59, Subject Numeric Files, 1967-1969: Science, Box 3014, NARA
126 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
127 Ibid.
mankind. The majority of the 300 essays the post received incorporated the themes and rhetoric that the USIA had crafted to frame the mission. Nemours Regaud suggested that Apollo was “the triumph of the spirit shared by all men,” while Dieuseul Auguste argued “if nations would work together like the stages of Saturn, the peacemaking would not be more difficult than going to the moon.” It is important to note that entrants knew they were submitting their essays to the USIS, which suggests that their outpouring of enthusiasm and praise could be strategic as opposed to earnest. Also, essayists competed for Saturn V and LEM models, which indicates that this group was made up of space enthusiasts, not a representative sampling of the Haitian population. 128

Flight Coverage in Communist Nations

Although the Soviet Union restricted live coverage of the lunar landing, the splashdown of Apollo 11 appeared in press, radio and television programming. For the most part, this coverage balanced enthusiasm for the mission alongside descriptions of the importance of Soviet unmanned probes, calling Apollo 11 and the Soviet Luna 15 mission, “interrelated wonderful achievements.” Among the Soviet Union’s closest Eastern European allies, Hungary offered the most praise for the mission. All Eastern European countries—save East Germany, Bulgaria and Albania—carried live coverage of the Apollo 11 mission. The media in China, North Korea and North Vietnam did not acknowledge the flight while Cuban media covered some of the mission. 129 Cuban radio carried nearly five hours of reports on the Apollo 11 splashdown while a Cuban

128 USIS Port-Au-Prince to USIA, 23 October 1969, Box 20, Entry P 243, RG 306, NARA
government weekly magazine included a 17-page spread on the mission. In China, the VOA broadcasted on two channels to circumvent government jamming.

The Soviet press framed Apollo 11 as a shared human achievement, as opposed to a national mission. A 17 July article in Pravda referenced Frank Borman’s visit to the USSR and his statement that Project Apollo was made “possible through the common efforts of all mankind,” including Russians from Tsiolkovskiy to Yuri Gagarin. The East German Der Morgen newspaper argued: “the moonwalk of the US astronauts is a success which no nation can claim for itself,” because it relied on accomplishments of mankind “from Galileo to Einstein.” In a similar vein, on 27 July, the Polish paper Trybuna Ludu, called the astronauts “the ambassadors of mankind,” and stressed that the success of the mission was based on the efforts of many countries over time. On the same day Zycie Warszawy, another Polish paper, commented: “today we rejoice together with the astronauts, with their families, with all Americans and all mankind.”

The flight received thorough treatment in Romania, a gesture that the USIA interpreted as an effort to improve US-Romanian relations ahead of President Nixon’s upcoming visit to Bucharest. Headlines of Romanian morning papers called the flight “a brilliant victory of man.” Millions of Romanians, according to the Agerpress news agency, stayed up through the night to watch coverage of the flight. Scinteia, the leading party paper, called Apollo 11 “undoubtedly one of the most extraordinary events in the whole history of mankind,” and noted that Armstrong’s message “aroused a tremendous

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130 Arthur Bardos to Henry Loomis, 24 July 1969, Box 4, Director's Subject Files, 1968-1972, RG 306, NARA
132 “Man on the Moon: Communist Reactions to the Voyage of Apollo 11,” 25 July 1969, Box 20, Entry P 243, RG 306, NARA
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wave of enthusiasm in the whole world, which held its breath while watching the grand
mission of the daring explorers." President Ceausescu’s congratulatory message to
President Nixon also appeared in the press. 133

Critique

Critique of Project Apollo and anti-US government protests sprang up around the
world during the Apollo 11 mission. As the CBS journalist stationed in Tokyo reported
on the lunar landing a crowd of 3,500 Japanese students filled the city streets, protesting
the United States government. CBS also interviewed Americans in Harlem who
questioned the expense of space exploration given the very serious struggles facing their
neighborhood. 134 Ralph Abernathy, successor to Martin Luther King as chairman of the
Southern Christian Leadership Council, along with 500 representatives from the Poor
People’s Campaign, arrived at Kennedy Space Center to protest the launch and raise
awareness of America’s poor. They held a vigil and marched with mule-drawn wagons to
demonstrate the discontinuity of NASA’s high technology and the basic needs of
American society. 135 Soviet newspaper Izvestiya featured the demonstration in an 18 July
article. 136 The American Embassy in Dar es Salaam described a scene of 300 youth
leaders at the local university using bull horns to protest Vietnam and call for the
“slaughter [of] leading imperialist gangster [President Nixon]” on 21 July. A newspaper
in Niamey questioned the high cost of lunar exploration given more pressing needs on

133 Ibid.
136 “Man on the Moon: Communist Reactions to the Voyage of Apollo 11,” 25 July 1969, Box 20, Entry P 243, RG 306, NARA.
The Libyan anti-American weekly publication *al-Rakib* quoted a Cuban diplomat who commented, “Sending a man to the Moon is a useless luxury.”

This complex mix of enthusiasm and dissent underscores how the lunar landing did not happen in a vacuum; it was interpreted and experienced in the context of the Vietnam War, urban unrest, civil rights tensions and dissatisfaction with US government policies.

**INTERPRETING APOLLO**

*Poems and Letters*

A few days after the mission, a group of poets in the Republic of China gathered together in Taipei to write poems about the lunar landing. The State Department translated a selection of these poems and sent them to President Nixon. A poet in Israel composed a piece for President Nixon that expressed hope that the “white queen” would “bestow understanding on the people.” Both Pablo Neruda and W.H. Auden, moved by Apollo 11, wrote poems to explore the significance of lunar exploration. Neruda, the politically outspoken writer and chief of Chile’s Communist Party, penned a poem dedicated to the astronauts, expressing hope that “the new visitors to the Moon will leave up there a portrait of that good poet Jules Verne who showed them the way.” He had explored space exploration in poems throughout his career, including “Lazybones,” which he composed shortly after *Sputnik 1* orbited the earth. Both poets did not herald the

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137 John Reinhardt to Hewson Ryan, 25 July 1969, Box 20, Entry P 243, RG 306, NARA.
138 American Embassy, Benghazi to Department of State, 1 August 1969, Box 2014, Entry 1613, RG 59, NARA.
139 Nan-Shih Ho, Chairman of the United Poet Association of China to Richard Nixon, 27 July 1969, Box 3015, Entry 1613, RG 59, NARA.
140 USIS Tel Aviv to USIA Washington, 24 July 1969, Box 4, Entry A1 42, RG 306, NARA.
141 Foreign Media Reaction: Apollo 11 Sunday Report, 20 July 1969, Box 4, Entry A1 42, RG 306, NARA.
astronauts' accomplishment or the impressiveness of America's scientific and
technological know-how. Instead, they considered the ways that lunar exploration could
expand human imagination and heighten expectations for a better life on earth.¹⁴²

Letters and the Adoption of Global Rhetoric

From Hungary to Guyana, leaders congratulated Nixon and the Apollo 11 crew on
the historic mission. At the climax of America's human spaceflight program, and after a
decade of promotional material incorporating phrases like "for all mankind," many of
these congratulatory letters include variants of this global rhetoric. What is even more
notable than the inclusion of global rhetoric is the widespread prevalence of the word
"hope." The majority of congratulatory letters contain the word "hope" and expressed the
wish that the lunar program would benefit "all of mankind," by bringing the world peace,
prosperity, and other markers of progress promised in years of public information
programming.

President Duvalier of Haiti expressed to Nixon that it was his "hope that this
historic milestone will contribute to the well-being of all mankind." President Kenyatta of
Kenya wrote that it was his "hope that this momentous event will serve to strengthen the
cause of international peace, security and co-operation for the benefit of all mankind."
President Tito of Yugoslavia noted that it was his "hope that this achievement of human
brain and ability inspire all countries and peoples in the world to work together."¹⁴³ And,

Flashes of the Fantastic: Selected Essays from the War of the Worlds Centennial, Nineteenth International
¹⁴³ François Duvalier to Richard Nixon, 26 July 1969, Box 5, White House Central Files: Subject Files:
Outer Space, RNPL; Jomo Kenyatta to Richard Nixon, 22 July 1969, Box 5, White House Central Files:
Subject Files: Outer Space, RNPL; Josip Tito to Richard Nixon, 22 July 1969, Box 5, White House Central
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the King of Morocco used the phrase “all mankind” three times in his short congratulatory telegram. These messages, and the hundreds of other letters sent to Nixon, express very similar sentiments: they describe enthusiasm within their country for the lunar landing and they convey unfulfilled wishes for progress.

In the late 1980s, when he was reflecting back on the significance of the Apollo program, and the use of the phrase “for all mankind,” Nixon speechwriter William Safire explained, “We’d have to say humankind now,” acknowledging how the gendered phrase that seemed so natural and inclusive to him in the 1960s would have been inappropriate in the context of 1980s culture.144 Adopted by the USIA, State Department and numerous presidential administrations to signal unity, the phrase is gendered and condescending. The prevalence of its use in public diplomacy programming throughout the 1960s implies an underlying rationalization, and perhaps naiveté, which conflates American interests and values with those of the rest of the world.

It is important to note that the use of this global rhetoric by foreign leaders, the international press and the public does not simply represent a demonstration or acceptance of American hegemony. Whether or not space exploration was actually viewed as “for all mankind” or “of all mankind” by foreign leaders, the press and the world public, this language was a central feature of how the intentions, accomplishments and benefits of Apollo were framed in discourse. The appropriation of language can also be an assertion of power or of goodwill. Many leaders used American global space rhetoric to cloak broader discussions of national and international needs, and to articulate local understandings of progress. The use of this global rhetoric is not a demonstration of

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shared beliefs and interests, or homogeneity through space exploration, but a mechanism of coordination in an increasingly interwoven global community.145

Interpreting Impact

In August 1969, less than a month after the first lunar landing, the USIA finalized a study on the impact of the US space program on both domestic and foreign public opinion. Americans, the report concluded, finally felt assured that their country led the space race. They were enthusiastic about Apollo 11 but concerned with the cost of a large-scale space program given pressing domestic problems, including housing, education, civil rights, pollution and urban renewal. As the 1960s wore on, the report explained, Americans became less concerned with beating Soviet space feats and instead were interested in the direct applications and benefits of space exploration in addressing the country’s problems. A Gallup Poll taken on the heels of the first lunar landing revealed that the majority of Americans were “lukewarm” about the idea of sending humans to Mars. “Negroes,” the poll revealed, “opposed the idea [of a] Mars landing by a ratio of three to one.” Much of the critique expressed by Americans in Gallup Polls and in the USIA’s analysis illustrates a concern for national, as opposed to international, problems.146

The two most notable features of foreign public opinion, the report emphasized, were the tendency to view Apollo 11 as “an achievement of all mankind” and that the mission “should serve to bring mankind closer together.” The United States’ policy of

145 This process of coordination reflects Peter Galison’s discussion of ‘trading zones’ in Image and Logic: A Material Culture of Microphysics (Chicago: University of Chicago Press, 1997). The conclusion of this dissertation engages with the concept of ‘trading zones’ in more detail.
146 “Impact of U.S. Space Program on Domestic and Foreign Opinion,” 20 August 1969, Box 4, Entry A1 42, RG 306, NARA.
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“openness” the report concluded, “permited a high degree of personal identification with American space exploration, and fostered a sense of vicarious participation.” Over ten years earlier, the launch of Sputnik cemented the Soviet Union’s role as a superpower in the minds of many people around the world. But the USSR, the report argued, was not able to match this significant “sense of vicarious participation.” The root of the difference was that the Soviet space program did not “escape the shadows of secrecy, concealment, and nationalistic possessiveness.” The US approach to space information dissemination—especially the policy of “openness”—bore fruit, according to the USIA.\textsuperscript{147}

Compared to the launch of Sputnik 1, the USIA argued, the first lunar landing “had more innate human and immediate psychological drama than the more abstract triumph of launching an earth satellite.” The new telecommunications infrastructure amplified the impact of Apollo 11 on international audiences, according to the report. Thanks to satellite networks, “the direct and immediate participation of millions upon millions as eye and ear witnesses immeasurably magnified wonder, suspense, and jubilation.” By 1969 it had become clear to public diplomats that the victory of landing men on the Moon did not lie in besting Soviet space accomplishments. Instead, the victory was in prompting global participation in an American led and designed event. For public diplomats the triumph lay in the widespread identification with an American accomplishment.\textsuperscript{148}

\textsuperscript{147} Ibid.
\textsuperscript{148} Ibid.
Chapter 4: "One Giant Leap for All Mankind"

CONCLUSION

USIA officials recognized that enthusiasm for Apollo 11 would fade with time. But, the USIA could help slow this process, a report noted, if the agency worked to “deepen our audiences’ understanding of the scientific and technological bases of the moon landing, to encourage the discussion of its meaning for humanity, and to keep alive the world’s respect and affection for America and the sense of unity among mankind which Apollo 11 produced to such a miraculous extent.” US government officials knew that Project Apollo could not erase the growing criticism of government spending, civil rights tensions, urban unrest, the faltering war in Vietnam or the other challenges facing the United States in 1969. Nonetheless, Nixon along with his advisors hoped that a carefully crafted public relations campaign focused on the first lunar landing could be parlayed, at least for a short while, to bolster support of US foreign policies. In his diary, Chief of Staff H. R. ‘Bob’ Haldeman suggested that “at least part of the reason for the efforts to build strong nationalism with [the] space thing, and certainly the reason behind the push for better PR capability...[is] to get ready for what lies ahead,” referring to Nixon’s strategy for pulling out of the Vietnam War. As the next two chapters will examine, the US government worked hard to extend the political dividends of the Project Apollo by promoting the benefits of space exploration at home and abroad with astronaut tours, moon rock exhibits, films and other promotional programming.

