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More Than "One Small Ball in the Air:"

How Lyndon Johnson Spun Sputnik into a National Crisis

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A Thesis in the Field of History

for the Degree of Master of Liberal Arts in Extension Studies

Harvard University

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Abstract

The story of the Sputnik 1 launch is rooted in a rich history of politics, prestige, and psychology, yet today's popular summaries simplify the events and omit crucial parts of the story. While most of the world viewed Sputnik 1 as an unexpected event, President Dwight D. Eisenhower had been warned of both the Soviet Union's satellite progress as well as the negative psychological impact that a Soviet satellite would have on America. Despite these warnings, Eisenhower, a Republican, did not prioritize the U.S. satellite effort in the mid-1950s. Shortly after the Sputnik 1 launch, Democratic Senate Majority Leader Lyndon Johnson, seeing an opportunity to advance his party's cause, became a vocal critic of the Administration's handling of the satellite program. He exaggerated the meaning of the event, saturated the media with hyperbolic statements, and declared the U.S. as losers in the race to space. Johnson's Senate Inquiry into the Satellite and Missile Programs, while touted as non-partisan, cultivated mistrust in President Eisenhower by favoring witnesses who supported the Democrats' arguments and criticized the Administration. Ultimately, Lyndon Johnson leveraged Sputniks 1 and 2 as political ammunition to weaken President Eisenhower, advance the Democratic party, and create a seismic shift in power in the U.S. government.

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Finally, thank you to my kids for humoring my endless LBJ anecdotes, obscure space statistics, and highlights from my adventures in modern-day Abilene, Kansas. I hope one day you'll crisscross the country in pursuit of your own dreams.

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Glossary

Central Intelligence Agency (CIA). A civilian run agency within the Executive branch of the U.S. government established as part of the National Security Act of 1947. The CIA was designed to provide the U.S. military and policy communities with information and analysis of potential threats to national security. During the Cold War, the agency's primary objective was to evaluate and determine Soviet capabilities and intentions.[1]

Department of Defense (DoD). Federal division of the Executive branch of the U.S. government responsible for protecting the security of the United States by coordinating and supervising the United States Armed Forces and all other agencies and matters directly related to the national security of the United States.[2]

Intercontinental Ballistic Missile (ICBM). A long-range, land-based missile designed to deliver weapons to targets located at least 5500 km from the missile's origin.[3]

International Geophysical Year (IGY). A collaborative, international program designed to study scientific phenomena of the Earth and its environment. 67 countries participated in the IGY that ran from July 1957 to December 1958, which resulted in significant progress in outer space research and satellite development.[4]

Intermediate Range Ballistic Missile (IRBM). A land-based missile designed to deliver weapons to targets located 3000-5500 km from the missile's origin.[5]

Medium Range Ballistic Missile (MRBM). A land-based missile designed to deliver weapons to targets located 1000-3000 km from the missile's origin.[6]

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[1] Huw Dylan, David V. Gioe, and Michael S. Goodman, *The CIA and the Pursuit of Security: History, Documents and Contexts* (Edinburgh: Edinburgh University Press, 2020), 64, https://www.jstor.org/stable/10.3366/j.ctv1453jfz.
[2] U.S. Department of Defense, https://www.defense.gov/about/.
[3] "Ballistic Missile Basics," Missile Defense Advocacy Alliance, August 14, 2018, https://missiledefenseadvocacy.org/missile-threat-and-proliferation/missile-basics/ballistic-missile-basics/.
[4] "The International Geophysical Year (IGY)," Eisenhower Presidential Library, https://www.eisenhowerlibrary.gov/research/online-documents/international-geophysical-year-igy.
[5] "Ballistic Missile Basics."
[6] "Ballistic Missile Basics."

National Aeronautics and Space Act of 1958. A bill centered around issues of flight within and outside of the Earth's atmosphere. The Space Act, sponsored by Senators Lyndon B. Johnson and Styles Bridges, established NASA and appointed the President as its chair.[7]

National Aeronautics and Space Administration (NASA). Created on October 1, 1958, as part of the Space Act of 1958, NASA is an independent agency of the U.S. government tasked with running the U.S. space program. It is run by civilians but coordinates with the various branches of government.[8]

National Aeronautics and Space Council (NASC). A government body created as part of the Space Act of 1958 that was assigned to oversee federal agency activities as outlined in the Space Act. Members included the President, who acted as chair; the Secretaries of State and Defense; the Chairman of the Atomic Energy Commission; the Administrator of NASA; and four members selected by the President and approved by Congress (one federal agency representative and up to three civilian members). The NASC was abolished in 1973.[9]

Preparedness Subcommittee of the Armed Services Committee. Activated in 1957 in response to Sputnik 1, this subcommittee of the Senate Armed Services Committee was tasked with investigating the nation's preparedness for issues of defense. Lyndon B. Johnson was the committee's chair from 1957-1960, during which time he conducted an inquiry into the nation's activities in outer space.[10]

Union of Soviet Socialist Republics (U.S.S.R.). Successor to the Russian Empire of tsars, the U.S.S.R. is a former Communist empire located in northern Eurasia. The U.S.S.R. was established in 1922 and dissolved in 1991, and between 1946 and 1991, covered 8,650,000 square miles, or one-sixth of the Earth's land surface. Also referred to as the Soviet Union; both terms are used interchangeably throughout this text.[11]

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[7] "National Aeronautics and Space Act of 1958 (Unamended)," National Aeronautics and Space Administration, https://history.nasa.gov/spaceact.html.
[8] "What is NASA?" National Aeronautics and Space Administration, last modified September 24, 2018, https://www.nasa.gov/audience/forstudents/k-4/stories/nasa-knows/what-is-nasa-k4.html.
[9] "Archives," John F. Kennedy Presidential Library and Museum, https://www.jfklibrary.org/asset-viewer/archives/USNASC.
[10] "Subcommittees 1955-78," National Archives, https://www.archives.gov/legislative/finding-aids/reference/senate/armed-services/subcommittees-1955-1978.html#85th.
[11] "Soviet Union," Britannica, https://www.britannica.com/place/Soviet-Union.

United States Information Agency (USIA). An agency within the Executive branch tasked with promoting the national interest abroad and influencing the ideology of developing nations. Created by President Eisenhower in 1953, the USIA (referred to as USIS in foreign outlets) disseminated information that promoted democracy abroad through "seemingly independent" media outlets, USIS posts, exchange activities, information programs, and international broadcasting.[12]

Vanguard Project. One of two satellite projects the United States developed in the context of the IGY. Vanguard was still in development when the U.S.S.R. successfully launched the satellite Sputnik 1 into orbit on October 4, 1957. Vanguard's televised and much-publicized TV-3 launch failed when the rocket exploded shortly after takeoff in December 1957. The other U.S. IGY satellite project, Explorer, successfully reached orbit on February 1, 1958.[13]

[12] Arthur Bardos, "'Public Diplomacy:' An Old Art, A New Profession," VQR, 2001, https://www.vqronline.org/essay/public-diplomacy-old-art-new-profession.
[13] Cliff Lethbridge, "Vanguard Fact Sheet," Spaceline, https://www.spaceline.org/cape-canaveral-rocket-missile-program/vanguard-fact-sheet/.

Chapter I.

Introduction

A master narrative can be defined as "the dominant story that gets told against a background of assumptions which people believe to be true and which they use to make sense of events and of each other."[14] Today, the popular story of the Soviet satellite Sputnik 1 follows a master narrative that makes use of assumptions, oversimplifies the event, and fits neatly on a flash card for a 10^{h} grade U.S. History class. The flashcard reads, "On October 4, 1957, the Soviet Union launched Sputnik, the first man-made satellite, shocking the American public and beginning the Space Age."[15] Missing from the narrative are the rich context, controversies, and personalities that turned a simple, innocuous satellite into a national issue and a global spectacle.

Space historian Roger Launius contends that master narratives serve a valuable purpose in society by "helping to create a usable past...[by offering] secure knowledge formed to delineate the trajectory of the historical event and center it in its appropriate cultural place."[16] While convenient, master narratives run the risk of oversimplifying events and ignoring nuance, errors that can contribute to accounts of history that are incomplete, inconsistent, and even inaccurate. In the case of Sputnik 1, the master

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[14] Michael Bamberg, "Master and Counter Narratives,' Behavioral Sciences, https://researchoutreach.org/wp-content/uploads/2021/05/Michael-Bamberg.pdf.
[15] "October, 1957: Soviets Launch First Artificial Satellite into Earth Orbit," *American Physical Society* 16, no. 9 (2007), https://www.aps.org/publications/apsnews/200710/physicshistory.cfm.
[16] Roger Launius, "American Spaceflight: History's Master Narrative and the Meaning of Memory," in *Remembering the Space Age: Proceedings of the Fiftieth Anniversary Conference*, ed. Steven J. Dick (Washington, D.C.: National Aeronautics and Space Administration, 2008), 353-385.

narrative gets a major plot point wrong: the launch did not set off an immediate shock or panic in America. Many in the government and scientific communities were actually aware of the Soviets' progress in missile and satellite development; furthermore, those who were not, i.e., the general public, largely considered the launch to be interesting but nothing to panic about.

While the U.S. academic community has challenged the master narrative to varying degrees, the popular narrative has persisted in the nation's collective consciousness, due in no small part to the undiscerning eye of the Internet and a lack of notable effort to extend the complexities of the event beyond the realm of academia. As such, misinformation abounds concerning vital elements of the story of Sputnik 1. The master narrative as summarized in the vast majority of non-academic literature fails to mention that the immediate reaction to Sputnik in the U.S. was not alarmist. An example is the current (as of March 2023) entry for "Sputnik" in the *Encyclopedia Britannica*:

> Sputnik 1, the first artificial satellite launched, was a 83.6-kg (184-pound) capsule. It achieved an Earth orbit with an apogee (farthest point from Earth) of 940 km (584 miles) and a perigee (nearest point) of 230 km (143 miles), circling Earth every 96 minutes and remaining in orbit until January 4, 1958, when it fell back and burned in Earth's atmosphere. The launch of Sputnik 1 shocked many Americans, who had assumed that their country was technologically ahead of the Soviet Union and led to the "space race" between the two countries.[17]

Granted, academic accounts of Sputnik 1 differ significantly from non-academic accounts. The former are informed by material not available to the general public, such as non-digitized and classified government documents. In fact, even the academic community has not been fully aware of the entire story of Sputnik 1 over the years because of the many documents concerning the events leading up to the launch that are

[17] "Sputnik," Britannica, https://www.britannica.com/technology/Sputnik.

classified. However, in 2017, the CIA released fifty-nine declassified documents that have helped connect missing pieces of the puzzle. These documents, in combination with oral histories obtained after 1957, change the master narrative substantially.

They describe a Republican president, Dwight D. Eisenhower, who prioritized military over scientific uses of outer space and failed to adequately prepare the country for a rivalry with the U.S.S.R. over who would be the first nation to successfully launch a satellite and set it in orbit. The documents also add to the body of literature that surrounds Democratic Majority Leader Lyndon Johnson, who played a pivotal role in turning the otherwise trivial launch into a nationwide panic that stoked Communist fears and pushed for criticism of the Eisenhower Administration.

The primary purpose of this thesis is to add to the existing literature of Sputnik 1 by providing a closer look at the event that helped shape the world as we know it today. In this respect, my contribution to the literature is an in-depth, highly detailed account of the Sputnik 1 story that focuses on the specifics of President Eisenhower's actions leading up to the launch and Lyndon Johnson's actions after it. My account is structured around primary sources that include obscure government documents that a minority of historians have referenced, as well as an abundance of newspaper articles from the period. These and other sources aided my deconstruction of the budgetary factors involved in the 1950s U.S. space effort, as well as the copious warnings of the Soviet launch, among other crucial components of the story. All of the pieces fit together to provide a much-needed context for the October 4, 1957, launch and the dramatic events that followed. I argue that Lyndon Johnson appropriated the new "Space Race" in 1957 for personal and party gain, and then used manipulative psychological tactics to mislead

the vulnerable American populace. In this way, he strategically transformed Sputnik into an issue of public opinion that manifested in a seismic shift in American leadership.

The academic and scientific communities have been aware of the holes in the master narrative for decades but have failed to adequately communicate them to the general public. Books by Robert Caro and Walter McDougall shed light on the real story, but most people haven't read them. The master narrative occupies many of the sources readily accessible to everyday Americans (i.e., informational websites, news outlets, government statements, published histories of NASA, films/TV shows, and scores of others), and, as such, the everyday American does not know the backstory or actual events surrounding the Sputnik 1 launch. Those who do know of Johnson's association with the Space Race do not express judgment over the senator's manipulative and deceptive tactics to push the Democratic agenda, likely because they do not know the full story.

This leads to my true aim of this thesis: to reach those who encounter "Forbidden" messages when trying to read journal articles kept locked behind academic credentials that they will never possess—more specifically, to provide an accessible, transparent account of the events that transpired and the choices President Eisenhower made in the years and months leading up to the Sputnik 1 launch, followed by Lyndon Johnson's role in the satellite's dramatic effect on American politics. For I feel that the information available to the public reinforces the master narrative by celebrating America's "achievements" while ignoring its sometimes messy and often controversial history. If this thesis can be shared with just one student who only knows Sputnik 1 as the "Soviet satellite that shocked and alarmed America into entering the Space Race," we will be one

step closer to presenting a valid account that every American citizen, academic or not, has the right to know.

Historiography

At the crux of the Sputnik 1 story is President Dwight D. Eisenhower. Primary documents reveal that Eisenhower was not only aware of the Soviets' progress and plans, but he also made the informed decision to *not* close the gap between the two countries when given the chance. Roger Launius explains this fact in "An Unintended Consequence of the IGY: Eisenhower, Sputnik, the Founding of NASA." While Launius defends the former President for his decisions regarding the space program throughout much of the article, he concedes that "Eisenhower had been explicitly warned of [the] potential [of a Soviet satellite] in 1955 in a critical National Security Council document."[18] This failure to prioritize the program is noted by Robert J. Watson in 1997's comprehensive *History of the Office of the Secretary Defense: Into the Missile Age 1956-1960*: "The project (known as Vanguard) though supported by DoD, was regarded as primarily a civilian project with little urgency behind it."[19] He also reveals the very noteworthy detail that "[the Army] service already had an available rocket (Redstone) fully capable of launching a satellite into orbit."[20]

When Sputnik 1 was launched, Lyndon Johnson was Senate Majority Leader, a position he assumed in January 1955 after the Democrats regained control of the Senate

[18] Roger D. Launius, "An Unintended Consequence of the IGY: Eisenhower, Sputnik, the Founding of NASA," *Acta Astronautica* 67, no. 1 (2010): 259, https://doi.org/10.1016/j.actaastro.2009.10.019.
[19] Robert J. Watson, *History of the Office of the Secretary of Defense, Vol. 4: Into the Missile Age, 1956-1960* (Washington, D.C., 1997), 124, https://history.defense.gov/Portals/70/Documents/secretaryofdefense/OSDSeries_Vol4.pdf.
[20] Watson, *History of the Office of the Secretary of Defense,* 125.

in the fall 1954 election.[21] Much is written about Johnson's agreeable working relationship with Republican President Dwight D. Eisenhower, as well as Johnson's voting record and domineering leadership style in the Senate. Less clear cut are the Senator's actions directly following the launch of Sputnik 1, as well as his personal agenda as unofficial spokesperson of the Space Race, because current scholarship presents markedly different accounts and perspectives of both components. Just how quickly did Johnson respond, and what were his actions? These details help paint a larger picture of the Senator's motivations for attaching himself to the space issue.

Johnson's longtime aid and eventual White House Press Secretary George Reedy describes Johnson as reluctant to become involved at first: "For about two weeks [after Sputnik] I doubt whether [Johnson] devoted too much attention to it," Reedy recalled in a 1992 interview conducted as part of an oral history of the origins and development of the National Aeronautics and Space Act of 1958.[22] Reedy said that it was his own memorandum to the Senator on October 17 that prompted Johnson to contact Richard Russell, the Chairman of the Armed Services Committee, about taking up the issue as a challenge to President Eisenhower and his approach to outer space. Thomas Gaskin writes to similar effect in "Senator Lyndon B. Johnson, the Eisenhower Administration and U.S. Foreign Policy, 1957-60:" "Johnson was somewhat slow to react to the crisis. He had been one of the 'economizers' of the defense budget…and a part of those cuts had

[21] Kent Germany, "Lyndon Johnson: Life Before the Presidency," Miller Center, originally published in *History Review* 63: 2009, https://millercenter.org/president/lbjohnson/life-before-the-presidency.
[22] *Legislative Origins of the National Aeronautics and Space Act of 1958 [microform]: Proceedings of an Oral History Workshop, Conducted April 3, 1992, Moderated by John M. Logsdon* (Washington, DC: National Aeronautics and Space Administration, 1998), https://history.nasa.gov/40thann/legislat.pdf.

been the missile program."[23] Furthermore, Robert Caro, eminent Johnson biographer and winner of the Pulitzer Prize in 2003 for his work *The Years of Lyndon Johnson: Master of the Senate*, writes that Johnson "did not seem to feel all that much urgency himself. News of Sputnik had come on October 4 and Russell had in the next day or so turned over the investigation to Lyndon, but Johnson did not come to Washington until October 16."[24]

Other historians describe Johnson's response as more urgent. In "Lyndon Johnson's Unsung Role in Sending Americans to the Moon," Jeff Shesol describes a man jolted into action "within hours" of the Sputnik launch. "Before the evening was out," Shesol contends, "[Johnson] was working the phones, talking to aides, and sketching out plans for an investigation of the anemic U.S. [space] program."[25] This version of events matches the recollections of Eilene Galloway, a National Defense Analyst who worked closely with Senators Russell and Johnson after Sputnik 1 launched. She recalls that upon hearing of the Friday, October 4 launch, Johnson "immediately" phoned Senator Russell, who phoned Galloway the following Monday with a request for a report on the effect of the Soviet satellite achievement on the United States. She states, "In this situation LBJ reacted swiftly and became the most energized leader I have ever beheld in galvanizing the Congress, the Pentagon, industry and the scientific community, to take decisive action

[23] Thomas M. Gaskin, "Senator Lyndon B. Johnson, the Eisenhower Administration and U.S. Foreign Policy, 1957-1960," *Presidential Studies Quarterly* 24, no. 2 (1994): 347, https://www.jstor.org/stable/27551245.
[24] Robert A. Caro, *The Years of Lyndon Johnson: Master of the Senate* (New York: Alfred A. Knopf, 2002), 1024.
[25] Jeff Shesol, "Lyndon Johnson's Unsung Role in Sending Americans to the Moon," *The New Yorker,* July 20, 2019, https://www.newyorker.com/news/news-desk/lyndon-johnsons-unsung-role-in-sending-americans-to-the-moon.

to achieve U.S. preeminence in outer space."[26] Clearly, there lacks a consensus in the literature regarding Johnson's actions immediately after the event.

