At the Tip of the Pyramid: The Iconography of Early Astronauts and Cosmonauts

by

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Abstract

The first American astronauts and Soviet cosmonauts became household names in the midst of proving that human beings could live and work beyond planet Earth. How and why did these men (along with one Soviet woman) achieve their status as cultural icons? This thesis will examine the impact of journalists who reported on the space travelers for public consumption, as well as the politicians who agreed to fund space efforts, in answering that question. Journalists at *Life Magazine* and *Pravda* attempted to set the agenda for the public regarding the heroic perception of space travelers. The self-images of the space travelers themselves also bear examination, because their self-images often contrasted with their images in the media. This thesis thus explains how fame operated for a group of aviators in a charged Cold War environment and the astronauts' and cosmonauts' own perception of that fame.

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Introduction

The Korean War had resulted in thousands of American casualties. Soviet premier Nikita Khrushchev had exclaimed "We will bury you!" while speaking to Western ambassadors in Moscow. A Soviet rocket had lifted a 184-pound artificial satellite into orbit, where it soared over American heads every day for three months.[1] James Reston had lived through each of these 1950s Cold War related events as a *New York Times* journalist, winning two Pulitzer Prizes for his reporting.[2] Yet a group of military pilots needed to do nothing more than show up at a press conference to reaffirm Reston's confidence in America. "Those gloomy students of the American character who think we've lost the hop on our fastball should have been around here this week when seven young American men dropped into Washington on their way to outer space," he wrote.[3] He referred to the scene at Washington D.C.'s Dolley Madison House on April 9, 1959, when the original seven *Mercury* astronauts received their introduction. Scott Carpenter, Gordon Cooper, John Glenn, Gus Grissom, Wally Schirra, Alan Shepard, and Deke Slayton were anything but ordinary Americans, as they had test flown supersonic fighter jets for a living. Nonetheless, the men found it strange that they only had to put on civilian clothes, smile for the cameras, and answer a handful of questions to receive such national adulation. The

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1 Eugene Cernan with Don Davis, *The Last Man on the Moon: Astronaut Eugene Cernan and America's Race in Space*, (New York: St. Martin's Press, 1999), 30-32.

2 R.W. Apple, Jr., "James Reston, a Journalist Nonpareil, Dies at 86," *New York Times*, December 7, 1995.

3 James Reston, "The Sky's No Longer the Limit," *New York Times*, April 12, 1959.

gruff Air Force pilot Slayton turned to Shepard and whispered, "They're applauding us like we've already done something, like we're heroes or something."[4]

This press conference marked the birth of the astronaut myth. Like medieval knights hundreds of years earlier, astronauts became symbols of honor and prestige even as thousands of lesser recognized people helped to send them into space. One year after the Dolley Madison press conference, a group of 20 Soviet fighter pilots became cosmonauts and inspired their nation as well.[5] Many adults today remember the iconic statements and images of the earliest astronauts and cosmonauts, from Yuri Gagarin's "Poyekhali!" ("Off we go!") on April 12, 1961 to a grainy Neil Armstrong climbing down *Eagle's* ladder on July 20, 1969. Historians have the task of explaining how and why the astronaut myth developed. Two sources especially influenced this myth: journalists and politicians. Journalists, often described as creators of the "first draft of history," had a strong ability to shape national discourse and did so through their statements about astronauts and cosmonauts. Politicians from Washington and Moscow funded space efforts primarily because they understood space achievements would win support in the Cold War among non-aligned nations. Politicians also sought to instill pride in their nations and found space travelers a compelling source of pride. At that time and in the decades since, the early space travelers have also described their image of themselves. Their statements have sometimes run counter to the perceptions established by journalists and politicians. Examination of the journalistic, political, and astronaut communities illustrates that the dominant cultural narrative of space travelers depicted them as clean cut and patriotic, even if that narrative jars with the space travelers' own memories and robs them of their uniqueness as human beings.

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4 Roger D. Launius, "Heroes in a Vacuum: The Apollo Astronaut as Cultural Icon," (presented at the 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, January 10-13, 2005): 4.

5 Asif A. Siddiqi, *Challenge to Apollo: The Soviet Union and the Space Race, 1945-1974* (Washington D.C.: NASA SP-4408, 2000), 246-247.

The literature on early astronauts is already very expansive. Since the end of the *Mercury*, *Gemini*, and *Apollo* eras of spaceflight, many astronauts have written bestselling memoirs themselves. From the highly reflective *Carrying the Fire* by Michael Collins (1974) to the most recent *Falling to Earth* by Al Worden (2011),[6] astronauts have hit upon several common themes in their memoirs: their hopes, fears, fierce competition in the selection of flight crews, spectacular sights of journeys beyond Earth, and reaction to their sudden celebrity status. The last point is especially instructive for the purpose of this thesis. The astronauts did not have to contend with fame when they served their country as aviators, but the flood of ticker tape parades upon returning from space emphasized their status as cultural icons. Cosmonauts such as Yuri Gagarin and Alexei Leonov published memoirs (in very different eras) describing this notion as well. This thesis thus draws on a literature in which the space travelers themselves describe their icon status. Historians have also published accounts that touch on the iconography surrounding astronauts and cosmonauts. In some cases these accounts describe individuals, such as Gurbir Singh's work on Gagarin and James Hansen's work on Armstrong.[7] In his brief article "Heroes in a Vacuum," Roger Launius expanded the focus by examining *Apollo* astronauts as a whole and the factors accounting for their appeal (their background, youth, willingness to place their lives on the line, etc.).[8] Previous authors have briefly analyzed the role of journalists and politicians in promoting human spaceflight as well, such as James Kauffman in his book *Selling Outer Space*.[9]

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6 Michael Collins, *Carrying the Fire: An Astronaut's Journeys* (New York: Farrar, Straus and Giroux, 1974) and Al Worden, *Falling to Earth: An Apollo 15 Astronaut's Journey to the Moon* (Washington: Smithsonian Books, 2011).

7 Gurbir Singh, *Yuri Gagarin in London and Manchester* (Manchester: Astrotalkuk Publications, 2011) and James R. Hansen, *First Man: The Life of Neil A. Armstrong* (New York: Simon & Schuster, 2005).

8 Launius.

9 James L. Kauffman, *Selling Outer Space: Kennedy, the Media, and Funding for Project Apollo, 1961-1963* (Tuscaloosa: University of Alabama Press, 1994.

Given that this literature exists, why does another author need to examine the subject of early space travelers as icons? This thesis will differ from all previous attempts in terms of breadth. Asif Siddiqi wrote in a 2006 NASA publication that "Cultural historians should devote attention to the complex role astronauts play as part of the iconography of heroism in American culture…the extant scholarship remains woefully incomplete."[10] Indeed, no previous author has examined at length the iconography of astronauts and cosmonauts side by side and then examined their self-perceptions as well. This approach allows for a comparison between two sides of the Cold War as well as a comparison of how media images fit in with the recollections of historical actors. Astronauts and cosmonauts shared much in common; each entrusted their lives to high performance machinery and sacrificed much of their family lives in pursuit of the space frontier. The general public in America and Russia each lauded their space travelers. Yet American and Russian citizens perceived space travelers differently, because the journalists who reported on them operated in different environments. Rather than examining only snippets of the early space effort, this thesis will examine the change over time from the *Mercury* and *Vostok* eras to the *Apollo* and *Soyuz* eras. The thesis will also examine unpublished material along the way, such as the personal papers of Armstrong and Gene Cernan that are archived at Purdue University.

The first chapter will focus on the early American astronauts, beginning with the aforementioned Dolley Madison press conference of 1959. This chapter will explain the forces that shaped the public perception of astronauts, from the backgrounds of the men, to their contract with *Life Magazine* that provided them with favorable media coverage, to the NASA

[10] Asif A. Siddiqi, "American Space History: Legacies, Questions, and Opportunities for Future Research," in *Critical Issues in the History of Spaceflight*, eds. Steven J. Dick and Roger D. Launius (Washington D.C.: NASA SP-2006-4702, 2006), 474-475.

public relations office, to their feats during missions. President John F. Kennedy, the one politician most synonymous with a bold space program, shaped the astronauts' appeal as well because he sought to frame human spaceflight within the frontier narrative of his presidency. The men who flew in space already possessed very admirable qualities such as dedication, work ethic, and physical courage, but this chapter will explain how journalists and politicians alike enhanced their public appeal. The second chapter will shift the focus to the Soviet Union and explore the similarities and differences between the iconic status of astronauts and cosmonauts. The lack of freedom enjoyed by Soviet journalists made a significant difference in the public perception of cosmonauts. The blustery Nikita Khrushchev, the premier of a society aimed at eliminating class distinctions, touted his space program and cosmonauts in a different manner than Kennedy. The first two chapters together will thus offer a comparison of iconography in separate cultures. The coverage in these chapters will be necessarily selective, since a 92-page thesis cannot adequately cover all missions, but will attempt to cover public perceptions as comprehensively as possible.

The third chapter will take a different approach because it will focus on the space travelers' own perceptions. This chapter will demonstrate the space travelers' understanding that their lives were not as clean cut as their sanitized media images would suggest. The job of astronaut or cosmonaut carried several burdens, such as the competition for seats on mission and the lack of time to enjoy family life. These burdens underscore that the aviators were three dimensional figures and not simply the smiling faces in magazines next to quotes about their devotion to God, family, and country. No matter how journalists, politicians, and the public felt about their jobs, only the astronauts and cosmonauts understood the grind of working day after day, year after year to open a new frontier. Their voices deserve consideration.

Chapter One

The American Astronaut as Icon, *Mercury* to *Apollo*

Not until April 9, 1959 did reporters have a chance to present American astronauts as icons. Following the Dolley Madison press conference, journalists tried to explain exactly why the public should view the "Original Seven" astronauts in this way. "What made them so compelling was not that they said anything new, but that they said all the old things with such fierce conviction," James Reston wrote of the seven men.[11] These "things" Reston mentioned concerned not their flying abilities, but mainly their beliefs about country, family, and religion. The astronauts spoke about these issues because the journalists asked them the questions. The reporters could have played to the astronauts' strengths by asking questions about the jet aircraft they had piloted during their military years. The men would have felt better prepared and more comfortable if this was the case, but technical questions would not have aroused the pride journalists sought. Instead, the reporters asked the seven to profess their commitment to traditional American values. Each man stated that he supported American democracy, felt committed to his wife and children, and attended church regularly. Whereas Soviet citizens supported Communism and believed in atheism, journalists wanted to establish these men as truly American figures.[12] Tom Wolfe described this mindset in his book *The Right Stuff*, describing the press as an animal and stating that "the animal seemed determined that in all matters of national importance the *proper emotion*, the *seemly sentiment*, the *fitting moral tone*

[11] Reston, "The Sky's No Longer the Limit."
[12] Launius, 4.

should be established and should prevail (emphasis original)."[13] The press did not ask the troubling questions that characterized the later Watergate scandal. Instead, buoyed by John Glenn's especially eloquent answers, the first astronauts emerged as excellent American role models.