A month after the first lunar landing it was still too soon to judge the long-term impact of Apollo 11. The national prestige value of the flight might wane, impressions of American scientific and technological superiority might diminish, and the flight’s effect

149 Apollo Operation Center to Henry Loomis, 6 August 1969, Box 15, Entry P 243, RG 306, NARA.
150 H.R. Haldeman, The Haldeman Diaries, 81.
on the reception of US foreign policies abroad would likely disappear. Public diplomats focused on another measure of the impact of the US space program; they asked if the sense of unity brought about by Apollo 11 programming signaled "an emerging new dimension in the international political process, comparable to the experience of unity that might be expected to emerge from such global disasters as a world epidemic, a meteor collision, or a nuclear accident." Commentary around the world, the USIA reported, stressed that the lunar landing was an achievement for all mankind. "Along with the decrying of wars and division," the USIA emphasized, "went an expressed sense of solidarity of the human community—a sense apparently heightened by awareness that the whole of mankind was sharing the emotions and exhalation of a single experience." US government and CBS coverage of the flight had promoted this global consciousness by streaming images of audiences around the world viewing the flight as part of their flight coverage, using global rhetoric, and organizing communal events. A core element of the experience of watching or listening to the lunar landing was the awareness that the rest of the world was following the flight as well.

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CHAPTER 5
Astronaut Ambassadors: The Apollo 11 Diplomatic Tour

"Here are a few helpful reminders. 1. The water is drinkable, although it is not the most popular native drink. 2. You can always expect student demonstrations. 3. Never turn your back on the president. 4. Never be seen with the vice president. 5. If you leave your shoes outside the door, they will be stolen. 6. It is unsafe to walk on the street after dark. 7. Do not discuss the following sensitive issues with the natives: Vietnam War, Budget, Foreign Aid, Import-Exports. 8. Rate of exchange is .05 cents per one dollar (American)."

The above excerpt is from a memo that was given to the Apollo 11 crew as they flew into Washington, D.C. after an around the world diplomatic tour. This parody briefing reveals more than the format of information sessions that the astronauts received upon landing in a new city, it exemplifies the seeming discontinuity of Project Apollo and domestic concerns in late 1960s America. Although the lunar landing marked the cutting edge of human technological achievements, and was in many ways the pinnacle of engineering and managerial success in this period, it took place at a time when the United States was also struggling to cope with poverty, crime, racial tension, environmental problems, and the Vietnam War.

When the Apollo 11 crew landed in Washington they did not have to worry about their shoes being stolen or student demonstrations. They were greeted on the White House lawn by a small celebration before joining President Nixon for a dinner of lobster Americaine, bibb lettuce salad and soufflé au Grand Marnier with sauce Sabayon. At

1 James Hansen, First man, 579.
2 Simon Bourgin to Mirada Bourgin, September 1969, Box 4, #1633, Folder “Astronaut Tours/Letters to Ely Echo,” Simon Bourgin Collection, BUA.
3 Marie Smith, “Ambassadors for Peace’ Honored,” Washington Post, 6 November 1969, D2
dinner, Nixon asked the astronauts to report on their tour, tell him about the heads of state
they had met and to comment on their conversations. He thanked them for acting as
ambassadors and according to Neil Armstrong, told the crew that “He had been trying for
years to get a meeting with Romanian President Nicolae Ceausescu and after leaving the
USS Hornet he was able to get an appointment. President Nixon said something to the
effect, ‘That meeting alone paid for everything we spent on the space program.’”4

Serving as the president’s personal representatives, the Apollo 11 crew toured the
world “to support US foreign policy, to demonstrate US willingness to share its
knowledge of space, to enhance American prestige in science and technology and to
promote the peaceful cooperation in what the president calls “the spirit of Apollo.”5
They visited thirty cities in twenty-four countries in just thirty-eight days and millions
upon millions of people saw, touched and spoke with the astronauts over the course of the
journey.

As chapter two examined, in the early 1960s, when the Soviet Union and the
United States first started launching humans into space, NASA, USIA and State
Department officials objected to sending astronauts on post-flight tours. Chapter three
discussed the reevaluation of this policy during the Johnson administration. This chapter
is the third part in this American astronaut tour trilogy. The Apollo 11 post flight tour
was the most elaborate, most promoted and most covered by the international media, of
all the astronaut goodwill trips. The Nixon administration expected that the tour would
reap significant foreign relations dividends, prompting Nixon and Henry Kissinger to
take a hands-on role in the planning and selection of tour locations. The Apollo 11 crew’s

4 James Hansen, First man, 579.
5 Department of State to U. Alexis Johnson, Frank Meyer, Julian Scheer, White House, 2 September 1969,
Folder “Apollo 11 Impact: Astronaut World Tour,” NASA.
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memoirs and biographies, as well as a handful of histories of Project Apollo, reference this tour but none of these accounts examine the goodwill tour in detail within the context of American foreign relations. But, President Nixon and his staff viewed the astronauts as some of the best ambassadors the United States could use to garner support of its foreign policies. The list of countries the astronauts’ visited on their whirlwind tour can be read as account of US allies and interest in the fall of 1969. Kissinger argued, “the visit of our astronauts abroad constitutes one of the effective policy vehicles available to us.” 6 This chapter weaves the political context back in to the story of Apollo 11 to highlights how profoundly the space program and American foreign relations were intertwined. 7

PLANNING THE APOLLO 11 POST-FLIGHT TOUR

Although it has been assumed for some time that the Apollo 11 crew would undertake a post-flight tour, serious discussions of the trip were not initiated until after the lunar mission was completed and the astronauts had splashed down in the Pacific Ocean. The astronauts also had a number of domestic events scheduled before they could begin their diplomatic journey, including hometown visits, parades in Houston, New York, and Chicago and the president’s reception in Los Angeles. Scheduling would be tight because government officials determined it was imperative that the crew be back in the United States in time for the Apollo 12 mission in mid-November. 8

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6 Henry Kissinger to Mr. Ruwe, 11 November 1969, Box 307, National Security Council Files: Subject Files, RNPL.


8 Julian Scheer to Peter Flanigan, 15 August 1969, Box 17, Entry P 243, RG 306, NARA.
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Before meetings began, letters flooded into the USIA and State Department with suggestions for tour stops. Illinois Representative Paul Findley wrote to William Rogers, Secretary of State, urging that South America be the first stop of the Apollo 11 crew’s itinerary because “To the south, priority attention from our astronauts would heighten the prestige of the United States as could no amount of foreign-aid dollars and help erase the memory of the disappointments and disagreeable events of recent years.” John E. Reinhardt, one of the first African American Foreign Service Officers and later Ambassador to Nigeria, sent a memo listing capitals in Africa that would have the “highest potential for favorable impact in support of US policy goals” by the astronauts’ visit. USIA officer William Thompson explained the importance of sending the astronauts to Pakistan and Lebanon in addition to India,

To all Indians, such a visit would represent convincing evidence of our recognition of that country’s important place in the world community of nations. We are concerned that a visit to India alone would have adverse political repercussions in Pakistan.... A visit to Lebanon is in fact a visit to the Arab world. Coming at a time when the Arabs believe the US is turning its back on them, the visit would have a powerful and favorable effect on Arab public opinion from the UAR to Iraq, particularly in those nations with whom we do not have diplomatic relations but who nevertheless gave wide-spread, enthusiastic coverage of the Apollo 11 mission.”

A similar request came from John Glenn, who had just visited Japan and observed that it was crucial for the United States to send astronauts to the country to counteract negative public opinion towards the United States. The USIA supported the suggestion but recognized that they should “not expect that criticism from Japanese opposition groups

9 Paul Findley to William Rogers, 31 July 1969, Box 17, Folder “Astronaut’s Tour 69,” Entry 243, RG 306, NARA.
10 John E. Reinhardt to Mr. Ryan, 29 July 1969, Box 17, Folder “Astronaut’s Tour 69,” Entry 243, RG 306, NARA.
11 William Thompson to Arthur Bardos, 1 August 1969, Box 17, Folder “Astronaut’s Tour 69,” Entry 243, RG 306, NARA.
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relating to Viet-Nam, Okinawa and the US-Japan Security Treaty will diminish significantly as a result [of the visit].” Recent public opinion polls taken in Japan indicated harsh criticism of certain US policies but general admiration for the United States, suggesting that the astronaut tour would have little impact on the acceptance of these policies.12

Some requests for astronaut visits also came from foreign leaders eager to host the Apollo 11 crew in their country. Dutch Prime Minister Petrus De Jong wrote to President Nixon requesting that intervene to ensure that the crew visited his country. De Jong was one of the foreign leaders that the State Department considered a “space buff.”13 Kissinger explained to Nixon, “The Dutch took their omission from your tour of Europe last February and March very much to heart, and I felt it would be best to try to accommodate the strong desire of the Dutch to play host to our astronauts.” Amsterdam was placed on the Giant Step itinerary.14

An Astronaut Travel Coordinating Committee, which had been requested by Acting Secretary of State U. Alexis Johnson, was set up and composed of State Department, NASA and USIA officials. Over the course of August and September 1969 the committee debated the guidelines for tour, selected the cities the astronauts would visit, and coordinated with foreign embassies. The tour selection involved a number of criteria, including foreign relations relevance to the United States, the potential enthusiasm of the public in various countries, the location of cooperative scientific programs or tracking station, and a manageable itinerary. The Committee recommended

12 Dan Oleksiw to Frank Shakespeare, June 1969, Box 4, Entry A1 42, RG 306, NARA.
13 US Embassy The Hague to Department of State, 22 October 1969, Box 22, Entry P 243, RG 306, NARA.
14 Henry Kissinger to Richard Nixon, Undated (early September), Box 307, National Security Council Files: Subject Files, RNPL.
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that the tour last six weeks, beginning with an appearance at the United Nations General Assembly. According to the Committee the first region of priority was Latin America, followed by Africa, Europe, the Middle East and Asia. The astronauts would visit each city for roughly two days, which would allow the astronauts a brief rest between public events.\textsuperscript{15}

The State Department wrote to diplomats stationed in potential astronaut tour stops to see how the visit would be managed there, what the crowd reaction would be like, and when heads of state would be available to receive the crew. The American Embassy in Rawalpindi assured the State Department that the astronauts would receive a warm welcome in Pakistan, and an especially “tumultuous welcome” in Dacca.\textsuperscript{16} The Embassy in Teheran guaranteed the State Department that given the “almost emotion interest generated here by Apollo 11, we [feel] certain [that the] astronaut presence will be received with [a] tremendous popular acclaim.” The Shah of Iran had a number of upcoming trips schedule so it would be best if the Apollo 11 crew visited before 2 October, according to the Embassy.\textsuperscript{17} The Embassy in Mexico also eagerly encouraged an astronaut visit in Mexico City, explaining “intensity of Mexican admiration derives from special kinship engendered by saturation [of] television/press/radio simultaneous coverage of Apollo exploits by popular Mexican commentators” as well as the tracking station located in Guayas.\textsuperscript{18}

\textsuperscript{15} Richard Philips to U. Alexis Johnson, 11 August 1969, Box 17, Entry P 243, RG 306, NARA.
\textsuperscript{16} US Embassy Rawalpindi to State Department, undated, Box 307, National Security Council Files: Subject Files, RNPL.
\textsuperscript{17} US Embassy Tehran to Secretary of State, 3 September 1969, Box 307, National Security Council Files: Subject Files, RNPL.
\textsuperscript{18} US Embassy Mexico City to Secretary of State, 6 September 1969, Box 307, National Security Council Files: Subject Files, RNPL.
When US officials approached the Hungarian government about a potential astronaut stop in Budapest they were turned down. When the Hungarian Deputy Minister gave the announcement he explained: “the planned world tour has propaganda character and creates unwanted pretenses to which we do not want to contribute...we cannot contribute to the strengthening of such pretenses.” The State Department believed that the Hungarian government likely coordinated their decision with Soviet leadership. Nixon understood the reason why the Hungarian government declined but he found “the language employed by the Hungarians invidious and uncalled for.” Kissinger explained to Secretary of State William Rogers that after Hungary’s announcement the president wanted to review “the substance of possible additional bilateral arrangements with the Hungarians” before any additional negotiations were made, which suggests that Nixon was considerably offended by the statement. Although Nixon pressed for a visit to Poland as an alternative to Hungary, the Department of State worried that this gesture would make it “look as if we were shopping for an East European stop” and that if Soviet leadership prevented Hungary from receiving the astronauts it was unlikely that permission would be given to Poland.

THE TOUR

The Giantstep team arrived in Mexico City at 11 AM on Monday September 29th, to an elaborate reception at the airport followed by a parade through the city where, as

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19 US Embassy Budapest to Secretary of State, September 1969, Box 307, National Security Council Files: Subject Files, RNPL.
20 Henry A. Kissinger to William Rogers, 19 September 1969, Box 307, National Security Council Files: Subject Files, RNPL.
21 Henry Kissinger to Richard Nixon, Undated (September 1969), Box 307, National Security Council Files: Subject Files, RNPL.
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Simon Bourgin recounted, “half the kids in town chased us through the police lines and in and out of the cars, with everyone wanting to touch, touch and to embrace.” The Mayor gave the astronauts keys to the city during a ceremony at City Hall, where there were large Mexican and United States’ flags constructed out of flowers and people dressed in colorful costumes cheered while a band played the Mexican National Anthem. This was followed by a dinner hosted by President Gustavo Diaz Ordaz and two hundred social and political leaders. According to one report, the president chided the crew “on what he described as the injustice of the Nixon administration’s intensive hunt for dope smugglers at Mexican border crossings” and “voiced his nation’s resentment of “operation intercept,” the crackdown on marijuana that has bottlenecked crossing points and causes severe economic damage to Mexican border towns.” Billed as the “Conquistadors of the Moon,” the Apollo 11 crew enjoyed an overall enthusiastic reception in Mexico. Robert McBride, the Ambassador to Mexico, commented that visit was “highly successful” and that it was “best USIS operation that I have seen in my many years in the Foreign Service.”