While the specifics behind the scenes may be unclear, historians have direct evidence of Johnson's public reaction in the form of statements to the press regarding the launch. While initially quiet, about two weeks after the Sputnik launch, Johnson broke his silence, declaring the launch a "worse defeat for the United States than Pearl Harbor."[27] From that point on, he addressed the nation urgently and often, invoking images of a rapidly approaching Communist threat and repeating an assertion that Sputnik had shattered the U.S.'s reputation as the world's most technologically advanced country. He used veiled language to imply that the U.S. did not reach space first because, unlike the Soviets, the President failed to adequately prioritize the missile and satellite programs in the early-mid 1950s.[28]

The literature splits again when postulating about Johnson's motivations for calling for a high-profile Senate Inquiry of the matter. In *Eisenhower: The White House Years,* Jim Newton states that Johnson's Congressional hearings investigating "perceived failings of America's space efforts…were chiefly a vehicle to promote his own political ambitions."[29] Similarly, in *LBJ: Architect of Ambition,* biographer Randall Woods presents Johnson as a capable senator with an agenda. While fellow Democratic Senators Jackson and Symington "had been raising a hue and cry about the deplorable state of the

[26] Eilene Galloway, "Appendix B: Additional Comments," in *Legislative Origins of the National Aeronautics and Space Act of 1958,* 57.
[27] Zuoyue Wang, *In Sputnik's Shadow: The President's Science Advisory Committee and Cold War America* (Rutgers University Press, 2008), 72.
[28] One example: "Series of WSB-TV Newsfilm Clips of Texas Senator Lyndon Johnson Commenting on the Upcoming Congressional Hearings on the US Space Program," November 5, 1957, WSB-TV television station Atlanta, GA, https://dlg.usg.edu/record/ugabma_wsbm_wsbn33600.
[29] Jim Newton, *Eisenhower: The White House Years* (Norwell: Anchor, 2012), 256.

nation's defense under the penurious Eisenhower administration," Woods writes that Johnson was "mindful of the political moment," choosing to assume a less combative perspective. He adds, "Johnson believed that the wisest posture for Senatorial Democrats was one of constructive criticism…[Johnson] believed that an investigation was in order, but it should be impartial and bipartisan, and he should be in charge."[30] Woods also notes that Johnson "intended to take advantage of [the space issue] for his and his party's benefits."[31] So too does Robert Dallek, who, in *Lone Star Rising,* asserts that "Johnson saw the political advantage to himself and the Democrats in seizing the space issue."[32] Roger D. Launius agrees with these historians, stating in "An Unintended Consequence" that "there is good reason to believe that the response to Sputnik was politically constructed for specific electoral ends."[33]

Other historians feel differently. For example, George Reedy insists that Johnson did not have the presidency on his mind when he took up the "space thing." He asserts, "I am not at all sure that, at that particular point, Lyndon Johnson was interested in the presidency."[34] Eilene Galloway agrees: "LBJ was not motivated by thoughts of running for president at that time."[35] Moreover, the current literature cannot agree on how Johnson reacted in the immediate aftermath of the Sputnik launch, nor does it answer the question of why he decided to champion the space effort at all. Further complicating the matter, Glen P. Wilson, a Johnson staff member during this time and eventual contributor

[30] Randall Woods, *LBJ: Architect of Ambition* (Riverside: Free Press, 2006), 333.
[31] Woods, *LBJ: Architect of Ambition,* 333.
[32] Robert Dallek, *Lone Star Rising: Lyndon Johnson and His Times, 1908-1960* (New York: Oxford University Press, 1991), 529.
[33] Launius, "An Unintended Consequence," 258.
[34] *Legislative Origins of the National Aeronautics and Space Act of 1958,* 41.
[35] Galloway, in *Legislative Origins of the National Aeronautics and Space Act of 1958,* 58.

to the National Aeronautics and Space Act of 1958, offers a convergence of these opinions:

> Johnson grabbed the headlines and TV coverage, as he had planned. But it also put him up-front in the public eye as being "Mr. Space," an image he held for many years as the one politician who was truly interested in the space program and its implications for the future of the United States and its place in the future development of mankind.[36]

For his part, Johnson never publicly stated that he wanted to be president; in fact, he claimed the opposite on multiple occasions. For example, when *Life* magazine asked Johnson if he would refuse the Democratic nomination in 1960 if offered to him, he replied, "It's too late to refight the election of 1956 and too early to fight the election of 1960. I haven't any interest in debating why we didn't do something yesterday. The only thing I hope is that we won't have to debate tomorrow why we didn't start today."[37] In typical Johnson fashion, this quote gives off the impression of a refusal, but it doesn't actually answer the question—hence the debate as to his true motives in response to Sputnik 1.

Moreover, by analyzing Johnson's actions, in particular with regard to the Senate hearings he orchestrated in response to the Soviet satellites, this thesis argues that Lyndon Johnson took coordinated care after Sputnik 1 to damage the Republican administration and promote the Democratic party. In doing so, he compelled a majority of voters to support the Democrats in 1958, and the result was a major change in the composition of the nation's Congressional leadership.

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[36] Glen Wilson to Gerry Siegel, December 7, 1957, Lyndon B. Johnson Presidential Library.
[37] "Lyndon Johnson Has the Ball,'" *Life Magazine*, January 10, 1958, 20, print copy.

Chapter II.

Failure to Launch

> The U.S. must immediately embark on a long-range development program to secure for the West space superiority. If we do not, somebody else will. That somebody else very probably would be the Soviet Union.
>
> —Wernher von Braun, 1952

Over sixty years of hindsight has shown that, contrary to the master narrative, the launching of Sputnik 1 was not an unexpected event. The Central Intelligence Agency (CIA), Department of Defense (DoD), and President Dwight D. Eisenhower were aware of the U.S.S.R.'s rapid progress in their missile and satellite programs, and there was clear intelligence indicating a Soviet satellite launch within weeks of the October 4 event.[38] Despite this warning, the President chose not to bolster the U.S. satellite program when he had the chance. He believed in "responsible" spending, which included increasing the country's nuclear weapons arsenal but not providing substantial funding to the new space program. This devotion to the idea that a nation's military reflects its power prevented him from understanding that another factor could be equally important in the eyes of the rest of the world: prestige.

Eisenhower, a seasoned general, was trained and tested on the battlefield; thus, he was not prepared for the "cold" war with the U.S.S.R. that broke out after World War II—especially not on the new battlefield of outer space.[39] As the two nations jockeyed for

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[38] Amy Ryan and Gary Keeley, "Sputnik and US Intelligence: The Warning Record," *Studies in Intelligence* 61, no. 3 (2017): 9, https://www.cia.gov/static/cc89b7bbcb47c3b75b77da0f12a28bc7/Sputnik-and-US-Intel.pdf.

[39] Chester J. Pach, Jr., "Dwight D. Eisenhower: Life in Brief," Miller Center, https://Millercenter.Org/President/Eisenhower/Life-In-Brief.

power, outer space emerged as a territory to be conquered, and while Eisenhower appreciated the military benefits that could arise from accessing space, he did not see the point in pursuing outer space for the purpose of abstract measures of power, such as prestige. Eisenhower's failure to appreciate the psychological component of outer space, followed by his failure to react appropriately to the Sputnik launchings, created an opening for a more attuned leader to enter the emerging battlefield and turn the space race into an issue of national concern.

A Nuclear Battleground

When World War II ended in 1945, a new war broke out—but not in the traditional sense. No longer suspicious allies on the battlefield, the U.S. and the U.S.S.R. assumed roles of peacetime adversaries, for as much as the U.S.S.R.'s participation in the war against Hitler had "purified them ideologically in the eyes of many Americans," the Soviet Union was still a Communist state, which by its nature posed a potential threat to democracy worldwide.[40] Furthermore, the U.S.'s demonstration of nuclear strength at the close of the war had created vulnerability among the Soviet military, which the nation's leader, Joseph Stalin, planned to eradicate by establishing a new era of Soviet military dominance.[41] This meant developing a nuclear bomb as soon as possible, followed by an intercontinental ballistic missile (ICBM) that could deliver that bomb to an adversary on

[40] John Lewis Gaddis, "Was the Truman Doctrine a Real Turning Point?" *Foreign Affairs* 52, no. 2 (1974): 387, https://doi.org/10.2307/20038055.
[41] Kristen D. Burton, "Cold Conflict," n.d., The National World War II Museum, https://www.nationalww2museum.org/war/articles/cold-conflict.

the other side of the planet, if needed. Although never officially announced to the world or his opponent, this was a race that Joseph Stalin fully intended to win.

In the summer of 1945, angered and threatened by America's spectacle of technology in Japan, Stalin initiated a crash program that would "press military technology as far and as fast as possible."[42] Indeed, over the next several years, the U.S.S.R. made great strides in science and technology, and on August 29, 1949, the Soviet Union detonated its first atomic bomb, nicknamed "First Lightning."[43] The following month, evidence surfaced that Klaus Fuchs, a German-born physicist who contributed to the development of U.S. atomic weapons, had given the Soviets "precise information" about the program as well as comprehensive details about the theorized hydrogen bomb.[44] This would explain the impressive speed of the atomic program as well as the subsequent thermonuclear program, which successfully tested a hydrogen bomb in 1953.

That same year, Stalin directed Sergei Korolev to begin developing a nuclear delivery system that could deliver hydrogen bombs halfway across the world in minutes: the intercontinental ballistic missile (ICBM). Lacking the U.S.'s superior piloted aircraft capabilities, Stalin chose to go a riskier, but more powerful route than his rival; if successful, an ICBM could shorten the trip across the globe from hours to minutes, making virtually any location on Earth a potential target.[45] The Soviet ICBM project

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[42] Walter McDougall, *"...The Heavens and the Earth: A Political History of the Space Age*" (New York: Basic Books, 1985), 50.
[43] "Soviets Explode Atomic Bomb," History.com, February 9, 2010, https://www.history.com/this-day-in-history/soviets-explode-atomic-bomb.
[44] "Soviets Explode Atomic Bomb."
[45] "Series: Intercontinental Ballistic Missiles," National Park Service, https://www.nps.gov/articles/series.htm?id=09AF828C-1DD8-B71B-0B7EF976E874E182#:~:text=Intercontinental%20Ballistic%20Missiles%20(ICBMs)%20were,target%20in%20the%20world%20vulnerable.

received steady funding, and on August 21, 1957, an R-7 rocket became the world's first operable ICBM after it successfully traveled over 6000 km.

In contrast, the U.S. ICBM program did not receive significant funding throughout its development. Although research on ICBMs and missile defense began in the U.S. in 1946, the Army was not very concerned with these programs because of its own overwhelming air superiority and true intercontinental bombers; in fact, funding was cut in 1948 in favor of other projects.[46] Therefore, research and development received little support from this time, that is, until the Soviets successfully tested their first hydrogen bomb in 1953. At that point, the U.S. immediately reactivated its ICBM research, but development slowed in 1956, when President Eisenhower made large budget cuts to defense spending.[47] It took a spectacle of Soviet technology to rejuvenate the U.S.'s ICBM program: in response to the Soviets' successful Sputnik 1 launch on October 4, 1957, the ICBM program was immediately assigned priority status along with greatly increased funding.[48] Unfortunately, the U.S.'s second place finish was magnified by the time it took to catch up—the first successful test flight of the Atlas ICBM took place on November 28, 1958, well over a year behind the Soviets' flight.

Extending the Missile Race to Outer Space

The considerable thrust of these powerful rockets lent them to another purpose: they could act as launch vehicles for sending a satellite, person, dog, or even an

[46] Kenneth P. Werrell, "Hitting a Bullet with a Bullet: A History of Ballistic Missile Defense," College of Aerospace Doctrine, Research and Education (CADRE), Air University Press, 2000: 3, https://apps.dtic.mil/sti/pdfs/ADA381863.pdf.
[47] "U.S. Missile History," The Military Standard, http://www.themilitarystandard.com/missile/history.php.
[48] Watson, *History of the Office of the Secretary of Defense,* 137.

automobile into outer space. Gathering information about the Earth from beyond the bounds of its atmosphere was crucial for understanding not only the planet and its place in the solar system, but also for gaining access to places on Earth that lay beyond territorial lines. Satellites placed in orbit around the Earth would enable Global Positioning Systems, enhance weather predictions, and allow for a level of reconnaissance that any military would covet. In the mid-1950s, in hopes of exploring (and hopefully controlling) outer space, both the U.S.S.R. and the U.S. decided to use their new missile technology to get there.

Although the U.S. got an early start on satellite research, inter-agency politics hampered its development. The Navy began researching space rocketry in 1945, submitting a satellite development proposal to the Joint Army and Navy Aeronautical Board in March of 1946. Not wanting to be shown up by another military branch, rather than consider the proposal and potentially sign on, the Army delayed the meeting so its officers could have time to develop "equal competence" on the subject.[49] Both branches presented proposals in May 1946, but no agreement was made as to which branch should run the project. The decision was postponed pending higher-level guidance. This guidance never came, and it wasn't until 1955, nine years later, that the Army and Navy agreed on a joint satellite program, to be named Project Orbiter.

The U.S. lost many years to this inter-agency conflict, as the Soviet effort did not start, at least officially, until May 24, 1954. It was on this date that Sergey P. Korolev, then the "Chief Designer of the Special Design Bureau No. 1 (OKB-1) of the Scientific

[49] "From the Sea to the Stars: A Chronicle of the U.S. Navy's Space and Space-Related Activities, 1944-2009," edited by the Applied Research Laboratory, University of Pennsylvania, 2009, https://www.history.navy.mil/research/publications/publications-by-subject/sea-to-stars.html.

Research Institute No. 88 (NII-88)," sent a letter to the Council of Ministers and the Minister of Defense Industries proposing an Earth satellite project that would use a modified R-7 ICBM as the launch vehicle.[50] The proposal was approved, and work on the Soviet Earth satellite began.

Thus, the next race between the dueling nations would have its finish line in outer space, and it was to be played out against the backdrop of scientific inquiry as part of the International Geophysical Year (IGY). Set to last from June 1957 to December 1958, this global event was designed to broaden humanity's understanding of the Earth by sharing information freely among the international scientific community. A key objective of the event was to design and launch a scientific satellite into Earth's orbit, where data only accessible from such a vantage point could be collected.[51]

On July 28, 1955, the U.S. government announced its intention to develop such a satellite for the purposes of the IGY. The endeavor, named Project Vanguard, was to be run by the Navy. The Soviet Union followed suit just four days later, announcing its own plan for an Earth satellite. This caught U.S. military officials off guard, as it was generally assumed that the Soviets lagged too far behind in missile development to achieve a successful orbital launch in just two to three years.[52] Such was not the case, as surveillance and intelligence gathered over the next year provided strong indications that the Soviet satellite project was progressing swiftly.[53]

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[50] Sergey Korolev, "On the Feasibility of Development of an Artificial Earth Satellite," May 24, 1954, https://history.nasa.gov/sputnik/russ2.html.
[51] Yulia S. Lyubovtseva, et al., "Sixtieth Anniversary of the International Geophysical Year (1957–2017): Contribution of the Soviet Union," *History of Geo- and Space Sciences* 11 (2020): 159, https://doi.org/10.5194/hgss-11-157-2020.
[52] Andreas Reichstein, "Space—the Last Cold War Frontier?" *Amerikastudien / American Studies* 44, no. 1 (1999): 114, http://www.jstor.org/stable/41157439.
[53] Ryan and Keeley, "Intelligence Warning of the 1957 Launch of Sputnik."

On May 2, 1956, the Operations Coordinating Board (OCB), a task force concerned with overseeing U.S. covert operations, was instructed to focus on the burgeoning Soviet space program and its threat to national prestige and security. There was a growing concern over the possibility that the Soviet satellite would reach orbit before Vanguard, so the OCB was tasked with studying "the impact of Soviet earth satellite programs whether in connection with the International Geophysical Year (IGY) or presently conducted."[54] The group reported little official activity, meeting only twice over the next 13 months. On June 13, 1957, the OCB held its third meeting in reference to this "Working Group on Certain Aspects of NSC 5520 (Earth Satellite)." The group was growing concerned about intelligence reports of Soviet missile progress, as well as recent statements from the Soviet Academy of Sciences indicating that the Soviets would be launching an Earth satellite "soon, literally in the next few months."[55] The June 13 meeting of the OCB resulted in the following recommendations, should the Soviets indeed launch a satellite before the U.S.: 1) emphasize that the U.S. was never in a race to launch the first satellite, and 2) American scientists should accept the Soviets' accomplishment in the spirit of the IGY. The Board also recommended that the Department of State anticipate possible changes in public opinion abroad, and that all phone lines be open in case any hints were dropped at the upcoming IGY Special Committee Bureau meeting to be held in Brussels in September.[56]

[54] Memorandum of meeting, "OCB Working Group on Certain Aspects of NSC 5520 (Scientific Earth Satellite), Third Meeting, June 13, 1957," OCB Working Group on Earth Satellites Minutes 1956-58, Box 1, National Aeronautics and Space Administration Files: Documents Relating to Space Program 1953-62, Eisenhower Presidential Library.
[55] Memorandum of meeting: "OCB Working Group, Third Meeting, June 13, 1957."
[56] Memorandum of meeting: "OCB Working Group, Third Meeting, June 13, 1957."

The OCB held its fourth meeting on June 17, 1957, during which it modified and approved a contingency statement to be delivered by the National Academy of Sciences should the Soviets announce specific plans of a satellite launch. In addition, a statement was to be prepared immediately should the Soviets actually launch a satellite.[57] This second contingency statement would ultimately be the one that the National Academy of Sciences delivered after the Soviets won this race by successfully launching Sputnik 1 into orbit on October 4, 1957. Records reveal a gap in OCB meeting notes from June 17 through October 4, indicating that the committee did not meet, at least not on record, between those times, a detail that has been omitted from previous historians' accounts.

The Sputnik Spectacle

Sputnik 1 launched on October 4, 1957, at 10:29 p.m. Moscow time (3:29 p.m. EST). By 7:00 p.m. the following day, the OCB had reconvened, and a "coordination process commenced on an informal basis," which included the Department of Defense, USIA, the National Science Foundation, U.S. National Committee for the IGY, and the CCE staff.[58] The committee discussed the global reaction to Sputnik and stressed the need for U.S. officials to avoid any public reference to the Soviets' potential military capability; rather, the Board agreed that the focus must remain on the scientific goals and collaborative spirit of the IGY.

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[57] Memorandum of meeting: "OCB Working Group on Certain Aspects of NSC 5520 (Scientific Earth Satellite), Fourth Meeting, June 17, 1957," OCB Working Group on Earth Satellites Minutes 1956-58, Box 1, National Aeronautics and Space Administration Files: Documents Relating to Space Program 1953-62, Eisenhower Presidential Library.

[58] Memorandum of meeting: "OCB Working Group on Certain Aspects of NSC 5520 (Scientific Earth Satellite), 5th and 6th meetings, October 5th and 6th, 1957," October 8, 1957, OCB Working Group on Earth Satellites Minutes 1956-58, Box 1, National Aeronautics and Space Administration Files: Documents Relating to Space Program 1953-62, Eisenhower Presidential Library.

This explanation was adopted by the White House and the President, who attributed the U.S.'s failure to launch before the Soviets to the U.S.'s focus on scientific elements during the design and development phases of its IGY Earth satellite, Vanguard. Scientists who had supported Eisenhower's satellite policies insisted that the Vanguard program was following its own timeline, one that would ensure that the satellite's scientific capabilities were sophisticated, as the official goal of the project was to collect data for the shared use of the world's scientific community.[59] The National Science Foundation, one of Vanguard's principal supporters, assured the public that there was no "race" to outer space; nonetheless, the nation was not convinced. In his seminal work, *...The Heavens and the Earth,* historian Water McDougall notes that "the public outcry after Sputnik was ear-splitting. No event since Pearl Harbor set off such repercussions in American life."[60] This determination is misleading, however, as public opinion polls did not reveal significant concern over Sputnik until weeks later.[61]

This reaction was compounded on November 3, 1957, when the U.S.S.R. launched its second satellite, Sputnik 2. This time the stakes were raised by the inclusion of a live passenger, a part-Samoyed terrier dog named Laika. At the time, it was impossible to return an object to Earth, but this did not deter the U.S.S.R. from launching a dog into space. The Soviet propaganda machine pushed the event with all its might, and Laika's impending journey was featured in news outlets all around the world. Much less publicized was the dog's death, which likely occurred after just one to two orbits around the Earth (a total of roughly three hours), not seven days, as the Soviets insisted

[59] Lyubovtseva. et al., "Sixtieth Anniversary of the International Geophysical Year," 159.
[60] McDougall, *...The Heavens and the Earth,* 152.
[61] Launius, "An Unintended Consequence," 258.

publicly.[62] In this case, the U.S.S.R.'s propaganda effort was used to not only win the race to space, but to kick dust up in its wake.

Both Sputniks eventually spurred intense reactions in the U.S. in every sector, from private citizens to government officials. One such reaction came from Charles Douglas Jackson, a general and close friend of Eisenhower's who worked in the Office of Strategic Services during World War II. A member of the OCB, Jackson wrote Eisenhower a memo on October 8 expressing grave concern about the launching of Sputnik 1: "The successful launching of the Soviet satellite is an overwhelmingly important event—against our side."[63] The former presidential advisor declared that the launch of Sputnik was the culmination of a month of the most "skillfully executed...psychological warfare orchestration as I have ever seen."[64] The gravity of the situation was also expressed in a letter to CIA director Allen Dulles from members of the State Department, who "believed that the United Stated [was] in a period of national emergency."[65] Moreover, the United States was rattled by this Soviet demonstration of scientific advancement, and what followed was a "sudden crisis in confidence in American technology, values, politics, and the military."[66]

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[62] Alice George, "The Sad, Sad Story of Laika, the Space Dog, and Her One-Way Trip into Orbit," Smithsonian Magazine, April 11, 2018, https://www.smithsonianmag.com/smithsonian-institution/sad-story-laika-space-dog-and-her-one-way-trip-orbit-1-180968728/.
[63] C. D. Jackson to Henry Luce, October 8, 1957, Luce, Henry R., 1957 (1)-(3), Box 71, Subseries A. Alphabetical File, 1933-1964 , General File or Time Inc. File, 1933-1964, Jackson, C. D.: Papers, 1934-1967, Eisenhower Presidential Library.
[64] Jackson to Luce, October 8, 1957.
[65] Robert R. McMath, Lawrence A. Hyland, George B. Kistiakowsky, and Francis H. Clauser, to Allen Dulles, October 23, 1957, Box 1, CIA (October 1957 - October 1958), Office of the Special Assistant for Science and Technology (James R. Killian and Records, George B. Kistiakowsky): 1957-61, White House Office Files, Eisenhower Presidential Library.
[66] Paul Dickson, "Sputnik's Impact on America," NOVA, November 6, 2007, https://www.pbs.org/wgbh/nova/article/sputnik-impact-on-america/.