What other factors contributed to the image of the seven *Mercury* astronauts? The men appealed to journalists and the public alike due to their backgrounds. Many of the men grew up in small towns, with working class parents, and all had served their country in the military. Since most did not come from privileged backgrounds, the men epitomized the American spirit of achieving success through intelligence and hard work rather than superior financial resources. A corps of white, male, middle class astronauts meant that the men represented mainstream America.[14] Astronauts also proved appealing because they placed themselves in physical danger for the good of their country. The images of exploding rockets, including the first attempt to launch a U.S. satellite in 1957, reminded them that they would die if they were onboard and their escape system failed to function. Yet the men volunteered for dangerous work anyway, like Cincinnatus of ancient Rome, because they felt their nation needed them. The astronauts also drew appeal from their lifestyles. Whether drag racing in Corvettes, skiing, or flying supersonic jets, the men drew attention to their love of speed and fast paced lives. When Americans looked at magazines or newspapers of astronauts performing these tasks, they saw young men in excellent shape. This appealed to the American image of youthful, vigorous men. Finally, the astronauts performed feats in their missions that enabled Americans to see them as heroic. When

13 Tom Wolfe, *The Right Stuff* (New York: Farrar, Straus and Giroux, 1979), 99.
14 Launius, 5-7.

Glenn reentered the atmosphere despite warnings that *Friendship 7's* heat shield may be loose, for instance, the public saw their composure on display.[15]

These factors made the astronauts appealing figures, but how did journalists reinforce their appeal and add to the myth of a clean cut, all-American astronaut? Their portrayal in *Life Magazine* especially reinforced their image. One year after their introduction in 1959, the astronauts signed a contract that gave this magazine exclusive access to their personal stories. The contract lasted for ten years, meaning the magazine provided an indelible link from astronauts to the public throughout the era leading up to *Apollo 11*. Editor Edward Thompson explained in a letter to chief astronaut Slayton in June 1964, "NASA photographers are not professional enough for the requirements of the newspapers, magazines, or books." He went on to stress the importance of an independent organization in covering the training activities of the astronauts.[16] The opportunistic Thompson understood that his magazine would benefit financially from the arrangement. His words also speak to the value in a free society of the media interpreting the astronaut image, rather than a government agency. The writers and photographers worked for *Life Magazine* and were not completely beholden to the government, in accordance with the First Amendment of the U.S. Constitution that established freedom of the press. This amounted to one of the crucial differences between coverage of the American and Russian space programs.

The reporters for the magazine fostered an image of the astronauts as homespun figures. Stories included photos of the men with their wives and children and drew attention to the

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15 Launius, 5.

16 Edward K. Thompson to Donald K. Slayton, June 1964, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 5, *Life Magazine* Contract with Astronauts Folder.

anxiety their families felt during missions.[17] Americans today are accustomed to picking up magazines and reading shocking personal details about celebrities. Yet *Life* reporters depicted their subjects as reinforcing that traditional American value—commitment to family—and did not report on any astronaut infidelities. "I knew, of course, about some very shaky marriages, some womanizing, some drinking and never reported it," remembered *Life's* Dora Jane Hamblin. "The guys wouldn't have let me, and neither would NASA."[18] When placed in the context of *Life Magazine's* history, this should not be surprising. The conservative publisher Henry Luce, who founded the magazine in the 1930s, believed that *Life* should "fulfill the need for a great magazine with a national purpose." Since the glossy color photos and personal stories would enhance *Life's* sales and reputation for promoting patriotic values, and the astronauts would receive thousands of dollars in return, the match proved perfect for both sides.[19]

The *Life Magazine* contract remains notable as well for the portrayal of the astronauts' wives. The seven wives appeared on the cover of the magazine's September 21, 1959 issue and included their thoughts on their husbands' new line of work. The readers of this issue saw the wives portrayed in traditional American gender roles. While the husbands placed their lives in danger, just as in World War II, the wives stayed at home to support them and take care of the children. The wives wrote statements such as Rene Carpenter's "We are so open and honest with each other about these things—both our hopes and our fears—that nothing becomes frightening."[20] This sentiment demonstrated the challenge that the wives faced; even while feeling the anxiety of being married to an astronaut, they needed to express optimism to their

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17 Howard McCurdy, *Space and the American Imagination* (Washington: Smithsonian Institution Press, 1997), 90-91.

18 McCurdy, 91.

19 Kristen Starr, "NASA's Hidden Power: NACA/NASA Public Relations and the Cold War, 1945-1967" (PhD diss., Auburn University, 2008), 251-252.

20 Rene Carpenter, "There Are No Dark Feelings," *Life Magazine*, September 21, 1959, 147.

husbands and the journalists of *Life* who entered their homes. As the era of American women flying in space remained far in the future, women in this earliest era operated in a supportive role. Journalism carried this message to Americans across the country.

The favorable journalism extended beyond *Life Magazine*, as Glenn discovered on a trip to California. Glenn called a newspaper publisher one night and begged him not to publish a photo of an astronaut with a young woman that the newspaper possessed. The photo never appeared in public, much to Glenn's relief. "To this day, and knowing the press much better now, I'm still amazed it didn't run," the astronaut and U.S. senator recalled in his memoir. Though he angrily denounced the behavior of his colleagues the next day, the press had once again refused to compromise the myth of the wholesome astronaut image.[21] While Glenn worried that astronaut behavior could have affected NASA funding, he need not have worried given the reluctance of the media to shatter the myth.

NASA's public relations office also contributed to reinforcing of this astronaut mythology. Before going on stage at the Dolley Madison house, NASA's Walter Bonney and Paul Haney briefed the *Mercury* seven on the questions the journalists would ask and the clean image they should project. When *Life* received the personal stories contract, the magazine's employees worked closely with the NASA Office of Public Information (OPI) to gain access to the astronauts' activities. "I believe he feels it's to NASA's and his interest to have good preliminary coverage in *Life* as well as the definitive post-flight coverage," *Life's* Don Wilson wrote of NASA's Bonney.[22] NASA's public relations effort expanded when all manned spaceflight activities moved to Houston, Texas in 1962. Haney eventually oversaw an operation

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21 Neal Thompson, *Light This Candle: The Life and Times of Alan Shepard* (New York: Random House, 2004), 268.

22 Starr, 258.

that escorted 300,000 center visitors per year, distributed educational programs, and provided detailed accounts of each mission to the media as they progressed.[23] The close working relationship underscored that favorable media coverage was a two-way street. An obliging press corps and a strong public relations effort at the government agency in question worked in tandem to present the image of astronauts as patriotic figures unmarred by infidelities.

In the midst of the already favorable media coverage, Americans began flying in space. How did the *Mercury* flights themselves enhance the astronaut image in the minds of reporters and, by extension, the public? Alan Shepard became the first American to voyage into space in his famous suborbital flight of May 5, 1961, so his achievement deserves special attention. Journalists could have rightly emphasized that Shepard's journey was far less technically impressive than Yuri Gagarin's orbital flight the previous month. Yet after the national embarrassments that afflicted America in the spring of 1961 (Gagarin's feat and the failed Bay of Pigs invasion into Cuba), Shepard gave his country a lasting image of success. Journalists such as Philip Dodd praised NASA's open information policy. Whereas the Soviets obscured the news of Gagarin's flight until after he launched successfully, U.S. TV networks carried Shepard's launch live. This policy of refusing to hide behind a veil of secrecy gave Shepard's flight a distinctively American quality.[24] Reston added his praise in the *New York Times*, referring to Shepard as "the kid next door, the dream of the easy, athletic all-American boy, with faith in the Lord, and a glorious, happy wife."[25] Nobody could have disputed that Gagarin had flown higher and faster, but journalists such as Reston still took solace in Shepard's character, which contrasted with the Communist Gagarin.

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[23] Starr, 278.

[24] Starr, 242-243.

[25] Reston, "Symbol of the Nation: Shepard Restores the Capital's Faith in Virtues of the American People," *New York Times*, May 9, 1961.

Throughout the *Mercury* program, no astronaut proved more beneficial from a journalistic standpoint than Glenn. When he became the first American to orbit Earth on February 20, 1962, NASA benefited from the most image conscious of the early astronauts. "I still get a real hard-to-define feeling down inside when the flag goes by," Glenn stated before a joint session of Congress following his *Friendship 7* flight. Journalists left behind their cynicism after Glenn's safe return; they did not criticize Glenn for such statements, but rather presented him as an embodiment of American patriotism.[26] Just as he had done at the Dolley Madison press conference, he went from reinforcing his support for his nation to his family. He introduced his mother and father from New Concord, Ohio and then stated, "above all, I want you to meet my wife, Anne…Annie…the Rock!"[27] Glenn's background as a man who had met his wife while both were toddlers, in a small town located in middle America, gave his words a ring of authenticity. He also spoke of his fervent religious values before Congress, stating, "I think to try to limit God to one particular section of space or something is a very foolish thing to do…God is certainly bigger than that, and I think he will be wherever we go."[28] In Glenn, America possessed an astronaut who not only epitomized traditional American values, but did so with greater eloquence than the other astronauts. Engineers in highly technical fields usually do not have a reputation for such eloquence. Among astronauts such as Gus Grissom, who famously made a three word speech during an appearance in California ("Do good work"),[29] Glenn stood apart from his colleagues.

In order to ascertain Glenn's status as a cultural icon, it is also useful to judge the public reaction to his *Friendship 7* flight. The letters sent to him indicate that people around the world

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[26] McCurdy, 90.
[27] Wolfe, 289.
[28] "What Astronaut Glenn Told Congress About His Faith," *St. Petersburg Times*, March 1, 1962.
[29] Ray E. Boomhower, *Gus Grissom: The Lost Astronaut* (Indianapolis: Indiana Historical Society Press, 2004), 122.

viewed him as a role model and even a potential answer to their personal problems. One man in New Jersey, anguished about the death of his son in an airplane crash, sent a letter asking Glenn to send "a word of comfort" to his family.[30] Other letters arrived trying to hawk the Glenn name for financial benefit, from a cigar manufacturing executive in Switzerland to a woman in Kansas who needed a business partner.[31] Letters also arrived from Boy Scouts, thanking him for his endorsement of their activities.[32] These letters demonstrate that Glenn had become a quintessential icon, in that the public viewed him as influential on any issue of interest even though he was only a test pilot and astronaut. Another Ohio born astronaut, Neil Armstrong, witnessed the same phenomenon in the wake of his becoming the first man to set foot on the Moon. Muslims claimed he converted to Islam while on the lunar surface, while Eagle Scouts asked him for congratulatory letters. "I have found that many organizations claim me as a member, for which I am not a member," Armstrong stated, "and a lot of different families—Armstrong families and others—make connections, many of which don't exist."[33] For Glenn and Armstrong especially, the combination of their unique achievements and positive portrayal in the media meant that even people who did not share a connection to the test piloting or astronaut communities tried to capitalize on their names.

By the time the *Mercury* program ended in 1963, the six men who flew had collectively added to the astronaut image in several other important ways that journalists emphasized. The first was that the men sat alone in their spacecraft. This enhanced the romance of the mission, because it meant that just one person could react to the sights and sounds of the experience as

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30 John Glenn, *P.S. I Listened to Your Heartbeat: Letters to John Glenn* (Houston: World Book Encyclopedia Science Service, 1964), 137-138.

31 Glenn, *P.S. I Listened to Your Heartbeat*, 150-152.

32 Glenn, *P.S. I Listened to Your Heartbeat*, 92-96.

33 Hansen, 632.

well as any life threatening malfunctions. A *Newsweek* journalist touched on this theme by calling Glenn " a single remote figure" in advance of his February 1962 flight, while a *New York Times* reporter referred to Gordon Cooper as "the pilot alone in orbit" after the last *Mercury* flight. Even the *New York Times* description of Grissom's childhood included an emphasis on his "solitary activities."[34] This emphasis appealed to the press because it evoked the image of explorers in the past. Charles Lindbergh sat alone in his aircraft while flying across the Atlantic Ocean in 1927. The idea of "rugged individualism" in conquering new frontiers such as the western United States and the sky was not new. Journalists were thus predisposed to mention the *Mercury* astronauts as carrying on in that tradition.[35]

The next factor was the control that the astronauts exerted during their voyages. Though Shepard spent just fifteen minutes in space, he maneuvered *Freedom 7* by manually operating his pitch, roll, and yaw controls. As journalist Jim Schefter remembered, "Yuri Gagarin was a passenger. Al Shepard was a pilot." Shepard thus epitomized the American trait of being in control of his journey, like a mountain man in the western United States.[36] An even more telling description appeared in *Time Magazine* when Cooper reentered in his *Faith 7* vehicle: "Like a rifleman with a cross-hair sight," Cooper "lined up the horizontal mark on his window with the horizon."[37] This description amounted to the journalist taking readers back in time. When men such as Daniel Boone had explored the western frontier in earlier centuries, they had done so through "rugged individualism." These explorers did not have to rely on anyone else to make their way; they had taken matters such as hunting and trapping into their own hands. Similarly,

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[34] Kauffman, 57.