Departing the next day at 9 AM, the crew flew south on President Nixon’s plane Air Force 2 to Bogota, followed by a short stop in Brasilia to avoid flying over Bolivia, and then on to Buenos Aires and Rio de Janeiro. The USIA office in Colombia reported to Washington “For a day—and this is a relief—everyone loved the United States once

23 “3 Astronauts Leave Mexico For Colombia” 1 October 1969.
24 This designation for the Apollo 11 crew could have been taken as either a criticism of the United States as an imperial power or as local association of explorers; it is unclear from the context. The crew was often compared to European colonialist explorers, both by US government officials as well as the media in many foreign countries. Examples in Portugal suggest a positive correlation as one would expect. The Sun, Baltimore “Apollo 11 Crew Rests in Norway” The Sun (Baltimore), 12 October 1969, 4; Simon Bourgin to Mirada Bourgin Box 4 #1633 Folder “Astronaut Tours/Letters to Ely Echo,” BUA.
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again. After a day in each city they then were off to the Canary Islands for a small break before starting the European leg of their tour. In a letter to his wife, Simon Bourgin captures the experience of the tour up to that point:

Are we really going do this (the schedule) 23 more times? That’s impossible. Rio was bizarre. Remind me to tell you. An unofficial official lunch that was an epic. King of publishing empire hosted instead of Foreign Office, and host’s giant Dalmatian ate Mike Collin’s desert. Otherwise except for swim in Copacabana Hotel pool I hardly got out of hotel. Everything very smooth with party. I had long talk with Neil [Armstrong] coming into Rio about moon landing and mission. Fascinating. Girls (wives) very much enjoying themselves. 27

Madrid was the first stop in Europe. Initially there were questions about visiting Spain because of the dislike of Franco’s regime throughout the rest of Europe and the potential risks to European political and public opinion of the United States. But, the crew did visit Madrid and received what the Chicago Tribune claimed was the largest reception foreigners had been given since President Eisenhower visited the country in 1959. The astronauts visited Columbus Square to lay wreaths at the Christopher Columbus monument and acclaim Columbus as their colleague in exploration. Like many stops on the tour, the streets were decorated with national and American flags and filled with cheering crowds. In advance of their visit, the weekly top-circulation picture magazine, La Actualidad Espanola distributed two posters of the astronauts superimposed in Spanish scenes. The first was a parody of a bullfight cartel while the other depicted the crew in the Spanish matador’s “traje de luces,” or “suits of lights.” 28 This gesture of

26 USIA Bogota to USIA Washington, 31 October 1969, Box 21, Folder “Giant Steps,” Entry 243, RG 306 NARA.
27 Simon Bourgin to Mariada Bourgin, October 1969, Box 4, #1633, Folder “Astronaut Tours/Letters to Ely Echo” Simon Bourgin Collection, BUA.
adoption of the Apollo 11 crew into local costumes or traditions, as well as the crew’s efforts to link their mission with local heroes or history, was ubiquitous throughout the tour. It reflected US government officials’ interest in making the lunar landing “for all mankind” and well as the interest abroad in participating in the event.

On their next stop in Europe, the crew enjoyed “warm autumn sun and clear blue skies” in Paris and a welcoming to rival Lindbergh’s historic reception in France. As they had on others stops along the way, the crowd wanted to touch the Apollo 11 crew during the motorcade, and the public enthusiasm was perhaps the most significant effect of the stop. The USIA post reported, “With the astronauts on view in the flesh, the exploit was instantly brought back to human terms. Armstrong’s boyish face, his unfailing good nature, his lack of pretense helped to reinforce the feeling that the moon landing was a human feat that, for various good reasons, was first accomplished by Americans.” Furthermore, the astronauts “succeeded in dispelling the notion that the moon landing was simply the result of the US winning a space race and they emphasized that the moon landing should serve the cause of peace by giving all humanity a new perspective on our planet and its problems.”

After Paris it was on to Amsterdam and then Brussels. In addition to the traditional motorcade, the crew embarked on a “watercade” down the canals of Amsterdam. Thousands of Amsterdamers saw the astronauts in person, while another estimated 3 million watched the event on television in the Netherlands as well as Austria.

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29 Simon Bourgin to Mariada Bourgin, October 1969, Box 4 #1633, Folder “Astronaut Tours/Letters to Ely Echo” Simon Bourgin Collection, BUA.
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Belgium, Ireland, Luxembourg, Spain, Switzerland, Tunisia and Yugoslavia. According to a number of sources, the astronauts’ motorcade in Belgium evoked memories of the Allied Liberation.

The Giantstep party’s next stop was Oslo. As their motorcade drove into the city the streets were clogged with people and “the Norwegian Government, from his Majesty on down, took great pride in the fact that the Astronauts were visiting Norway (and only Norway of the Nordic countries).” The astronauts took a short break in Norway and helicoptered to the King’s hunting lodge in the mountains before flying to Germany. In Norway, as in many countries the astronauts visited, it was seen as a great honor to be part of the Giantstep tour and was taken as a mark of the country’s significance in geopolitics or United States foreign relations.

After Berlin, the party’s next stop was London where astronaut Michael Collins told Queen Elizabeth and others gathered at Buckingham Palace that he would like to “take all the world’s political leaders up about 100,000 miles, tell them to look back and see how there are no borders and how small the differences between nations really are.” He continued, “The earth seems like a jewel in the sky...it is a shame how people are fouling up the place.” The astronauts were sick by the time they reached London, after undertaking such a hectic schedule. The British press did not respond well to canceled interviews and made critical comments about how “the men who conquered the Moon are finding their world tour has its hazards too.” The astronauts’ wives, on the other hand,

31 US Embassy The Hague to Department of State, 22 October 1969, Box 22, Entry P 243, RG 306, NARA.
33 USIS Oslo to USIA Washington, 31 October 1969, Box 21, Folder “Giant Steps,” Entry 243, RG306, NARA.
received enthusiastic commentary in the British capital. As in a number of cities, a press
conference was also scheduled for the astronauts’ wives. They were asked about their
domestic lives and how their husbands had changed since the flight. One press headline
read: “The Moon Men’s Wives Outshine Weary Husbands.”\textsuperscript{35}

After twenty-four hours in London the party continued to Rome and then
Belgrade, the only city visited in Eastern Europe.\textsuperscript{36} The State Department viewed
Yugoslavia as the most liberal states in Eastern Europe and believed that it might be
moving toward becoming a free-market open society. Josip Tito, the Yugoslav president,
was “avidly interested and well informed on space matters,” according to the US
Embassy in Belgrade.\textsuperscript{37} The police estimated a crowd of a half a million on the
motorcade route, with many waving small American flags, which was a record breaking
welcome according to one Yugoslav official.\textsuperscript{38} During his toast at a luncheon with
President Tito, Armstrong deviated from the prepared text and reflected on his personal
connection to the country, explaining that this visit was a particular pleasure for him.
Armstrong’s first experiment in school, he explained, involved producing a replica of one
of Nikola Tesla’s experiments. The First Lady was related to Tesla and was especially
pleased by the speech.\textsuperscript{39}

The USIA post in Belgrade reported that “The Apollo-11 Astronaut visit served
our foreign policy interests by further demonstrating to both the government and people

\textsuperscript{35} USIS London to USIA Washington, 18 December 1969, Box 22, Entry P 243, RG 306, NARA.
\textsuperscript{36} In Rome, according to the \textit{New York Times} “at the city hall, the arrival of the group coincided with a
demonstration by a group of irate mothers demanding more schools. But, for a moment, the local problem
was set aside as the mothers joined in the applause.” “Rome Welcomes Apollo 11 Crew” \textit{New York Times},
\textsuperscript{37} US Embassy Belgrade to US Embassy Rome, October 1969, Box 23, Entry P 243, RG 306, NARA.
\textsuperscript{38} Apollo 11 Operations Office to Frank Shakespeare, 24 October 1969, Box 1, Folder “INF 2-3 Weekly
Reports- IOR Director to Agency Director 1969,” Entry A1 42, RG306, NARA.
\textsuperscript{39} US Embassy Belgrade to US Embassy Ankara, October 1969, Box 23, Entry P 243, RG 306, NARA.
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of Yugoslavia our friendly interest in the country and providing them with an opportunity to show in an apolitical context the admiration they feel for US achievements.”

Politika, a Belgrade paper, featured a first-page story of the Giantstep tour while the visit was covered in all local papers, many with multi-page features on the astronauts. The newspaper Bora, noted that on the astronauts’ hunting trip with President Tito, Armstrong proved himself to be “a good astronaut but poor hunter (he bagged only five ducks.)” The US Embassy in Belgrade described Tito as an avid outdoorsman so it was not surprising that the astronauts joined the Yugoslav leader hunting to encourage friendship between their two countries, even though Armstrong may not have been an avid hunter himself.

After their stop in Belgrade, the Giantstep party enjoyed a brief visit to Ankara where, according to a Turkish newspaper, “by the time the motorcade reached Ataturk Boulevard, the people on either side of the road were three deep, undisciplined and excited, straggling deeper and deeper into the road in spite of the police motorcyclists who patrolled to keep them at bay.” The newspaper contrasted this reception with the previous year when “anti-American feeling led to the burning of the US ambassador’s car and American sailors being tossed into the sea” whereas the Giantstep tour “produced only smiles and welcome, from the curious and the lunch-break crowd.” According to the United States ambassador, the tour was a “uniquely successful Presidential Mission” and as “an outstanding success from the point of view both of our relations with Turkey.”

40 USIS Belgrade to USIA Washington, 20 November 1969, Box 21, Folder “Giant Steps,” Entry 243, RG306, NARA.
42 “Turkey’s First and Only English Daily” Daily News (Turkey), Undated; Jemima Kallas “American Astronauts Arrive in Ankara,” Box 21, Folder “Giant Steps,” Entry 243, RG306, NARA.
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He suggested that the visit was important factor in improving the image of the United States in Turkey and in emphasizing friendship between the two countries.

From Turkey the crew flew to Kinshasa, their only stop in Africa. In an oral history William Der Bing, a Deputy Chief of Special Events at NASA, recalled arriving in the Congo:

As you go in, there were just mile upon mile upon mile of natives, just grinning. They have a habit of pointing at you. They grin and point. That’s the nature of the way they welcome you, I guess. It’s very primitive looking. The different costumes—the different colors and the different designs—obviously for the different tribes. I felt something occur to me as we were riding down—I suddenly realized how Custer must have felt, you know, in the middle of all that, and thank God, this is the friendly type. But they were just as exuberant....

Der Bing’s account of Kinshasa has clear colonialist undertones. His description of the Congo reads as if it could have been written during the European’s “civilizing mission” in the global south. As noted earlier, a central element of US foreign relations during this period was shaped by liberal developmentalism, which grew out of racial and civilizational hierarchies. Many government officials within the United States viewed populations in the global south as backward and in need of American scientific and technological development.

Other members of the Giantstep party described the welcome as one of the warmest that they had experienced on their trip. According to one report, almost the entire population of the city greeted the astronauts when they arrived and the news coverage of the event was extremely heavy. President Mobutu remarked that the people

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43 Interview with William Der Bing, 2 January 1970, Record Number: 19523, Series: Biographies- NASA Employees, NASA.

“appreciate highly the honor and the privilege that was reserved to them by the US people and government by inscribing Kinshasa as the African stop of your world tour, and they see, in this attention, a new testimony of the sincere and deep friendship which unites your great country to theirs.”45 Similar to the stop in Oslo, and many other cities, the visit was treated as an honor and mark of distinction. A Congolese newspaper noted that the visit was “testimony to the confidence the Congo enjoys at the present time in the eyes of the world” and a recognition of the “privileged place occupied by the Congo in Africa.”46

From Africa the crew flew to Iran and then India and Pakistan. In Bombay alone, more than 2 million people welcomed them to the city, a reception that according to The Times of India, was the “biggest-ever welcome in the city,” surpassing visits from Pope Paul VI and the Shah of Iran. The crew attended a massive reception at Freedom Ground, Bombay’s major public meeting place, where the astronauts climbed the ladder of full-scale 23-foot replica of the lunar module and posed for photographs.47 In Dacca, on their next stop, the Apollo 11 astronauts were again greeted by thousands of people. Although the crowds were generally enthusiastic, a group of political, student and religious leaders called Aldrin a “member of the Zionist movement” and insisted that the Government of Pakistan ban the crew for visiting the country. According to a USIA memo “the rationale of the statement is really a compliment to the astronauts: “we cannot permit America to erase anti-American feelings in the minds of Pakistanis through the American moon

45 US Embassy Congo to the White House, 25 October 1969, Box 21, Folder “Giant Steps,” Entry 243 RG306, NARA.
46 Apollo Operations Office to Frank Shakespeare, 24 October 1969, Box 4, Folder “SP- Space and Astronautics,” Entry Al 42, RG306, NARA.
47 “Moon men touch down to biggest-ever welcome in city” The Times of India, 27 October 1969, 1. in Box 21, Folder “Giant Steps,” Entry 243, RG306, NARA; Apollo 11 Operations Office to Frank Shakespeare, 30 October 1969, Box 4, Folder “SP- Space and Astronautics,” Entry Al 42, RG306, NARA.
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In response, the USIA released a story that stressed Aldrin’s commitment to Presbyterianism and his work with the Boy Scouts. Even with criticisms from some groups, the visit to Pakistan was considered “extremely successful and most productive in terms of serving US Foreign policy interests and USIS objectives in Pakistan.”