Another notable response to the Sputnik launch came from the U.S. Senate. Galvanized by the assumption that the Eisenhower administration dropped the ball in its effort to get to space before the Soviets, Senate Democrats jumped at the opportunity to investigate and critique the state of the U.S. missile and satellite programs. On October 7, Senator Richard Russell, Chair of the Armed Services Committee, announced an official investigation into the shortcomings of the program. He added, "Senator Lyndon Johnson, who is chairman of the Preparedness Subcommittee of the Armed Services Committee, which has jurisdiction of this matter... has been instructed to make a full inquiry and assemble all the facts."[67] Roughly two weeks later, Johnson arrived in Washington, D.C., and he did so without an ounce of subtlety. Once he entered the "media riot," Johnson was outspoken and direct, stating that '"Americans could ignore only at great peril' the fact that the Soviet Union had outstripped the United States 'in a field where we thought we were supreme;'" that is, science, weapons development, and space exploration.[68]

Dissecting the Budget

Meanwhile, dissatisfied with Eisenhower's official stance that there had never been a "race" to begin with, critics within the government and across America called for a concrete explanation for the U.S.'s failure to get a satellite into orbit before the Soviets. It quickly became clear that one of the reasons was insufficient funding of the U.S. satellite program. On October 5, the morning after the launch, *The New York Times*

[67] Allen Drury, "Democratic Senators Demand a Full Investigation of the Nation's Satellite Program," *The New York Times,* October 8, 1957, https://www.nytimes.com/1957/10/08/archives/democratic-senators-demand-a-full-investigation-of-the-nations.html.
[68] "Johnson Offers Space Program," *The New York Times,* December 5, 1957, https://www.nytimes.com/1957/12/05/archives/johnson-offers-space-program-senator-sketches-5point-plan-to-meet.html.

printed an article entitled "U.S. Delay Draws Scientists' Fire." It stated that "some scientists" knew that there was "one chance in ten that the Vanguard satellite would be put in orbit by the end of the International Geophysical Year, Dec. 31, 1958, unless the purse strings were loosened, and the project speeded."[69] Internal documents show that Eisenhower was informed of the rising costs as early as April 1956, when a conflict arose over who should fund the program, the Department of Defense or the National Science Foundation. It was even suggested at one point that the program be abandoned, as the costs continued to rise above and beyond the early estimates. This option was opposed by several government officials, including Herbert Scoville, Jr., Assistant Director of Scientific Intelligence, who warned CIA Director Allen Dulles in an April 10, 1956, memo that "it is felt that serious damage would be done to United States international scientific prestige if the Earth satellite program were either abandoned or placed on a normal course of business basis."[70]

Further complicating matters was a difference of opinion on the scope of Project Vanguard. In late 1956, to improve the likelihood of a successful launch, scientists began calling for an increase in the number of satellites in the program from six to twelve. The Office of Defense Mobilization's (ODM) Science Advisory Committee sent a request to the Joint Chiefs of Staff that included a report on the satellite program as well as a memo from Dr. I. I. Rabi, chairman of the committee, who warned that "failure by the U.S. to launch satellites successfully during the IGY...would result in loss of U.S. scientific prestige that would be compounded by successful Soviet launching."[71] This request fell

[69] Richard Witkin, "U.S. Delay Draws Scientists' Fire," *The New York Times*, October 5, 1957, https://www.nytimes.com/1957/10/05/archives/u-s-delay-draws-scientists-fire-satellite-lag-laid-to-the.html.
[70] Ryan and Keeley, "Sputnik and US Intelligence: The Warning Record," 6.
[71] Robert A. Divine, *The Sputnik Challenge* (New York: Oxford University Press, 1993), 5.

on deaf ears, as revealed in a December 3 memorandum to the NSC from the Joint Chiefs of Staff, who "noted the reference document and have no comments to offer."[72] In an NSC meeting on January 24, 1957, NSF director Waterman again argued for the expansion of Project Vanguard's scope. He received support from Arthur S. Flemming, Director of the Office of Defense Mobilization's (ODM) Science Advisory Committee, who cited Dr. Rabi's recommendations from the previous fall.[73] This issue became a point of contention between the quarreling agencies: six additional satellites would be costly—who should pay for it?

The intensity of the conflict reached a fever pitch in April 1957, when the Department of Defense, the NSF, the CIA, and others all presented their opinions to the President about who should fund the program. NSF director Alan T. Waterman argued that the Department of Defense, in fulfilling its role as conductors of the program, should be responsible, citing the following letter from Secretary Wilson to the President, dated April 5, 1956: "The Department of Defense in implementing the directive on NSC report #5520 has initiated and is conducting a program which will culminate in six attempts to place satellites in orbit prior to December 31st 1958."[74] Others argued that the financial responsibility for the satellite program rested with the NSF. On April 30, 1957, the Director of the Bureau of the Budget, Percival Brundage, outlined the issue to the President: The Department of Defense had authorized initial financing from its

[72] Author's Footnote to "Memorandum of Discussion at the 310th Meeting of the National Security Council, Washington, January 24, 1957," Department of State, https://history.state.gov/historicaldocuments/frus1955-57v11/d344.
[73] Author's Footnote to "Memorandum of Discussion at the 310th Meeting of the National Security Council, Washington, January 24, 1957."
[74] Alan T. Waterman to Percival Brundage, April 24, 1957, Briefing Notes subseries (2) 1955-58, NSC series, Office of the Special Assistant to the NSA, White House Office, Eisenhower Presidential Library.

emergency fund, and as the costs of the program increased, successful arguments were made to the NSC and the Bureau of the Budget, which "continued to approve use of the emergency fund as necessary."[75] By August 31, 1957, $67.9 million had been obligated from the emergency fund for the project, and $50.7 million had been expended. Seeing as the funds had not been reimbursed, and claiming that it had never been clear from the beginning who would fund it, the Department of Defense was no longer willing to finance the program. Brundage wrote,

> The Secretary of Defense has now concluded that it is not advisable for the department to provide further support of the project...and believes that adequate financing should be arranged by supplemental requests submitted for appropriation to the National Science Foundation, which the department considers to be the sponsor of the program.[76]

Brundage ended the memo with a remark about the significant increase in cost from the beginning of the program to present:

> In weighing the benefits deemed to be derived from the project and its priority in comparison with all the other current projects, it was initially approved in the expectation that the cost would be between $15 and $20 million. I question very much whether it would have been authorized, at least on a crash basis, if the actual cost had been known at that time.[77]

At a meeting of the NSC on May 10, the President considered the arguments and comments from the various departments. When told that the satellite's instrumentation had become increasingly complicated and costly, the President acknowledged the issue of national prestige, but argued that it depended on getting a satellite into orbit, and not on the instrumentation of the scientific satellite. Moreover, he was frustrated by the

[75] Percival F. Brundage to Dwight D. Eisenhower, October 8, 1957. Central Files, Eisenhower Presidential Library.
[76] Percival F. Brundage to Dwight D. Eisenhower, April 30, 1957, Folder 2, Box 7, Briefing Notes subseries, NSC Series, Office of the Special Assistant to the NSA, White House Office, Eisenhower Presidential Library.
[77] Percival F. Brundage to Dwight D. Eisenhower, April 30, 1957.

increasing costs, noting that "everybody wanted to duck responsibility for finding the money to fund the program."[78] The issue of prestige ran constant through this meeting, with many officials and other experts agreeing that the program was about more than just getting a satellite to space. It was a psychological battle that the U.S. could not afford to lose.

Ultimately, after considering the facts and concerns associated with the program, Eisenhower decided that the program must continue. He issued a directive on May 14, 1957, which stated, "The U.S. scientific satellite program under NSC 5520 should be continued on no more elaborate basis than at present," and that the "scientists working on this program should again scrutinize it carefully to determine whether the estimated additional funds required can be reduced by restricting the program in ways which will not jeopardize the current objectives under NSC 5520."[79] Eisenhower instructed the various agencies to look into the feasibility of cutting their satellite budgets, and he expected to hear presentations of the findings at the next NSC meeting.

Eisenhower's decision reflects his commitment to minimal government funding of civilian-based scientific research, and while he agreed with scientists that the satellite program should move forward, he was not willing to increase the expense to an unknown amount. He insisted that the program follow the original objective, which had outlined a budget of $20 million. By mid-1957, the program's expected budget had ballooned to

[78] "Memorandum of Discussion at the 322nd Meeting of the National Security Council: Washington, D.C., May 10th, 1957," Box 9, Eisenhower Papers, 1953-1961 (Ann Whitman File), NSC Series, Eisenhower Presidential Library.
[79] "Record of Actions—Approved by the President on May 14, 1957," in Memorandum to General Cutler on October 21, 1957. "Earth Satellites (1) 1955-58" folder, Box 7, Briefing Notes Subseries, NSC Series, Office of the Special Assistant for National Security Affairs: Records, 1952-61, White House Office, Eisenhower Presidential Library.

$200 million, a development that deeply frustrated the President.[80] In a decision that demonstrates the President's preference for military over civilian spending, as well as his refusal to look beyond the concrete, Eisenhower decided on May 14, 1957, that there lacked a compelling reason for an expansion of the project's scope. Simply put, he felt that the parameters of the original plan were sufficient. Later criticisms of Eisenhower's handling of the satellite program focus on this critical decision in May 1957 to not prioritize the speed of the program. In the end, Eisenhower had heard numerous arguments and read many reports in the years leading up to Sputnik 1 that warned of the potentially drastic psychological effects that a Soviet satellite could have on America. He simply did not feel that psychology warranted extreme measures.

Warnings Ignored

One of these proponents was the CIA, the body in charge of tracking the Soviets' progress in missile capacity. On May 12, 1955, Dr. Herbert Scoville, Assistant Director for Scientific Intelligence, sent a memo to CIA Director Allen Dulles via Deputy Director of Intelligence Robert Amory, Jr. In the memo, Scoville attempted to convey the "importance of [the Vanguard] program in connection with psychological warfare."[81] Scoville stated that the favorable foreign reaction to NSC 5520 "must not be discounted by failure to actually launch a satellite within the time limit, or by permitting the Soviets to anticipate it with a launching of their own due to our failure to press ahead vigorously."[82] This was a direct request for the Vanguard program to be sped up, and the

[80] Percival F. Brundage to Dwight D. Eisenhower, October 8, 1957.
[81] "CIA Financial Support for Earth Satellite Project," May 12, 1955, Intelligence Warning of the 1957 Launch of Sputnik Collection, CIA.gov, https://www.cia.gov/readingroom/document/0002287889.
[82] "CIA Financial Support for Earth Satellite Project."

CIA even offered to fund some of the expense to a "magnitude which will permit the agency to have a reasonable voice and influence in the development and direction of the program."[83] Again, these arguments fell on deaf ears.

Proponents of the master narrative claim that Eisenhower was not aware of the Soviets' rapidly progressing satellite program. And yes, Eisenhower's decision to keep the Vanguard project on track could potentially be justified if he was unaware of the Soviets' progress all together, or if he believed that they were progressing but were still well behind the U.S. For if Eisenhower knew that the Soviets were well on their way to launching an Earth satellite, and that they were planning to launch as early as "September or October" of 1957, one would assume that he surely would have instructed the Department of Defense to speed up the Vanguard project, regardless of cost, or to bolster the U.S. effort by signing off on twelve satellites instead of six.[84] The record shows that the President was informed of the Soviet satellite's progress at all times, yet he chose not to act.

On the other side of the world, fueled by "prestige and psychological factors," Soviet scientists and engineers made significant progress from 1955 to 1956, just as the CIA's Network Security Information Exchanges (NSIE) fact sheets from 1955 predicted.[85] In 1956, the CIA began briefing the President and select members of Congress on these observed developments. On October 6, 1956, Scoville sent a memorandum to the Deputy Director of Intelligence, which included Scoville's

[83] "CIA Financial Support for Earth Satellite Project."
[84] "Comment of a Soviet Scientist on the Soviet Earth Satellite," July 17, 1957, Intelligence Warning of the 1957 Launch of Sputnik Collection, https://www.cia.gov/readingroom/docs/DOC_0000124266.pdf.
[85] "Allen Dulles Letter to Deputy Secretary of Defense Donald Quarles," July 5, 1957, Intelligence Warning of the 1957 Launch of Sputnik Collection, https://www.cia.gov/readingroom/document/0006687215.

comments on a Department of Defense Progress Report issued just a few days earlier. The report relayed intelligence on the Soviet satellite program, which was making significant strides, and Scoville agreed that "the USSR will make a major effort to be the first country to orbit an Earth satellite...it has the capability of orbiting a small vehicle in early 1957."[86] The reports increased in frequency at that point, and by mid-1957, declassified CIA briefings show that the President was warned that the U.S.S.R. was planning to launch a satellite before the end of the year.

Much of this intelligence was gleaned from Soviet scientists themselves, who played out a carefully crafted performance of Soviet propaganda, in which prominent Soviet scientists confirmed the plan but remained vague with the launch date. For example, Scoville sent a memo to Dulles in June 1957 reporting that the "president of the Soviet Academy of Sciences stated that soon, literally in the next few months, the Earth will get its first satellite."[87] The next month, a CIA report from a meeting of the International Astronomical Union in Belgium recounted a conversation in which the noted Soviet scientist and astronomer Boris Vasilyevich Kukarin stated, "We will launch [the satellite] this September or October."[88] So, while the evidence is clear that the U.S., including the Commander-in-Chief, knew a great deal about the Soviet Union's swift and effective push to launch their satellite, there were too many unknowns to stop, much less prevent it. The U.S. only had control of its own program, which ultimately was at the mercy of the President.

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[86] "U.S. Scientific Satellite Progress (NSC 5520)," October 6, 1956, Intelligence Warning of the 1957 Launch of Sputnik Collection, CIA,
[87] "Comments on Letter of ME V.A. Nekrassoff,'" June 27, 1957, Intelligence Warning of the 1957 Launch of Sputnik Collection, CIA, https://www.cia.gov/readingroom/docs/DOC_0006687221.pdf.
[88] "Comment of a Soviet Scientist on the Soviet Earth Satellite."

The psychological consequences of a Soviet satellite had been outlined to Eisenhower on many occasions and from many sources; nevertheless, he simply did not understand the notion that one could find meaning in something that clearly lacked the substance of strength. Historians and commentators contend that Eisenhower should have given more thought to this psychological component, but to him, prestige and respect came from a strong military, not from a "small ball in the air."[89] In fact, he even saw some advantages in letting the Soviets launch a satellite first. At the time, no rules existed regarding the use of orbital space. Having dealt firsthand in World War II with the dangers of crossing into another country's terrestrial air space, as president, Eisenhower advocated for freedom of the skies. Unfortunately, the Soviet Union did not share such a goal. Eisenhower felt that Sputnik 1 solved this problem; by circumventing the globe without protest, Sputnik 1 could become a precedent for freedom of international/orbital space.[90]

When America learned that the Soviets had successfully launched a satellite into outer space, it suddenly didn't matter who held the stronger military capability. The power lay in the race, and Sputnik 1 demonstrated that not only did the "Soviets beat [the U.S.] to the finish line," but the event made Americans feel "unexpectedly bested by Soviet technology."[91] It appeared that America had lost this race, and the failure to dominate the Soviets reverberated throughout the world. Since the end of World War II,

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[89] Yanek Mieczkowski, *Eisenhower's Sputnik Moment* (Ithaca: Cornell University Press, 2013): 65.
[90] "Memorandum of Conference with President Eisenhower after Sputnik," October 8, 1957, Eisenhower Presidential Library, National Archives Identifier: 186623, https://www.archives.gov/historical-docs/todays-doc/index.html?dod-date=1009.
[91] Lina Mann, "Lyndon B. Johnson: Forgotten Champion of the Space Race," The White House Historical Association, July 15, 2021. https://www.whitehousehistory.org/lyndon-b-johnson-forgotten-champion-of-the-space-race.

the U.S. had made a concerted effort to impress the world with its technological abilities and democratic ideals, and the government was no stranger to propaganda as a means to spread its philosophies around the world.[92] Sputnik, then, was an example of the opposite, and the failure of the U.S.to best the Soviets was interpreted around the world as proof of a superior Soviet military. Eisenhower's reassurances that the U.S. was well-stocked with weapons that could be used in case of a war were not convincing. Sputnik was all about optics, and at that moment, all that the American people saw was the U.S.S.R. reach the finish line first and claim a victory that would forever be America's loss.

Sticking to a Story

Eisenhower wasn't sure how to respond to the commotion that ensued during that first weekend in October 1957. He could not understand the connection the American people made between spectacle and "real" power. One thing was for certain, in any case: to prevent more damage to US prestige, his and the rest of the government's reactions would have to be coordinated and direct. The USIA instructed its representatives to "avoid giving an impression of 'sour grapes,' to avoid politico-military implications, and to guide public interest to the whole IGY program itself with its possibilities of many practical benefits through the cooperation of the international scientific community."[93] In other words, they should try to emphasize the long-term benefits of a more thought out

[92] Zinovia Lialiouti, "Cold War Propaganda, US Prestige and the Eisenhower Administration: Implications from a Case Study Approach," *Journal of American Studies* 15 (2014): 172, doi: 10.12797/AdAmericam.15.2014.15.14.
[93] Staff Notes no. 210, October 7, 1957, Box 27, Toner Notes: October 1957, The White House, Eisenhower Presidential Library.

and sophisticated outer space program, not the fleeting byproduct of an all-out Soviet crash program.

Ahead of a press conference planned for Wednesday, October 9, Eisenhower met with advisors and scientists to process the event and strategize the next steps. The feedback was not good. In a letter dated October 8, 1957, the National Planning Association was blunt:

> The sensational launching of the first earth satellite confirms...that in the field of basic scientific research and in engineering development we have been lagging behind the Soviet Union. Implicit in the foregoing is a vast and, from our point of view, a distinctively unfavorable shift in power relations.[94]

Further, David Beckler, Assistant to the President of the National Academy of Sciences, wrote a scathing list of "observations" for the upcoming NSC meeting, including an assertion that "the U.S. satellite vehicle is marginal in performance and the number of attempts will be severely limited due to fund restrictions."[95] He noted that although Sputnik 1 was not a military weapon, it tended to be identified in the minds of the world with the impressive military and technological strength of the U.S.S.R., and that "this will inevitably be impressed in the minds of the world."[96] Fortunately for Eisenhower, Beckler also mentions a positive byproduct of Sputnik: "The Russians have in fact done us a good turn, unintentionally, in establishing the concept of freedom of international space—this seems to be generally accepted as orbital space, in which the missile is

[94] National Planning Association to Dwight D. Eisenhower, October 8, 1957, Box 7, DDE Diary October 1957, Eisenhower Presidential Library.
[95] David Z. Beckler to Victor Cooley, "Memorandum Regarding Agenda for Upcoming 10/10/57 NSC meeting," October 8, 1957, Box 3, Special Assistant for Science and Technology (James R. Killian and George B. Kistiakowsky): Records, Office of the White House Office, 1957-61, Eisenhower Presidential Library.
[96] Beckler Memorandum to Victor Cooley.

making an inoffensive passage.'"[97] This point was all but lost on most of the government, however, and it clearly was not on the minds of America at large.