[35] McCurdy, 90 and Kauffman, 57-58.

[36] James Schefter, *The Race: The Uncensored Story of How America beat Russia to the Moon* (New York: Doubleday, 1999), 141-142.

[37] Kaufmann, 60.

Cooper was not simply along for the ride in a completely automated spacecraft. He had the authority to control his voyage just as a settler did when firing a rifle.

A third factor related to the importance of human beings traveling in space as opposed to unmanned spacecraft. In Daniel Boone's era, no machine existed that could travel to the western frontier and send telemetry data back to a control room. Yet the flights of the *Mercury* astronauts raised the question: was there any need for human beings to travel in a hostile environment that robotic vehicles could safely traverse? Journalists usually responded by pointing to the unique qualities that an astronaut possessed as opposed to a machine. Astronauts had the ability to use trained minds in returning data and, once on the lunar surface, explore greater swaths of territory in far less time than robotic rovers. In short, these journalists proclaimed, a machine could not compete with the complexity of the human brain.[38] Reporters also understood that human spaceflights carried a greater level of prestige. "No satellite…can match the ageless human drama of the individual—solitary, questioning, vulnerable—facing the unknown," a *Newsweek* writer stated in 1962, just prior to Glenn's flight.[39] Even industrial advertising of the early 1960s illustrated the support for human spaceflight that existed in the media. Periodicals such as *Aviation Week and Space Technology* and *Missiles and Rockets* featured *Mercury* related advertisements that expressed color and visual drama, a stark contrast to the blander ads related to satellites and probes.[40] Even as Dr. James Van Allen and other scientists expressed their support for sending machines only into space, consumers of popular media usually received a different message.

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38 Kaufmann, 63.

39 Kaufmann, 66.

40 Megan Prelinger, "A Comparative Study of Human and Robotic Spaceflight as Represented in Industrial Advertising," (lecture, NASA Headquarters, Washington D.C., April 26, 2011).

Journalists believed that the events of the *Mercury* program justified their bias in favor of human spaceflight. After Glenn persevered through the false signal that his heat shield had faltered, John Finney wrote that Glenn had proved an astronaut "could and should be more than just a passive passenger aboard an automated spacecraft."[41] Cooper lent credence to the argument when he carried out the last mission in 1963. He landed just four miles away from his recovery ship even after his automatic stabilization and control system lost power, because he successfully held his vehicle in the proper attitude and fired his retrorockets manually.[42] Thanks in large part to journalists who wrote about them, the *Mercury* astronauts established the idea of humans being essential to spaceflight. The idea persists to this day in arguments about the future of exploration on the Moon and Mars.

A fourth factor relating to the *Mercury* astronaut image in the media bears mentioning as well: the depiction of the astronauts' families during flights. Journalists frequently emphasized the idea, particularly in *Life Magazine*, that heroic men traveled into space and left behind equally heroic wives and children to fret about their return. For instance, the June 1, 1962 *Life* issue featured a photo Rene Carpenter watching her husband's launch on the cover. Scott Carpenter's *Aurora 7* had overshot his splashdown target, leading to a delay in his recovery. The accompanying article by Mrs. Carpenter mentioned, "The wait for news of him during that long period of silence after reentry was a difficult one for all of us inside the house." Yet she emphasized that she had faith in her husband's ability to withstand any hardship and her son never found any tears when looking into her eyes.[43] Articles such as these enhanced the notion of an astronaut as an icon because the reader gained the impression that their wives and children

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41 Kaufmann, 62-63.

42 Loyd S. Swenson, James M. Grimwood, and Charles C. Alexander, *This New Ocean: A History of Project Mercury* (Washington D.C.: NASA SP-4201, 1989), 500-502 and Kaufmann, 64-66.

43 Rene Carpenter, "The Time That Took Too Long," *Life Magazine*, June 1, 1962.

made great sacrifices in supporting them during flights. The family members each knew their role was to support the astronaut and accepted this without complaint. Spaceflights were thus shared experiences between devoted men, women, and children who deserved admiration for handling the stress of the experience.

The *Gemini* astronauts picked up where the *Mercury* flyers had left off, making ten piloted flights and taking the essential steps toward President John F. Kennedy's goal of landing men on the Moon by decade's end. Many of the aforementioned factors that explained the appeal of the *Mercury* astronauts remained in place during *Gemini*. The primary differences were that two men flew aboard each spacecraft (taking away the romantic notion of a single seat vehicle) and that the presence of more astronauts added to the difficulty of making personal connections with the men who flew. Still, the selection of new astronauts for the *Gemini* program (nine in 1962 and 14 in 1963) meant more places where Americans could take regional pride in their astronauts. The people from the communities where these astronauts were born and raised, and their reactions to the flights, offer yet another angle in exploring the cultural appeal of astronauts.

The personal correspondence of astronauts and the work of journalists each indicate that their small town backgrounds helped the public to identify with them. Gene Cernan, who joined the astronaut corps in 1963 and made his first spaceflight on *Gemini 9*, grew up in suburban Chicago and attended Proviso High School in the small, blue collar community of Maywood, Illinois.[44] Following his selection as an astronaut, letters poured into his current residence of Monterey, California. Helen and Dick Spencer wrote of the persistent phone calls asking them if they were related to Cernan, exclaiming, "We were so proud to say yes! Even our 5 yr. old went

[44] Cernan, 22.

to school this morning with your picture to show to the class at news time."[45] Other letter writers expressed pride in their mutual connection to Proviso High School or Purdue University, Cernan's alma mater.[46] Writers such as Duane Upton tried to collect mementos from Cernan, asking for a "personally autographed photograph, plus your long-hand signed statement on how you feel the space program will affect the future of mankind and what impact it will also have on present generations all over the world."[47] Finally, writers such as Leonard Aronowitz tried to draw inspiration from Cernan's success in life. A hard luck 23 year old who suffered from cerebral palsy, Aronowitz hoped Cernan would answer some questions for him, thereby brightening his own outlook on life.[48] Proviso school superintendent LeRoy Knoeppel went even further by writing, "I feel as if I know you as well as any other student who has gone to Proviso."[49]

Similarly, journalists from the astronauts' hometowns scrambled to fill columns with reactions from the tight knit communities. When John Young launched on *Gemini 3*, for instance, journalists sought recollections from elementary school teachers and even the nurse who treated his childhood illnesses and remembered him constructing model planes.[50] Other journalists sought recollections from the colleges that astronauts attended. For instance, Frank Arganbright collected quotes from several of Armstrong's Purdue professors and mentioned that

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45 Helen and Dick Spencer to Eugene A. Cernan, 1963, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 4, 1960s Correspondence Folder.

46 Betty Craine to Eugene A. Cernan, 1963, and Lewis Edwards to Eugene A. Cernan, 1963, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 4, 1960s Correspondence Folder.

47 Duane Upton to Eugene A. Cernan, 1963, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 4, 1960s Correspondence Folder.

48 Leonard Aronowitz to Eugene A. Cernan, 1963, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 4, 1960s Correspondence Folder.

49 LeRoy Knoeppel, 1964, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 14, 1964 Folder.

50 Betty Carrollton, "Astronaut John Young's Nurse Looks Forward to Launching," *Virgin Islands Daily News*, March 23, 1965

he was the first Purdue graduate to take the school's flag into space.[51] Various people even tried to falsely inject themselves into the astronauts' past so that they could claim to be part of history, as Armstrong found following his lunar landing. Jacob Zint, an amateur astronomer from Wapakoneta, Ohio, claimed that Armstrong visited him and dreamed of traveling to the Moon as a young boy even though the astronaut specifically remembers, "All of his stories appear to be false."[52] Despite the inaccuracy, the fact that journalists rushed to print such stories illustrated the pride inherent in an astronaut's upbringing. American citizens otherwise unknown attempted to share in the small town spirit that astronauts cultivated.

When the astronauts made their first spaceflights, a return home always marked one of the prominent post-flight rituals. A month after the *Gemini 3* flight, almost 10,000 residents lined the streets of Orlando, Florida (then a much smaller town than today) for Young's homecoming. Junior high school band members played the "Unsinkable Molly Brown," while the girls in a local dress shop wore homemade spacesuits and the mayor of the city presented the astronaut with an award thereafter known as the "John Young Medal."[53] At the home of Young's parents on the day of the flight, 16 policemen had stood watch to protect them from any undue attention while a local band marched to the home and played "For He's a Jolly Good Fellow" in honor of the seventh American manned spaceflight.[54] Armstrong's hometown of Wapakoneta provided another good example, as 15,000 people crowded into the town that normally contained 7,000 for the return of the *Gemini VIII* commander. "You are my people,

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51 Frank Arganbright, *Wednesday Evening Report*, 1966, Neil Armstrong Newspaper Clippings Collection, Archives and Special Collections, Purdue University Libraries, Box 1.

52 Hansen, 44.

53 Astronaut John Young Gets All-Out Home Town Tribute," *Orlando Herald-Tribune*, April 25, 1965.

54 "Young Studied Rockets Years Ago, Dad Says," *Oscala Star-Banner*, March 24, 1965.

and I am proud of you," he remarked.[55] "But (in a) small town you are able to develop your own leadership or your own decision making," remarked Glenn in a recent interview.[56] Brian O'Leary described the earliest astronauts as "boys who were not exposed to the cosmopolitan complexities and doubts which pervade the urban East and California."[57] Small towns thus proved crucial not only to an astronaut's upbringing, but also to understanding the iconography that enveloped the astronauts in the 1960s.

By following the *Gemini* astronauts, journalists were also able to overshadow traumatic events in contemporary America with upbeat coverage of space missions. Historians of 1960s America have no shortage of tragedy to study, from Kennedy's murder, to segregation, to the Vietnam War. Yet right in the middle of that decade, *Gemini IV* astronaut Ed White became the first American to perform an extravehicular activity (EVA). Gene Cernan considered White "an All-American, clean-cut straight arrow, the poster boy for the program," and no astronaut better demonstrated the youth and vigor that was part of the astronaut's appeal than White.[58] He had starred in track at the West Point Military Academy and nearly made the 1952 U.S. Olympic track team. On June 3, 1965, he appropriately became the first American to take part in the physical activity of "walking in space."[59] The media's fascination with White's achievement crowded out the more divisive issues of the time. Although President Lyndon Johnson made a major civil rights address on June 4, White provided the image of a space suited astronaut cavorting outside his vehicle and playfully refusing to come back inside. This proved quite a

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55 Hansen, 275.

56 John Glenn, interviewed by James R. Hansen, 2005, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 9, John Glenn Folder.