On their next stop, in Bangkok, one editorial claimed that “No American goodwill ambassadors have achieved such great success in promoting friendship, good understanding and a feeling of joint responsibility among all human beings as these astronauts.” From Thailand the party flew to Darwin where they refueled and then onto Sydney, Guam, Seoul and Tokyo. In Sydney, according to a telegram from the American Embassy, the “image of United States was enhanced through the personalities and actions of the astronauts themselves” while in Seoul the visit “increased bonds of friendship already strong with Korea, added to strength [of the] image of US as [a] strong ally way out ahead in space effort and by analogy strong in [a] military sense.” In Japan the crew was again greeted by thousands of cheering people, throwing confetti and waving small flags. A USIS telegram from Tokyo reported that the “Astronauts’ visit to Japan was [an] unparalleled success in highlighting and humanizing [the] image of US scientific achievements in space research.” The reception in Japan was so positive that Armstrong

48 Apollo 11 Operations Office to Frank Shakespeare, 24 October 1969, Box 4, Folder “SP- Space and Astronautics,” Entry A1 42, RG 306, NARA.
49 USIA Washington to USIS Dacca, 24 October 1969, Box 15, Folder “SP 10 Apollo 11 [Folder 2/2],” Entry 243, RG 306, NARA.
50 USIS Rawalpindi to USIA Washington, 22 October 1969, Box 21, Folder “Giant Steps,” Entry 243, RG 306, NARA.
51 USIS Bangkok to USIA Washington, 10 November 1969, Box 21, Folder “Giant Steps,” Entry 243, RG 306, NARA.
53 USIA USIS Tokyo to USIA Washington, November 1969, Box 21, Folder “Giant Steps,” Entry 243, RG 306, NARA.
expressed his regret that they were not able to stay longer, especially in a country with such scientific sophistication and strong mass media.\textsuperscript{54}

**AFTER THE TOUR**

Reports and commentary on the tour emphasize that it was a resounding success. In Bourgin’s review, he highlighted that American Ambassadors observed a new flexibility in tackling a “host of problems whose approaches were otherwise frozen.” He went on to explain that “by their modesty, expertise, and warmth the astronauts projected an image of the kind of Americans other nations would like us to be.”\textsuperscript{55} I should point out here what “kind of Americans” these astronauts were. They were white, male, middleclass, and Christian; they did not represent a cross-section of late 1960s American society. Under secretary of State for Political Affairs U. Alexis Johnson suggested “the visits of the Apollo 11 astronauts to many nations... have helped greatly in extending and deepening the sense of personal involvement of the peoples of the world in our space program.”\textsuperscript{56} It is apparent that the Giantstep tour drew record crowds of people and prompted extensive media coverage around the world, and that is also eased political relationships between the United States and many countries.

In addition, the meaning of the Apollo program in the context of foreign policy had shifted. By the late 1960s and early 1970s American technology applied in space and in the war in Vietnam were often contrasted. The commentary on the astronaut tours by a Czechoslovak broadcaster demonstrates this theme: “this is the America we love, one so

\textsuperscript{54} William Weathersby to Henry Loomis, 15 December 1969, Box 4, Folder “SP- Space and Astronautics,” Entry A1 42, RG 306, NARA.

\textsuperscript{55} NASA Authorization for Fiscal Year 1971 ‘Hearings before the Committee on Aeronautical and Space Sciences United States Senate’ Ninety-First Congress second session on S. 3374. 11 March 1970.

\textsuperscript{56} Ibid. 1010.
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totally different from the American that fights in Vietnam.” Although in the Sputnik era, space shots were employed in large part to demonstrate military technological capability, by the end of the Apollo program the symbolism of space feats, at least as discussed amongst State Department and USIA officials in reference to international relations, had transferred from one of technological might and strength, to one about humanity.

Shortly after the Giantstep tour ended, Neil Armstrong joined Bob Hope and a host of other celebrities on a USO tour to entertain American troops abroad. In Bangkok a soldier challenged the value of the Apollo missions and asked Armstrong to explain why the US is so interested in the Moon instead of the conflict in Vietnam.” Armstrong explained, “The nature of the American system is that it works on many levels in many areas to try to build peace on Earth, goodwill to men. And one of the advantages of the space activity is that it has promoted international understanding and enabled cooperative effort between countries on many levels and will continue to do so in the future.”

To Armstrong, and many of the people involved in the Giantstep tour, the space program was an essential foreign relations tool that helped to put forward an image of America—one that was peaceful and inclusive—that was sorely needed in 1969, especially with war raging in Vietnam.

CONCLUSION

Astronaut tours and the Apollo program were employed to serve a new aim by the end of the 1960s; they were no longer primarily an illustration of technological capability and scientific prestige, they were utilized to demonstrate that the United States was committed to advancing human experiences, not just to fighting the Vietnam War.

57 James Hansen, First man, 580.
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Whether or not landing on the Moon and the post-flight tour achieved this goal is undoubtedly up for debate. But, what I hope to emphasize here is that US government officials employed this large-scale technological program to serve a somewhat different foreign policy goal than it was originally intended to by the Kennedy administration in the early 1960s. Just as the geopolitical and domestic contexts shifted over the course of the 1960s, so too did the rationalizations for the value of the Apollo program within the State Department and at the USIA.

In the earlier use of the space program in public diplomacy, officials highlighted technological expertise and either put hardware on display or encouraged the astronauts to primarily share scientific knowledge, hoping that science and technology would be viewed as apolitical and therefore be more politically potent. But by 1969, the role of the astronaut in foreign relations had transformed. The Apollo 11 crew were not science lecturers, as many early tours had been, they instead were sent around the world to represent the United States— and it should be emphasized that this was a particular kind of United States, one of white, clean-cut men who were Christian, middle class and faithfully served their president. This image of ‘Americans’ or ‘America’ was clearly a contrast to the America that was described in the parody memo at the beginning of this chapter. What does it mean for a government to be represented by citizens that are one gender, one race, one religion and one social class? Could this incongruity tell us something about how the country was coping with social unrest in the 1960s? Did public diplomats sell a homogenous image, in part, as a reaction to a politically and racially heterogeneous country? Although these questions may not have firm answers, it is apparent that this contrast – between the astronauts and the country they were
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representing-- illuminates the discontinuity between the ‘image’ of America that
government officials hoped to portray abroad by using the space program in public
12055 is a 3.2 billion year old Pigeonite Basalt. Studies have concluded that it is a porphyritic rock with a medium-grained variolitic to subophitic groundmass and it is made up of the minerals pyroxene and plagioclase. This rock, as well as other basalts, is dark in color and was solidified from molten lava. Scientists believe that the material in 12055 was melted at depths of at least 150 to 250 kilometers underground before it was shot to the surface by a volcanic explosion. The rock has a slightly reddish hue, which indicates that it has less titanium than other similar samples. 12055 is also a moon rock, which was displayed at the 1970 World’s Fair in Osaka, Japan. Geological details may provide a satisfactory description of the moon rock, yet they fail to explain why fairgoers came by the millions to see the rock in the summer of 1970, and what they also saw when they gazed on its craggy form. The technical specifications of the rock- its make-up, its size, its shape- can only reveal so much about this object. Although it had a commonplace appearance at a fair that boasted some of the most cutting-edge scientific, engineering, art, and architectural innovations, this moon rock became the most popular exhibit at the most popular World’s Fair to date.

2 The popularity of the rock is difficult to claim. My suggestion that the rock was the most popular exhibit at the fair is based on the commentary of the display at the time. In 1970 the rock was dubbed the most popular exhibit by numerous newspaper articles and in USIA reports. The limited capacity of the US pavilion restricted the number of people who could actually see the rock. For this reason, it is possible that more people saw other exhibits at the fair. Even so, the rock was extremely popular in discourse about the fair, at the time and in retrospect, even if the visitor count may not have been the highest at the fair. Jack Masey, the Deputy Commissioner General of Design for the US Pavilion, reflected that “Without question, the Moon rock on display in the space exhibit was not only the most popular object displayed in the US Pavilion, but was the most popular object of Osaka’s Expo ’70.” Jack Masey and Conway Lloyd Morgan, *Cold War Confrontations: US Exhibitions and Their Role in the Cultural Cold War* (Baden, Switzerland:
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Reactions to the World's Fair exhibit, in addition to the other moon rock exhibits that the United States mounted around the world varied, but interest in the rocks was widespread in the late 1960s and early 1970s. By the end of 1970, more than 41 million people attended moon rock exhibits in over one hundred countries. The USIA suggested that these exhibits "brought some of the experience of [the lunar landing] to the home ground of millions." Newspapers, journals, and millions of exhibit goers offered both complimentary and critical commentary on the displays, the rocks, the significance of the Apollo program, and the massive resources that the United States utilized to bring the rocks back to earth.

By 1972, Apollo astronauts on six missions had brought back roughly 842 pounds of lunar rocks core samples, pebbles and dust from the Moon. This material not only helped advance scientific understanding of the Moon, it became a political instrument in the hands of the Nixon administration. Built around a case study of the exhibition of a moon rock in Osaka, this chapter presents a more detailed account than earlier chapters of the interplay of US government officials' motivations for displaying artifacts of the space program abroad, as well as a foreign public's reception of these efforts. While the


3 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1970, 82.
4 Apollo 11 Operations Office to Frank Shakespeare, 10 October 1969, Box 3, Entry A1 42, RG 306, NARA.
5 Archival material, American and Japanese newspapers, popular Japanese publications, exhibit exit interviews, oral histories of Japanese visitors, and a home movie of the exhibit, illustrate that the moon rock's popularity was a product of the interplay between the production and consumption of the American space program. Historian Glen Asner has observed that, "historians who consider the role of spaceflight in popular culture tend to focus more on the spectacle of space technology and its presentation (in museums,
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The chapter focuses primarily on the Osaka exhibit, other political uses of moon rocks—
including President Nixon’s gifting of rocks to foreign heads of state as well as other
exhibits around the world—are also discussed.

Scholars who have analyzed space artifacts as a way to shed light on the co-
production of culture and technology usually set their sights on big-technology, like the
Saturn V or the Lunar Module. It is almost paradoxical that a relatively small and plain-
looking rock, like the one put on display in Osaka, could become a powerful symbol of
one of the largest and most complex technological programs of all time. But by 1970,
moon rocks were the newest, most exciting artifacts in the USIA’s space propaganda
arsenal. At the beginning of the space age, as earlier chapters have investigated, public
diplomats sought to impress their audiences with high-tech, cutting-edge space
spectaculars. Space was marketed, in the early 1960s, to excite, attract and convince the
world of the legitimacy of United States leadership. But, space exhibits, films, and
photographs, by the 1970s, were no longer employed to demonstrate American power
and authority. Instead, they became tools for fostering connections, and signaling the
universal values and mutual interests of the United States and the world. The moon rock

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movies, books, television, etc.) than on the spectators.” According to Asif Siddiqi, although there have been
a number of studies on the role of consumerism in the history of technology, space historians “have
traditionally focused on production rather than consumption in chronicling the history of spaceflight.” See,
Glen Asner, “Space History from the Bottom Up: Using Social History to Interpret the Societal Impact of
Spaceflight,” in The Societal Impact of Spaceflight, ed. Steven J. Dick and Roger D. Launius (Washington,
Claims: Toward a Global History of Space Exploration,” 425-443.

For a discussion of the relationship between space artifacts and engineering programs see, Martin Collins
and Douglas Millard, ed. Showcasing Space (London: Cromwell Press, 2005) 1-6; Donald MacKenzie,
Inventing Accuracy: An Historical Sociology of Nuclear Missile Guidance (Cambridge, MA: MIT Press,
1993); and David Mindell, Digital Apollo (Cambridge, MA: The MIT Press, 2008).

display in Osaka was part of this shift in the USIA’s approach to space diplomacy to recast space exploration as an endeavor on a human scale.\(^8\)

**WORLD’S FAIRS**

Held on an 815-acre site in the hills near Osaka, Expo ’70 was the first world exposition in Asia. The fair marked the 2600\(^{th}\) anniversary of Japan, the centennial of Japan’s participation in international commercial markets, and the rise of unprecedented economic growth and development in the country. Over the course of 183 days—from March 15th to September 13\(^{th}\) -- the fair drew roughly 64 million visitors, making it the most heavily attended exposition in history. Out of these 64 million visitors, 62 million were Japanese at a time when the total population of Japan was 103 million. On an average peak day, 641,000 to 835,000 people crowded the 118 pavilions at the site, a turnout that was twenty-five percent higher than the 1967 Montreal Expo. Nearly eighty countries, ten provincial and municipal governments, four international organizations, and thirty-two domestic exhibitors participated in Expo ‘70.\(^9\)

World’s fairs had a long history by 1970, initiated by the 1851 Great Exhibition in London. Often referred to as the Crystal Palace Exhibition, the success of this expo spurred a tradition of world’s fairs that held a significant place within the cultural and \(\text{\footnotesize \^{8}The response to the Moon rock at the World’s Fair parallels the technological enthusiasm expressed by Americans in the nineteenth and twentieth century, but the humbleness of the rock’s appearance presents a striking contrast to the large scale engineering feats that traditionally stirred such reactions. Even though the display’s cultural context, the rock’s relationship to science and technology, and its lackluster appearance indicate that the popularity of the Moon rock at Expo ’70 differ from Michael Smith and David Nye’s analysis, this paper builds on their insights about technological enthusiasm. See, Michael L. Smith, “Selling the Moon” 177; David Nye American Technological Sublime (Cambridge, MA: The MIT Press, 1994).}


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political life of Europe and the United States by the second half of the nineteenth century. Exposition authorities often focused on scientific and technological innovations as a way to connect understandings of national progress with scientific and technological achievements. Paola Antonelli, Senior Curator at the Museum of Modern Art in New York, likens world’s fairs to the Olympic games, suggesting, “They were Olympic games in which countries competed not with sports, but rather with technology and science, not with muscles and training, but with innovation and imagination.” The fair at Osaka was no different. The Soviet pavilion soared high above all the others and was filled with precision instruments, models of spaceships, and a hydro-jet liner; American exhibit planners put US space accomplishments prominently on display. The United States and the Soviet Union used Expo ‘70 as a venue for promoting their technological preeminence to the world in the midst of the Cold War.