President Eisenhower held a press conference on Wednesday, October 9, during which he downplayed the significance of the Sputnik launch, insisting that the U.S. was well ahead of the Soviets in terms of weapons and defense systems. When asked if he thought that U.S. scientists should have acknowledged the "race" with the Soviets and requested that Vanguard be given top priority, Eisenhower stuck to his story: "There never has been one nickel asked for accelerating the program. Never has it been considered as a race, merely an engagement on our part to put up a vehicle [for the IGY]."[98] He also repeatedly emphasized the scientific nature of the IGY, implying that the U.S. could have gotten a satellite up before the Soviets if that had been the sole objective. He explained:

> So far as this satellite itself is concerned, if we were doing it for science and not for security, which we were doing, I don't know of any reasons why the scientists should have come in and urged that we do this before anyone else could do it. Now, quite naturally, you will say, 'Well, the Soviets gained a great psychological advantage throughout the world,' and I think in the political sense that is possibly true; but in the scientific sense it is not true except for the proof of the one thing, that they have got the propellants and the projectors that will put these things in the air.[99]

Records show that Eisenhower was not being entirely truthful with his answers. Internal memos and letters reveal that the scientific community had appealed to him on many occasions to prioritize the program and increase funding, but the President had decided each time to keep Project Vanguard on its course. Regardless, on October 9,

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[97] "Memorandum of Conference with President Eisenhower after Sputnik," October 8, 1957.
[98] "Official White House Transcript of President Eisenhower's Press and Radio Conference #123 Concerning the Development by the U.S. of an Earth Satellite." October 9, 1957, https://www.eisenhowerlibrary.gov/sites/default/files/research/online-documents/sputnik/10-9-57.pdf.
[99] "Official White House Transcript of President Eisenhower's Press and Radio Conference #123."

1957, Eisenhower confidently reassured the nation: "Now, so far as the satellite itself is concerned, that does not raise my apprehension, not one iota."[100]

The President could make this assertion because he was privy to knowledge that the rest of the Free World was not—namely, that in July 1956, he had approved WS-117L, a top-secret military satellite reconnaissance and protection program with the "stated objective of providing continuous surveillance of pre-selected areas of the world to determine the status of a potential enemy's war-making capacity."[101, 102] However, given the top-secret nature of the project, Eisenhower could not back up his claims of military superiority publicly, regardless of the degree to which they would likely placate his critics.

Eisenhower's non-alarmist attitude soon confronted reality. On October 17, 1957, the USIA's Office of Research and Intelligence released a report entitled "World Opinion and the Soviet Satellite: A Preliminary Evaluation." It outlined four "broad major effects" that the Sputnik launch had dealt on world public opinion:

> 1) Soviet claims of scientific and technological superiority over the West and especially the U.S. have won greatly widened acceptance; 2) public opinion in friendly countries shows decided concern over the possibility that the balance of military power has shifted or may soon shift in favor of the USSR; 3) the general credibility of Soviet propaganda has been greatly enhanced; and 4) American prestige is viewed as having sustained a severe blow, and the American reaction, so sharply marked by concern, discomfiture and intense interest, has itself increased the disquiet of friendly countries and increased the impact of the satellite."[103]

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[100] "Official White House Transcript of President Eisenhower's Press and Radio Conference #123."
[101] "WS-117L," General CIA Records, FOIA Document # CIA-RDP85B00803R000100040002-8, https://www.cia.gov/readingroom/docs/CIA-RDP85B00803R000100040002-8.pdf.
[102] This program would develop into CORONA, whose Discoverer 2 satellite on April 14, 1959, quietly became "the first satellite to be stabilized in orbit in all three axes, to be maneuvered on command from the earth, to separate a reentry vehicle on command, and to send its reentry vehicle back to earth." ("Discoverer 2," NASA, https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=1959-003A.).
[103] United States Information Agency, Office of Research and Intelligence, "World Opinion and the Soviet Satellite: A Preliminary Evaluation," October 17, 1957, "Earth Satellites," folder 3, box 7, Briefing Notes

The warnings had been justified. By mid-October 1957, Dwight Eisenhower, military hero and once-beloved president, was no longer leader of the world's most powerful nation, at least so far as the world saw it. His failure to prioritize the space program during the first five years of his presidency coupled with his inaction when faced with compelling reasons to speed up Project Vanguard caused a sudden dip in American prestige across the globe. Furthermore, Eisenhower's public lack of concern immediately following the launch contributed to a sense of uneasiness throughout the nation. It was in this climate that Senator Lyndon Johnson emerged from the Senate, jumping at the opportunity to criticize the Republican Administration by implying that Eisenhower's fiscally conservative policies were to blame for the Soviets' first place finish. "If more money is needed," Lyndon Johnson declared, "let's spend it. If more resources are needed, let's use them. If more hours are needed, let's work them. Let us do whatever it takes."[104]

Subseries, NSC Series, Office of the Special Assistant for National Security Affairs: Records, 1952-61, White House Office Files, Eisenhower Presidential Library.

[104] Jeremy Deaton, "NASA Almost Never Came to Be. Its Creation is a Lesson in Political Power," Popular Science, March 16, 2018, https://www.popsci.com/nasa-almost-never-existed/.

Chapter III.

A Man of Urgency

> There are those who argue that Johnson is, in fact, if not in theory, the country's most powerful man, because he loves...to exercise power, and President Eisenhower does not.
>
> —Stuart Alsop

When Sputnik 1 took flight, Lyndon Johnson and his advisors saw an opportunity to call into question the competence and priorities of the current Administration and advance the Democrats' agenda. Johnson created a sense of urgency so intense and pervasive that the public had no choice but to stop and listen. He used President Eisenhower's calm, inconspicuous reaction to the event as fuel for an argument that the Soviets' feat was one that should have, and could have, belonged to the United States. Johnson's relentless use of Sputnik 1 as political ammunition dealt a tough blow to the Administration and placed the Senate Majority Leader at the helm of the new national issue of space research and exploration.

The Sputnik Reaction in the United States

As much as President Eisenhower outwardly denied it, the world was different after Sputnik 1 exited Earth's exosphere and entered the vastness of outer space. Just about anyone back on Earth with access to a radio, newspaper, or television would learn of Sputnik I within days, and one would have been hard-pressed not to feel the magnitude of the event. The moment was even more noteworthy for the half of the population who had never heard of space satellites. A poll examining Americans' interest in newspaper

science stories conducted in February 1957 included one question pertinent to this study: "What is the purpose of space satellites?" 54% of respondents could not answer the question because they had never heard of a space satellite. The study's sample was limited to newspaper readers, however, who were more likely to encounter news about satellites than people who didn't read newspapers. One can deduce, therefore, that the percentage of people who had never heard of space satellites was actually well over 54% in February 1957.[105] Indeed, a June 1957 poll surveying a cross-section of people in Baltimore asked, "What is an artificial moon or space satellite?" Just 18% of respondents "showed some understanding of the term 'satellite.'"[106]

Many popular narratives today paint the launch of Sputnik 1 as a shocking event that shifted the global balance of power in the Soviets' favor. An example:

> On October 4, 1957, the Soviet Union launched the earth's first artificial satellite, Sputnik-1. The successful launch came as a shock to experts and citizens in the United States, who had hoped that the United States would accomplish this scientific advancement first...The fact that the Soviets were successful fed fears that the U.S. military had generally fallen behind in developing new technology.[107]

While several reports support the latter claim, this characterization as a whole is unsatisfactory, as there were markedly varied responses across the globe and within the United States. For example, on Saturday, October 5, a three-lined, boldface headline dominated almost half of the *New York Times'* front page, reading, "Soviet Fires Earth Satellite into Space / It is Circling the Globe at 18,000 M.P.H. / Sphere Tracked in Four

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[105] Stephen Bassett Withey, Robert C. Davis, and Inter-university Consortium for Political Social Research, "News Media Study, 1957," Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research [distributor], 1970: 2.
[106] Donald N. Michael, "The Beginning of the Space Age and American Public Opinion," *Public Opinion Quarterly* 24, no. 4 (1960): 575, https://doi.org/10.1086/266973.
[107] "Sputnik, 1957," U.S. Department of State, Office of the Historian, https://history.state.gov/milestones/1953-1960/sputnik.

Crossings Over U.S."[108] While the headline was eye-catching, the language was informational and neutral in connotation, not sensational and dramatic. Similarly, most of America did not consider Sputnik 1 a reason to panic. Several eye-opening polls and surveys conducted shortly after the launch present the image of a tempered, thoughtful post-Sputnik America, not a population in crisis. One survey of 3000 adults conducted a week after the launch posed open-ended questions about the event. By then, most respondents had heard of Sputnik 1, and the majority was not particularly surprised by it. Some even spoke of the launch in positive terms, describing it as a sign that "science is progressing."[109]

A similar reaction was confirmed in a government study conducted at the same time but not released until the following year. Respondents from Washington, D.C., and Chicago expressed concern, with 50% considering the launch a "blow to our prestige." However, in another question, 60% were confident that the U.S. would "make the next great 'scientific' advance."[110] The study also cited a survey conducted by the Opinion Research Corporation that produced similar findings: only 13% of respondents felt that the U.S. had fallen behind the Soviets "dangerously;" 36% were confident that the U.S. would catch up; and 46% still felt that the U.S. was superior to Russia in technology.[111] This is a far cry from the familiar image of red terror that often appears in tandem with the name "Sputnik."

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[108] *New York Times* front page headline, October 5, 1957, https://timesmachine.nytimes.com/timesmachine/1957/10/05/issue.html?auth=login-smartlock.
[109] Launius, "An Unintended Consequence," 258.
[110] International Affairs Seminars of Washington, "American Reactions to Crisis: Examples of Pre-Sputnik and Post-Sputnik Attitudes and of the Reaction to other Events Perceived as Threats, 15-16 October 1958," A83-10, Box 5, U.S. President's Committee on Information Activities Abroad (Sprague Committee) Records, 1959-1961, Eisenhower Presidential Library.
[111] Launius, "An Unintended Consequence," 258.

Further support for this temperate American reaction can be found in a Public Opinion Index that surveyed 1000 adults and 115 newspaper editors immediately after the launch. The results indicate a soft impact: of the 95% of respondents who were aware of the event, 40% "dismissed it without serious thought as to what it might mean to them and their country."[112] More notable yet, despite the U.S.' failure to win first place, 80% of respondents felt that the U.S. was "at least even" and "would catch up before long."[113] Clearly, these Americans were confident enough in their nation's technological capabilities to not feel especially threatened by the Soviets' showy demonstration of theirs. This sentiment would grow more alarmist, however, as the "beep, beep, beep heard around the world" settled comfortably into orbit.

A Global Perspective

While Americans may have been largely unphased by the satellite at first, the rest of the world took immediate notice. Since the beginning of the Cold War, U.S. efforts abroad had been effective in convincing target countries of the benefits of democracy, no small feat given the massive Soviet propaganda effort to sway developing countries to join the Communist bloc.[114] Allegiance abroad was not guaranteed, however, and from such a long distance, a demonstration of power was much more effective than a speech or pamphlet. Therefore, the Sputnik 1 launch was an effective propaganda move because it provided a tangible argument that the U.S.S.R. had more advanced technology than the

[112] O. M. Gale to Neil McElroy, April 14, 1958, Office of the Secretary of Defense, https://www.eisenhowerlibrary.gov/sites/default/files/research/online-documents/sputnik/4-14-58.pdf.
[113] Gale to McElroy, April 14, 1958.
[114] Andrew L. Yarrow, "Selling a New Vision of America to the World," *Journal of Cold War Studies* 11, no. 4 (2009). https://doi.org/10.1162/jcws.2009.11.4.3.

U.S. Many countries took this to mean that the U.S.S.R. was also superior in the field of science as a whole.[115] The Soviet leader Premier Nikita Khrushchev maneuvered his propaganda machine deftly to juxtapose the success of his country with the massive failure of the United States, a country so convinced of its superiority that it failed to actively protect it. Khrushchev understood the power of action and optics to sway opinions, regardless of the integrity, if any, of the foundation that lay beneath them.

The Sputnik 1 launch revealed that this feeling was shared by America's allies as well, as several partner countries in NATO expressed great concern over the implications of the launch on the perceived ability of the U.S. to defend against a Soviet military attack. Belgian representative Andre de Staercke noted that for the western members of NATO, "It was not sufficient for [the U.S.] to possess this superiority; they must also believe in it."[116] This statement was echoed by German chancellor Konrad Adenauer in November 1957 when he spoke of an "air of doubt surrounding U.S. participation and interest in NATO as a result of the military scientific advances of the U.S.S.R."[117]

As predicted by Eisenhower's advisors in the years leading up to Sputnik 1, the days and weeks that followed sparked a newfound global skepticism of U.S. scientific prowess. The U.S.I.S. outpost in Mexico reported on October 14 that, in response to the satellite launch, Mexican newspaper and magazine editors had turned to the Soviet Embassy for scientific material instead of U.S.I.S. The report noted that these editors had employed "varying degrees of bluntness" when asserting that the U.S.S.R was now ahead

[115] U.S. Information Agency, "Impact of U.S. and Soviet Space Programs on World Opinion," July 7, 1959, A83-10, Box 6, U.S. President's Committee on Information Activities Abroad (Sprague Committee) Records, 1959-1961, Eisenhower Presidential Library.
[116] Evanthis Hatzivassiliou, "The View from NATO: Sputnik as a Catalyst, 1957–8," *The International History Review* 42, no. 6 (2020): 1140, https://doi.org/10.1080/07075332.2019.1700543.
[117] Hatzivassiliou, "The View from NATO," 1140.

of the U.S. in science.[118] Another scathing report from Tehran described how the Iranian government considered the satellite "such a blow to U.S. prestige that [Iranian representatives] displayed uneasy embarrassment when discussing it with Americans."[119] Furthermore, the satellite was a topic of discussion at the Western European Union Assembly meeting held in Strasbourg on October 10, 1957, during which several representatives expressed notable criticisms of the U.S. missile and satellite effort. German Parliamentary Representative Fritz Erler stated gravely, "Now that the Soviet Union has taken the lead with the intercontinental ballistic missile and the earth satellite, the prospects of gaining political aims through military strength have been further reduced."[120] Netherlands representative Johannes J. Fens also bemoaned the political implications of the Soviet launch:

> I am less worried about a disturbance in the military equilibrium than about a disturbance in the political equilibrium. In the eyes of neutral and young countries which have not yet decided which bloc to join, Russia's prestige will have been immeasurably strengthened. The Russians have outstripped the West in technical progress; they are the strongest; Western prestige, Mr. President, has been greatly damaged.[121]

Lord Stonehaven of the United Kingdom expressed a similar dismay with the lagging American missile program, stating his surprise "not that the Russians had the I.C.B.M. now, but that the Americans had not had it before." He was less concerned with Sputnik 1 than the political implications of a failed American response: "If the American satellite goes off like a damp squip, that is the time to get worried."[122] His statement

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[118] "Staff Notes no. 216," October 15, 1957, Box 27, Toner Notes: October 1957, The White House, Eisenhower Presidential Library.
[119] United States Information Agency, Office of Research and Intelligence, "World Opinion and the Soviet Satellite: A Preliminary Evaluation," October 17, 1957.
[120] "Assembly of Western European Union Proceedings 3rd Session (Second Part) October 1957," accessed from the Archive of European Integration, 68, https://aei.pitt.edu/65160/1/WEU078.pdf.
[121] "Assembly of Western European," 52.
[122] "Assembly of Western European," 59.

eerily foreshadowed the failure of the Vanguard launch two months later, which further diminished the image of U.S. prestige abroad.

A World Gallup Poll conducted on October 27, 1957, asked participants from eleven European cities and one American city the following: "Do you feel that the Russian satellite is a serious blow to U.S. prestige?"[123] In six of the twelve cities, more people answered "yes" than "no" or "I don't know" (New Delhi, Toronto, Paris, Oslo, Helsinki, and Copenhagen). Amsterdam, Washington-Chicago, and Vienna were virtually even, but there were significant "I don't know" answers as well. Stockholm, Bonn, and Brussels were the only three to answer clearly that the satellite was not a major blow. Moreover, citizens in America and the media abroad exhibited concern, but not the level of panic that has become synonymous with today's popular telling of the Sputnik 1 launch.

President Eisenhower Faces the Critics

From October 4, 1957, through the end of the decade, media coverage in the U.S. of Sputnik 1 and Sputnik 2 was strikingly dissimilar to the initial tempered response of American citizens. The press adopted a tenor of panic, fear, and urgency that quickly permeated American politics and culture.[124] This is not widely known by scholars and students of American history because the U.S. polls conducted shortly after the launch of Sputnik 1 are buried in the literature beneath thousands of newspaper articles from 1957-1960 that trumpet the shock and warn of the grave implications of the Sputniks. *Life*

[123] Hazel Gaudet Erskine, "The Polls: Defense, Peace, and Space," *Public Opinion Quarterly* 25, no. 3 (1961): 486, https://doi.org/10.1086/267042.
[124] Kim McQuaid, "Sputnik Reconsidered: Image and Reality in the Early Space Age," *Journals: University of Toronto Press* 37, no. 3 (2007): 372, https://doi.org/10.3138/cras.37.3.371.

Magazine went so far as to advise Americans to "not pretend that Sputnik is anything but a defeat for the United States;" the *Los Angeles Times* similarly declared, "Russia scored a smashing propaganda and psychological victory over the United States;" and the *New York Times* labeled Sputnik 1 "a devastating blow to the United States' scientific, industrial, and technical prestige in the world."[125] The press was clearly in control of the narrative at this point, and they "created opinion as well as reported it."[126]

The press was not the only actor in the frenzied depiction of Sputnik and the now quickly accelerating Space Race. Words emanating from the Capitol Building in Washington, D.C., during this time were equally dramatic, as Democratic senators cried out for an explanation of why and how the Soviets beat the U.S. into space. Senators Stuart Symington, Richard Russell, and Henry Jackson quickly became front page news as they characterized the Sputnik launch as a "grave threat to U.S. national security...and a blow to American prestige."[127] Symington and Jackson were in full attack mode, blaming the failure of the U.S. to launch the world's first satellite on President Eisenhower's economic management of the missile and satellite programs.[128] Indeed, the President's desire to see "the Defense Department cut down to [a] spartan basis" had negatively impacted the military's ability to reach its objectives.[129] Elaborating on this grievance, Senator Symington argued, "For fiscal reasons this government...continues to cut back and slow down its own missile program," to which Jackson implored the

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[125] As quoted in Jack Lule, "Roots of the Space Race: Sputnik and the Language of U.S. News in 1957." *Journalism Quarterly* 68, no. 1 (1991): 80-81, https://doi.org/10.1177/107769909106800109.
[126] McQuaid, "Sputnik Reconsidered," 372.
[127] Deaton, "NASA Almost Never Came to Be. Its Creation is a Lesson in Political Power."
[128] "Senators Attack Missile Fund Cut," *The New York Times*, October 6, 1957, https://www.nytimes.com/1957/10/06/archives/senators-attack-missile-fund-cut-the-united-states-continues.html.
[129] Minutes from meeting held in the Oval Office, March 29, 1956, "Mar. '56 DIARY – acw (1)" folder, Ann Whitman Diary Series, Eisenhower Papers, Eisenhower Presidential Library.

Defense Department to "immediately restore recent cuts in expenditures for missile development."[130]

To add to the damage, a report from the National Science Foundation on October 25 outlined the ways in which Eisenhower's budget cuts for fiscal year 1958 negatively impacted several vital IGY projects and threatened their completion.[131] In an alarming admission, the Army announced that five IGY projects essential to the Rocketry Program at Fort Churchill were being halted due to Eisenhower's decision to cut the program's $1,600,000 funding from the budget. The report states that "the effect of this action would be the substantial elimination of the entire U.S. IGY Rocketry Program...; serious damage to national prestige and U.S. rocketry progress; and sharp reduction in international commitments undertaken by the USNC-IGY committee."[132] To what extent Senators Symington and Jackson knew of this development is not evident in the public record, but they were clearly on to something, as the President's quest for a balanced budget was on course to destroy the U.S.'s most substantial contribution to the IGY.

In contrast to his Democratic colleagues, Majority Leader Johnson was quiet on October 4, 1957. He was concerned that if he threw himself into the debate about budget cuts, curious onlookers would discover that he had been instrumental that summer in cutting close to two-and-a-half billion dollars from the defense budget for the next fiscal year.[133] A deeper look into his voting record would reveal Johnson's role as a "budget cutter," a characterization that would not be helpful at this juncture. To turn attention

[130] "Senators Attack Missile Fund Cut."
[131] National Science Foundation, "Summary of IGY Projects Affected by Recent DOD Fiscal Actions," October 25, 1957, Dept. of Defense folder 2, Box 3, Subject Subseries, Special Assistant Series, White House Office of the Special Assistant for National Security Affairs, Eisenhower Presidential Library.
[132] National Science Foundation, "Summary of IGY Projects."
[133] Alfred Steinberg, *Sam Johnson's Boy* (New York: MacMillan, 1968), 479.

elsewhere, Johnson chose to let the louder, more polarizing voices dominate the first few days of the Sputnik flurry while he considered how he could use the satellite to his advantage.