57 Brian O'Leary, *The Making of an Ex-Astronaut* (New York: Pocket Books, 1971), 117.

58 Cernan, 73 and Launius, 5.

59 Colin Burgess and Francis French, *In the Shadow of the Moon: A Challenging Journey to Tranquility, 1965-1969* (Lincoln: University of Nebraska Press, 2007), 23.

contrast to recent images of police officers using fire hoses against civil rights demonstrators. Journalists at *Time* and *Newsweek* devoted cover stories to the EVA, at the expense of civil rights.[60] The nation saw this dynamic again on June 14, when Chicago civil rights demonstrators called off a march because they did not want to disrupt the two million Chicagoans who attended the ticker tape parade for White and Jim McDivitt.[61]

Yet taken in their totality, the ten *Gemini* flights challenged journalists who sought to maintain reader interest in astronauts. *Life* reporter Ralph Graves wrote an October 1966 letter stating, "I think we ought to consider the possibility of not renewing the astronaut contract" because the personal stories of astronauts just had not aroused the same level of intrigue as during the *Mercury* era. Graves decried that "space has become familiar," "the two-man crew has reduced the pioneer adventure feeling of one man alone in space," "the astronauts themselves have proliferated to the point of facelessness," and "the increased delay between splashdown and astronaut availability has reduced the news interest of what they have to say."[62] Thompson responded to Graves, rejecting the argument that they should give up the contract. He did agree with his colleague that coverage should reach a greater depth than it did during the *Gemini* days. He suggested that the public would benefit most from personal connections with the newer astronauts, rather than the onboard color pictures that "contribute to the facelessness." Yet he maintained that astronaut coverage "has been an important way of making a *Life* a young magazine."[63]

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[60] David C. Carter, *The Music Has Gone Out of the Movement* (Chapel Hill: University of North Carolina Press, 2009), 1-3.

[61] Austin C. Wehrwein, "Crew of *Gemini 4* Hailed in Chicago," *New York Times*, June 15, 1965.

[62] Ralph A. Graves to *Life* reporters, October 1966, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 5, *Life Magazine* Contract with Astronauts Folder.

[63] Edward K. Thompson to Ralph A. Graves, October 1966, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 5, *Life Magazine* Contract with Astronauts Folder.

This exchange is instructive because it illustrates the difficulty of maintaining celebrity even when novelty declines. When launches took place nearly every two months, how could the public differentiate between the icons who launched on the most recent mission and the icons who launched on the prior mission? Hamblin tried to answer in a June 1967 letter, writing of the importance of "making human beings, identifiable ones, out of all the myriad of astronauts today." She suggested that *Life* reporters should devote attention to the astronauts' naming of their spacecraft and the designing of their mission patches. This approach would satisfy the public's desire to understand the imaginative traits of early astronauts who otherwise spoke in highly technical terms. She also suggested devoting coverage to the scientist-astronauts the agency had selected in 1965, so as to give readers a sense of the diversity in the corps.[64] Each of the aforementioned *Life* reporters understood the danger of public interest flagging amid an expanding astronaut corps and the need to counteract this effect. The *Life* reporters remained fiercely protective of their duty in fulfilling this task into the *Apollo* era, especially because they understood the financial benefit of their contract. Graves wrote to NASA's Julian Scheer in 1969 that he felt "extremely unhappy about the proposal that Deke Slayton and Frank Borman write by-line stories for the *New York Times*" given the *Life* contract for exclusive access.[65]

Life reporters did not influence astronaut iconography alone, however, and Americans did not pursue this task alone. Though the astronauts flew in spacecraft emblazoned with the American flag, they learned that they were global rather than merely national icons as the 1960s progressed. Following Glenn's *Mercury* flight, the Soviet Union's *Pravda* newspaper sent out a predictably partisan message: "Americans do not forget that the road to the cosmos was paved by

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[64] Dora Jane Hamblin to *Life* reporters, June 1967, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 5, *Life Magazine* Contract with Astronauts Folder.

[65] Ralph A. Graves to Julian W. Scheer, 1969, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 5, *Life Magazine* Contract with Astronauts Folder.

Soviet people… notwithstanding the sound of some propagandists of the 'cold war.'" Yet the Communist writers still acknowledged the "great courage" of Glenn.[66] Numerous letters to Glenn arrived from overseas, expressing admiration for the redheaded Marine and his achievement even if they disapproved of the American system of government or foreign policy. Glenn had flown combat missions in the south Pacific during World War II, but even a group of people from Nagasaki, Japan congratulated him on his feat. Letters poured in from the Soviet Union, usually to express wishes for an end to Cold War hostilities and admiration for Glenn. A history teacher even pointed to the friendship and collaboration of the American and Soviet people in World War II and hoped that Glenn's "victory in the cosmos" could inspire a preservation of friendship.[67] The reaction to Glenn's flight indicates that even people hostile to America were willing to look past the flag on his spacecraft and judge the man underneath as worthy of praise. Courage knew no nationality to most of the letter writers.

Armstrong and Dick Gordon also tested the foreign image of American astronauts by taking an eleven country tour of Latin America, following their *Gemini* missions in 1966. This assignment furthered the task of winning support among non-aligned nations in the Cold War. Though most of the astronauts were active duty military personnel at a time when the Vietnam War divided world opinion, the men saw the acclaim for their jobs largely transcend that division. NASA official George Low remembered the crowds as "spontaneous, friendly, and extremely warm." Armstrong and Gordon signed as many autographs and shook as many hands as possible, while newspaper writers and television anchors lauded the astronauts like their American counterparts. Armstrong even made a concerted effort to learn Spanish, which

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66 "Pravda Hails Glenn For 'Great Courage,'" *New York Times*, February 23, 1962.

67 Glenn, *P.S. I Listened to Your Heartbeat*, 74-86.

enhanced his popularity among the masses. Only in Montevideo and Panama City did hecklers disrupt the astronauts' activities, uttering slogans such as "Murderers, get out of Vietnam!"[68]

Foreign journalists also worked to cultivate certain images of American astronauts. Throughout the 1960s leading up to the lunar landing, *Paris-Match* magazine served as one example of a foreign periodical lionizing the feats of Americans in space. Following World War II, consumerism rose in France and the nation's citizens found glossy magazines an attractive commodity. Circulation of *Paris-Match* reached 1.5 million per week during its 1960s heyday. The French perception of the United States was not overwhelmingly positive during this era, particularly with regard to America's war in Vietnam.[69] Yet NASA activities often transcended such negative perceptions, as the writers of *Paris-Match* demonstrated through their adulation of astronauts. The periodical included images of astronauts meeting with priests before liftoff, a notion that fit with the popularity of Catholicism in France at the time. Readers also saw images of astronauts spending time with family, a notion that fit with the idea of patriarchy so popular in France during the 1960s.[70] Above all else, the coverage offered by *Paris-Match* proved the elements of an astronaut's appeal that *Life Magazine* had emphasized, such as religion and devotion to family, transcended national boundaries.

America's space program did not escape tragedy, as Grissom, White, and Roger Chaffee perished in a launch pad fire during a routine test before they could take *Apollo 1* into orbit in 1967. NASA administrator James Webb remarked, "It was the defacement of an idol. NASA

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68 Hansen, 296-300.

69 Guillaume de Syon, "Astronauts and Cosmonauts in Frenchmen: Understanding Space Travel Through the Popular Weekly Paris-Match," (lecture, NASA Headquarters, Washington D.C., April 26, 2011).

70 Ibid.

and the astronauts had been built up for a fall."[71] His comment referred to the perception, fostered by the media, that America's astronauts and their supporters on the ground were destined to succeed. Astronauts had returned safely to Earth sixteen times by 1967, meaning journalists found this perception easy to advance. Yet in the aftermath of the fire, NASA's critics argued that journalists should have been more willing to hold the agency accountable for mistakes instead of giving readers such an overwhelmingly optimistic perception.[72]

Yet the astronauts themselves were not to blame for the accident. Reporters emphasized that even as the machine they sat inside failed, the human beings remained one of the strongest elements in America's effort to reach the Moon. In the tradition of fallen warriors in the past, the press hailed the dead astronauts for their sacrifice and urged the continuation of the Cold War struggle to reach the Moon. None of the three astronauts were civilians; all three had military experience and Grissom even had the experience of flying combat missions over Korea. This made it easy for the press to advance the idea that all three knew the risks and felt prepared for death.[73] A *Time Magazine* article from February 3 is especially instructive for the iconographic depiction of the three men. The article described White as "an archetypal all-American boy…quietly religious, unashamedly patriotic and ruggedly athletic." It also emphasized that White jogged a couple of miles every morning, shinnied a rope in his backyard on weekends, and usually rode his bike three miles from his home to the Manned Spacecraft Center. Though the least well known of the three men, Roger Chaffee earned posthumous praise as a "boyishly

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71 Evert Clark, "Six Months After Tragedy, the Apollo Program Finds Itself Gaining but 'Still in a Time of Testing," *New York Times*, July 2, 1967.

72 Starr, 297.

73 William J. Cromie, "'Every New Flight is a Brand New Challenge,'" *Deseret News* (Salt Lake City, UT), January 31, 1967.

handsome" astronaut who "seemed to ape some of Gus's mannerisms."[74] The *Life Magazine* article following the accident struck a similar sentimental note. "But put these three astronauts high on the list of the men who really count, three men…who had the presumption to believe the earth was mostly a marvelous launching platform, a great place to leave for an adventure."[75]

Journalistic coverage of the *Apollo 1* accident thus reinforced multiple aspects of the astronaut appeal. Journalists could have emphasized Grissom's intense bitterness about the state of the *Apollo* spacecraft at the time of his death, for instance, (he hung a lemon on the *Apollo* simulator and expressed frustration with the communication system during the fatal test)[76] but articles such as these and accompanying photos depicted the crew as committed to their country and families. The articles also reminded readers that three youthful, handsome, and athletic men had just died (particularly White). A *Time* essay of February 10 reaffirmed the importance of sending such men into space as opposed to machines, a frame that journalists had pursued since the *Mercury* era: "Without a man onboard the spacecraft, there is no judgment aloft, no freedom of choice, no chance to take advantage of unforeseen opportunities, less chance than ever before of getting past unforeseen trouble."[77] Finally, the tragedy crystallized for the press and public the motivation for reaching the Moon: future astronauts must not let their fallen friends die in vain. The deaths of Grissom, White, and Chaffee thus reinforced an image present since the Dolley Madison conference: a steadfast willingness to give his life to his country, even to the point of Grissom's statement during the *Gemini* era, "If we die, we want people to accept it."[78]

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74 "Space: To Strive, To Seek, To Find, And Not To Yield," *Time Magazine*, February 3, 1967, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 13, Magazines Folder.

75 Ralph Morse, "Put Them High on the List of the Men Who Count," *Life Magazine*, February 3, 1967.

76 Boomhower, 290-300.

77 "Why Should Man Go to the Moon?" *Time Magazine*, February 10, 1967, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 13, Magazines Folder.