Planning Stages

Planning for the United States Pavilion began in 1967. The United States Congress appropriated 10 million dollars for the pavilion construction and programming, and appointed Commissioner General Howard Chernoff as the director. The USIA led the organization of the United States’ exhibition. USIA exhibit designer Jack Masey became the Deputy Commissioner General for Planning and Design and Davis, Brody, Chermayeff, Geismar and de Harak became the design team for both the architecture and the exhibits of the pavilion. Masey had led the design team for the American Pavilion at

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the 1967 World’s Fair in Montreal as well as the 1959 American Pavilion in Moscow, which prompted the famous “kitchen debate” between Vice President Nixon and Soviet leader Khrushchev.\(^\text{13}\)

The theme of the United States pavilion, ‘Images of America,’ was meant to familiarize fairgoers with different aspects of American culture, science and technology. Chernoff explained that his team, “came here with two goals: to show the Japanese more about America than they have ever seen and to show the Japanese that Japan and America have a lot more in common than they thought.”\(^\text{14}\) Expo ‘70 was not staged for the whole world: ninety-seven percent of visitors were Japanese. Although newspapers from every corner of the earth reported on the exposition and seventy-six nations participated, for the most part the audience was Japanese. The organizers of the US pavilion recognized that this would be the case and planned their exhibits accordingly.\(^\text{15}\)

In January 1968, Robert Sullivan, a USIA employee, observed that the “experience gained at EXPO-67 suggests strongly that a limited amount of market research could be useful in planning for an effective US exhibit at the Osaka Fair. At bottom, an exhibit is a product. Selling a product requires knowing what the consumer expects and wants.”\(^\text{16}\) The USIA hired Behaviormetrics, Inc. to conduct two companion studies, one in New York and one in Japan. The reasoning behind conducting a survey in New York, according to the market research team, was based on the grounds that


\(^{16}\)Robert Sullivan to Miss White, 11 January 1968, Box 23, Folder “Public Opinion & Inquiries,” Entry 2054, RG 306, NARA.
Japanese people living in the United States were “in a much better position to make recommendations about a United States exhibition, as well as to provide a general background of attitudes towards the United States based on actual knowledge and experience, than Japanese who have never been to this country.” The report stressed that “one area commanded universal assent, and this was the area of Science and Technology. Whether asked in free response question, pre-coded rank order form, or in other ways, this area invariably came out on top by a wide margin.” And, within the areas of science and technology, space and automobiles were the two most popular interests. The study conducted in Japan also reported that science and technology were “the overwhelming first choice, with Space Research the dominant category within it.” Fairgoers, the report concluded, wanted to see space artifacts.

When Vice President Spiro Agnew heard about the United States Pavilion at the World’s Fair, he wrote to NASA Administrator Thomas Paine on the importance of exhibiting the country’s space accomplishments in Osaka. He suggested, “that our Pavilion in Osaka should take full advantage of this unprecedented opportunity for reaching millions of Asians directly by presenting the most comprehensive and dramatic space exhibit that is possible to assemble.” The attention of Asia, he proposed, would be focused firmly on the Expo, making it a key opportunity to relay a positive image of the United States abroad, and redirect negative attention brought on by American involvement in the Vietnam War. Agnew asked to be briefed on the proposed scope of

17 Study prepared by Behaviormetrics, Inc for USIA, 15 April 1968, Box 26, “Study-Osaka Exhibition Depth Interview,” Entry 2054, RG 306, NARA.
18 Ibid.
19 Ibid.
20 Spiro Agnew to Thomas Paine, 30 September 1969, Box 335, Folder “United States Information Agency,” Secretary of the Smithsonian (hereafter RU 99), Smithsonian Institution Archives, Washington, DC.
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the space exhibits by the United States Pavilion organizers and suggested that the pavilion display a moon rock because “the Japanese have in recent months manifested an intense interest in seeing samples of lunar surface material.” Agnew was attuned to the political potential of exhibiting the moon rock in Osaka, and his letter indicates that he wanted to make sure NASA and USIA officials were as well.

Agnew not only understood the political potential of a moon rock at Expo ’70, he recognized that moon rocks could support American foreign interests in other ways as well. During a diplomatic tour of Asia to discuss the Nixon Doctrine, Agnew carried moon rocks as goodwill gifts for each leader in the nine countries he visited. New York Times coverage of the trip suggested that the gifting of these rocks established a mood of friendship, which aided the discussion of other foreign relations matters. Shortly after the Apollo 11 mission, President Nixon, along with his National Security Advisor, Henry Kissinger, and USIA and State Department officials, had decided to give moon rocks to foreign heads of state, along with the flown miniature national flags, as a diplomatic gesture. The plaques were made gift included specs of moon rock particles--0.05 grams, scarcely more than a grain of rice- embedded in Lucite and mounted with a plaque that read: “Presented to the People of X by Richard Nixon, President of the United States of America.” The miniature national flags that had been flown to the moon were mounted alongside the Lucite ball. Agnew delivered the gifts on behalf of the Nixon administration to each of the leaders he visited on his trip.

Many of the responses to the rocks were quite positive, and Heads of State were enthusiastic about the tiny flags in particular. For instance, the Algerian president

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21 Ibid.
23 Theodore Eliot, Jr to Henry Kissinger, 7 May 1970, Box 2965, Entry 1613, RG 59, NARA.
expressed special appreciation that the Algerian flag had been flown to the Moon, especially given the lack of diplomatic relations between the two countries and he suggested that it “underlined the universality of the American space program.” State Department officials expected that many of these plaques would be placed in public spaces. President Josip Tito placed the plaque in the Yugoslav history museum, which according to the American Embassy in Belgrade was “probably [the] most visited secular shrine in the country.”

EXHIBITING SPACE EXPLORATION AT EXPO ‘70

The United States Pavilion was a cable-stiffened pneumatic dome that the media often described as a “Band-Aid” or “giant pincushion.” Based on a concept first developed by NASA in 1967, the 465-foot-long by 274-foot-wide dome had an understated appearance from the outside, but was open and airy inside. It housed exhibits on photography, American painting, sports, space exploration, architecture, folk arts, and contemporary art. The USIA selected these exhibits, in part, because of their perceived translatability to the Japanese audience.

Designers created a prescribed path that would take visitors through each part of the pavilion. The path was wide enough so that visitors could stop and spend more time viewing particular exhibits that were of interest to them. The space exploration area was the last and the largest exhibit fairgoers would come upon. A full-scale replica of the

24 Ibid.
25 US Embassy in Belgrade to the Secretary of State, 25 June 1970, Box 2965, Entry 1613, RG 59, NARA
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Apollo 11 landing site greeted visitors as they entered the space exploration hall. The USIA worked closely with NASA to make sure the replica mirrored what the visitors would have seen on their television sets when they watched Buzz Aldrin working with a core sample device while Neil Armstrong took pictures of him. The landing simulation included a stiffened American flag, spacesuits in position and a Lunar Module. Apollo 8, Gemini 12, Freedom 7, spacesuits, and satellite mockups hung from the ceiling and space food samples of the first meal on the Moon- including peaches, pineapple grapefruit drink, sugar cookie cubes, bacon squares, and coffee- demonstrated the human side of space exploration. Chernoff stressed that using “real” or “authentic” space artifacts was of crucial importance to the overall success of the pavilion. “Space,” he explained, “is the biggest here... it’s all most people talk about,” and for this reason the space display at the United States Pavilion should receive the highest priority attention. After visiting a space exhibit in the Sapporo Park Hotel, Chernoff told the designers that they should make sure that original artifacts were displayed in Osaka. He reflected, “the Japanese will have had enough of mock-ups by the time we open.”

Representatives from the USIA asked NASA staff and astronauts to lend artifacts to the exhibit. They hoped for personally owned flight-flown items, like Thomas


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Stafford’s jingle bells and Willy Schirra’s harmonica, which would portray the human dimension of the space program. The Bible verse read aboard Apollo 8 was of particular interest to USIA organizers because, as Masey explained, “We feel certain it would be one of the outstanding attractions in the exhibit for both the Japanese public and foreign visitors to Expo ’70,” since “thousands of them undoubtedly listened to the message read from this book.” By exhibiting the Bible, space food and personal flown items, the pavilion organizers hoped to give visitors a sense of the experience of being an astronaut and living in space. As Masey later reflected, “Authenticity was in the design team’s view essential to the success of the whole presentation, which would conclude with the most authentic object of all, a sample of the moon rock.”

The Fair Opens

When the 1970 World’s Fair opened in March, massive crowds lined up at the American Pavilion, which prompted officials to extend pavilion hours. From the moment the fair opened in the morning, until it closed at night, a continuous long line snaked from the entrance of the pavilion. The Mainichi Daily News explained, “ Thousands of people join the throng in a long queue waiting for entrance, taking the attitude that two to three-hour wait ‘can’t be helped.’ Almost all of them are there for a glimpse of the first

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souvenir from space, the moon rock." Unlike the very spacious Soviet pavilion, the United States pavilion was small and had a very limited capacity, making demand higher and lines longer. One man explained why he decided to wait in a long line, "We cannot return home without seeing the moon rock." On one of the busiest days the Expo had seen, visitors waited in a 1,500-meter-long line for four to six hours to gain admittance to the American Pavilion.

The media often compared the American and Soviet Pavilions in their coverage of the fair. An article in Kobe Shimbun, a Japanese newspaper, claimed that the United States was "the winner in space competition" with the Soviet Union because its displayed artifacts were real. "In the end," the article noted, "it’s the impact of real things. The Soviets also have a space exhibit. But they are models and cannot compare with the real Apollo." When comparing the American and Soviet pavilions, reporters and visitors often took note of the different exhibit styles each employed. In an article for the Japan Times, Masaru Ogawa wrote, "The casual and low-posture approach of the American exhibitors was apparently appreciated by the Japanese viewers... The Soviet Union Pavilion was overwhelming- in the sense, of course, that there was an obvious effort to ram 50-odd years of Soviet communism down the visitors throat with one great push."

An American Embassy telegram reported to President Richard Nixon that when the Expo officially opened, the media said "US was [the] ‘star’ pavilion, drawing approximately 90,000 visitors to the Soviet’s about 70,000 and the Japanese National Pavilion just a

little less.” The coverage of the fair, according to the telegram, focused on “the ‘draw’ of [the] moon rock and [the] ‘actual’ hardware in [the] US Space Exhibit.”35

Space at the Fair

Space exploration images and themes saturated all corners of the fair grounds, not just the exhibit halls of the American and Soviet pavilions. The official Expo guide’s description of central theme of the fair was buttressed by a large image of the Apollo 8 Earthrise photograph. Standing in the center of the fairground a huge 70-meter tall structure with three faces, 25-meter long arms, and 11 meters in diameter “Golden Sun” became the most prominent landmark of the fair. The tower housed an exhibit on the evolution of man, which dealt with the origins of life on the subterranean level and was crowned by a display of the “Universe” at the top. According to the Expo guide, fairgoers could be propelled “through the solar system, along the Milky Way and out into the further reaches of space” if they toured the structure. Space exploration was also an important feature at Expoland, the amusement park within the World’s Fair. Five large balloons greeted visitors, representing unknown planets, at the entrance of Expoland. Rides included a Space Station atop a space-rocket-like tower, 35-meters in the air, and the Astrojet, a ride that simulated taking a trip to outer space.36

Some of the Japanese private pavilions featured space-related themes and exhibits as well. The Mitsui Group built a dome where visitors could take a “trip into outer space

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36 Expo '70 Official Guide (Suita, Japan: The Japan Association for the 1970 World Exposition, 1970)
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and the world of creation.” In this pavilion a series of projectors, electronic equipment and special effects were designed to create the sensation of traveling in space. The Expo guide’s description of the Hitachi Group pavilion opened with the question: “ever want to fly a flying saucer?” The pavilion included a “sky lobby” and a computerized flying simulation. Various Japanese private pavilions’ food concessions themed their menu items on space exploration. Visitors to the fair could dine on a “Space Course,” “Apollo Curry and Rice,” “Apollo 12 Rice Cake” and “Apollo Lunch.”

A Home Movie of the Expo ‘70

A home movie taken by a Japanese family of four offers a lens onto what captured the average visitors’ attention when they entered the fairground. When the videographer entered the United States pavilion, the camera zoomed in on the moon rock. After scanning the photography exhibit that depicts everyday life in the United States, the film then moves on to highlight a number of the other areas of the Pavilion. Shortly after the film captures other parts of the pavilion the cameraman’s focus shifts back to the space exhibit with the Lunar Module and satellites hanging overhead like disco balls. The next scene is another close-up of the moon rock. As the picture zooms out to show the moon rock exhibit in its entirety, it shakes slightly, an indication that the footage was taken by a handheld video camera. The film shows how the case with its pronged stand displayed the moon rock as if it were a large jewel as opposed to a craggy stone. Next, the videographer captures the moon rock from another angle and then pans up and down the rock to capture every detail of its surface. At the very end of the film there is a brief close-up of the mother and son, a reminder that this is a home movie, shot to record

37 Ibid.
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memories of a family’s visit to the fair. This home movie offers a rare glimpse into a visitors’ perspective. The moon rock clearly captured the cameraman’s attention more than any other object in the pavilion, which expresses unfiltered fascination or curiosity with the stone.\textsuperscript{38}

"The Biggest Single Attraction"

The \textit{Shukan Shonen}, a weekly Japanese youth magazine, featured an article that described what visitors would see when they toured the American pavilion. "You pass through a long, concrete tunnel and enter the light, airy exhibit area that looks like a gymnasium... pay attention overhead," instructs the author of an article. "Go down a flight of stairs,” he continues, “and you’re in the space exhibit area. Your pace quickens unconsciously."\textsuperscript{39} The article describes scientific satellites hanging from the ceiling, the \textit{Gemini 12} capsule, a lunar surface mock-up, space suits, food, and equipment. He explains, "The biggest single attraction of the Expo 70 Osaka Exhibition is the “Moon Rock.” There are people who practically run out of the US Pavilion once they’ve reached this spot."\textsuperscript{40} This popular publication’s enthusiastic description of the moon rock parallels much of the Japanese media commentary during the fair.

The press coverage of the moon rock, by both the Japanese and foreign media, was extensive before and during Expo ‘70. Most articles that discussed the American Pavilion highlighted the moon rock display above other exhibits. The \textit{Japan Times} predicted, "Of course the key exhibition, and probably the most popular, will be the

\textsuperscript{38} Home video footage from the private collection of Greg Yermakov, 1970.
\textsuperscript{39} Yukio Kawahara to the American ambassador, 8 August 1970, Box 21, Folder “Press Relations,” Entry 2054, RG 306, NARA.
\textsuperscript{40} Ibid.
display of an actual sample of moon rock which was obtained by American astronauts on their lunar mission. Before the Expo opened, a substantial percentage of articles on the fair featured the image of the moon rock or Apollo 8 spacecraft, while descriptions of the American Pavilion often started off with information about the size, rarity, and importance of the moon rock. During the fair newspapers featured descriptions of the American Pavilion’s space exhibition accompanied by images that included captions like, "To get in the US Pavilion for a look at the moon rock is one of the hardest jobs at the EXPO site." The media’s emphasis on space exploration, and the moon rock in particular, sold space artifacts as the stars of the fair. Although there was a preexisting enthusiasm for space exploration in Japan, the efforts of the USIA along with the media’s coverage of the pavilion boosted the image of the moon rock as the ‘must see’ artifact at the fair.