Meanwhile, Senators Symington and Jackson were calling for an immediate inquiry into the current state of the U.S. missile and satellite programs, as well as any plans that were in place for their futures. On Monday, October 7, the demand for an investigation gained traction as Democrats George Smathers and Mike Mansfield, as well as Republicans Styles Bridges and Alexander Wiley, joined the cause. Senators from both parties announced to the press from the outset that "politics should have no place in the matter," emphasizing that the goal of the inquiry was to obtain facts, not place blame.[134] At the same time, however, there was a clear split along party lines regarding the significance of Russian advances and the appropriate level of urgency with which the U.S. should proceed. Senator Mansfield warned that the White House should take the recent Soviet science achievements seriously, arguing, "For too many years the United States has been all too prone to underestimate the capabilities of the Soviet Union, and now the chickens are coming home to roost."[135] Senator Smathers also chose his words carefully, as he called for an investigation into the "failure" of the programs in question. Both senators were cautious to not implicate the President directly, as such a partisan move could end up in cross-party backlash.

Senator Wiley advocated for an investigation on the grounds of national security: "In view of a possible Pearl Harbor, we've got to be on our toes, and whether we are on our toes or not, only the scientists who have been employed to work on the program can

[134] Drury, "Democratic Senators Demand a Full Investigation."
[135] Drury, "Democratic Senators Demand a Full Investigation."

answer."[136] Several Republican senators took offense to the Democrats' slightly veiled criticism of the President, including Jacob K. Javits, who characterized "what he called 'partisan criticism' as a disservice to our world position, our defense efforts and our scientists."[137] Moreover, the underlying Democratic argument was clear: President Eisenhower had failed to provide adequate leadership over the U.S. missile and satellite programs, which had slowed the U.S. effort substantially while the Soviet programs grew rapidly.

Shaping a National Crisis

While the drama unfolded on Capitol Hill during that first weekend in October 1957, Johnson acted from the comfort of his Texas ranch. He and Richard Russell, the Chairman of the Armed Services Committee, spoke by phone to discuss how to structure the Senate inquiry. Given the importance of maintaining a non-partisan atmosphere, Johnson and Russell knew that they could not let Senators Symington or Jackson take the lead, as their opinions on the matter would make it impossible for the tone of the hearings to remain neutral.[138] The public record lacks a clear explanation for Russell's decision not to chair the hearings himself, but it is suspected that he already knew that Johnson was the right man for the job. On October 8, Russell announced that the Preparedness Subcommittee, with Johnson at the helm, would be launching an investigation immediately, with hearings to begin on November 25.[139]

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[136] Drury, "Democratic Senators Demand a Full Investigation."
[137] Drury, "Democratic Senators Demand a Full Investigation."
[138] Steinberg, *Sam Johnson's Boy,* 479.
[139] Drury, "Democratic Senators Demand a Full Investigation."

Just like that, Lyndon Johnson entered the stage, quickly establishing himself as the voice of a wounded America, demanding to know the extent of the Soviets' technological lead over the U.S., and, more importantly, how it could be eliminated. Johnson had been asking questions since the night of October 4, as he watched, transfixed, as Sputnik 1 shot across the sky over his Texas ranch. He later wrote that when Sputnik 1 left the Earth, "a new era of history dawned over the world. Now, somehow, in some new way, the sky seemed almost alien." He recalled that, for the first time, it "might be possible for another nation to achieve technological superiority over this great country of ours."[140] Despite having never expressed an interest in space exploration or satellites publicly, Johnson leapt into the public eye, armed with an urgent message for America: with Sputnik 1, the Russians had dealt a blow to U.S. prestige that could be heard around the world; it was therefore imperative that the U.S. take immediate action to "assure our friends that the 'Free Society' retain the lead in the Space Age."[141] With this and other exigent talking points, Johnson deftly wove himself into the fabric of the U.S. space effort.

As the nation turned to its new resident space expert for guidance, President Eisenhower learned of the psychological and political fallout from the Soviet launch. He held meetings with members of his administration and the science community and attempted to understand how people could make assumptions about the strength of the U.S. military simply from the nation's failure to put a satellite in space first. The political

[140] Lyndon Johnson, *The Vantage Point: Perspectives of the Presidency, 1963-1969* (Holt Reinhart and Winston, 1971): 272.
[141] John G. Norris, "Complacency Hit; Johnson Plans Searching Inquiry," *The Washington Post and Times Herald,* November 6, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/complacency-hit-johnson-plans-searching-inquiry/docview/148909948/se-2.

component was addressed in an October 10 NSC meeting that focused on the "Implications of the Soviet Earth Satellite for U.S. Security."[142] In the meeting, the President heard reports from the CIA, Department of Defense, National Science Foundation, Project Vanguard, National Academy of Sciences, State Department, and USIA.

CIA director Allen Dulles and Under Secretary of State Christian Herter spoke of the widespread implications of the launch on the foreign image of the U.S. Dulles prefaced his comments with a contextualization of the launch within the greater Soviet propaganda effort, noting that, prior to the launch, "Khrushchev had moved all his propaganda guns into place," with Sputnik 1 being the third component of a "trilogy of propaganda moves" that also included the recent successful tests of an ICBM and a large-scale hydrogen bomb.[143] He explained how this propaganda effort had primed a response from foreign powers that largely confirmed the U.S.S.R.'s claims of military and scientific supremacy over the U.S. He cited reports from China, Western Europe, Asia, and Africa that demonstrated how the intense Soviet propaganda push "was exerting a very wide and very deep impact."[144] In short, it was not good news.

Secretary Herter echoed Dulles' points, stating that the foreign response from both U.S. allies and neutral countries was "pretty somber," and that the U.S. would need to counteract this sentiment with clear demonstrations of U.S. scientific and military strength.[145] At the end of the meeting, Eisenhower was still not convinced that Sputnik 1

[142] National Security Council, "Discussion at the 339th Meeting of the National Security Council, Thursday, October 10, 1957," October 11, 1957, Box 9, NSC Series, Eisenhower Papers, 1953-1961 (Ann Whitman File), Eisenhower Presidential Library.
[143] National Security Council, "Discussion at the 339th Meeting of the National Security Council."
[144] National Security Council, "Discussion at the 339th Meeting of the National Security Council."
[145] National Security Council, "Discussion at the 339th Meeting of the National Security Council."

warranted major changes in the satellite program and related defense policies. He decided that the official line from the White House would be that the Administration "stand[s] firmly by the existing satellite program." He instructed government officials to insist that "we have a plan—a good plan—and...we are going to stick to it."[146] Eisenhower's insistence on maintaining the status quo demonstrates the extent to which he was out of touch with the current climate of America. This worked well for Lyndon Johnson, who offered concern, reassurance, and leadership to an increasingly restless population.

Throughout the rest of October and into November, the national conversation around Sputnik 1 intensified. Aside from a two-day trip to Washington, D.C. on October 16, Johnson spearheaded the project from his Texas ranch, assembling an adept staff of New York lawyers, elite scientists, and able administrators back in Washington.[147] Johnson's team conducted interviews with prominent scientific, military, and aeronautics experts, gathering details of all facets of the space and missile programs. After two weeks and over one hundred interviews, Johnson determined that the information gathered from the hearings warranted "further action," and on October 22, he announced the launch of a preliminary Congressional inquiry into the national space program.[148] He cited a lack of "coordinated authority" over the program, which had created a situation "where we have a team, but I'm afraid it lacks a driver."[149] He also indicated that the inquiry could lead to a full investigation into the program.

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[146] National Security Council, "Discussion at the 339th Meeting of the National Security Council."
[147] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1024.
[148] John W. Finney, "Johnson Orders Inquiry on Space," *The New York Times,* October 23, 1957, https://www.nytimes.com/1959/10/23/archives/johnson-orders-inquiry-on-space-he-hails-transfer-of-army-team-but.html.
[149] Finney, "Johnson Orders Inquiry on Space."

Johnson's means of persuasion at this time was in his rhetoric, so he sprinkled his announcement with figurative language to attach a sense of drama and urgency to the issue. For example, he claimed that the hearings uncovered "far too many instances in which we have pushed the button, but our missile remained on the launching pad." He continued, "At the same time the Soviets are making a bullseye out of—and placing a satellite into orbit around—the moon...The American people are asking why, and they deserve an answer."[150] Johnson's rhetoric played into the developing narrative that Sputnik 1 was a targeted attack by a most manipulative enemy.

Johnson could depend on his longtime aid George Reedy for almost fanatical encouragement before and during his push for a national response to Sputnik. Although "LBJ needed no staffer to instruct him in politics," Reedy, inspired by Senatorial aid Charles Brewton, forwarded a memo from Brewton to Johnson on October 17 announcing that the Senator should "plunge heavily into this one."[151] The memo included a cover letter from Reedy, in which he announced that the new space issue had the potential to "blast the Republicans out of the water, unify the Democratic Party, and elect you president."[152] The two staffers envisioned an investigation into the current space program that would uncover the failings of the program "without hysteria, without elaboration, and definitely without partisanship."[153] Reedy's memo lays out Brewton's blueprints for the impending Senate inquiry, announcing that the "central figure must be a

[150] Finney, "Johnson Orders Inquiry on Space."
[151] McDougall, ...*The Heavens and the Earth,* 149; George Reedy to Lyndon Johnson, Memorandum, October 17, 1957, "Memos October 1957," Office Files of George Reedy 1951-1955, Box 420, LBJ Senate Papers 1949-1961, Lyndon B. Johnson Presidential Library.
[152] George Reedy to Lyndon Johnson, Cover letter to memorandum, October 17, 1957, "Memos October 1957," Office Files of George Reedy 1951-1955, Box 420, LBJ Senate Papers 1949-1961, Lyndon B. Johnson Presidential Library.
[153] George Reedy to Lyndon Johnson, Memorandum, October 17, 1957.

Senator who has a reputation for statesmanlike nonpartisan investigations of defense and who is not involved too heavily in the emotional issues surrounding segregation."[154]

Brewton and George Reedy knew of one such man, and Reedy expressed in his cover letter that "he was convinced that you are the only man who can handle it...you have a reservoir of goodwill and an aura of statesmanlike handling of defense problems from the early Preparedness Committee days."[155] James H. Rowe, a lawyer and another of the Senator's advisors, also weighed in on the issue. He told Johnson that he must exhibit "a sense of urgency to counteract the complacency of the administration... Lyndon Johnson's greatest contribution can be—and should be—to carry on psychological warfare against Eisenhower."[156] Lowe, Reedy, and Brewton's advice was successful, and Johnson took hold of the issue in grand form.

Raising the Stakes

While the American people, their government, and foreign powers around the world grappled with the U.S.'s fall from grace, the Soviets quietly did it again. When they launched Sputnik 2 on November 3, 1957, the White House admitted that the U.S "had suffered another psychological setback" but was quick to point out that this was not significant in the *real* race of military ballistic missiles.[157] Eisenhower responded to this spectacle of superiority by sticking to his calm, non-alarmist attitude, stating on November 7 that the Soviets had "utilized their Sputnik for propaganda, not science."[158]

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[154] Reedy to Johnson, Memorandum, October 17, 1957.
[155] Reedy to Johnson, Cover letter to memorandum, October 17, 1957.
[156] Robert A. Divine, *The Johnson Years, Volume Two* (University Press of Kansas, 1987), 222.
[157] John W. Finney, "It's 'No Surprise'; But Demands Increase for a Congressional Missile Inquiry," *The New York Times*, November 3, 1957, nytimes.com/1957/11/04/archives/its-no-surprise-but-demands-increase-for-a-congressional-missile.html.
[158] McDougall, *...The Heavens and the Earth,* 146.

Just as several of Eisenhower's advisors had predicted, however, these vague placations were proving inadequate in quelling the public's demand for answers.

Two weeks before the Sputnik 2 launch, the Committee on International Policy of the National Planning Association sent a letter to the President outlining its findings regarding the global effects of the Sputnik 1 launch.[159] The Committee outlined four major findings:

> 1) the Soviet Union's quest to extend its dominion was "challenging the fundamental values of western civilization;" 2) the Soviet Union was steadily shifting the balance of power away from the U.S.;" 3) the prestige of the non-Soviet world was deteriorating; and 4) the American people did not understand the extent of this depreciation.[160]

This was because on October 15, when the letter was drafted, the American public had not yet been told by the media and vocal members of Congress that Sputnik I was something to worry about. The committee noted that if the American people knew of the grave situation at hand, "economy and governmental expenditures undoubtedly would not be the principal motivating force in Congress."[161] The committee's recommendations included a passionate plea to the President to "assert that high quality of leadership in which you excel and in a series of public statements undertake to dispel the illusion with which so many citizens have been bemused."[162] Needless to say, the President did not follow the committee's recommendations.

After the Sputnik 2 launch, however, Eisenhower was finally ready to follow his advisors' advice and increase his efforts to share information with U.S. citizens about the

[159] National Planning Association to Dwight D. Eisenhower, "The Committee on International Policy's Findings and Recommendations Concerning the Aftermath of Sputnik I," October 15, 1957, Box 27, DDE Diary October 1957, Eisenhower Presidential Library.
[160] National Planning Association, "The Committee on International Policy's Findings."
[161] National Planning Association, "The Committee on International Policy's Findings."
[162] National Planning Association, "The Committee on International Policy's Findings."

extensive capabilities of the U.S. defense program. This new effort would include presidential speeches broadcast on television and radio that were aimed at assuaging the "apprehension of the American people about our defense posture."[163] He hoped that he could persuade the public, both at home and abroad, of the enduring strength of the U.S. military. He planned a news conference for Wednesday, November 6 to answer questions and provide information about the most recent Soviet space developments.[164]

Lyndon Johnson was similarly ready to face—and fire up—the nation. He flew to Washington, D.C. for meetings and a briefing at the Pentagon. On Monday, November 4, Johnson joined fellow Democrat and Committee Chairman Richard Russell and senior Republican Styles Bridges for the briefing from Secretary of Defense Neil McElroy, Deputy Secretary Donald Quarles, and Chairman of the Joint Chiefs of Staff General Nathan Twining.[165] The five-and-a-half hour meeting focused on the military missile program but also covered the status of the Soviet satellite program. After the Pentagon briefing, Lyndon Johnson announced to a packed room of reporters that "a searching inquiry" would be launched by the Senate into "all aspects of the United States missile and satellite programs."[166] He, Russell, and Bridges answered questions for an hour, reiterating that the goal of the investigation was not to place blame; however, he added, "where errors were made, they will be brought to the attention of the American

[163] Dwight D. Eisenhower to Preston Hotchkis, November 15, 1957, "DDE Dictation November 1957" folder, Eisenhower Presidential Library.
[164] Finney, "It's 'No Surprise'; But Demands Increase."
[165] John W. Finney, "President and Aides Study Reports on Soviet's Feat," November 5, 1957, https://www.nytimes.com/1957/11/05/archives/president-and-aides-study-reports-on-soviets-feat-fiveandahalfhour.html.
[166] Finney, "President and Aides Study Reports."

public."[167] Johnson gave a summary to the media that expressed concern yet held optimism over the current state of the U.S. satellite and missile programs:

> The Soviet achievement is confirmation of the feeling that we have not done our best in strengthening defenses and raising the level of technology. This does not mean that we cannot catch up with the Soviet Union; it does mean that we have not kept in step with the needs of our times.[168]

The next few days were a flurry of activity for Johnson: he juggled standard committee sessions, committee planning sessions, and party conferences; made speeches and released statements through any and all news outlets possible; and fielded never-ending phone calls.[169] He was determined to make space a big issue, and more importantly, *his* issue. By this time, Johnson was all in; he truly believed in the need to re-organize the missile and satellite programs, but he also craved and flourished under the high-pitched media coverage and rapt attention from the public. For, as Caro describes in *Master of the Senate,* Johnson "insisted on being the center of attention, of dominating any room in which he found himself."[170] Now, with every newspaper quote and press conference, Johnson crept closer to the designation of the nation's most vocal and accessible expert on space.

Eisenhower on the Sidelines

President Eisenhower was having a busy week too, albeit not as showy. He held budgetary and legislative meetings and conferred with scientific and national security advisors. While he might have been indifferent before, Eisenhower now knew that he

[167] Finney, "President and Aides Study Reports."
[168] Finney, "President and Aides Study Reports."
[169] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1025.
[170] Caro, *The Years of Lyndon Johnson*: *Master of the Senate,* 112.

needed to demonstrate some leadership, lest he be showed up by Lyndon Johnson, his foremost political rival in Washington.

During Johnson's tenure as Senate Majority Leader, he and Eisenhower assumed the roles inherent to their opposing governmental positions. While civil in public, Eisenhower expressed privately that he did not like Johnson's informal style or boorish behavior, called Johnson "phony, unreliable, and opportunistic."[171] He later would characterize the Senator as "a small man [without] the depth of mind nor the breadth of vision to carry great responsibility...Johnson is superficial and opportunistic."[172] Johnson could easily have shot off a string of gripes about Eisenhower if he wanted (from the war hero's frugal government spending to extended 18-hole golf outings on weekdays), but Johnson respected Eisenhower and attempted to avoid public conflict as much as possible. To his credit, Eisenhower exhibited great patience with Johnson, accommodating Johnson's ego when necessary.[173] This mutual effort to place the well-being of the nation before personal differences resulted in a period of highly successful foreign policy measures and legislative initiatives.

Needless to say, the Sputnik 1 and 2 launches pushed the President and Senate leader's relationship to new limits, as Johnson led the charge against Eisenhower's inaction and aloofness regarding the missile and space programs. He made a great point to assure the Republican leadership that his committee's review into the satellite and

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[171] "William Robinson Diary Entry, July 18-25, 1960," "Eisenhower: July-December 1960" folder, Box 4, Series I Eisenhower: Chronological Series, 1944-69, William Robinson Diary, Eisenhower Presidential Library.
[172] Fred Greenstein, *The Hidden-Hand Presidency: Eisenhower as Leader* (New York: Basic Books, 1982), 28, https://archive.org/details/hiddenhandpresid0000gree.
[173] Samuel J. Cooper-Wall, "The Master of the Senate and the Presidential Hidden Hand: Eisenhower, Johnson, and Power Dynamics in the 1950s*," The Gettysburg Historical Journal* (2011): 183, https://cupola.gettysburg.edu/ghj/vol10/iss1/6.

missile programs would be objective and focused on finding the facts, not the failings of the current Administration. His promise to avoid partisanship was accepted, and on October 21, 1957, Eisenhower's Secretary of Defense told Johnson, "If through your efforts it is kept out of partisan politics, it will be for the good of the public and we want to work with you."[174]

Johnson was also set on convincing the President of his earnest intentions. On November 6, Johnson paid Eisenhower a visit in the Oval Office to discuss the impending Senate inquiry. The Senator told the President that "he hoped [they] would close ranks, forget anything about Republicans and Democrats and do the job."[175] The President later told his secretary that Lyndon "said all the right things. I think today he is being honest."[176] At this point, it wasn't clear if Johnson was actually sincere or not, but he was adamant about sticking to an objective inquiry; he preferred any criticisms of the Administration be articulated by the witnesses themselves, a strategy that cemented his role as the nonpartisan "central figure" in Charles Brewton's blueprints.[177]

Johnson was perfectly cast—he was later described by the media and historians as giving a master performance—to keep his inquiry, and himself, at the top of the news.[178] The President's advisors were growing concerned by Eisenhower's complacency on the matter and urged him to offer up some solutions, lest the nation start looking seriously to Democratic leadership in the next election. When the White House announced that the

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[174] Robert Dallek, *Lyndon B. Johnson: Portrait of a President* (New York: Oxford University Press, 2004), 109.
[175] "Diary: November 6, 1957," "November 1957" file, DDE Diary, Eisenhower Presidential Library.
[176] "Diary: November 6, 1957."
[177] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1025.
[178] Examples include Divine, Caro, and Rowland Evans and Robert Novak, "Sputnik Probe Showed Johnson at His Best: The Exercise of Power—V," *The Washington Post and Times Herald*, November 17, 1966, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/sputnik-probe-showed-johnson-at-his-best/docview/142729694/se-2.

President would be making a "TV-radio report of great significance" on Wednesday, November 6, Johnson was caught off guard; this was a last-minute change from an address the President had planned for the following week in Oklahoma City. This change in the President's schedule complicated Johnson's next media appearance. He had planned to hold a formal news conference on Thursday the 7th to outline the impending investigation and give more details as to how the hearings would be structured. He was acutely aware of the fact that the more he was in the news and on TV, the more America would latch on to his talking points, and with Tuesday now sitting empty between Monday and Eisenhower's address, Johnson grabbed it.