78 Schefter, 248.

Only four preparatory piloted missions later, Armstrong and Buzz Aldrin gave the world an image of the astronaut at the pinnacle of achievement. How did the press interpret humanity's first lunar landing on July 20, 1969 and the astronauts who carried out the feat? "We're always going to feel, somehow, strangers to these men," explained Eric Sevareid of CBS on that day. "How people on Earth will treat these men, the rest of their lives, that gives me more foreboding, I think, than anything else."[79] This comment reflected the fact that the men had lost their anonymity and therefore private citizens could no longer understand what it meant to be Armstrong or Aldrin. The comment also reflected the media's often vain hope for astronauts to express what the journey really meant to them. Journalists asked Armstrong to make grand philosophical statements about the moon landing, which he declined to do. "What Armstrong on the eve of becoming the First Man did not and would not define or explain about himself, others now sought, almost desperately in the days before the launch, to explain and define for him," wrote Armstrong's authorized biographer James Hansen. "…We were to be the author of our own Moon landing."[80]

These "authors" in the media published numerous articles prior to the launch of *Apollo 11*. Norman Mailer, the most famous of them, offered criticism of the astronauts. He interpreted the Moon landing as an achievement of a white, Anglo-Saxon, and Protestant culture. As a Jew who identified with America's 1960s counterculture, Mailer viewed astronauts and other NASA employees as dull figures. He observed that Armstrong, Aldrin, and Mike Collins wore short, close cropped hair and believed in traditional American values like patriotism and Protestantism.[81] Mailer thus confirmed the sentiment that James Reston had expressed ten years

[79] Hansen, 522.
[80] Hansen, 400.
[81] Norman Mailer, *Of a Fire on the Moon* (Boston: Little, Brown & Co., 1970), 316.

later, only he did so while criticizing what he considered a stale, corporate culture. William Stevens emphasized in the *New York Times* that Armstrong grew up in Wapakoneta, Ohio, where the "dominant verities still include hard work, honesty, church on Sunday and the Republican party." He also mentioned Armstrong's strong work ethic from a young age and respect for his intensely religious mother.[82] *Life Magazine's* Hamblin shared this sentiment in her own Armstrong article, writing that although his parents raised him during the Great Depression, his family survived by relying on traditional values like "work hard, smile, save your money, count your blessings, and pray a lot."[83] Even if these writers did not really know Armstrong on a personal level, they were still willing to write about the first man on the Moon as a possessor of traditional American values who the nation's citizens could rally around.

Apollo 11 proved more than ever that the entire world basked in the achievements of American astronauts. Eight hundred and twelve foreign journalists, including twelve from the Soviet Union, traveled to Florida to cover the launch. Even a writer from Communist Czechoslovakia observed "This is the America we love," when considering the feat of Armstrong and Aldrin peacefully placing their boots on another world.[84] Following their return to Earth, the three crewmen visited twenty-three countries in forty-five days. Just three years after Armstrong had taken part in his tour of Latin America, this trip would give him and his colleagues a chance to gauge foreign perception of astronauts in the wake of the end of the space race. Aldrin remembered the "warmth and friendliness" with which foreigners greeted him.[85] Even in Communist Yugoslavia, thousands of well-wishers waved American flags in rows ten

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82 William K. Stevens, "What Kind of Men Are They?" *New York Times*, July 17, 1969.

83 Dora Jane Hamblin, "Three Men Bound for the Moon," *Life Magazine*, July 4, 1969.

84 Hansen, 3.

85 Buzz Aldrin, *Magnificent Desolation: The Long Journey Home from the Moon* (New York: Harmony Books, 2009), 67.

deep and climbed on roofs to see the men who had carried out humanity's first lunar landing.[86] Armstrong, the "First Man," naturally experienced the strongest popular reaction overseas. In 1972, he rode into Langholm, Scotland on a horse-drawn carriage while eight thousand Scots and Englishmen applauded him. The people of this town took pride in the commander of *Apollo 11* because the Armstrong family lineage had emerged in Scotland.[87] This amounted to yet another example of people claiming an American astronaut as their own, as Glenn had experienced. The exploits of astronauts proved so enticing to the public that foreigners attempted to bask in their legacy in whatever small way possible.

The evidence indicates that journalists and the mass public influenced astronaut iconography from *Mercury* through *Apollo*, but they did so in concert with one other powerful group in American society: politicians. Politicians have always had a great opportunity to shape national discourse through their public statements. The Greek philosopher Aristotle recognized as early as the 4th century BCE that politics and communication are each essential elements of human nature.[88] When Americans reflect today on the 1960s, they often associate the decade with the blustery statements of Kennedy and Nikita Khrushchev. These politicians dealt with potentially threatening events such as the failed Bay of Pigs invasion and Cuban Missile Crisis, but they also sought ways to instill pride in their nations. Astronauts provided a convenient means of doing so. Although most astronauts were military personnel, they did not spend their time training to kill an enemy once they joined NASA. They participated in the peaceful exploration of space, epitomizing President Kennedy's inaugural statement on January 20, 1961

86 *Tri-City Herald*, "Yugoslavs Cheer *Apollo 11* Trio," October 19, 1969.

87 Hansen, 13.

88 Linda T. Krug, *Presidential Perspectives on Space Exploration: Guiding Metaphors From Eisenhower to Bush* (New York: Praeger, 1991), ix.

"that both sides begin anew the quest for peace."[89] In this sense, the astronauts symbolized the American spirit that politicians wished to convey.

President Kennedy proved the most influential politician in contributing to the icon status of American astronauts. Kennedy had famously used the term "New Frontier" as the Democratic presidential nominee in 1960 and, once elected, associated the feats of astronauts with the frontier mythology. "What was once the furthest outpost on the old frontier of the West," declared the president in his 1962 Rice University speech, "will be the furthest outpost on the new frontier of science and space." The *Mercury* astronauts often used the same language in justifying their work. Grissom even went so far as to write that had he lived in the early nineteenth century, he would have wanted to "help open up the west."[90] The highest authority in the country had thus framed the astronaut appeal around the tried and true narrative of exploring new frontiers, just as journalists had done, and the astronauts had echoed the sentiment. President Thomas Jefferson had stated in 1806, "it is but justice to say that Messrs. Lewis and Clarke and their brave companions have by their arduous service deserved well of their country." Over a century and a half later, Kennedy had given a new group of explorers presidential approval.[91]

The president met with the *Mercury* astronauts following their flights, which also gave an impression of strong government support. Kennedy presented Shepard with a Distinguished Service Medal three days after the *Freedom 7* flight and mentioned during his speech that the U.S. risked great embarrassment by publicizing spaceflights in full view of the world. This gave

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89 John F. Kennedy, "Inaugural Address, January 20, 1961," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 8, 2011).

90 Kaufmann, 33.

91 Thomas Jefferson, "Sixth Annual Message, December 2, 1806," The American Presidency Project, http://www.presidency.ucsb.edu (accessed February 7, 2012).

Shepard's achievement a distinctively American quality, he emphasized, echoing one of the journalistic frames of the flight.[92] But of all the astronauts, the president connected most closely with Glenn. Kennedy and his wife rode with Glenn in a New York City ticker tape parade following the *Friendship 7* flight that received extensive coverage in *Life Magazine.* A caption beneath one of the *Life* photos even stated, "two exuberant young Americans share the country's joy."[93] The support of the most powerful man in the country thus enhanced Glenn's positive image and vice versa. As historian James Kaufmann asserted, Glenn's flight succeeded brilliantly in restoring support for Kennedy's Moon initiative. The goodwill that the astronaut generated helped administration officials in their push to maintain funding for the *Apollo* program.[94] Even conservative columnists who had been critical of Kennedy's space aim praised Glenn and his voyage.[95]

Kennedy also praised the skills of the astronauts, particularly after Cooper's flight. Cooper's aforementioned performance aboard *Faith 7* prompted Kennedy to say "that man is still the most extraordinary computer of all. His judgment, his nerve, and the lessons we can learn from experience still make him unique and, therefore, make manned flight necessary and not merely that of satellites."[96] This statement thus reinforced the idea expressed by journalists, that human travelers possessed unique abilities that mere machines did not have and were a vital element in America's space effort. For a president who had staked part of his legacy on the effort to send humans to the Moon before decade's end, this idea resonated.

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92 John F. Kennedy, "Remarks at the Presentation of NASA's Distinguished Service Medal to Astronaut Alan B. Shepard, May 8, 1961," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 8, 2011).

93 Matthew Cunningham, "'But Why, Some Say, the Moon?'" *Quest: The History of Spaceflight Quarterly*, Volume 16, Number 1 (2009): 36.

94 Kaufmann, 46.

95 M. Cunningham, 36.

96 John F. Kennedy, "Remarks Upon Presenting NASA Distinguished Service Medal to Astronaut L. Gordon Cooper, May 21, 1963," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 8, 2011).

Among government officials, Kennedy was hardly alone in emphasizing the heroic qualities of the astronauts. The members of Congress, who voted on the NASA budget year after year and thus kept Kennedy's Moon initiative alive, used similar language as the president. Politicians such as Sen. Alan Bible, Rep. Harold Donahue, and Rep. Carl Albert equated Glenn with the pioneers of America's past. Democrats and Republicans alike also praised Glenn's adherence to traditional American values such as faith and family, just as journalists had already done.[97] Cooper also won praise from politicians such as Congressman Garner Shriver, who stated, "When the automatic electronic devices failed and went inoperative at the crucial period, it was the man in the capsule who manually directed" *Faith 7* to a splashdown.[98] The politicians who allocated money for spaceflights believed the human component was a vital link in the chain that would lead from the Earth to the Moon. In their statements, they worked alongside journalists in casting astronauts as icons.

Kennedy's death on November 22, 1963 brought to a tragic end the administration that carried the moniker "New Frontier," but two additional presidents added to the astronaut image before the end of the *Apollo* program. President Lyndon Johnson felt a great sense of regional pride in the astronaut corps, as each of them lived in his home state. After each of the *Gemini* and early *Apollo* flights, he invited the astronauts to his ranch. He thus proved especially adept at identifying the astronaut with the Lone Star state. Johnson praised the humility of astronauts, stating, "I haven't yet met a man who has not come down from space wanting to give more credit to all the men and women on the ground than he would accept for himself up there."[99] But most all, he treated the astronauts as courageous figures who the American people could admire

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97 Kaufmann, 128.

98 Kaufmann, 130.

99 Lyndon B. Johnson, "Remarks in Houston at the NASA Manned Spacecraft Center, June 11, 1965," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 12, 2011).

in the midst of news about Vietnam and racial tension. "The personal qualities of the astronauts and their colleagues will ultimately prevail in the conquest of space," he stated after the *Gemini 8* crew made their emergency splashdown.[100]

President Richard Nixon inherited a space program that he knew his Democratic rivals Kennedy and Johnson had built into an operation on the verge of landing the first men on the Moon. Despite his frugality and ultimate unwillingness to continue with the goal of sending humans beyond Earth orbit, the president still believed that the iconic stature of astronauts could help to inspire the people of his country. Some of Nixon's advisors believed the president should cancel all remaining lunar missions after the near loss of the *Apollo 13* crew. White House counsel John Ehrlichman later stated that the president refused to do so in part because he valued the heroism of astronauts.[101] Kennedy, Johnson, and Nixon each realized Americans would react strongly not only to a demonstration of their technology, but to the people who braved dangers to use that technology. If the most powerful men in the country adhered to the notion of astronauts as icons, the public was more likely to follow suit.

Some astronauts served in politics themselves, another indication of their appeal. Glenn, Harrison "Jack" Schmitt, and Jack Swigert were each elected to serve in government among astronauts from the *Mercury*, *Gemini*, and *Apollo* eras. Though Glenn was not elected to the Senate until 1974, much of the encouragement that spurred his initial run in 1964 centered around the traditional American values that journalists had already emphasized. A Bostonian wrote to him, "You have been trained in many disciplines. Moral discipline, a man who was not afraid to proclaim his faith in God." Another writer from Nevada stated, "You have some

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[100] Lyndon B. Johnson, "Statement by the President Following the Safe Return of the *Gemini 8* Astronauts, March 16, 1966," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 12, 2011).
[101] Chaikin, 3: 162.

qualities that are spectacularly lacking in many members of that august body: guts, intelligence and integrity.[102]

Many additional astronauts served the nation in other political capacities, particularly as the *Apollo* program reached its peak. California Governor Ronald Reagan wrote a letter to President Nixon in 1969 suggesting that "there might be a program of expanded 'ambassadorial visits' throughout the world by all of our astronauts and their wives. Each of these men, and his wife, is an excellent ambassador, not only for the space program, but for the United States of America…They are intelligent, poised, good-humored, completely at ease in any situation, and totally dedicated to the principles in which we believe."[103] Several early astronauts made Reagan's words prophetic. After the *Apollo 8* flight sent the first humans to lunar orbit in December 1968, two of the three crewmembers (Frank Borman and Bill Anders) served their country in government positions. President Nixon admired Borman and made the *Apollo 8* commander a Special Presidential Ambassador to Europe. He met world leaders from Queen Elizabeth II to Charles De Gaulle during his tour in 1969 and even became the first astronaut to visit the Soviet Union, where three cosmonauts greeted him amicably.[104] The following year, Nixon tapped Borman on another world tour to advocate for the release of American prisoners of war in Vietnam.[105] Nixon also named Anders executive secretary of the National Aeronautics and Space Council, where the astronaut provided oversight of NASA policy. Following *Apollo 11*, Michael Collins began his position as Assistant Secretary of State for Public Affairs.[106]

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[102] Glenn, *P.S. I Listened to Your Heartbeat*, 180.