With 8,000 new visitors pouring into the pavilion every hour, traffic jams quickly formed in front of the moon rock case. New York Times art critic John Canaday commented that the entire structure of the American Pavilion, “for 999 visitors out of 1,000 is only a shelter for a piece of moon rock... the US Pavilion might just as well be cleared right now of everything but the moon rock, which would make room for the crowds that want to see it.” Charles Lynch of the Ottawa Citizen agreed. “The Japanese are fascinated by a hunk of the Moon,” he explained, “and the US could have skipped building a pavilion and just done the moon bit, and dominated the fair.” Even in foul

weather, he continued, a huge line remained outside the United States Pavilion while no one waited to get into the Soviet Pavilion. 45

MESURING PUBLIC OPINION

The USIA hired The International Research Association (IRA) to undertake a study on visitors' reactions to, and impressions of, the United States Pavilion. Over the course of a week in August, the IRA interviewed visitors waiting in line at the pavilion and visitors leaving the pavilion. Close to 1,400 interviews were taken by a multilingual staff covering such topics as what pavilions had been visited, exhibits of interest, expectations, disappointments, and comparison of pavilions. When asked what pavilion was the most interesting and impressive, Japanese attendees chose the Mitsubishi Pavilion followed by the United States pavilion, while foreign visitors preferred the American Pavilion. Criticisms of the United States Pavilion were rare by both Japanese and foreign fairgoers.

The IRA reported that Japanese and foreign fairgoers both found the space exploration exhibit the most impressive of the displays within the United States pavilion. While Japanese visitors were primarily interested in the moon rock and the Apollo 8 capsule, foreign visitors commented on the lunar module and other flown space components. Interest in the space exploration exhibit in general beat all other exhibits five to one among men and women. When asked what feature of the space exhibit was the most notable the majority of visitors said the moon rock. When asked what the pavilion conveyed about the United States, the interviewees' responded "American

45 Charles Lynch, "Farewell to Expo," Ottawa Citizen, Box 19, Folder "Press Clippings- Misc.,” Entry 2054, RG 306, NARA.
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achievement in science/technology/space science,” followed by the country’s
“strength/size/greatness/great development/advances.”

DOMESTIC AND INTERNATIONAL EXHIBITS

While the moon rock at Expo’ 70 drew large crowds, additional moon rocks
exhibits around the world attracted millions of people to USIA exhibits. After Apollo 11,
NASA supplied the USIA with six moon rocks to exhibit around the world. This limited
supply prompted the USIA to set up brief displays so that the greatest number of people
around the world to see lunar material in person. In France, for instance, a moon rock
made an eight-city tour around the country. The USIA estimated that 250,000 people saw
the rock in person on the tour while another 30 million watched French television
coverage of the exhibit. Public diplomats viewed moon rock exhibits as “unique in
[their] effect and immediate impact.” Within the first year, millions upon millions of
people lined up to see this lunar material in USIA organized events on each continent.

The USIA’s first priority exhibit location was Moscow. Moscow authorities lifted
their general ban on Apollo events for the moon rock display, which allowed over
100,000 people to see the rock during its eleven-day exhibit. This rock was shown as part
of the Education USA exhibition already organized for the Soviet capital. The second
priority showing was in Japan. A USIA official explained, “the post feels that it could
contribute to an atmosphere favorable to the United States in the days before Prime

46 International Research Associates report on visitors’ reactions, 22 Dec 1970, Box 2, Folder “Reactions to
US Pavilion at Expo’ 70 (1970),” Entry 2054, RG 306, NARA.
47 National television coverage of moon rocks was quite popular. The USIA estimated that half of the
metropolitan population of Portugal watched TV programming on a lunar rock. Report to the Congress
from the President of the United States on United States Aeronautics and Space Activities, 1970, 84.
48 Report to the Congress from the President of the United States on United States Aeronautics and Space
Activities, 1970, 84.
Minister Sato’s departure for the important Okinawa negotiations.” For the Japanese exhibit the USIA arranged a private showing in the Imperial Palace as well as an exhibit in the National Science Museum. The third city on the USIA’s priority list was Vienna. Television features on a moon rock exhibit, officials hoped, would reach a wide viewership in Czechoslovakia and Hungary. Roughly 100,000 people attended the moon rock exhibit in Vienna, including the Austrian president, in less than five days. The Viennese press, according to a USIA report, suggested that this exhibit launched “a new era in Austrian-American cultural relations.”

Like the exhibit at Expo ’70, moon rock displays around the world attracted huge crowds that taxed exhibit facilities. In Bogota over 35,000 people saw a moon rock during its fifty-three hour display, at a rate of roughly eleven people per minute. The USIA encouraged its outposts to emphasize the scientific as opposed to the monetary value of the rocks because “placing a price tag on it distorts our objectives and makes security more difficult.” The USIA instructed these outposts to set up mechanical barriers and have police called in for security because the rocks were “a tremendous curiosity and crowd drawer.” At the Bucharest International Fair, the USIA reported, a moon rock and other space artifacts “caused near chaos,” drawing an estimated 300,000 people to

49 Apollo Operations Office to Frank Shakespeare, 21 November 1969, Box 1, Entry A1 42, RG 306, NARA.
50 William H. Weathersby to Frank Shakespeare, 24 October 1969, Box 4, Entry A1 42, RG 306, NARA.
51 Apollo Operations Office to Frank Shakespeare, 21 November 1969, Box 1, Entry A1 42, RG 306, NARA.
53 Henry Loomis to all principal USIS posts, 12 January 1970, Box 25, Folder “Space Exhibit- NASA,” Entry 2054, RG 306, NARA.
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the exhibit. A report from the American Consulate in Angola enthusiastically described how the “Moon rock exhibit was a smashing success...it provided the opportunity for broad contact with the media and local officials, as well as provoking a great deal of general interest about the United States, not only about space exploration.” Like space themed events throughout the 1960s, moon rocks were treated as a useful opening for further foreign relations interactions. US government officials used these exhibits as informal opportunities to interact with local politicians and the media.

The American Consulate in Nassau considered the moon rock exhibit a particularly important instrument of soft power. The United States maintained a number of bases in the Bahamas, including test range sites. With Bahamian independence on the imminent horizon, public diplomats hoped that a moon rock exhibit could encourage the local population to support renegotiation of base agreements when the time came. The exhibit, public diplomats explained, “offers a unique opportunity to work toward this objective [of support] since it can dramatize US space accomplishments and the role which the Bahamas test range facilities played in that achievement.” The open, modernist pavilion that housed the moon rock exhibit also included displays of space themed photographs, models of spacecraft, and information panels on the Air Force Eastern Test Range. By exhibiting a moon rock the United States sought to foster support as well as a sense of local identification with the US bases.

54 Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1970, 84.
55 American Consulate in Luanda to the State Department, 4 September 1970, Box 2965, Entry 1613, RG 59, NARA.
56 American Consulate in Nassau to the Secretary of State, 14 December 1970, Box 2965, Entry 1613, RG 59, NARA; American Consulate in Nassau to the State Department, 21 April 1971, Box 2966, Entry 1613, RG 59, NARA.
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THE VALUE OF MOON ROCKS

The Smithsonian Institution hosted the first lunar rock display in September 1969. At the opening ceremony, Apollo 11 astronaut Buzz Aldrin compared the moon rock to another one of the Smithsonian’s popular artifacts: the Hope diamond. He noted, “If we were to compare the two pieces of matter [the diamond and the moon rock], and make a judgment on their value, since value is usually judged by scarcity, there is no doubt that before us is the most valuable piece of material we have ever seen.” Aldrin’s comparison offers insight into how moon rocks were often judged. To Aldrin, this rock was valuable because it was rare, not because it served any particular function, such as contributing to scientific understanding of the Moon.

Over 8,000 visitors poured into the Smithsonian Arts and Industries building on the national mall to see the moon rock on the opening day, “undeterred by a lone hippie outside who picketed with a sign saying: ‘Down with stone worshipers.” One visitor observed: “Very interesting. It looks like any other rock, but what it represents is what counts.” Another visitor, described by the newspaper as a “long-haired,” remarked perhaps sarcastically, “Well, man, I can now say I have seen God and go to Venice and die.” James Webb, the former NASA administrator, offered comments that were quite grandiose: “The rock represents all the work and all the submergence of personal ambitions that thousands put into the space effort...It proves we have the scientific, technical and managerial capability of expanding our space values for use under the sea, on the land and in the air.” Many visitors to the Smithsonian that day were not impressed.

59 Sanford Watzman, “Moon Rock is Show-Off,” Plain Dealer (Cleveland), 18 September 1969.
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with the moon rock but in general they were glad they had seen it and could tell others about this experience. A teenager from Virginia thought it would be great to recount this experience to his grandchildren someday. “I can say I have seen it” was the most popular refrain at the Smithsonian exhibit.\textsuperscript{60}

A tongue-in-cheek article \textit{New Yorker} highlights the irony of the moon rocks’ popularity. The author of the satire stood in line for two hours with his young daughter at the Smithsonian to see the moon rock on display there. The man behind him in line opined that the rocks “represent the finest single human triumph of all time,” while the man in front of him said “he hated the moon rocks” because of the money that was spent to bring them back to earth. This two opinions reflect much of the debate within the United States about the value of space exploration in general. The author played on the rocks’ lack-luster appearance when he exclaimed:

\begin{quote}
The moon rocks were the greatest thing we had ever seen in our entire lives! The moon rocks were red, green, blue, yellow, black, and white. The moon rocks gave off a slight hum, which cleaned your teeth, and a brilliant glow, which absolved you from sin. They sat on a pillow of the purest Velcro, and people who touched the pillow were able to throw away their crutches and jump in the air.\textsuperscript{61}
\end{quote}

This seeming contradiction—the contrast between the rock’s unimpressive appearance and the significant meaning and value observers ascribed to it—is a common thread in visitors’ reactions around the world. Visitors willingly admitted that the rock’s appearance was unspectacular, yet continued to believe that the experience of seeing it was important in some way. A reporter for the Washington, D.C. \textit{Sunday Star} gave a

\begin{flushleft}
\textsuperscript{60} Herman Schaden, “8,200 View Moon Rock,” \textit{The Evening Star}, 18 September 1969.
\end{flushleft}
paradoxical impression of the moon rock exhibit when he wrote, "A 2-pound moon rock, undistinguished in appearance, but historically unrivaled, will go on display."  

When the New York’s Museum of Natural History put a moon rock on display in November 1969, it attracted a record-breaking crowd. Although the lunar sample was smaller than the one exhibited at the Smithsonian, visitors voiced the same refrain. As thirteen-year-old Gregory Vogel commented, “It looks like a piece of something you could pick up in Central Park, but it’s cool that it’s from the Moon.” One visitor said she expected to “see something, at least with purple spots or green stripes,” and although it did not fulfill these expectations she was glad she attended the exhibit anyway. Another visitor, Janet Wagners, offered reflections that embodied the general reaction to the rock in New York: “Its appearance is rather disappointing but it’s the whole thought of it that’s important. It’s very moving as a symbol.”  

Critique

The Nixon administration’s use of the moon rocks as goodwill gifts also illustrates the tension between enthusiasm and disappointment, between celebration and critique of government spending, which was often trigged by the moon rocks in this period. In August 1969, Art Buchwald, perhaps the most notable or notorious satirist, targeted Nixon’s moon rock goodwill gifts in his column. Poking fun at the assumption that moon rocks could solve, or at least improve American foreign relations, Buchwald describes Nixon, sitting in the Oval office, with a box full of moon rocks on his desk. Henry Kissinger enters the offices, in Buchwald’s satire, and says: “Mr. President, Israeli

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Prime Minister Golda Meir is on the phone and she wants the 50 F-4 jet fighters you promised.” The satirized Nixon responds that he cannot give her the jets because it would “antagonize the Arabs” but he can give her fifty moon rocks in their place. Kissinger replies: “She was hoping you’d say that.” The satire continues with Nixon suggesting taking a box of moon rocks to the Soviet disarmament conference so that when the “Soviets give in on a point, we give them a rock. If, on the other hand, they turn us down on a proposal, we take a rock away. In that way they’ll have an incentive to negotiate with us.” Kissinger, according to Buchwald, thinks the plan is brilliant. “We may stop them from building an ABM (anti-ballistic missile) system after all,” exclaims Buchwald’s version of Kissinger. The satire then touches on all the relevant foreign relations issues of August 1969 and jestingly explains how Nixon plans to solve each of these issues with moon rocks.64

The absurdity of Buchwald’s satirized conversation is undeniable, which is precisely why it is so powerful. Buchwald was the most widely syndicated political satirist in the United States, and his column regularly appeared in 550 newspapers across the country. He used exaggeration, irony and symbolism to expose political inconsistency and once characterized humor “as the most socially acceptable form of hostility.” Nixon was among his favorite subjects. Buchwald once exclaimed, “Nixon was my Camelot. Every day was something new.”65 Nixon, and his administration, was widely adored among satirists, cartoonists and comedians in the late 1960s. According to historian Stephen Whitfield, “It is doubtful whether any postwar American politician ever evoked

64 Art Buchwald, “Promise the Moon—and Give ‘Em Some of It” Los Angeles Times, 5 August 1969, B7.
65 Stephen J. Whitfield, “Richard Nixon as a Comic Figure” American Quarterly, 37, no. 1, Special Issue: American Humor (Spring, 1985) 124.
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so much mirth—much of it angry—as he.”66 Not only did the Nixon administration provide plenty of opportunities for humorists to poke fun, the 1960s saw a rise in the use of political satire in general. In this decade it became “more explicitly cruel, without fear of censorship, stigma, or punishment,” according to Whitfield.67

Buchwald’s moon rock satire, not only reflects the swelling criticism of the Nixon’s administration’s foreign policies, it also illustrates how perceptions of the Apollo program were intertwined with the rising lack of faith in the government’s role abroad, the mishandling of federal funds and the Nixon administration’s leadership. The use of moon rocks as foreign relations objects became problematic because their humble appearance and questionable value provided fodder for people already critical of the administration. These plain looking rocks were easy targets for criticizing government spending as not only wasteful, but also misguided and silly. Because of their seeming similarity to Earth rocks, moon rocks were a problematic icon of high-tech exploration and American prestige.