For a month, Johnson had been painting a picture of the Soviet threat that ranged from the fantastical (he asserted that the country who had control of space would control the Earth's weather) to the alarming ("Soviets have beaten us at our own game...the Communists have established a foothold in space.").[179] His dramatic rhetoric struck a chord with politicians on Capitol Hill and families in their living rooms, and it was sticking. As historian Douglas Brinkley aptly put it, "While the public had not been immediately afraid of the ramifications of Sputnik, by the time Johnson was done with them, they were."[180]

Lyndon Johnson's November 5 press conference outlining the planned course of the missile-satellite investigation was televised. Speaking in his slow Texas accent, Johnson answered questions plainly and succinctly, his steady tone and composed affect conveying an aura of thoughtful concern. He explained the purpose and context of the hearings in language that the average citizen could understand:

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[179] Divine, *The Johnson Years, Volume Two,* 224.
[180] Douglas Brinkley, *American Moonshot* (New York: Harper, 2019), 134.

> This will be a national hearing instead of a partisan hearing. We want to know why we came up second; why Russia has two satellites...already launched while we have none; what we need to do, how to do it, and when we're going to do it; and...we're going to let the chips fall where they may.[181]

When a reporter asked if Johnson was "satisfied with our progress in the missiles and satellite field," the Senator deftly steered his answer away from the programs' deficiencies, which would have pointed fingers at the Eisenhower administration. Instead, he focused on the positive:

> Well, the information we received does not lead us to any conclusions of helplessness or despair. We're lagging in both the satellite and missile field, but there's no reason to believe that we cannot catch up if we have the will to win and if we just pitch in and get going. There is reason to believe that if we apply the necessary energy and the necessary determination and willpower that we can solve the problems that face us. I believe we'll do that.[182]

By early November 1957, Johnson had primed America for an investigation of the space program that would expose the grave leadership failures and planning errors that had led to the U.S.'s inability to launch a satellite before the Soviets. In the month following the Sputnik 1 launch, Johnson had exercised his self-described tendency to "immediately exert efforts" to get what he wanted. The next step was to prove that Eisenhower was asleep at the wheel, and there was no better way to do that than to deconstruct the nation's missile and space programs—live, when possible, on TV and radio. By coaxing the media into the inquiry, Johnson extended his cause beyond the Capitol and into the court of public opinion.

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[181] "Series of WSB-TV Newsfilm Clips."
[182] "Series of WSB-TV Newsfilm Clips."

Chapter IV.

Space Goes on Trial

> We must work as though no other Congress would ever have an opportunity to meet this challenge, for, in fact, none will have an opportunity comparable.
>
> —Lyndon Johnson

After the Sputnik 1 launch, Lyndon Johnson used the media and his penchant for persuasion to insert himself into the national conversation about outer space. Once seated comfortably at the helm of the space issue, Johnson harnessed his newfound notoriety to produce an inquiry into the failings of the U.S. missile and satellite programs. While marketed as a bipartisan endeavor strictly concerned with uncovering facts, Johnson's inquiry ultimately heaped the blame for Sputniks 1 and 2 squarely on the President's shoulders. Through strategic witness selection and nuanced questioning, Johnson ensured that any criticisms of the President and the Administration came from the witnesses' mouths and not his own. In this way, Johnson's orchestration of the hearings was a deft demonstration of party politics, which ultimately contributed to a seismic shift in the makeup of the decision-making bodies in the U.S. government.

"The Johnson Hearings"

On Monday, November 25, 1957, the United States Senate Preparedness Investigating Subcommittee of the Committee on Armed Services launched an "Inquiry into Satellite and Missile Programs," or, as it was quickly dubbed in the press, "The

Johnson Hearings."[183] As Chairman of the subcommittee, Senator Johnson guided the hearings from start to finish, "in such a way that the entire country would be fully aware of his role in responding to Sputnik."[184] Johnson's opening remarks were carefully crafted, as evidenced by several preliminary drafts found in the records. One draft included an especially charged paragraph:

> Free societies are particularly vulnerable to the threats of military extinction or enslavement. In a world which includes a powerful totalitarian state, militantly aggressive and ruthless in its determination to achieve its ends, free countries cannot relax or become complacent.[185]

As an allusion to the Soviet Union, this sentiment reflects Johnson's Anti-Communist beliefs, which had been apparent since the end of World War II; his Congressional records included support for nuclear weapons research as well as U.S. involvement in the Korean War. Furthermore, in 1950, Johnson asserted that "the world has expected the United States to lead the free nations unafraid and unbullied," a sentiment that resurfaced seven years later in that early draft of the subcommittee chairman's opening remarks.[186] For reasons that remain unclear, such language is absent from the final draft. However, it is reasonable to assume that George Reedy, Johnson's close advisor, had counseled against adopting such an aggressive tone; after all, Reedy's copious notes and directive-filled memos stressed the need for "positive and constructive goals," not blame-shifting or direct allegations.[187]

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[183] "Senate Quiz on Missiles Opens Today," The Washington Post and Times Herald," November 25, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/senate-quiz-on-missiles-opens-today/docview/148836514/se-2.
[184] Divine, *The Johnson Years, Volume Two,* 222.
[185] Lyndon Johnson, "Draft, Opening Remarks of Inquiry into Satellite and Missile Programs," "November 1957" folder 1 of 2, George Reedy Files, Lyndon B. Johnson Library.
[186] Reichstein, "Space—the Last Cold War Frontier?" 116.
[187] George Reedy to Lyndon Johnson, Memorandum, "November 1957" folder 1 of 2, George Reedy Files, Lyndon B. Johnson Presidential Library.

Indeed, Johnson's opening remarks followed Reedy's outline and borrowed heavily from his advisor's "script." What resulted was a tone of grave and urgent concern for the country's national security. Johnson called the current situation "an even greater challenge than Pearl Harbor," except that "we do not have as much time as we had after Pearl Harbor."[188] Johnson then reframed the image of the nation as that of a victim to that of a nation that was up for the challenges at hand. Johnson then repeated earlier assurances that the hearings would be conducted objectively and without presuppositions, stating, "Our goal is to find out what is to be done. We will not reach that goal by wandering up any blind alleys of partisanship."[189] These statements set the tone for "The Johnson Hearings," which concluded on January 23, 1958, after hearing testimonies from seventy-three witnesses.[190]

In his opening remarks, Johnson explained that the committee would begin the hearings with scientists, "because we felt that our people should know exactly what we are talking about."[191] The scientists who took the stand that first day, Edward Teller, Vannevar Bush, and Jonathan Chipman, were indeed some of the nation's most prominent and respected scientists; all had been involved in the Manhattan Project (the U.S.'s secret program during World War II that developed the first nuclear weapon), and they held strong name recognition. The scientists spoke with great urgency and authority about the inadequacies of the current satellite and missile programs. What the Subcommittee did not reveal, however, was that none of these "experts" was actually

[188] *Inquiry into Satellite and Missile Programs: Hearings before the United States Senate Preparedness Investigating Subcommittee of the Committee on Armed Services, Part I* (Washington: U.S. Government Printing Office, 1958): 3.
[189] *Inquiry into Satellite and Missile Programs, Part I*, 2.
[190] Mieczkowski, *Eisenhower's Sputnik Moment,* 141.
[191] *Inquiry into Satellite and Missile Programs, Part I*, 2.

involved in the current satellite and missile efforts. This detail was not unknown to the Subcommittee: in fact, assistant counsel Edwin Weisl, Jr. recalled that "we interviewed, I suppose, as many leading scientists as we could that were at least affected with these programs, or interested."[192] Subsequently, the inquiry's opening day featured a flurry of scientists who had been chosen to appear more for optics and narrative than actual satellite and missile expertise.

First to testify was "father of the hydrogen bomb" Edward Teller. Reedy later explained that the inquiry's lead counsel, Edwin Weisl, Sr. chose to open the hearings with Teller because "he had a colorful and dramatic story to tell," one that would give the hearings a sense of urgency from the start.[193] Teller had recently announced a series of proposals for the programs, and Weisl, Sr., as one of the Inquiry's architects, envisioned a storyline in which Teller would first reiterate his plan, then be followed by a cadre of political, academic, and military experts, who would take the stand and "comment and enlarge upon [his proposals]."[194] As expected, Teller's testimony on November 25 was impassioned and alarmist. He claimed that the United States had "waited too long" to begin its ICBM program, and that the Russians had "closed the gap [in nuclear energy] in an alarming fashion." Ever the dramatist, he added, "There is no doubt that in a few more years the Russians will leave us behind, and way behind."[195] However, Teller contradicted himself on numerous occasions as he simultaneously complimented and

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[192] Transcript, Edwin L. Weisl, Jr., Oral History interview 1 (I), 10/30/1968, by Joe B. Frantz, Internet Copy, Lyndon B. Johnson Presidential Library, https://www.discoverlbj.org/item/oh-weislejr-19681030-1-74-51-a.
[193] Rip Bulkeley, *The Sputniks Crisis and Early United States Space Policy* (London: Macmillan, 1991), 188.
[194] Bulkeley, *The Sputniks Crisis,* 187-188.
[195] John G. Norris, "2 Scientists Urge Boost in Missiles," *The Washington Post and Times Herald*, November 26, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/2-scientists-urge-boost-missiles/docview/148864716/se-2.

criticized the existing U.S. missile and satellite programs. For example, he offered thirteen separate recommendations for the satellite and missile programs, yet "emphasized several times that he thought the ballistic missile program was excellent and excellently managed."[196] And in an obvious demonstration of his lack of expertise on the subject at hand, Teller "warned against any drastic rearrangement in the program, even as he advocated its acceleration and expansion."[197]

Dr. Vannavar Bush was next, and although a brilliant engineer with decades of experience, including initiating the Manhattan Project, he was no more involved in the missile and satellite programs than Teller.[198] Like Teller, Bush was posed with the question of how the U.S. could speed up the missile and satellite programs, but, like Teller, he chose to focus his responses on other aspects of U.S. defense. Bush reiterated a long-standing proposal to modify the Unification Act of 1947 and establish a unified war plan. Like Teller, "he warned against rash pushing for a reorganization of the missile program... [stating that] the program was too far along."[199] Bush avoided specifics and agreed that the sluggish start to the ICBM program had been damaging, adding that "the Soviet Sputniks can be one of the finest things the Russians ever did for us [if we drop] our smugness and complacency and get to work."[200] The day's final witness, metallurgist John Chipman, did not help the legitimacy of the opening witnesses when he admitted, "I

[196] Jack Raymond, "Teller Bids U.S. Disperse and Reinforce Air Bases; Bush Hits Service Rivalry," *The New York Times*, November 26, 1957, https://timesmachine.nytimes.com/timesmachine/1957/11/26/issue.html?auth=login-smartlock.
[197] Raymond, "Teller Bids U.S."
[198] Jerome B. Wiesner, "Vannavar Bush," in *Biographical Memoirs, Volume 50* (Washington, D.C.: National Academy of Sciences, 1979), 89, http://www.nasonline.org/publications/biographical-memoirs/memoir-pdfs/bush-vannevar.pdf.
[199] Raymond, "Teller Bids U.S."
[200] Norris, "2 Scientists."

am no authority on missiles, nor on any other defense item at the present moment."[201]

Moreover, Chairman Lyndon Johnson's decision to place Teller, Bush, and Chipman at the outset of the hearings was strategic in that it created a sense of drama and urgency while also establishing a compelling baseline narrative for subsequent witnesses to cultivate. The trio's credentials were enough to make up for any weak spots in their testimonies; in fact, *The Washington Post and Times Herald* reported the next day that "the testimony of Doctor Edward Teller seemed to fit in admirably with the Johnson prescription" of stressing the magnitude of the issue from the get-go.[202] The same can be said for Bush and Chipman, who echoed Teller's sentiments.

Over the next few days, a parade of witnesses took the stand, raising a multitude of issues that stemmed from the subcommittee's primary task of "conducting a full, complete, and exhaustive inquiry into the state of our defenses and the steps that would have to be taken."[203] On November 26, General James H. Doolittle, decorated Air Force veteran and chairman of multiple scientific and aeronautics advisory boards, echoed Teller and Bush's alarmist attitudes: "I believe that the rate of Russian progress is much more rapid than ours; that, in some areas, she has already passed us. If the rate continues, she will pass us in all."[204] Johnson and his committee failed to mention that the general had no intimate knowledge of the missile and space programs. Adding to the narrative were military heavyweights Wilbur Brucker, Secretary of the Army, and Army Lieutenant General James Gavin. The latter provided an account of inter-agency conflicts

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[201] *Inquiry into Satellite and Missile Programs, Part I*, 90.
[202] "Not a Defeat—A Challenge," *The Washington Post and Times Herald*, November 26, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/not-defeat-challenge/docview/148892967/se-2.
[203] *Inquiry into Satellite and Missile Programs, Part I*, 2.
[204] *Inquiry into Satellite and Missile Programs, Part I,* 111.

and budgetary fiascoes that had "stripped U.S. ground forces just as an emerging nuclear stalemate restored their importance."[205] Again, these testimonies, although outwardly authoritative, did not answer the question of how the missile and satellite programs could be sped up; instead, they focused on the inadequacies and mistakes of the current Administration. These testimonies helped nestle the image of the lagging U.S. missile and satellite programs snugly into the scaffolding of the hearings, and the image gained traction as the weeks went on.

Some sessions were held behind closed doors, for security purposes. However, the fervent open testimony from some of the nation's foremost scientists and military leaders revealed significant failings on the part of the President to speed up the U.S. missile programs, information that produced major headlines and ignited government action. One notable example involved two of the United States' rivaling ballistic programs, Jupiter-C and Thor. The Jupiter-C program was established in 1956 by the Army using a modified version of Wernher von Braun's Redstone missile. It was classified as an MRBM with a range of 2400km.[206] The Thor program, in contrast, was established in 1955 by the U.S. Air Force. It was designated as an IRBM and had a range of roughly 3000km.[207] From the start, the Jupiter-C and Thor programs were rivals, and therefore budgetary allotments had to cover both programs.

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[205] McDougall, *...The Heavens and the Earth,* 154.
[206] "JUPITER-C," The Smithsonian's National Air and Space Museum, https://airandspace.si.edu/exhibitions/space-race/online/sec200/sec252.htm.
[207] "Model, Missile, Thor IRBM," The Smithsonian's National Air and Space Museum, https://airandspace.si.edu/collection-objects/model-missile-thor-irbm-122/nasm_A19640642000#:~:text=This%20is%20a%201%3A22,3%2C000%20kilometers%20(2%2C000%20miles).

On the second day of the hearings, members of the committee drilled General James Doolittle on the subject of the rivaling missile programs. He admitted that the delay in choosing a program to focus on had caused the programs to slow: "I believe we could make faster progress and save money if we could put all of the people who have been working on both projects on one and wash out the other one."[208] This admission, when added to the revelation that in March 1957, as part of his "economy measures," President Eisenhower had cut funds to both programs, demonstrated the President's failure to prioritize the U.S. ballistic missile programs. In fact, Eisenhower had ignored warnings from Assistant Chief of Staff for Guided Missiles Major General Samuel Brentnall, who warned that "[budget] cuts would lead to a serious 'missile gap' (between the US and USSR) by about 1960."[209] The day after Doolittle's testimony, Wednesday, November 27, Secretary of Defense Neil McElroy began his testimony with an announcement:

> We have been undertaking, during the past few days, an intensive reassessment of our position with respect to the testing and development program of our IRBM missiles, the Thor and the Jupiter... Accordingly, we are today authorizing the placing into production of both the Jupiter and the Thor missiles."[210]

Senator Johnson was pleased: "The statement you have made just now to the committee, and to the country, is good news. I hope, as this committee continues its investigation, there will be more reassessments, followed by more good news."[211] Johnson would indeed hear more good news that evening during Deputy Secretary of Defense Donald A. Quarles' testimony. He told the subcommittee that a report calling for

[208] *Inquiry into Satellite and Missile Programs, Part 1,* 139.
[209] "United States Missile Systems," Military Histories, https://www.militaryhistories.co.uk/emily/race.
[210] *Inquiry into Satellite and Missile Programs, Part 1,* 194.
[211] *Inquiry into Satellite and Missile Programs, Part 1,* 195.

higher pay for scientific and technical personnel in the Armed Services (a report that had been "put aside" earlier in the year by the Administration for being "inflationary"), would be presented to Congress the next year for consideration.[212] The timing of this decision coincides with the testimonies of the first two days of hearings, during which there was a call by Teller and Bush to better incentivize such personnel. Moreover, by the close of the first week, Johnson's hearings were going according to plan: failings of the Republican Administration were coming to light, and Eisenhower was forced to initiate damage control.

"Flopnik" Deals Another Blow

The subcommittee went on recess at the end of the third day of hearings. A week later, the picture of a fledgling space effort that had emerged over those first days suddenly shone in technicolor as a Vanguard TV-3 launch vehicle exploded into a "huge fireball" just seconds into a test launch. Test launches were not scheduled to occur until March 1958, but the outcry from impassioned members of the media and government after the Sputnik 2 launch finally convinced the President to act. Putting aside his reluctance to speed up the project, Eisenhower had acquiesced and "committed the United States to launching a small test satellite [in December] and scientific satellites starting in March."[213] The outcome of this altered timeline was broadcast on television, and the world watched as the rocket, carrying a test satellite much smaller than the one

[212] Jack Raymond, "M'Elroy Orders Thor and Jupiter into Production," *The New York Times*, November 28, 1957, print copy.
[213] John W. Finney, "Vanguard Failure a Blow—and Goad—to U.S.," *The New York Times*, December 7, 1957, https://timesmachine.nytimes.com/timesmachine/1957/12/08/113411372.html?pageNumber=222.

being created for the IGY, lifted just four feet off the launch pad before exploding.[214] The project's deputy director, J. Paul Walsh, described the scene in a press conference the night of the event:

> The engine was not pushing the rocket up. The rocket fell back down into the stand and then fell over. There was a terrific noise—a series of rumbles—and then a very rapid burning. A ball of flame shot up to fifty or a hundred feet. There was no shockwave—it was not a high order of detonation...no one was injured—except perhaps for pride.[215]

While no lives were lost and the satellite emerged unscathed, the event had a tremendous negative effect on America's prestige abroad, and allies, adversaries, and even the U.S. media began to poke fun at the nation's expense. One *New York Times* reporter wrote the following day, December 7, that in "Paris cafes, German beer gardens and Arabian bazaars, the US satellite program became a laughing stock and the brunt of pointed quips."[216] The criticisms spilled into the press as sound bites, cartoons, and poems that lambasted the dramatic American failure. The press in Great Britain had a field day coming up with witty one-liners, such as the *Daily Mirror*'s "America's Sputnik Dies Bleeping on the Ground: Oh What a Flopnik!"[217]

In contrast, the Soviet press ridiculed the U.S. by simply reprinting a sampling of the many deprecating statements originating in the U.S. and elsewhere. Such phrases included "devastating blow to American international prestige," (the U.S.) "terrible

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[214] "60 Years Ago: Vanguard Fails to Reach Orbit," NASA, December 6, 2017, https://www.nasa.gov/feature/60-years-ago-vanguard-fails-to-reach-orbit.

[215] "Nothing Hurt but Pride: Rocket's Loss of Thrust," *The Manchester Guardian*, December 7, 1957, https://www.newspapers.com/image/259795984/?terms=%22manchester%20guardian%22%20%22nothing%20hurt%22&match=1.

[216] Finney, "Vanguard Failure a Blow—and Goad—to U.S."