[103] Governor Ronald W. Reagan to President Richard M. Nixon, July 15, 1969, Eugene A. Cernan Papers, Archives and Special Collections, Purdue University Libraries, Box 4, Binder w/Photos and Correspondence from Dignitaries Folder.

[104] John M. Lee, "Borman Blasts Off Smoothly as Envoy to Britain," *New York Times*, February 4, 1969 and "Soviet Astronauts Greet Borman as His Visit Begins," *New York Times*, July 3, 1969.

[105] Richard M. Nixon, "Statement on Appointing Frank Borman as Special Representative on Prisoners of War, August 7, 1970," The American Presidency Project, http://www.presidency.ucsb.edu (accessed October 19, 2011).

[106] Peter Grose, "Collins, Former Astronaut, Sworn in as State Department Aide," *New York Times*, January 7, 1970.

Armstrong, the most publically renowned astronaut of all, traveled to Vietnam to visit U.S. troops over Christmas 1969. Armstrong took questions from GIs and encouraged them to continue their education when they returned home.[107] These actions by the early astronauts reinforced the notion that they were willing to serve their nation in a time of need. Meanwhile, the Nixon administration benefited from the goodwill that astronauts generated at home and abroad. The men would not have been useful in this capacity without their iconic status that the public, press, and politicians had given them.

The American astronauts of the 1960s performed technological feats that no humans had ever before accomplished, but as icons they operated in a nation that had long since embraced celebrity culture. As far back as the 1830s, journalists began publishing human interest stories about prominent Americans. The trend particularly increased around the turn of the century, because candid photography and motion pictures allowed journalists to offer new dimensions to their reporting about American icons. Journalists strove to present the "real" selves of famous figures, for the benefit of the public. Aviators were no strangers to this dynamic, as Charles Lindbergh found following his famous transatlantic flight in 1927. Journalists strove to gather and report as much detail as possible on his childhood and to depict him as a clean cut figure who had the humility to maintain a level head in the midst of his fame.[108] The early American astronauts were in a different position than Lindbergh, because they were U.S. government employees called upon to serve their country in the Cold War. Yet 1960s journalists reacted to the astronauts as 1920s journalists had reacted to Lindbergh, in their desire to portray the newest aviators as clean cut Americans. Even as the act of humans traveling into space remained very new throughout the 1960s, media coverage of the people who carried out the achievement

[107] Hansen, 581.

[108] Dominick A. Pisano, ed., *The Airplane in American Culture* (Ann Arbor: The University of Michigan Press, 2003), 77-80.

therefore drew on a much older phenomenon. The engineers in government and industry may have cut the metal and built the machines that carried the first astronauts into space, but only the astronauts witnessed the sights and sounds of a new frontier while placing their lives on the line. The astronauts thus gained a status as icons that drew on a long tradition of celebrity culture in America, including for past explorers.

Chapter Two

The Russian Cosmonaut as Icon, *Vostok* to *Soyuz*

Soviet citizens watched the first footsteps on the Moon like the rest of the world, but with the understanding that their country could have pulled off the feat. The *Vostok*, *Voskhod*, and *Soyuz* flights had given the Soviets a wealth of flight experience. Engineers had designed an N-1 rocket, LK lunar lander, and spacesuit for a cosmonaut to step onto the lunar surface.[109] No Russian reached the Moon, but 1960s journalists hailed cosmonauts as clean cut, patriotic Communists just as American reporters hailed astronauts as ideal American citizens. The similarities between astronauts and cosmonauts are obvious; all of them were government employees and placed their lives on the line in hurtling beyond Earth's atmosphere for the sake of national prestige. Yet astronauts and cosmonauts operated in different environments as far as the dissemination of their feats to the public was concerned. For purposes of comparison, it is instructive to briefly examine celebrity, journalism, and politics in the Soviet Union and then turn to cosmonauts specifically.

Soviets who explored new frontiers had already achieved celebrity status during the Soviet Union's brief existence. Soviet polar exploration in the 1930s particularly demonstrates this point, as books, articles, films, and radio broadcasts about arctic explorers inundated the general public. For instance, numerous articles emphasized the bravery of Otto Schmidt in placing his life on the line for the sake of exploration and science, along with his determination

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[109] Andrew Chaikin, *A Man on the Moon: The Voyages of the Apollo Astronauts* (Alexandria: Time-Life Books, 1999), 2: 38-39.

in reaching his goals and dedication to the Soviet Union. Joseph Stalin held a great interest in promoting heroes such as Schmidt so that Soviet citizens could view these heroes as models of proper conduct.[110] These Soviet explorers flew aircraft to reach their polar destinations and numerous scientists had already pondered the next extension of aviation: the use of rockets to propel humans into space. Konstantin Tsiolkovsky became the most renowned of these spaceflight theorists, as Soviet propaganda drew attention to his work long after his death in 1935. Journalists even claimed that Tsiolkovsky had invented the airplane and dirigible in 1947.[111] Just as in America, a cultural fascination with exploration predated the ability to send humans into space.

Soviet journalists operated in a far different environment than American journalists because they could not write editorials in disagreement with the official Communist position on exploration or any other topic. American presidents have always had to tolerate dissenting voices from liberal and conservative newspaper columnists. Premiers such as Stalin and Nikita Khrushchev did not have that problem because only Communist party members controlled the publishing of newspapers and appointment of newspaper journalists. Vladimir Lenin stated his belief that a Soviet citizen should become a new person by following Communist propaganda and Soviet journalists attempted to facilitate this.[112] By the time Stalin died and Khrushchev became premier in the 1950s, journalism had entered a new era in terms of the increased use of photos and strong Communist party effort to increase circulation. The circulation of Soviet newspapers reached 68.7 million by 1961, the year Gagarin became history's first space

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110 John McCannon, "Positive Heroes at the Pole: Celebrity Status, Socialist-Realist Ideals, and the Soviet Myth of the Arctic, 1932-1939," *The Russian Review*, Volume 56 (July 1997): 348-50.

111 Slava Gerovitch, "Creating Memories: Myth, Identity, and Culture in the Russian Space Age," in *Remembering the Space Age*, ed. Steven J. Dick (Washington D.C.: NASA SP-2008-4703, 2008), 212.

112 Anthony Buzek, *How the Communist Press Works* (London: Pall Mall Press, 1964), 7, 28.

traveler.[113] The journalistic environment thus proved very conducive for the idolization of Soviet space travelers.

Journalistic coverage of the Soviet corps of space travelers differed from the U.S. side from the very beginning. The first 20 cosmonauts, all military pilots like their American counterparts, began training for spaceflight in 1960. But whereas American journalists immediately wrote stories about the American astronauts and their backgrounds, no "Dolley Madison moment" occurred to create the myth of the Soviet cosmonaut.[114] No swarm of journalists descended on the initial cosmonauts to query them about their patriotism or to speculate who among them would be selected to lead his nation into space. Only with the thaw of the Cold War decades later could researchers uncover a photo of the twenty men.[115] The Soviet secrecy worked to the advantage of the Communist party. Had Soviet journalists reported on each of the cosmonauts for the outside world, western journalists would have known the identity of Valentin Bondarenko (the cosmonaut who died on the ground in a 1961 fire) as well as other cosmonauts eliminated from the program. The lack of openness in the press created the illusion of a cosmonaut corps unmarred by any defections.[116]

As Soviet rockets lifted a series of dogs into space and the cosmonauts were deep in training, the members of the state commission needed to make a choice on which cosmonaut would make the flight of *Vostok 1*, humanity's first foray into space. With the field for that achievement already whittled from twenty to six, the remaining cosmonauts took their final exams by preparing in the *Vostok* simulator in January 1961. Just as on the American side, a

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113 Trevor Rockwell, "The Road to the Stars is Paved By the Communists: Soviet Propaganda and the Hero Myth of Yuri Gagarin," Master's thesis, University of Victoria, 2005, 17.

114 Colin Burgess and Rex Hall, *The First Soviet Cosmonaut Team: Their Lives, Legacies, and Historical Impact* (Chicester, UK: Praxis Publishing, 2009), 30.

115 Siddiqi, 247.

116 Burgess and Hall, 130.

peer vote and simulator performance factored into the decision on who to fly first. But the crucial factor of propaganda played a larger role on the Soviet side. No matter how well Yuri Gagarin performed as a pilot, the twenty-six year old had several factors built in to his advantage. He was born into a working class family in the Smolensk region, but had rejected the family tradition of carpentry to become a Soviet air force pilot. Gagarin's background thus sent a powerful message to his nation and the western world: even people born in unfortunate economic circumstances could pursue rewarding careers.[117] Head of cosmonaut training Nikolai Kamanin's selection of Gagarin for *Vostok 1* came only after careful preparation on Gagarin's forthcoming status as an icon.

When Gagarin orbited Earth once over 108 minutes on April 12, 1961, Soviet journalists finally had a chance to write about a cosmonaut as a clean cut, patriot figure. An *Izvestia* newspaper article published two days later reported that Gagarin sang during his return to Earth: "The country hears, the country knows…" He told the press that he felt moved to tears by Nikita Khrushchev's congratulatory telegram after his return.[118] Soviet readers thus gained the impression that Gagarin did not fly in space for his own benefit; he felt motivated by concern for his nation. Soviet journalists also resorted to printing lies in order to hail Gagarin, a critical difference from their western counterparts. Newspapers reported that Gagarin made a patriotic speech right before he took the elevator to board his rocket, when in fact he had made the pre-recorded speech much earlier.[119] An article appearing in all Soviet papers on April 25 even described Gagarin's *Vostok* spacecraft by stating, "The space pilot can land in the cabin of the

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117 Siddiqi, 261.

118 *The First Man in Space: The Record of Yuri Gagarin's Historic First Venture into Cosmic Space: A Collection of Translations from Soviet Press Reports* (New York: Crosscurrrents Press, 1961), 15-16.