After Apollo 17, the last lunar mission, President Nixon sent another set of goodwill moon rock plaques abroad. Like the Apollo 11 set, each plaque included a small national flag and a rock embedded in Lucite. The Apollo 17 rocks were larger than the Apollo 11 fragments; each plaque included 1.1 grams of lunar material, which is roughly equivalent to size of a small pebble. Unlike the Apollo 11 moon rock gifts, however, the Apollo 17 plaque underplayed Nixon’s role in the mission. Whereas the Apollo 11 plaque read “Presented to the People of X by Richard Nixon, President of the United States of

66 Ibid. 114.
67 Ibid. 114.
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America,” the Apollo 17 plaque recast the gesture as a gift from the entire nation:
“Presented to the People of X from the People of the United States of America.”

CONSUMERS OF SPACE EXPLORATION

What did people see when they looked at these moon rocks? Were they simply symbolic objects, instruments of American foreign relations or straw men used to critique the US government? Scholars across disciplines recognize that audiences are not passive viewers of objects, but contributors to the formation of an object’s meaning. Exhibit visitors bring their own history and imagination to a display—they do not enter galleries as blank slates. In a different capacity, the moon rocks brought their own history to these exhibits in the early 1970s. The biography of these rocks—where it came from, how far it traveled, and who interacted with it along the way—were of particular interest to fairgoers, foreign leaders and the American public. Over thirty years after the Osaka World’s fair, museum studies scholars David Anderson and Hiroyuki Shimizu conducted oral histories with fairgoers to investigate long-term memory of exhibitions. They asked fairgoers what they remembered in general. The responses they received are quite revealing and offer insight into consumers experience with the US governments’ utilization of space exploration as a form of soft power.

Interviewees said that the moon rock at Expo ’70 was the third most memorable feature of the fair, following the size of the crowds and their frustration over not be able

68 Jeanne W. Davis to Theodore Eliot, Jr., 1 May 1973, Box 2968, Entry 1613, RG 59, NARA.
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to see all the exposition had to offer. A popular refrain from fairgoers was that they had heard about the moon rock, or had seen it in the news before the Expo, and they expected that it was the exhibit to visit at the fair. A middle-aged woman who attended the fair with her husband explained her interest in seeing the rock: “I remember that I had to see the moon rock. If I were to go there I had to see it, because it was popular that time.” A middle-aged woman expressed that she had hoped to see the moon rock at the fair simply because, “We were exposed to a lot of information and hype in the media and press.”

Once fairgoers got to the moon rock display, after waiting in line for hours, many were not impressed. A housewife who visited the fair five times was extremely disappointed by the moon rock. She remembered, “Probably the most popular place was for the moon rock. It wasn’t that big at all! So, I was SO disappointed! We saw it about two times, but the first time we saw it we were so shocked! And we said to ourselves “This is the moon rock?” It wasn’t any different to stones here on Earth.” There were a variety of expectations for what the moon rock would look like and a variety of reactions when visitors finally got to see it in its case. A women who made her living fixing kimonos, also was surprised by the size of the rock “I thought is was going to be big, but it was actually quite small!” A little girl remembered that, “It was really just a normal rock. I thought if I saw it up close for real it would be either twinkling or glittering.”

Even though reactions to the moon rock varied, and a number were quite negative, for the most part, the moon rock was the focal point of memories of the fair, whether the interviewee did or did not actually see the rock. A teenager recalled,

72 Ibid.
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“everyone was saying “the moon rock! The moon rock!”... We lined up, we reached the end and saw it. I don’t remember what it looked like, I only remember that we lined up!”

A sixth grade elementary student, after waiting in line for five hours, at first thought “Wow it’s a moon rock, and then as [she] looked at it very closely,” asked herself, “is it really a moon rock?” Perhaps surprised by its humble appearance, this fair attendee was enthusiastic about seeing the rock and said “wow, wow,” even though what she saw did not leave a large impression. A woman who worked near the expo explained that the most memorable part of the fair was seeing the moon rock: “I actually got to see the moon rock itself. The other pavilions, I don’t have much memory, but I think I went to several others. It (the moon rock) made me think WOW, they really went there!” The rock was exciting proof that the astronauts had visited the Moon.73

When interviewees spoke about the significance of the fair in general they often referred to the moon rock. A housewife who brought her two children to the fair commented “No matter what, we just had to go and see the expo... it was a very important time in the world, considering things like getting the moon rock was such an ordeal.” A man who worked at a TV station and attended the fair with his wife, two or three times, reflected on the meaning of the moon rock: “It gave an impression that humans went to the Moon! But even with the display of the moon rock- I questioned “what is the use of this” at that time, and thought it was just a piece of trophy brought from the Moon.”74

A forty-two year old woman attended the fair with the express purpose of seeing the rock and offered comments that reflected many fairgoers’ overall impressions: “it’s

73Ibid.
74Ibid.
real, it’s real!” She explained, “What I was feeling the most was that soon we would be making developments on the Moon and moving forward toward there, and that many things would be happening soon!” To this visitor, the moon rock represented the potential of space flight. She believed that in the near future people, like her, could take trips to the Moon. “Many regular people were talking that way,” she continued, “just the feeling that this was a REAL moon rock! I felt that people would be able to be going there soon, but in the end it wasn’t that way!” The moon rock was an important symbol to this visitor. “Sometimes when I should have been thinking about my worries at the time,” she explained, “I would look at such pictures (of the moon rock) and I would imagine what was possible (in the future)... but now I think how unrealistic that was.”

A number of themes run through this visitor's and other attendees' commentary of the fair. First, the moon rock was a highly anticipated and extremely publicized exhibit. According to the interviewees' responses, crowd psychology was the primary motivating interest in viewing the moon rock; none of these interviewees mentioned a curiosity in learning about the geology of the Moon. A second major theme is the frequent disappointment in the rock's humble appearance. After hearing about the Moon extensively before the fair, and waiting in line for hours, visitors were often underwhelmed once they got to the exhibit. The moon rock's prominent role in interviewees' recollections is the third major theme. No matter what fairgoers thought of the rock, it had a significant place within their recollections of the Expo. Fourth, and maybe most illuminating, the moon rock inspired the idea that the Moon was a place that had been and could be visited. It provided proof of the lunar landings and inspired optimism about the possibility of space tourism. Trips to the Moon, as the rock

75 Ibid.
demonstrated to fairgoers, were no longer merely part of the imagination, they were part of real life, and maybe even everyday life.  

Although the rock’s popularity was undeniably rooted in what it symbolized to onlookers about the Apollo program, technology, science or exploration, visitors’ commentary also makes it clear that the rarity of the rock in combination with its familiar everyday appearance were important factors in its reception at Osaka. The moon rock was not simply a malleable vessel for the meaning of the space program or American technological capability. The media coverage of the rock was not the event, as Michael Smith has suggested about the Apollo program, because the rock’s authenticity, rarity, and familiar look contributed to its impact, according to fairgoers. As stated by visitors, the moon rock exhibited in Osaka could not be substituted for a similar-looking rock found in someone’s backyard because the rock had a unique and important biography. Like the rock itself, the experience of viewing the rock could not be replicated. It was this experience—witnessing the “actual” rock the astronauts had retrieved by hand from the lunar surface—that connected audiences to the reality of the lunar landing. The excitement of the potential scientific benefits did not draw millions of people to the United States Pavilion, but the experience of viewing the rock, and the recognition that this experience was unique and only possible by visiting the United States Pavilion at Expo 70 in person, made the moon rock exhibit a popular event to millions of fairgoers in 1970.

Recently Jack Masey reflected that “one thing to remember is that these [world’s fairs] were unique events, and that participation meant presence, real presence in a real  

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76 Ibid.
77 Michael L. Smith. “Selling the Moon,” 177.
Chapter 6: The Political Lives of Moon Rocks

place, not in the virtual spectacles that surround us today.” 78 As the oral history interviews confirm, the moon rock captured the interest of thousands of Expo visitors because they believed that the rock was an authentic object from the moon. Ivan Chermayeff, a member of the Pavilion design team, observed that after the age of major World’s Fairs had ended, “the global nature of the world today, with television and internet, has made [World’s Fairs] obsolete. That said there are certain things that you have to feel in your hands—real things. Real things make a difference.” 79 Although fairgoers could not hold the moon rock in their hands, they viewed it as a “real” thing, which could not be replicated or appreciated in a photograph, but had to be witnessed first hand.

Like the Apollo 11 astronauts’ steps on the lunar surface, the first hand presence of humans made a difference. The rock’s familiar appearance helped to domesticate the Moon for fairgoers by demonstrating to them that the Moon was a place that had been and could be visited. The display merged the mythic and concrete: the moon rock was a heavenly body, and yet it looked like a simple object found in someone’s backyard. As the commentary of the consumers of the space program illustrates, the rock enabled fairgoers to see the potential of space flight from a more personal, down-to-earth perspective. For most fairgoers the significance of the moon rock lay, not in its ability to inspire awe or technological enthusiasm, but that it was tangible object on a human scale. Since the moon rock looked like an everyday rock, for fairgoers its presence at the World’s Fair translated space exploration into the realm of recognizable human experience.

78 Jack Masey and Conway Lloyd Morgan, Cold War Confrontations, 402.
79 Ivan Chermayeff quoted in Masey and Morgan, Cold War Confrontations, 402.
CONCLUSION
“For All Mankind”?

As the *Apollo 17* spacecraft neared the Moon on the evening of 7 December 1972, during the last lunar mission of Project Apollo, one of the astronauts onboard grabbed a handheld Hasselblad camera, looked back at the Earth and snapped a series of eleven color photographs. Twelve hours after the crew returned to Earth, NASA processed the film in Houston to distribute to the press. The photograph that caught attention depicted the whole Earth, without shadows obscuring any part of its surface, against an inky backdrop. Much like the *Earthrise* photograph, this *Whole Earth* image, as it became known, quickly circulated around the globe, and coalesced conversations about the need for world peace and environmental actions. Reminiscent of the plaques that the Apollo crews left on the Moon, the *Whole Earth* revealed a planet void of political boundaries. For years public diplomats had been promoting the consciousness of global unity and by 1972, thanks to the Apollo 17 crew, they had a photograph that personified this message. *Whole Earth* translated a concept that had once been abstract and imagined into one that was visually concrete.1

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Conclusion

One of the predominate narratives of Project Apollo asserts that viewing the Earth from space, whether it was the astronauts’ first hand perspective or later by looking at the photographs they took, recast understanding of humanity and the planet. In 1966, counter culture writer Stewart Brand started campaigning for NASA to take a photograph of the whole Earth, arguing, “no one would ever perceive things in the same way,” if they saw the Earth in its entirety.\(^2\) Brand’s contemporaries also expressed the notion that viewing the Earth from space would prompt a revolution, causing people to understand Earth and civilization anew. Once Apollo astronauts returned to Earth many recounted a transformative experience in space, perhaps expressed most succinctly by Apollo 8 astronaut Bill Anders: “we came all this way to explore the Moon, and the most important thing is that we discovered the Earth.” Reactions to the lunar flights around the world echoed the experience Anders describes.\(^3\) Sheila Jasanoff suggests that the *Whole Earth* image “perhaps more than any other has come to symbolize the Western world’s heightened perceptions of connectedness.”\(^4\) Other scholars also likened the space-based optic to the Copernican Revolution for its transformative impact on human self-perception.\(^5\) Had the new scientific revolution that US government officials predicted in the late 1950s, as discussed in chapter one, come to fruition?

\(^2\) Brand would later use the *Whole Earth* image on the cover of his *Whole Earth Catalog*, a counter culture how-to manual. Stewart Brand, “Why Haven’t We seen the Whole Earth Yet?” in *The Sixties: The Decade Remembered Now, By the People Who Lived it Then*, ed. Lynda Obst (New York: Random House, 1977) 168; Also see, Neil Maher “Shooting the Moon,” 526-531.


Conclusion

Poet Archibald MacLeish, inspired by the Apollo 8 mission and the astronauts’ optic, penned an essay, which was published on the front page of the *New York Times* on Christmas Day 1968. The Apollo 8 crew’s Christmas Eve address would have been fresh in the memory of many of the people who read the paper that day. Primed with the astronauts’ Universalist discourse from the night before, Americans read MacLeish’s similarly global message. “To see the earth as it truly is,” MacLeish declared, “small and blue and beautiful in that eternal silence in which it floats, is to see ourselves as riders on the earth together, brothers on the bright loveliness in the eternal cold—brothers who know now that they are truly brothers.” President Nixon quoted this passage in his inaugural address a month later and reached out to MacLeish to write another poem to capture the significance of the upcoming Apollo 11 mission. MacLeish declined, eschewing the president’s political incentives for such a poem.

Countless efforts to understand and articulate the meaning of Project Apollo focus on how the lunar missions created the experience and consciousness of global unity. Decades after Project Apollo, astrophysicist and science promoter Carl Sagan proposed that the photographs taken by the Apollo crews “helped awaken our slumbering planetary consciousness.” Critical of the politics of spaceflight, Sagan reflected “whatever the reason we first mustered the Apollo program, however mired it was in Cold War nationalism and the instruments of death, the inescapable recognition of the unity and the fragility of the Earth is its clear and luminous dividend, the unexpected final gift of

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7 MacLeish’s “Riders on the Earth,” however, was used to advance the Nixon administration’s objectives by later appearing in USIA propaganda. Richard Nixon to Archibald MacLeish, 1 July 1969, Box 4, White House Central Files: Subject Files: Outer Space, RNPL.; Trevor Rockwell, *Space Propaganda “For All Mankind,”* 97.
Conclusion

Apollo. Was this “gift” so unexpected? Was the globalist vision and transformative experience expressed by countless people, revolutionary? In what way was Project Apollo “for all mankind”? Sagan contrasts Cold War nationalism and the unity of the Earth, treating them as incompatible bedfellows. But, the consciousness of globalism that Sagan observed, this dissertation contends, sprung from nationalism. Although the linkages between American national interests and the consciousness of global interdependence may have become obscured by 1969, they are of one piece.