[217] "Jibes of Allies Cool as Reds Jeer at U.S.," *The Washington Post and Times Herald*, December 8, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/jibes-allies-cool-as-reds-jeer-at-u-s/docview/148843339/se-2.

fiasco," (Copenhagen) and "Washington plunged into a gulf of disappointment and dejection" (Great Britain).[218] Leveraging the U.S. and her allies' own words as criticism was a powerful power play from the supposed "winners" of the Space Race; the resulting image seen around the world was one of a Soviet superiority so high that the Kremlin didn't even have to issue a statement. Moreover, while American officials brushed off the failure as "an inevitable technological difficulty" and an example of scientific "trial and error," the rest of the world expressed shock and dismay at what was widely considered an even bigger blow than the two Sputniks.[219]

What made the Vanguard explosion so stunning was the frenzy and fanfare that led up to it. Rather than wait to announce the attempt until the satellite was safely in orbit (à la the U.S.S.R.), U.S. military leadership turned Project Vanguard's hasty December launch "into a sort of out-of-season Fourth of July celebration."[220] This was exactly what those involved in the project didn't want, as it created immense pressure for Vanguard to succeed on its first attempt. Secretary of the Navy Thomas Gates had expressed his concern over Eisenhower's announcement of a new test date to Defense Secretary McElroy on October 22, 1957:

> I am gravely concerned about the effects of the presidential statement of 9 October on the dates of intended firings of VANGUARD vehicles. The statement has been widely...interpreted as a commitment to achieve satellites on those dates. There is in fact only a probability—not a certainty—that satellites will be achieved on those first attempts.[221]

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[218] "Russians Impale U.S. on Own Barbs," *The New York Times*, December 8, 1957, https://timesmachine.nytimes.com/timesmachine/1957/12/08/113410135.html?pageNumber=36.
[219] Robert C. Albright, "Adverse Publicity Harmful Abroad, Democrats Say," *The Washington Post and Times Herald*, December 7, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/adverse-publicity-harmful-abroad-democrats-say/docview/148967743/se-2.
[220] "A Premature Fourth of July," *The New York Times*, December 8, 1957, https://timesmachine.nytimes.com/timesmachine/1957/12/08/113411411.html?pageNumber=229.
[221] Thomas S. Gates to Neil McElroy, October 22, 1957, Box 15, Office of the Special Assistant for Science and Technology (James R. Killian and George B. Kistiakowsky): Records, 1957-61, White House Office, Eisenhower Presidential Library.

This attempt to play "catch up" was not overlooked by the Soviet media. The *Red Star* newspaper featured a cartoon of Uncle Sam and John Bull trembling beneath an exploding Vanguard. The cartoon was accompanied by a Russian verse with the following rough translation:

> Uncle Sam conceived somehow / to launch a rocket into the skies.
> The whole world was told about it / not two days in advance—but two years.
> Uncle was a braggart and rich, / he called his sputnik 'Vanguard,'
> The name was simply wonderful and slick, / But the venture resulted only in smithereens.[222]

The Eisenhower Administration, for its part, did not consider the Vanguard explosion a "blow" to U.S. prestige, nor was the general sentiment from the Administration one of embarrassment or inferiority. Unlike countries abroad that made judgments not from facts but from grand technical displays, Eisenhower and his advisors were disappointed by the event but still quite confident in the U.S. satellite and missile programs. Scientific advisor J. R. Killian explained in a "Progress Report" to the President that "technically our missile development is proceeding in a satisfactory manner...we are at present behind the Soviets...[but] our technological progress in the missile field, in fact, has been impressive."[223] The problem had been the publicity. Dr. Killian wrote in response to a letter from Senator John Stennis that "there is no doubt that in public relations terms the whole episode was exceedingly unfortunate...[given] the

[222] "Russians Impale U.S. on Own Barbs."
[223] J.R. Killian to Dwight D. Eisenhower, December 28, 1957, Box 15, Office of the Special Assistant for Science and Technology (James R. Killian and George B. Kistiakowsky): Records, 1957-61, White House Office, Eisenhower Presidential Library.

international impact of this effort...all of us involved in these efforts in the future will do what we properly can to prevent this episode from being repeated."[224]

U.S. allies agreed that missteps were a part of the technological development process while simultaneously admonishing the lack of secrecy behind the launch, and the Vanguard program as a whole. Germany's *Frankfurter Allgemeine* asked, "Why, oh why, must the Americans always broadcast what they are going to do instead of keeping quiet and doing it?"[225] France's Foreign Minister M. Pineau echoed, "Why do you talk about these things before they go off?"[226] Similar statements from Italy, Britain, and other European nations poured in, prompting *The Washington Post and Times Herald* to announce, just two days after the Vanguard failure, "Across Europe, the almost unanimous verdict on the American failure was: 'They talk and boast too much.'"[227]

Especially vocal about the crash was Senator Lyndon Johnson, who called the failure "one of the best publicized—and most humiliating—failures in our history."[228] Speaking at a luncheon talk in Amarillo, Texas, the Senator elaborated with a rare criticism of the Administration:

> I shrink a little inside of me whenever the United States announces a great event and it blows up in our faces. As this is such an uncertain field, I am not able to understand the policy which makes such spectacular announcements in advance of the event...why don't they perfect the satellite and announce it from Cape Canaveral after it is in the sky?[229]

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[224] J.R. Killian to Senator John Stennis, December 20, 1957, Box 15, Office of the Special Assistant for Science and Technology (James R. Killian and George B. Kistiakowsky): Records, 1957-61, White House Office, Eisenhower Presidential Library.
[225] Drew Middleton, "As NATO Meets: What Europe Says of Us," *The New York Times*, December 15, 1957, https://timesmachine.nytimes.com/timesmachine/1957/12/15/90868770.html?pageNumber=221.
[226] "U.S. Sputnik Goes Up in Smoke," *The Manchester Guardian*, December 7, 1957, https://theguardian.newspapers.com/image/259795984/?terms=%22U.S.%20Sputnik%20Goes%20Up%20in%20Smoke%22&match=1.
[227] "Jibes of Allies Cool."
[228] Albright, "Adverse Publicity."
[229] Albright, "Adverse Publicity."

When Sputnik 1 had surprised the world just two months prior, the Western world objected to the way the Russians developed, tested, and launched their satellite from behind a veil of secrecy.[230] The tone changed when Vanguard forced the shoe to the other foot. Suddenly it was considered wiser to hide mistakes from the judgmental eyes of the world until success was all but guaranteed. As it stood, the U.S. did not help its global prestige by criticizing its own efforts after the failed launch.

The Johnson Show

The Vanguard catastrophe, while terrible for American morale, was convenient for Lyndon Johnson and his Preparedness Subcommittee, as it provided "even more urgency in uncovering the state of the nation's satellite and missile programs."[231] It demonstrated in no uncertain terms the supposition that had been growing throughout the first two weeks of hearings: the failure to launch a satellite before the Russians was indicative of the Eisenhower Administration's inability to mount an effective missile and space program.[232] From the very first witness, Johnson, Weisl, and the other subcommittee members seemingly ran the hearings just as George Reedy and Charley Brewton had advised, by "gathering the facts and presenting them to the public—without hysteria, without elaboration and definitely without partisanship."[233]

Johnson was incredibly productive during those two intense months, running the hearings during the day and working late into the night preparing questions for the

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[230] Michael Khodarkovsky, "'Look Up! Sputnik!' 60 Years Later," *The New York Times,* October 3, 2017, https://www.nytimes.com/2017/10/03/opinion/sputnik-cold-war-space-race.html?searchResultPosition=1.
[231] Gaskin, "Senator Lyndon B. Johnson, the Eisenhower Administration and U.S. Foreign Policy, 1957-1960," 347.
[232] Dallek, *Lone Star Rising: Lyndon Johnson and His Times, 1908-1960,* 531.
[233] Reedy to Johnson, Memorandum, October 17, 1957.

following day's witnesses. His probing queries and swift rebuttals showcased a near-encyclopedic knowledge of every aspect of the missile and satellite programs, and with the press allowed in the open hearings, Lyndon Johnson soon became a household name. But Johnson knew the importance of a steady stream of publicity, and the absence of media in the closed-door sessions limited the information available to the public. This is where Johnson took matters into his own hands, and while George Reedy may have been dispensing memo after memo of advice, it was Johnson who became "his own best public relations man."[234] He adopted what his aides dubbed "government by press release," wherein the Senator never left the Capitol without making sure the newsmen had something snappy for their next headline.[235]

Johnson went to great lengths to ensure this. He gave rushed quotes during lunch, timed "chance" hallway encounters post-testimony, and took five-minute recesses mid-session to tell cameramen to get ready for the doors to open. He leaked news to prominent reporters, speaking at length behind closed doors after the days' session. His favorite—that is, most adulatory in their stories—newsmen were invited home for dinner with Johnson's wife, Lady Bird, or to their Texas ranch on weekends. It was this cultivation of the press that kept Lyndon Johnson on the front page, not just during the Senate Inquiry on Missiles and Satellites, but for the entirety of his political career.[236]

The press lapped it up. Newspapers across the country were spattered with articles covering "The Johnson Hearings;" impressively, in the 59 days that elapsed from opening to closing remarks, Lyndon Johnson was featured in 83 articles in *The New York Times*

[234] Caro, *The Years of Lyndon Johnson: Master of the Senate*, 1025.
[235] Mieczkowski, *Eisenhower's Sputnik Moment*, 141.
[236] Caro, *The Years of Lyndon Johnson: Master of the Senate*, 1023.

alone—an average of 1.4 articles a day.[237] By the time the hearings concluded, Johnson had "established himself as the premier politician on space," a designation that was not earned by press coverage alone.[238] Throughout the hearings, Johnson avoided any spoken, direct attacks on the President; rather, he let the administration's weaknesses come to light through strategic witness selection and targeted questioning. In this way, "rather than plunge his sword into a bleeding target, Johnson took grazing swipes at the administration, coming across as a statesman concerned for the nation's safety."[239]

Through December and into January, Johnson was running the missile and satellite hearings while also attending to his many other daily responsibilities as the Senate Majority Leader. In addition, he gave speeches, took interviews, and "whirl[ed] through days and nights of activities seemingly without end."[240] His public statements were laced with charged rhetoric that reiterated the call for urgency that was now synonymous with the missile and satellite programs. On December 4, 1957, at a commendation dinner held in his honor, Johnson gave a speech that outlined a "five-point program to speed the United States into 'the world of space.'"[241] He first warned that '"Americans could ignore only at great peril' the fact that the Soviet Union had outstripped the United States 'in a field where we thought we were supreme;'" specifically, science, weapons development, and space exploration.[242] He argued that there must be a program in place to launch the U.S. to the front of the Space Race, which

[237] *The New York Times "*TimesMachine," accessed December 9, 2022, https://timesmachine.nytimes.com/browser.
[238] Mieczkowski, *Eisenhower's Sputnik Moment,* 140.
[239] Mieczkowski, *Eisenhower's Sputnik Moment,* 140.
[240] Dallek, *Lone Star Rising: Lyndon Johnson and His Times, 1908-1960,* 532.
[241] "Johnson Offers Space Program."
[242] "Johnson Offers Space Program."

he said was approaching with "breathtaking speed."[243] Johnson insisted there was no more urgent matter.

Statements such as these increased the inquiry's momentum and fueled the narrative that the U.S. lagged behind Russia with regards to space. Thanks to Johnson, this message was not confined to the pages of newspapers; his request for media access to the open hearings meant that testimonies and cross-examinations were broadcast live from the Senate Caucus Room, which was "jammed with radio and television cameras and microphones."[244] Johnson's "publicity bonanza" peaked when his visage graced the cover of *Life Magazine's* January 20, 1958, issue. The feature article, entitled "Lyndon Johnson Has the Ball," painted a picture in words and images of a "tremendously persuasive man [with] a keen, well-organized mind and the uncanny knack of getting other people to work with him."[245]

Daily coverage of the hearings and the emergence of Lyndon Johnson as "Mr. Space" impacted the mood of the American populace, who latched onto the now-pervasive message that Eisenhower had failed them. In one 15-month period, Eisenhower's approval rating dropped from the highest of his presidency (79% in December 1956) to the lowest (48% in March 1958).[246] The Sputnik controversy was a leading reason for this drop, as public opinion polls both domestically and abroad showed that the Russian achievements, along with the Vanguard failure, severely damaged the

[243] "Johnson Offers Space Program."
[244] Caro, 1028.
[245] "Lyndon Johnson Has the Ball,'" 20.
[246] Gallup, "Presidential Approval Ratings – Gallup Historical Statistics and Trends," *Gallup,* n.d. https://news.gallup.com/poll/116677/presidential-approval-ratings-gallup-historical-statistics-%20trends.aspx.

image and prestige of the U.S.[247] Moreover, as 1957 rolled over into 1958, the public turned its sights from the old to the new, as Lyndon Johnson offered a progressive, proactive approach to space that Eisenhower did not.

Partisan After All

The United States Senate Preparedness Investigating Subcommittee of the Committee on Armed Services concluded its Inquiry into Satellite and Missile Programs on January 23, 1958. Over the course of two months, the committee questioned seventy-two witnesses exhaustively about the programs' successes and failings, plans and prognoses, and areas needing improvement. Full transcripts of the hearings, along with relevant supporting documents, were printed and bound into a record consisting of three volumes that total 2,476 pages. At the conclusion of the hearings, the Subcommittee issued a report based on the inquiry's findings. It outlined 17 fields relating to the existing satellite and missile programs in which "decisive action must be taken."[248] The consensus in the Subcommittee, as Senate aide Glen P. Wilson later recalled, was clear:

> ...we could have done better if we had given the satellite project a higher priority; that satellites have military as well as scientific and other beneficial uses; that better organization was necessary; and that we needed to pay greater attention to our technological and scientific education.[249]

Nowhere in the record was there a direct attack on the President, but it was implicit that changes needed to be made at the highest levels. For all intents and purposes, the inquiry was well-planned, well-run, and appeared on the surface to be free of partisan squabbles.

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[247] Ian Kennedy, "The Sputnik Crisis and America's Response," Thesis, 2005, *Electronic Theses and Dissertations, 2004-2019*: 60, https://stars.library.ucf.edu/etd/579.
[248] *Inquiry into Satellite and Missile Programs: Hearings before the United States Senate Preparedness Investigating Subcommittee of the Committee on Armed Services, Part III* (Washington: U.S. Government Printing Office, 1958): 2315.
[249] *Legislative Origins of the National Aeronautics and Space Act of 1958*, 58.

Johnson had gone to great lengths to transform his boorish Senatorial persona into a neutral, non-judgmental character in this drama, even though he was anything but. In interviews at this time, he even made a point to swap the word "bipartisan" for "non-partisan" to emphasize his stated commitment to making these hearings about *truth,* not politics.[250] His marketing of the hearings was brilliant, and regardless of what went on behind closed doors, his public insistence that this was a national issue, not a party issue effectively eliminated the usual mudslinging that all too often widen the chasms between parties.

Things were not as they seemed, however. While Johnson kept up the appearance of non-partisanship, he periodically reminded the room, and readers at home, of the implicit power dynamic at play. For example, Johnson's handling of the inquiry received direct praise from General Lucius D. Clay, a highly decorated World War II general who served as Commander in Chief of United States Forces in Europe. At the beginning of his testimony, General Clay made a statement directed at the Chairman: "I have followed [this committee's] deliberations from the very first day, and I think the information which it has made available to the public and the work it has done for National Defense has been the most outstanding work of its kind that I have ever seen."[251] Johnson expressed deep appreciation on behalf of "each member of the committee, the majority and minority," a statement that simultaneously removed party rivalry from the hearings while also reminding onlookers that one existed outside of the Caucus room doors.[252]

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[250] Robert C. Albright, "Johnson's Now a Democrat Second," *The Washington Post and Times Herald*, December 22, 1957, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/johnsons-now-democrat-second/docview/148948592/se-2.
[251] *Inquiry into Satellite and Missile Programs, Part I,* 1362.
[252] *Inquiry into Satellite and Missile Programs, Part I,* 1362.

Furthermore, while most assessments of the hearings at the time and in the literature are positive, there were some historians who were not convinced. Rip Bulkeley suggests that the case as presented was one-sided and lacked information that would challenge Johnson's talking points.[253] This accusation was confirmed by Counsel Edwin Weisl, Jr. in a 1968 oral history. He admitted, "There was some badgering...of witnesses that were defending the administration's position... they were having to take a defensive view and were not allowed to fully express their views...It was pretty partisan politics."[254] Weisl, Jr. also commented on the degree of Johnson's commitment to the space issue, indicating that the Senator was not as devoted to the cause as he had led America to believe:

> He at least told us that his interest was one of national concern and he seemed to conduct himself that way at all times. However, at the last minute he refused to issue a report of this committee...I cannot feel that this was other than politically motivated; I considered it a grave mistake and I still do.[255]

Weisl, Jr. believed that Johnson was afraid he would not get a unanimous vote from the Subcommittee, and if there was indeed a minority report, he would rather publish nothing at all. Weisl Jr., for his part, felt that "[Johnson] seemed to think unity was more important than the purpose."[256]

In addition to Johnson's self-serving motives, recent critics of the hearings have attacked the credibility of individual witnesses, arguing, for example, that despite spearheading the U.S.'s successful Explorer launch in January 1958, Wernher von

[253] Bulkeley, *The Sputniks Crisis,* 189.
[254] Transcript, Edwin L. Weisl, Jr., Oral History interview I."
[255] Transcript, Edwin L. Weisl, Jr., Oral History interview I."
[256] Transcript, Edwin L. Weisl, Jr., Oral History interview I."

Braun's "line was trenchant, predictable and self-serving."[257] Furthermore, critics point out that the public heard assertions that the Defense Department and the President were urged to speed up the programs but ignored those requests and instead cut the budget. Certainly, this was a simplification of the events, as the genesis of the programs (as described in Chapter II of this analysis) shows that there were other key players and forces at work in the story. Finally, while McElroy and Quarles alluded to the point that the U.S. was not as far behind as Johnson and the Subcommittee asserted, the public did not hear concrete evidence to that fact because Eisenhower's surveillance efforts were classified. To this point, George Reedy later admitted that "some of the material should have been examined more carefully before being spread on the record," as it strengthened the notion of a "missile gap."[258]

This notorious "missile gap" was also widened by Johnson's rhetoric, both in and out of the Caucus room. As a top-ranking member of Congress, he was routinely briefed on matters of national security, including the status of the Russian missile and satellite programs. This is supported by a declassified October 17, 1957, memorandum from Assistant to the CIA Director Colonel Stanley Grogan, in which he details a conversation with reporter Mark Childs: "Childs declared that Senator Russell said that the CIA had kept the senior members of congress completely informed of the Soviet progress in the rocket development and regarding their capability to orbit the Sputnik."[259]

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[257] Mark Shanahan, Eisenhower's Parallel Track: Reassessing President Eisenhower's Activism Through an Analysis of the Development of the First US Space Policy. Dissertation, 2014, 194, http://bura.brunel.ac.uk/handle/2438/10737.
[258] Caro, *The Years of Lyndon Johnson: Master of the Senate*, 1028.
[259] Stanley J. Grogan to Allen Dulles, October 17, 1957, Eisenhower Presidential Library.

The consensus in these briefings was—contrary to the reigning popular theory—that the only thing the Russians had a slight lead in was thrust, which did *not* pose a threat to national security; in fact, if the tense relations indeed turned to combat, the U.S. was far more prepared that the Soviet Union because of its lead in accuracy and explosive power. According to biographer Robert A. Caro,

> A Soviet attack on the United States would...have been suicidal. America had enough nuclear capacity and missile technology—many times more than enough—to reduce the Soviet Union's cities and factories to ruins should the USSR launch an attack.[260]

Johnson chose not to disclose this information in the Subcommittee hearings, however, and instead continued to insist that there was a missile gap that called for "Americans to work as though there will never be a tomorrow and everything must be done tonight."[261] While hyperbolic, Johnson's message remained consistent and was not altogether off base. He may have exaggerated the Soviets' lead, but there was validity to his claim that a bolstered U.S. defense was crucial to staying competitive with such a formidable opponent. Even so, the insistence on a wide "missile gap" in the press was misleading and deceptive to the American people.

Seemingly fooled by Johnson's calculated optics, many American newspaper articles praised the hearings. For example, the unanimity of the Subcommittee's recommendations for bolstering U.S. defense was lauded in an article from *The Houston Press*:

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[260] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1027.
[261] "Johnson Urges US to Outdo Russians," *The New York Times,* December 19, 1957, https://www.nytimes.com/1957/12/19/archives/johnson-urges-us-to-outdo-russians.html.

> The unanimity and composition of the subcommittee are as impressive as the substance of this remarkable report. For the Democrats, [Senator] Johnson; Senator Symington...Senator Kefauver...and Senator Stennis. For the Republicans: Senator Bridges...Senator Saltonstall...and Senator Flanders...
> And they speak in one voice. It is not a voice of petty politics, nor of alarm and despair, nor of wishful thinking. It is a voice of patriotism and challenge.[262]

This report notwithstanding, the bulk of the praise reported in the media tends to focus on Johnson's handling of the inquiry, which has been described as "adroit" and a "minor masterpiece."[263] Committee member and counsel Cyrus Vance later referred to Johnson's leadership as "one of the most skillful pieces of diplomatic statesmanship that I have run across."[264] And skilled it was. Under the veil of "non-partisanship," Johnson's hearings cultivated a strong sense of dissatisfaction with the current Administration, President Eisenhower in particular. By the end of January 1958, the presidential approval ratings showed that Johnson had succeeded in sowing doubt in the minds of America about the competence of President Eisenhower and his Administration. It had all gone according to George Reedy and Charles Brewton's plans: the Republican party was weakened, Johnson was the nation's foremost expert on space, and, as a bonus, the U.S. missile and satellite programs were to receive an extra $800 million in the next year's budget.