119 Siddiqi, 274.

vehicle."[120] Gagarin actually parachuted out of the vehicle and landed separately, but nobody from the western world knew this until the 1980s.[121] Not surprisingly, Gagarin perpetuated this misconception about his flight in his memoir *Road to the Stars*, published in 1962. He also failed to mention that he had parachuted out of his vehicle, or that the equipment module initially failed to separate from the crew cabin late in his flight.[122]

Here it is instructive to examine the difference between the reception of the Gagarin flight by Soviet journalists and reception of the *Mercury* flights by American journalists. At the most basic level, journalists depicted Gagarin as a young, humble, brave figure devoted to his country in the same manner as American astronauts. Yet the Soviet journalistic treatment lacked depth in comparison. When Soviet citizens opened their copies of the *Pravda* newspaper, or when foreigners read their own newspapers, they saw a perception of the *Vostok 1* flight as a triumph but without the drama of the *Mercury* flights. The public did not know about the failed equipment module separation (this module unexpectedly remained connected to the crew compartment following retrofire) or the anxiety of the cosmonaut and his family on the ground. By contrast, American journalists reported immediately on life threatening issues such as Carpenter's off-target landing after his *Mercury* flight.[123] As mentioned in the previous chapter, a *Life* reporter entered the Carpenter home and even snapped a photo of Mrs. Carpenter anxiously watching the launch for the cover. No Soviet reader saw a photo of a worried Mrs. Gagarin, or gained any insights into how she and her family coped with anxiety. No reader saw any compelling quotes from Gagarin on his mindset just following retrofire. The state controlled press did not lend itself to the drama and intimacy of the *Mercury* program.

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120 *The First Man in Space*, 65.

121 Burgess and Hall, 161-162.

122 Yuri Gagarin, *Road to the Stars* (Moscow: Foreign Language Publishing House, 1962), 161.

123 "Scott Carpenter's Ride," *New York Times*, May 25, 1962.

Despite the comparative lack of intimacy and even outright lying, Soviet journalists strove to present Gagarin as a masculine figure who should make Soviets proud. He became head of the Soviet Water Skiing Association after the flight and journalists circulated images of him as tanned and physically fit. When American historian Roger Launius wrote of youth and virility as traits that explained the appeal of astronauts, he could also have been writing about cosmonauts.[124] Soviet journalists hailed Gagarin as a clean cut figure despite his personal behavior, another similarity in media coverage of astronauts and cosmonauts. Soviet officials knew that he was a womanizer and excessive drinker in private, but the press did not report on these indiscretions.[125]

Regardless of publication, Soviet journalists presented Gagarin as a personification of Communism. Though only he could speak of the sights and sounds of space travel, a *Pravda* journalist wrote that he owed his flight to "the inspiration, the talent, the persistence and the courage of millions of Soviet people." Journalists thus praised Gagarin as an individual hero but also described his success in terms of communal values highly regarded in the Communist Soviet Union.[126] *Soviet Life* magazine also proved instrumental in this regard. Writers emphasized the cosmonauts' working class backgrounds, driving home the point that even these citizens could achieve success in a society based on eliminating class distinctions. Though American journalists also extolled the humble backgrounds of astronauts, Soviet writers had a compelling reason of national ideology to do so for their cosmonauts.[127] A *Pravda* article from April 17 even contained a photo of two factory workers and made the point that people from lower tier

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124 Launius, 5.

125 Burgess and Hall, 168.

126 Trevor Rockwell, "The Road to the Stars is Paved By the Communists," 43.

127 Trevor Rockwell, "They May Remake Our Image of Mankind: Representations of Cosmonauts and Astronauts in Soviet and American Space Propaganda, 1961-1981," (lecture, NASA Headquarters, Washington D.C., April 26, 2011).

jobs should draw inspiration from Gagarin's conquest of space.[128] There can be doubt from this evidence that ideology shaped Gagarin's appeal as an icon.

Gagarin's post-flight world tour also deserves consideration and comparison with the astronauts' world tours mentioned in the previous chapter. Only four months following the flight of *Vostok 1*, he had already visited Brazil, Bulgaria, Canada, Cuba, Czechoslovakia, Finland, Great Britain, Hungary, and Iceland. Kamanin even turned down two thirds of the travel requests he received for Gagarin as head of cosmonaut training.[129] Gagarin attracted millions of spectators just like his American counterparts in the *Mercury*, *Gemini*, and *Apollo* programs, but his legacy on the international stage differed because he adhered so closely to the working class mystique. Long before Gagarin had known fame, he had known the life of a foundry man, which involved the anything but glamorous job of handling molten metal.[130] It is therefore instructive to examine his July 1961 visit to Manchester, an English city rich in working class people since the Industrial Revolution and support for trade unions. Fred Hollingsworth, the general secretary of the Amalgamated Union of Foundry Workers (AUFW), felt great pride in enrolling Gagarin as the union's first honorary member. "I am still a foundry worker at heart," the cosmonaut declared, and later remarked that the greetings of working class people "were dearer to me than many awards."[131] The appearance of Gagarin and his reception by the AUFW thus served as a symbolic rebuke to the American system of capitalism, under which working class people did not have as great an opportunity to achieve fame. His tour thus served a far different purpose than Neil Armstrong's tours.

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128 Rockwell, "The Road to the Stars is Paved By the Communists," 90-91.

129 Slava Gerovitch, "The Human Inside a Propaganda Machine," in *Into the Cosmos: Space Exploration and Soviet Culture*, eds. James T. Andrews and Asif A. Siddiqi (Pittsburgh: University of Pittsburgh Press, 2011), 78-79.

130 Gurbir Singh, *Yuri Gagarin in London and Manchester* (Manchester: Astrotalkuk Publications, 2011), Ch. 4.

131 Ibid.

Gagarin also appealed to the mystique of world peace during his visit to Britain. "If people everywhere worked for peace as the society and its equivalent in Russia were doing then the danger of push button war would not arise," Gagarin declared during a reception affiliated with the British Soviet Friendship Society. He repeated this sentiment throughout the year as he traveled to various nations.[132] In this sense, Gagarin and his American counterparts each functioned as men willing to use their celebrity to call for a thaw in the Cold War (but only on their own nation's terms). People in Britain and elsewhere in the western world typically knew about the Soviet Union only through the lens of a state-run media. Yet Gagarin's tour offered a chance for foreigners to see a living, breathing embodiment of the Soviet Union rather than words on a newspaper. Historian Gurbir Singh found that even decades later, the British citizens who met Gagarin recalled that his smile and resolve for world peace brought a smile to thousands in the United Kingdom. Most of these onlookers had never even seen a Russian before, but Gagarin's peaceful disposition convinced them to take a second look at Soviet intentions.[133] Singh's analysis is consistent with the American astronauts' experiences, particularly John Glenn and Armstrong. Differing national ideologies did not prevent astronauts or cosmonauts from retaining their cultural power.

Even fifty years after his flight and the end of the Cold War, the image of the heroic Gagarin abounds in Russia. No Russian has ever attempted a critical biography of Gagarin as an ordinary, flawed human being. Visitors to the Saratov State Museum near the *Vostok 1* landing site still see a large painting of Gagarin that reflects the image Communist party officials wanted to convey rather than the truth. The painting portrays him stepping out of his spacecraft, which he never did since he parachuted from it prior to touchdown, and being greeted warmly by a

[132] Singh, Ch. 7
[133] Singh, Ch. 7

Russian peasant and her granddaughter even though they actually felt frightened by him according to his secret testimony. Long after Gagarin died in a 1968 plane crash, Russians have presented a heroic narrative of their first space traveler even at the expense of historical accuracy.[134] His death at the age of just 34 also raises an important point. If still alive, he would now be in his late 70s. He would no longer have his youth and virility, but would have the chance to publicly debunk the sacred memories of the flight such as his landing inside the spacecraft. His death at such a young age therefore enhanced the image of the "sacred Gagarin." The world's first space traveler remained forever the smiling young man in Soviet propaganda photos.

As other cosmonauts followed Gagarin into space, in what ways did cosmonaut iconography mirror or differ from astronaut iconography? The identification of cosmonauts with Communism and socialism meant that Soviet journalists did not invoke religion in their writing about space travelers. Whereas American journalists had eagerly asked the *Mercury* astronauts about their religious habits at the Dolley Madison press conference, Soviet journalists not only declined to tout the early cosmonauts' religion, but specifically disavowed religion as it applied to spaceflight. When Soviets opened up popular newspapers and periodicals, they read quotes attacking religious beliefs from cosmonauts as well as ordinary citizens. The nonbelievers felt that the first cosmonauts gave their position more credibility because they could simply ask: now that human beings have flown beyond Earth and have not seen Heaven, why should we believe in God? An editorial from *Izvestia* expressed this view following the Gagarin flight: "He flew

134 Andrew Jenks, "The 50th Jubilee: Yuri Gagarin in the Soviet and Post-Soviet Imagination," (lecture, NASA Headquarters, Washington D.C., April 26, 2011).

right through the heavenly mansions and did not run into anyone: neither the Almighty, nor Archangel Gabriel, nor the angels of Heaven. It seems, then, that the sky is empty!"[135]

Gherman Titov, Russia's second man in space, went even further on his trip to the United States in May 1962. He reported seeing "no God or angels" on his flight. "The rocket was made by our people," he said. "I don't believe in God. I believe in man, his strength, his possibilities and his reason."[136] Karl Marx had famously expressed this sentiment in the previous century by writing "religion…is the opium of the people."[137] When the Bolshevik regime took power in the Soviet Union in 1917, Lenin's Leninist-Marxist ideology discouraged religious belief. Now Gagarin and Titov had carried out spectacular achievements by orbiting the Earth, yet the cosmonauts and the journalists covering them disavowed religion. Media coverage of cosmonauts thus identified them with traditional Soviet values, a far cry from Glenn's public statements at the same time. Participants on both sides of the Cold War space race even attempted to specifically repudiate each other as the 1960s progressed. NASA officials repeatedly publicized the belief of their astronauts that one could make technological progress while still believing in God.[138] President John F. Kennedy fought back against Soviet attempts to associate spaceflight with atheism at his prayer breakfast in 1962. The president stated that he preferred Glenn's statement "that he had made his peace with his Maker several years before" to

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135 Victoria Smolkin-Rothrock, "Cosmic Enlightenment," in *Into the Cosmos: Space Exploration and Soviet Culture*, eds. James T. Andrews and Asif A. Siddiqi (Pittsburgh: University of Pittsburgh Press, 2011), 151-152.

136 "Titov, Denying God, Puts His Faith in the People," *New York Times*, May 7, 1962.

137 Karl Marx, *A Contribution to the Critique of Hegel's Philosophy of Right* (Paris: Deutsch-Französische Jahrbücher, 1844), 1.

138 Smolkin-Rothrock, 151-152.

Titov's support for atheism because Glenn's viewpoint "is much a part of our American heritage."[139]

Titov contributed to the iconic status of the cosmonauts in other ways following his *Vostok 2* flight on August 6, 1961. Still the youngest person to ever fly in space (25 years old), he surpassed Gagarin in the ambition of his flight (he spent over a full day in orbit) and offered a more refined propaganda message. In his public remarks following landing, he attributed his success to a much greater cause than himself: "all the glory for this new victory belonged to the Party, the people, and, of course, the builders of the spaceship."[140] Communist Party officials elected Titov to full Party membership during his voyage, which added to his iconic image. The news that Titov had suffered from severe fatigue, dizziness, and nausea aboard *Vostok 2* would have clouded this image, but Soviet journalists did not report on this development. The timing of Titov's return also bears consideration, because he traveled to the newly constructed Berlin Wall in East Germany. Just seven days following his flight, the creation of the Berlin Wall separated democratic West Germany from Communist East Germany. East Germans found themselves cut off from family members and jobs. Yet the nightly news in East Germany had covered Titov's flight almost exclusively on August 6, meaning the public had vicariously shared the experience of spaceflight with a fellow Communist.[141]

Yet even in this time of trauma, Titov's trip to East Germany three weeks later demonstrated the cultural power of a cosmonaut. Though the creation of the wall held far greater significance in their lives than the flight of *Vostok 2*, thousands of East Germans serenaded Titov

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139 John F. Kennedy, "Remarks at the 10th Annual Presidential Prayer Breakfast, March 1, 1962," The American Presidency Project, http://www.presidency.ucsb.edu (accessed February 12, 2012).