“ONE WORLD”

Global discourse predated Project Apollo by thousands of years. From Ptolemaic cartography to fifteenth-century European mapping, imagining the Earth from space has been a basic feature of human experience and expression. In the sixteenth-century Europeans first circumnavigated the globe and revolutionary models of the cosmos began to take hold on the European imagination, developments that reverberated in new approaches to mapping. With the rise of European empires in the seventeenth-century, global discourse took on the trappings of Modernity; scientific objectivity, technological expertise, ethnic and cultural hierarchies, and an expansionist mission driven ontology colored this discourse. Air travel, especially global air travel, during the twentieth century nurtured an aerial perspective of the planet as unified and within one’s sphere of influence. The 1957 International Geophysical Year took the entire earth as a subject of

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Conclusion

study. The Cold War development of computing reinforced a vision of the world as a “closed system.” What sets Project Apollo global discourse apart from these earlier representations of the Earth?

As chapter one explored, during the immediate postwar period the United States assumed the position of a world power and an imaginary of the globe as its proper sphere of influence. This new American imaginary differed from earlier global discourse in one key respect: rather than serving solely as a rationalization for the preponderance of power, global discourse became an instrument to reinforce this power. Through the nation’s space program, among other means, US government officials sold a vision of global unity to the world public in order to advance American national interests. This programming emphasized inclusion, unity and a shared mission, in part, because public diplomats observed the political potential of this discourse.

Political theorist Benedict Anderson argued that political and geographic boundaries have little to do with nations and nationalism; in Anderson’s account, the globe resembles the Whole Earth photograph. A nation, he has explained, is “an imagined

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14 To understand globalization, and the rise of the consciousness of global interdependence, this dissertation has treated the global discourse as an actor’s category. This approach Sheila Jasanoff’s contention that examining “the struggle to define “global” may be one of the best avenues we have for engaging in a meaningful politics of globalism” in Sheila Jasanoff, “Heaven and Earth: The Politics of Environmental Images,” in Earthly Politics: Local and Global in Environmental Governance, ed. Sheila Jasanoff and Marybeth Long Martello (Cambridge, MA: The MIT Press, 2004) 33; This approach also owes a great deal to Jenifer Van Vleck’s corresponding argument that “advocating the globalization of history without historicizing globalization, historians risk simply replacing the nation with the world as history’s new naturalized container.” Van Vleck, Empire of the Air, 17.
Conclusion

political community." These communities are imagined because, like strangers reading the same morning newspaper, citizens may never meet each other even though they participate in an abstract communal event. Common language, common experiences, common history and an awareness of interdependence contribute to the construction of communities. The story of spaceflight’s role in American diplomacy reflects the process that Anderson describes. US public diplomats inundated the world population with icons, language, and communal experiences, which not only promoted spaceflight but also an imagined global community.

"FOR ALL MANKIND"?

In what respect was Project Apollo “for all mankind”? This global discourse was not simply a symptom of the conflation of America’s interests with those of the rest of the world. Nationalist globalism clearly informed underlying rationalizations of American power and mission, but it does not account for how and why space themed information programming evolved over the course of the 1960s. It is important to point out that this global discourse was not wholly born within the United States, but through a dialogue between US government officials and the audiences they hoped to influence.

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15 Eighteenth century print capitalism, according to Anderson, provided a common language, experience and imagined association between people who might never meet. In the second edition to his book, Anderson analyzed additional institutions that began to flourish in the age of mechanical reproduction: museums, maps and the census. Modern states employed these institutions to influence the content and shape of these “imagined communities,” Anderson explained. Anderson, *Imagined Communities*, 6.

16 In some ways, Anderson’s description of the formation of nationalism resembles both David Nye and Michael Smith’s discussions of technological display and national image making. In Nye’s study, Americans’ experience with awe-inspiring technologies has led to social cohesion. Communal events, according to Nye, contributed to American national identity. Smith focuses on the promotion, presentation and iconography of Apollo, or what Anderson might call the “logoization” of spaceflight. Project Apollo, according to Smith, was “an agent of national self-definition.” Both Nye and Smith are concerned with American experience and national identity making. But, Project Apollo was not a merely domestic story. The image-making and social cohesion that each author discusses applies to the role of Project Apollo in America’s relationship to the world as well. David Nye, *American Technological Sublime* (Cambridge, MA: The MIT Press, 1994); Michael Smith, “Selling the Moon,” 180.
Conclusion

Public diplomats adapted their presentation of Project Apollo abroad, in part to ensure its political potency. Initially, the American space program was “for all mankind” because this was the geopolitical astute way to frame an undertaking that had clear military applications and connections. The phrase “for all mankind” suggested that the modified ICBMs lifting satellites into orbit were for peace and global prosperity instead of national security. Propaganda narratives of spaceflight at the beginning of the decade incorporated the language of modernization theorists and space themed exhibits and lectures focused on American scientific expertise and hardware. When public opinion polls and feedback from foreign posts revealed that international audiences did not respond well to demonstrations of American greatness and technological strength, this message was dampened and replaced with an increased emphasis on global unity and international participation. Critique of US involvement in Vietnam and civil rights tension, prompted US officials to stress themes of peace, inclusion and a shared mission, even further.

This dissertation has sought to illuminate the connections between Project Apollo and American foreign relations, and illustrate how this relationship informed the emergence of the consciousness of global interdependence. Through global rhetoric, organized communal events, the use of symbolism and countless other measures, the United States government fostered an idea of global interdependence to support American national security interests. Observing that this framing helped them gain access to political leaders, to organize moon rock exhibits in Eastern bloc countries, and prompt a thank you letter from Ho Chi Minh, among other markers of foreign relations successes, public diplomats realized that it was precisely this global discourse that made Project Apollo a potent form of soft power. In this way, the global Apollo discourse that was
created out of political necessity became an agent of globalization, and provided framework for interpreting the new experience of global interdependence that it was helping to create.

A SPACE PROGRAM FOR THE 1970S

In 1970, the USIA’s semiannual report to Congress started-off with a list of the major names and events making news around the world: “Solzhenitsyn... Szczecin...Apollo...Osaka...Makarova...moon rocks... POWs... Gdansk... elections...Ginsburg...Khrushchev.” Space exploration holds two of eleven spots in this list, three if the significant space-focus of America’s participation in the Osaka World’s Fair is included.17 USIA reports from the field in the late 1970s, however, emphasized international economics, environmental problems, the aftermath of Vietnam, and a series of other topics that had little to do with American space efforts but everything to do with the concerns of the global public in this new decade.18 Shortly after the moon shots, space exploration would come to play a much smaller role in public diplomacy programming. Part of this change had to do with the Nixon Administration’s significant reorientation of the American space program. Even as the lunar landings were underway, new budget cuts reduced NASA’s funding to a quarter of what it had been in the mid-1960s and the agency shifted its focus from a single driving objective to a program based on multiple practical applications.19 This attenuation of space-themed public diplomacy programming

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17 USIA 35th Report to Congress, July-December 1970, Box 1, Entry P 180, RG 306, NARA
18 Other major themes included the Middle East, the Energy Crisis, International Economy, New Political Relations, Control of Illegal Drug Traffic and the American Bicentennial Celebration. USIA 44th Report to the Congress, July 1973-June 1976. Box 2, Entry P 180, RG 306, NARA
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also reflected a broader change in global politics and the United States' relationship to the world. As the Space Race became a competition of the past, and both superpowers sought cooperative programs, cost cutting measures and détente, space exploration could no longer effectively serve as a tool to differentiate two political systems or function as a symbol of the robustness of a capitalist economy. Finally, and perhaps most importantly, public diplomats had oversold the benefits of spaceflight in the 1960s, which undercut the effectiveness of space-themed information programs in the 1970s. Space exploration had not, and could not, deliver the bright future for humanity advertised by a decade of public diplomacy programming.

As the end of Project Apollo neared in 1972, NASA began to focus on the Apollo Applications Program, which was designed to fly leftover hardware from the lunar program. Between 1973 and 1974, the United States sent three crews to live on board Skylab, a space station retrofitted from an unused rocket stage. While the astronauts visited the space station, the USIA focused its attention on supporting the American economy by promoting tourism to the United States as well as marketing of US products overseas, not space exploration. At the end of the Skylab program the USIA published the pamphlet “Skylab: What It Did and What It Means”: a title that suggests audiences were not yet aware of what Skylab did or meant. Another pamphlet distributed in this period, “The Great Invisible Legacy of the U.S. Manned Space Program,” also implies that the significance and relevance of space exploration needed explaining. Although

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vague formulations of the benefits of spaceflight were commonplace in the 1960s, promises of “peace,” “unity,” and “progress” demanded more elaboration by the 1970s.\(^22\)

In 1979, the 78-ton Skylab space station prematurely lost its orbit and crashed into Western Australia. Journalist Ellen Goodman summed up the event in the headline of one of her articles: “From Feat to Beat in One Decade.”\(^{23}\) As triumphant and unifying as the first lunar landing seemed to be to diplomats like Ambassador Tasca, its impact on human progress, American global leadership and the future exploration of space, remained up for debate when Skylab hit the earth. Project Apollo ended just as the expansion of the American economy slowed, inflation rose, the war in Vietnam faltered, the energy crisis grew, and civil rights struggles persisted. After the last lunar flight in 1972, *New York Times* science reporter John Noble Wilford captured the tension between an earlier belief in scientific progress and the current cultural and political environment: “Apollo was an expression of faith in the value of scientific discovery in a time of reaction against science, even against rationality.”\(^{24}\) Although public diplomats’ articulations of the benefits of space exploration changed over time, and narratives of technological and scientific advancement were replaced with humanistic rhetoric and demonstrations of global unity, spaceflight could not follow through with the inflated promises from a decade of public diplomacy promotion. Undermined by the end of the space race and its initial technocratic rationalist framing, space exploration symbolized an outmoded vision of progress and competition that was out of step with 1970s politics and

\(^{22}\) *Report to the Congress from the President of the United States on United States Aeronautics and Space Activities, 1974.* 121.
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society. At one level, although Project Apollo fulfilled public diplomats' promise of unity; their promises of peace, prosperity and progress, however, were still out of reach.
APPENDIX A:

Archive Collections

Boston University Archives, Boston, MA (BUA)
  Simon Bourgin Collection

Dwight D. Eisenhower Presidential Library, Abilene, KS (DEPL)
  US President’s Committee on Information Activities Abroad Records

John F. Kennedy Presidential Library Archives, Boston, MA (JFKL)
  Arthur M. Schlesinger, Jr. Papers
  Office of the Personal Secretary
  National Security Files
  United States Information Agency Files

Library of Congress, Washington, DC (LOC)
  Thomas Paine Papers

Lyndon B. Johnson Presidential Library Archives, Austin, TX (LBJL)
  Administrative History
  Agency Reports
  Confidential Files
  National Security Files
  Social Files
  Vice Presidential Security Files
  White House Central Files

National Aeronautics and Space Administration Headquarters, History Office,
Washington, DC (NASA)
  Biographies- Astronauts
  Biographies- Government Officials
  Biographies- NASA Employees
  Oral History Interviews
  Robert Sherrod Apollo Collection
  Space Flight- Human Space Flight

National Air and Space Museum, Smithsonian Institution, Archives,
Washington, DC (NASM)
  Various individual folders

National Archives and Records Administration, College Park, MD (NARA)
  Department of State (Record Group 59)
  National Aeronautics and Space Administration (Record Group 255)
  United States Information Agency (Record Group 306)
Newspapers and Periodicals

Foreign Publications
  al-Akhbar (Egypt)
  al-Rakib (Libya)
  an-Nahar (Lebanon)
  Berliner Morgenpost (West Germany)
  Bora (Yugoslavia)
  Corriere della Sera (Italy)
  Daily News (Turkey)
  Der Morgen (East Germany)
  Ghanaian Times (Ghana)
  Hankuk Ilbo (South Korea)
  Illustrierte Berliner Zeitschrift (West Germany)
  Il Giornale d'Italia (Italy)
  Izvestiya (Russia)
  Kobe Shimbun (Japan)
  Koelnische Rundschau (West Germany)
  La Actualidad Espanola (Spain)
  London Daily Herald (United Kingdom)
  Maariv (Israel)
  Mainichi Daily News (Japan)
  Messagero (Italy)
  Muenchner Merkur (West Germany)
Neues Oesterreich (Austria)
Nihon Keizai Shinbun (Japan)
Ottawa Citizen (Canada)
Passaur Neue Presse (West Germany)
Philippines Herald (the Philippines)
Politika (Yugoslavia)
Pravda (Russia)
Scinteia (Romania)
Shukan Shonen (Japan)
Sueddeutsche Zeitung (West Germany)
Telegraf-Wochenspiegel (West Germany)
The Japan Times (Japan)
The Times of India (India)
Trybuna Ludu (Poland)
Zycie Warszawy (Poland)

American Publications
Chicago Tribune
Jet
Life Magazine
Los Angeles Times
New Yorker
New York Times
Plain Dealer (Cleveland),
Spaceflight
Sunday Star (Washington, DC)
The Evening Star (Washington, DC)
The Sun (Baltimore)
Time Magazine
Washington Post
The Washington Daily News
BIBLIOGRAPHY


Borstelmann, Thomas. *The Cold War and the Color Line: American Race Relations in the


Masey, Jack and Conway Lloyd Morgan. *Cold War Confrontations: US Exhibitions and Their*


Whitfield, Stephen J. “Richard Nixon as a Comic Figure.” *American Quarterly,* 37, no. 1, Special Issue: American Humor (Spring, 1985).