Legislative Effects

Lyndon Johnson's calculated motives and misleading representations of the Sputniks to America significantly affected United States policy and leadership. Johnson's persistence, authority, and urgency during the hearings led directly to legislation that

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[262] Congressional Record, 85th Congress, 2nd Session, February 6, 1958 Vol. 104, Part 2¾Bound Edition, https://www.congress.gov/bound-congressional-record/1958/02/06/104/senate-section/article/1803-1852.
[263] Chalmers M. Roberts, "Pull of the Moon Felt in Capital," *The Washington Post and Times Herald*, January 19, 1958, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/pull-moon-felt-capital/docview/148947835/se-2; Divine, *The Johnson Years, Volume Two*, 225.
[264] Divine, *The Johnson Years, Volume Two,* 224.

crossed President Eisenhower's desk in the summer of 1958. However, in another case of the popular narrative not matching the facts, Johnson was not as involved as many historians claim. The final day of formal hearings was January 23, 1958. A week later, on January 31, Explorer 1 became the first U.S. satellite to reach orbit. America exhaled in relief, and the media began to relax. Johnson, understanding that the space issue had lost public appeal, similarly lost interest. George Reedy states, "[Johnson] had something of a reputation of exploiting issues without bringing them to a head," and this was no exception.[265] Echoing Reedy, Ed Weisl, Jr. claims that Johnson lost interest in the inquiry even before the hearings were over, choosing to move on to the more pressing issue of the economy. There is evidence to suggest that this was the case. In a letter dated February 5, 1958, Johnson's old friend and advisor James Rowe wrote to the Senator:

> I believe you have gained all you can on space and missiles. You have received a tremendous press, increased your national stature and gotten away scot-free without a scratch. I think you should turn now to the obvious new issue, which is unemployment.[266]

Johnson heeded Rowe's advice, and the Senator stepped away from the investigation, forcing Weisl, Sr., and Vance to draft the investigation's final report.[267] Johnson's abandonment of the investigation before its conclusion does not prove that he did not care about outer space, but it certainly reflects the Senator's concern for not only the nation's well-being, but his own.

The hearings made evident the need for an organizing body to shape the founding and future of the nascent U.S. (non-military) space program, but there was disagreement as to what this body should look like. In February 1958, Johnson introduced a Senate resolution

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[265] Caro, *The Years of Lyndon Johnson: Master of the Senate*, 1029.
[266] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1028-1029.
[267] Caro, *The Years of Lyndon Johnson: Master of the Senate,* 1029.

(drafted by Edwin Weisl, Sr., and Cyrus Vance) to establish a Senate committee on aeronautical and space sciences.[268] The resolution passed unanimously, and Johnson became the new committee's chairman. Over the next few months, the Senate, House, and Administration all proposed competing bills for the new space program. Compromises were made, but by the summer, a point of contention remained between Johnson and President Eisenhower. Johnson's bill established a Space Policy Board to oversee the civilian space program, to which Eisenhower objected "on grounds that it would usurp the authority of the President."[269] To resolve the conflict, Johnson met with the President at the White House on July 7. There they made a compromise: Johnson suggested that the Policy Board stay in the bill, but the President could serve as the Board's chair. Eisenhower, quite "pleased" by the visit, agreed, and the Space Act of 1958 was signed into law on July 29, 1958.[270] George Reedy later remarked, **"**I don't believe that any other man could have forced through the Space Act in the face of the reluctance and foot-dragging that came from the White House."[271]

Johnson left his mark in the composition of the U.S. Legislature as well. On November 4, 1958, just over one year after the Sputniks entered the global lexicon, American voters voiced their discontent with the current administration. In what has been labeled "The Mid-term Revolution," Democrats gained an unpresented 13 seats in the

[268] Transcript, Edwin L. Weisl, Sr., interview 1 (I), 5/13/1969, by Joe B. Frantz, LBJ Library Oral Histories, LBJ Presidential Library, https://www.discoverlbj.org/item/oh-weislesr-19690513-1-74-267, 13.
[269] *Legislative Origins of the National Aeronautics and Space Act of 1958,* 53.
[270] Notes of Johnson meeting with Eisenhower at White House, July 7, 1958, Eisenhower Presidential Library.
[271] Transcript, George Reedy Oral History Interview I(c), 12/20/68, by T.H. Baker, Internet Copy, Lyndon B. Johnson Presidential Library, 26, https://www.discoverlbj.org/item/oh-reedyg-19681220-1-74-239-c.

Senate, an upset that remains the greatest transfer between parties in Senate history.[272] Democrats also picked up 48 seats in the House and elected five new governors. This tide change can be attributed to several factors, including a severe recession in the winter of 1957-1958 (arguably caused by Sputnik); however, the Sputnik flights and subsequent media and Congressional attention are mainly to blame, as they caused many Americans to lose confidence in their country's national security.[273] While President Eisenhower saw no threat in the Sputniks, he underestimated the threat of his 1958 political rivals, namely Lyndon Johnson, who used Sputnik as a "wedge issue" in the 1958 campaign.[274] Despite the remarkable election results, Eisenhower scoffed, telling an aide, "I don't care too much about the Congressional elections."[275] Just as he had underestimated the importance of Sputnik, Eisenhower failed to appreciate the weight of the November 1958 elections, which "marked a major turning point in the modern history of the Senate."[276]

Ultimately, Lyndon Johnson's appropriation of the space race was a highly effective tutorial in persuasion, persistence, and publicity, and, as Edwin Weisl, Jr., George Reedy, and others reported, an issue that Johnson exploited until it no longer served his purposes. His manipulation of the American psyche led directly to an invigorated space program, a road back to international prestige, and a Democratic

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[272] "Seats in Congress Gained/Lost by the President's Party in Mid-Term Elections," The American Presidency Project, n.d., https://www.presidency.ucsb.edu/statistics/data/seats-congress-gainedlost-the-presidents-party-mid-term-elections.
[273] Ross K. Baker, "Midterm Elections Can't Be Ignored: Column," *USA Today,* April 29, 2014, https://www.usatoday.com/story/opinion/2014/04/29/midterm-elections-2014-history-column/8482319/; Niall Ferguson, "Is the GOP Condemned to Repeat 1958?" *The Los Angeles Times*, October 30, 2006, https://www.latimes.com/archives/la-xpm-2006-oct-30-oe-ferguson30-story.html.
[274] Roger Launius, "What are Turning Points in History, and What Were They for the Space Age?" in *Societal Impact of Spaceflight*, edited by Steven J. Dick and Roger D. Launius. National Aeronautics and Space Administration, Office of External Relations, History Division, 2007, 32.
[275] Baker, "Midterm Elections Can't Be Ignored: Column."
[276] "Midterm Revolution," United States Senate, n.d., https://www.senate.gov/about/origins-foundations/parties-leadership/1958-midterm-revolution.htm.

advantage in the 1958 Senate race. While the early 1960s saw John F. Kennedy ignite the nation's interest in landing on the Moon, he could only do so because his vice president, Lyndon Johnson, had laid the foundation.

Chapter V.

Conclusion

In 2023, the 1957 launch of Sputnik 1 is not in the forefront of the average person's everyday consciousness. The majority of people alive today were not yet born when Sputnik 1 reached orbit; they did not hear the "deep beep-beep" of the satellite's transmitter or see the streak of white light cross the night sky, a sight that one witness described as "seeing history happen with my own eyes."[277] Instead, they are taught the master narrative that frames Sputnik as an unexpected event that caused shock and panic at home and damaged prestige abroad. As this thesis has demonstrated, Lyndon Johnson played a pivotal role in creating that panic and encouraging a largely unjustified distrust in the government.

At a time when the Communist threat was tangible, the American public wanted to know that there would be no question as to who the victors would be if it came to a war with the Soviet Union. President Eisenhower, confident in the strength of the U.S. military, responded to the launch with poised restraint, seeing no need to make a fuss. He told America that Sputnik posed "no additional threat to the United States," and that "there didn't seem to be a reason for just trying to grow hysterical about it."[278] Eisenhower even defended his position at a White House state dinner honoring Queen Elizabeth II, declaring that "the Free World's assets are so much greater than those of our potential enemy (Russia) that it is ridiculous to compare their brains, their abilities in

[277] Paul Dickson, "A Blow to The Nation," NOVA, 2001, https://www.pbs.org/wgbh/nova/sputnik/nation.html.
[278] "One Small Ball in the Air: October 4, 1957-November 3, 1957," NASA, https://history.nasa.gov/monograph10/onesmlbl.html.

science...with the combined total of the Free World."[279] His knowledge of the U.S.'s top secret military satellite activities gave him this confidence, but he could not reveal the program to the public; he therefore seemed to brush off the Sputniks, which was a grave mistake as far as his reputation, and that of his party, was concerned.

By the time Sputnik 2 reached orbit, Lyndon Johnson had all the ammunition he needed to sell his version of the Sputniks to the world; that is, the tale featuring an apathetic government whose budgetary cuts and lack of urgency had resulted in a massive failure of scientific technology and national security. Johnson fervently worked to orchestrate public hearings that would expose the Republicans' weaknesses, but without any obvious partisanship; for to come out on the offensive would cast the Democrats in a negative light. His strategy, spelled out to the letter in multiple memoranda from George Reedy, was to let others do the attacking. By assuming the role of non-partisan advocate for the people, Johnson avoided the partisan battles that would have most assuredly broken out if he had framed the hearings around the intention of discrediting the nation's then-beloved president.

Johnson navigated the televised hearings with dexterity and confidence, paying special attention to trumpet witnesses who could support his preferred narrative. His tactic was effective, but by no means a secret, as shown in a January 11, 1958, *New York Times* article about the hearings:

[279] Edward T. Folliard, "Launching of Satellite Made Lasting Impact," *The Washington Post and Times Herald*, September 30, 1958, http://search.proquest.com.ezp-prod1.hul.harvard.edu/historical-newspapers/launching-satellite-made-lasting-impact/docview/149024520/se-2.

> The questioning of witnesses by Senator Johnson and Edwin L Weisl...has been directed mainly toward bringing out the dark side of the picture. This has been deliberate, the aim being to dramatize the need for drastic action to meet the Soviet challenge.[280]

This description does not criticize Johnson's technique, and while historians today can scrutinize the transcripts and grumble about the inquiry's obvious lack of objectivity, Johnson played the part so well that there were no such impassioned accusations at the time. Even close to a decade later, the hearings were lauded in a 1966 *Washington Post and Times Herald* article, which declared, in bold letters, "Sputnik Probe Showed Johnson at His Best."[281] Indeed, the Inquiry into Satellite and Missile Programs was an example of Johnson's mastery of the media and his shrewdness as a seasoned politician.

While they may not be completely understood, Johnson's motives and actions in the wake of Sputniks 1 and 2 reaped rewards in 1958 in very big ways. Congress appropriated $815 million more for defense than President Eisenhower had requested, including funds specified for "long range missiles, missile firing submarines, [and] big bombers."[282] Johnson's hearings had direct effects on legislation as well, with 1958 bringing the formation of the Advanced Research Projects Agency (ARPA), the National Defense Education Act, and the Space Act of 1958, which created the National Aeronautics and Space Council (NASC) and established the nation's first civilian space agency, NASA. The momentum fueled by Johnson and his successful hearings carried over into the November 1958 midterm elections, which proved to deliver the exact

[280] John D. Morris, "What the Johnson Hearings Show; U. S. Armed Might Compared to Soviet," *The New York Times*, January 12, 1958, https://www.nytimes.com/1958/01/12/archives/what-the-johnson-hearings-show-u-s-armed-might-compared-to-soviet.html.
[281] Evans and Novak, "Sputnik Probe Showed Johnson at His Best: The Exercise of Power—V."
[282] Folliard, "Launching of Satellite Made Lasting Impact."

"smashing victory" over the Republicans that the Democrats had predicted prior to the election.[283]

Given the historical record that exists from October 4, 1957, through November 1958, it is reasonable to conclude that Lyndon Johnson, with his exaggerated, colorful style, used the Sputnik 1 and 2 launches to push the nation to support, and the government to endorse, legislative action that marked the beginning of the Space Race and the dawning of a new era in human history.

Further Research Topics

In one of his many memoranda of wisdom, in October 1957, George Reedy advised the Senate Majority leader that "what is badly needed now is some kind of a program to throw the energies of this country into the exploration of outer space. It cannot be done by private individuals because the effort required is beyond the resources of any one man or any one group."[284] While it would ultimately take four years, Reedy's recommendation foreshadowed the space program that emerged from President Kennedy's 1961 directive to "send a man to the Moon and return him safely to Earth" before the end of the 1960s: Apollo.[285] While beyond the scope of this thesis, it can be argued that the domino effect set off by Johnson's actions in response to the Sputniks ultimately led to the successful completion of the world's first manned Moon landing in 1969.

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[283] Folliard, "Launching of Satellite Made Lasting Impact."
[284] George Reedy to Lyndon Johnson. n.d., "Memos October 1957" folder, Office Files of George Reedy 1951-1955, Box 420, LBJ Senate Papers 1949-1961, Lyndon B. Johnson Presidential Library.
[285] John F. Kennedy, "Address to Joint Session of Congress, May 25, 1961," John F. Kennedy Presidential Library and Museum, Video, https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-to-joint-session-of-congress-may-25-1961.

The landing was a product of NASA, which worked on a crash basis once instructed by John F. Kennedy to concentrate on the moonshot. Following the dominoes backward, NASA was only established in 1958 because of Lyndon Johnson. Roger Launius argues this in a 2018 article in *Popular Science*. Answering the question of whether NASA "would have been created without political pressure from Johnson and his allies," Launius replied, 'No, probably not. Were we going to do space activities? Of course. Would it have been the purview of a separate civilian agency that has no military role? Probably not—at least not yet.'"[286] Thus, Johnson's effort allowed the U.S. to compete in the Space Race along a timeline that put an astronaut on the Moon before a cosmonaut. Had the U.S. space program progressed according to the timeline set by President Eisenhower's administration, it is impossible to assume that the U.S. would hold the superiority in space that it does today.[287]

Another "what if?" contends that the "missile gap," as endorsed by Lyndon Johnson was a deciding factor in the 1960 presidential election. Regardless of whether or not Johnson attached himself to the "space issue" in 1957 because he aspired to run for president in 1960, it was John F. Kennedy who won the Democratic primary election in 1960. Contrary to another master narrative, Johnson did not officially run in the primaries, but was written-in as a candidate. A possible reason for Kennedy's win could be the general tenor at the time of the U.S. electorate that favored the younger, more charismatic Kennedy. Periodic Gallup polling from June 1958 to May 1960 showed a steady preference for Kennedy; while the young Senator's support grew steadily among voters (from 19% in June 1958 to 41% in May 1960, Johnson's numbers remained

[286] Deaton, "NASA Almost Never Came to Be. Its Creation is a Lesson in Political Power."
[287] This designation may not last, however—as of 2023, the Chinese space program is progressing rapidly.

relatively stagnant, with the Majority Leader receiving 12% and 11% of responses at the same times. Moreover, by the end of the primaries, Kennedy had received 32.5% of votes while Johnson received just 0.3%.[288] The fact that Johnson was not an official candidate in 1960 supports the hypothesis that he never intended to run for president in the first place, although this cannon be proven.

For reasons still unclear, when Senator Kennedy asked Johnson to be his running mate on the Democratic ticket, Johnson agreed. The reasoning behind his decision has been the subject of a bounty of research and is beyond the scope of this thesis. An aspect of the 1960 campaign that is relevant to this review, however, is the role of the "space issue" on the outcome of that election. Despite having voted against Eisenhower's initiative to create NASA in 1958, Kennedy understood the psychological side of the Space Race, and he immediately adopted Johnson's public fervor for outer space exploration. He incorporated the issue into his campaign platform, declaring it as part of a new "New Frontier" in the United States:[289]

> the New Frontier is here, whether we seek it or not. Beyond that frontier are uncharted areas of science and space, unsolved problems of peace and war, unconquered pockets of ignorance and prejudice, unanswered questions of poverty and surplus… .The times demand invention, innovation, imagination, decision. I am asking each of you to be new pioneers on that New Frontier.[290]

[288] "Results of 1960 Presidential Election Primaries," John F. Kennedy Library, https://www.jfklibrary.org/learn/about-jfk/life-of-john-f-kennedy/fast-facts-john-f-kennedy/results-of-1960-presidential-election-primaries.
[289] John W. Jordan, "Kennedy's Romantic Moon and Its Rhetorical Legacy for Space Exploration," *Rhetoric & Public Affairs* 6, no. 2 (2003), 211, https://doi.org/10.1353/rap.2003.0047.
[290] John F. Kennedy, "The New Frontier," Speech, Democratic National Convention, July 15,1960, Papers of John F. Kennedy, Pre-Presidential Papers, Senate Files, Speeches and the Press, Speech Files, 1953-1960, John F. Kennedy Presidential Library and Museum.

Such language was reminiscent of Johnson's call to arms just a few years prior, and the Kennedy-Johnson ticket used the fabricated "missile gap," along with Eisenhower's neglect of space and technology, heavily to their advantage. Indeed, historian Walter McDougal contends that "no issue [outer space] better symbolized the New Frontier that the Kennedy/Johnson ticket asked the American people to explore."[291] While other issues were at play during the 1960 presidential election, Kennedy and Johnson's sharp criticisms of the Republicans' inability to launch a satellite formed the basis of a "space debate" that "may have contributed to Kennedy's narrow victory over Nixon in the 1960 election."[292]

Johnson's Space Legacy

Since Lyndon Johnson's death in January 1973, members of the scientific and academic communities have celebrated the former Senator and President's contributions to the development of the U.S. space program. In August 1973, at the unveiling of the newly designated Lyndon B. Johnson Space Center, Dr. James C. Fletcher, acting NASA Administrator, stated that "no other person did more to move America and the world rapidly into the space age than Lyndon Baines Johnson."[293] Similarly, in 2005 this sentiment reappeared in an article from *The Space Review*, in which former Chairman of the Executive Committee (CEO) of the National Space Society Alan Wasser writes, "a single man, Lyndon Baines Johnson, "LBJ", is primarily responsible for both starting and

[291] McDougall, *...The Heavens and the Earth*, 221.
[292] Jordan, "Kennedy's Romantic Moon and Its Rhetorical Legacy," 211.
[293] Mann, "Lyndon B. Johnson: Forgotten Champion."

ending "The Space Race."'[294] Finally, although there are many more examples, in 2022, Johnson was characterized by the National Constitution Center as having "worked tirelessly to promote himself and his agendas, including...the American space program. His ability to persuade politicians of both parties was legendary."[295]

Absent from these mainstream characterizations is any judgment of the deceptive methods with which Johnson spearheaded America's space effort in 1957. There are two possible explanations for this: either these mainstream writers chose to ignore this aspect in favor of painting Johnson in a favorable light, or they simply do not know. I choose the latter. After all, the master narrative, while known to many in the world of academia, does not surface in mainstream accounts of Lyndon Johnson and his contributions to the beginning of the Space Race. The details matter, as history can only accurately and effectively show change over time if all of the details are accounted for.

Granted, Johnson's exploitation of President Eisenhower's failure to promote the American space program and the Senator's subsequent manipulation of the American people may not be outwardly relevant in today's society, but that does not negate it. This is a story that deserves to move beyond the confines of journal articles and space history conferences, beyond thick, dense books that many people outside the scientific and academic worlds don't even care to read. Perhaps this thesis will make its way to the computer screen of a person who is unfamiliar with the Space Race, or to that of someone who has never associated Lyndon Johnson with the Space Race, and little by little, the master narrative of Sputnik 1 can change.

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[294] Alan Wasser, "LBJ's Space Race: What we didn't know then (part 1)," The Space Review, June 20, 2005, https://www.thespacereview.com/article/396/1.
[295] "10 Fascinating Facts About President Lyndon B. Johnson," National Constitution Center, August 27, 2022, https://constitutioncenter.org/blog/10-fascinating-facts-about-president-lyndon-b-johnson.

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