140 Cathleen Lewis, "The Red Stuff: A History of the Public and Material Culture of Early Human Spaceflight in the U.S.S.R.," (PhD diss., George Washington University, 2008), 137-138.

141 Heather L. Gumbert, "Cold War Theaters," in *Into the Cosmos: Space Exploration and Soviet Culture*, eds. James T. Andrews and Asif A. Siddiqi (Pittsburgh: University of Pittsburgh Press, 2011), 239-240.

with whistles, sirens, and applause. Communist journalists reported on this to counteract the notion that East Germans mainly stayed in their homes and lived in fear. Television especially served the purpose of Communism in this regard, because it allowed western observers to see Titov and his admirers.[142] Titov himself struck a defiant tone: "With that (the protection of the border), the plans of the West German and international imperialists, who want to interrupt the building of socialism, have been dealt a powerful blow." Since the people of East Germany perceived Titov as a symbol of socialism's strength (he had orbited Earth before any American had achieved the feat, after all), his words acted as a calming influence. Even if family members, jobs, and freedom existed on the other side of the wall, only on this side could one see the second man in history to orbit Earth.[143]

The *Vostok* program ended in 1963 along with America's *Mercury* program, but not before the pilot of *Vostok 6* drew another line of separation between the image of American and Russian space travelers. Valentina Tereshkova orbited Earth on June 16, 1963, making her the only woman to fly in space from either country during that decade. Kamanin had heard reports about the so-called "*Mercury 13*" women undergoing unofficial training for spaceflight in the U.S. He recognized that his country should try for the propaganda victory of launching a Soviet woman first. The Soviets decided to carry out this feat with Tereshkova, a 24-year-old parachute jumper selected among four other women. She arrived in Moscow in 1962 and quickly earned the nickname "Gagarin in a skirt."[144] The nickname demonstrated that Tereshkova shared her working class background and charming personality with Gagarin. Yet Soviet journalists also emphasized that a Russian female earned the chance to fly in space far in advance of any

142 Gumbert, 246-248.
143 Gumbert, 244.
144 Burgess and Hall, 229-236.

American female. As such, the journalists could draw on her appeal in two ways: her image as a heroic cosmonaut and as a mother. One *Soviet Life* writer even stated in an August 1963 article, "Valya Tereshkova is really two girls: one in orange coveralls (her *Vostok* suit), the other in a sky blue dress."[145] Whereas American journalists had no choice but to write about astronauts in masculine terms, Soviet journalists could now write about a cosmonaut as a caring, nurturing figure.

How did media coverage of Tereshkova fit into the prevailing conception of gender in the Soviet Union? Photos of girls and women appeared in newspapers regularly, but usually in passive positions such as sewing, knitting, or greeting males with bouquets of flowers. Independent figures who undertook great feats in science and engineering were almost always males until Tereshkova made her flight.[146] Yet Tereshkova also appealed to the traditional conception of gender. She left school at the age of seventeen to work in a tire factory and textile mill, meaning she had dutifully contributed to her country's economic output. She also took part in outdoor activities, allowing journalists to emphasize her youthful, vigorous appearance. In 1962, Tereshkova joined the Communist Party. The first female cosmonaut thus became a compelling figure for two reasons: she inspired the Soviet public to believe that females had a place in the predominantly male enterprises of science and engineering, while also appealing to the more traditional image of Soviet women as hardworking, physically fit, and loyal to her country.[147]

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145 Rockwell, "They May Remake Our Image of Mankind."

146 Roshanna P. Sylvester, "She Orbits Over the Sex Barrier," in *Into the Cosmos: Space Exploration and Soviet Culture*, eds. James T. Andrews and Asif A. Siddiqi (Pittsburgh: University of Pittsburgh Press, 2011), 184-186.

147 Sylvester, 184-187.

How did the iconic status of Tereshkova influence girls in the Soviet Union who admired her? In 1963, a team of sociologists performing a long-term study of desired career aspirations found that girls ranked technical fields such as math, medicine, chemistry, and physics highly. The number of Soviet women granted doctoral degrees in technical fields compared favorably to the United States, while the number of women who worked in such fields more than doubled from 1960 to 1970. Historians such as Roshanna Sylvester are quick to point out the reversal of this positive legacy. Women increasingly did not reach high level technical positions by the 1970s, while no Soviet woman flew in space again until 1982.[148] Even to this day, the number of women who have flown on *Soyuz* vehicles remains remarkably small compared to the number that has flown on American spacecraft. When two women and one man returned from the International Space Station in 2008, Russian space agency chief Anatoly Perminov wanted to make sure that such a crew configuration never happened again. "I'm just saying that when a majority (of the crew) is female, sometimes certain kinds of unsanctioned behavior or something else occurs," he said.[149] Yet in the Cold War era Soviet Union, Tereshkova's flight provided an inspiring case study of a woman breaking down conventional gender notions and girls in her country embracing opportunities in technical fields. American girls did not have this opportunity until the Space Shuttle era and Sally Ride's flight in 1983.

In reflecting on the *Vostok* program as a whole, one other difference between the Soviet and American space traveler bears consideration. From Gagarin to Tereshkova, the cosmonauts traveled to Communist and capitalist nations and inspired the masses just as their American counterparts did. Yet one element of their iconic status was missing: the spacecraft in which

148 Sylvester, 195-197.

149 "Russian Space Capsule Misses Landing by 420 km.," *Associated Press*, April 19, 2008.

they had traveled.[150] Following Glenn's *Mercury* flight, his spacecraft went on a global tour often called the "fourth orbit of *Friendship 7*." Members of 17 countries saw the vehicle, including President Kennedy, and it even reached Seattle's "Century 21 Exposition" by August 1962.[151] The international public could better comprehend Glenn's feat by witnessing the size and shape of the vehicle in which he had traveled. Exhibitions in scientific progress had long been a staple of the Soviet Union as well, whether in the 1920s or the 1960s. Visitors from the western and eastern world had seen artifacts of Soviet expertise such as power plants, steel, aircraft, and helicopters.[152] Yet no citizen, from either a Communist or non-Communist country, saw any of the six *Vostoks* on display immediately following the cosmonauts' flights. Any such tour would have revealed the truth about the *Vostok* ejection seat, as well as the top secret means of operating the vehicles. Yet the inability for the public to see the vehicle affected cosmonaut iconography, because no person could look at the *Vostoks* and consider the courage it took to launch and orbit Earth within such a machine. Not until 1965, after the program had already ended, did the Soviets place a *Vostok* on display in a public exhibition and even then the public could only see a model.[153]

Following the six *Vostok* flights, the Soviet effort to send cosmonauts into space lagged behind while America's astronauts undertook the highly successful *Gemini* flights. The Soviets did modify their one seat spacecraft to carry multiple crewmembers on their two *Voskhod* flights in 1964-65, allowing Soviet journalists to advance new angles emphasizing the appeal of cosmonauts. Vladimir Komarov, Boris Yegorov, and Konstantin Feoktisov flew aboard *Voskhod*

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150 Lewis, 159.

151 Swenson, Grimwood, and Alexander, 53.

152 "Russian Exposition Opens Tomorrow," *New York Times*, January 29, 1928 and "Soviet Exhibition Opens in Brazil," *New York Times*, May 4, 1962.

153 "*Vostok* Model is Shown to Public in Moscow," *New York Times*, April 30, 1965.

1 in 1964, marking the first time multiple passengers launched into space together. This feat allowed Soviet journalists to tout the diversity of their space travelers. Komarov belonged to the Communist Party, Yegorov to the Young Communist League, and Feoktisov to no party, meaning the three represented a cross section of Soviet society.[154] Millions of Soviet television viewers saw images of the men in the vehicle and heard their voices, a first. Whereas Gagarin had not taken any photos during his flight, television allowed the public to see a crew of young, physically fit cosmonauts on display. The TV images also showed the men wearing woolen suits and jackets, proving cosmonauts could work without bulky pressure suits. This gave the public a semblance of the ordinary in the midst of space operations. No American television viewer had yet witnessed American astronauts from such an intimate perspective. Finally, the *Voskhod 1* flight gave a chance for the cosmonauts to express their wishes for peace in the Cold War while in orbit: "From aboard the spaceship *Voskhod* we convey our best wishes to the industrious American people. We wish the people of the United States peace and happiness."[155]

The *Voskhod 1* crew would have been different if not for a change prompted by one cosmonauts' background. Chief Designer Sergei Korolev originally assigned Boris Volynov to command the crew, but members of the Soviet State Commission discovered that Volynov's mother was Jewish, prompting his removal just days before the flight. Korolev resented the directive to change the crew, but Khrushchev told him, "Don't rock the boat—it's not worth it!"[156] This event underscores one of the ironies of Khrushchev's tenure: he supported de-Stalinization, but failed to reverse Stalin's brutal policies towards Jewish people. No Jews held high positions in Soviet government. Jews comprised about half of the 250 people executed for

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154 "Political Diversity on *Voskhod* Noted," *New York Times*, October 21, 1964.

155 "Astronauts on TV," *New York Times*, October 13, 1964.

156 Burgess and French, *In the Shadow of the Moon*, 253-254.

economic crimes during Khrushchev's tenure.[157] The iconic status of a cosmonaut in the Khrushchev era was so strong that no Jew could represent the Soviet Union aboard the first *Voskhod* flight. In selecting crews, Kamanin and Korolev had to worry about not only the technical aptitude of their cosmonauts, but also politics and even religion. By contrast, NASA's Bob Gilruth carried out the selection of Alan Shepard to become the first American in space and did so without interference from top U.S. government officials. Though Shepard was a less politically popular choice than Glenn would have been, Gilruth made a decision based on advice from colleagues in medicine, training, and engineering.[158] Shepard's mother adhered to Christian Science, a very controversial religious doctrine in the U.S. since its founding in 1879.[159] Yet the non-mainstream religious beliefs in Shepard's background did not factor into astronaut crew selection as it did into the selection of the *Voskhod 1* crew.

Only one more piloted Soviet spaceflight followed (*Voskhod 2* in 1965) before tragedy struck on April 24, 1967. In one of the great ironies of the competition between the U.S. and U.S.S.R., Komarov lost his life aboard the *Soyuz 1* spacecraft just three months after Gus Grissom, Ed White, and Roger Chaffee had died in the *Apollo 1* fire. What differences emerged from Soviet and American media coverage regarding death in the line of duty? After Komarov plummeted to his death while returning from an 18 orbit mission, the TASS news service promptly reported that "the spaceship…crashed at great speed as a result of the parachute cords getting entangled."[160] Despite the Soviets' well-deserved reputation for obscuring the truth, *Pravda* journalists did report the truth by stating that Komarov offered "precise and crisp" transmissions to Earth, retaining his composure even when he knew his life was imperiled (the

[157] Jon Bloomberg, *The Jewish World in the Modern Age* (Jersey City: KTAV Publishing House, 2004), 26.
[158] Swenson, Grimwood, and Alexander, 350.
[159] Thompson, 12.
[160] Siddiqi, 587.

myth of his "cursing" the flight controllers notwithstanding).[161] As with the *Apollo 1* crew, Komarov's military background eased the task of presenting him as a patriot who had sacrificed his life for his country. He had joined the Soviet Air Force in 1942 and lived in sparse conditions in Siberia, a reflection on his spirit of sacrifice. As with his American colleagues, journalists hailed his devotion to family life as well. A grief stricken Gagarin said of Komarov, "In the evenings you can meet him out walking with his children. If he has a spare moment, he is with them." Komarov's remains were laid to rest in the massive wall at the Kremlin just as the bodies of Grissom and Chaffee were laid to rest at Arlington National Cemetery, each location symbolizing the prestige of the space traveler as national heroes of the highest order.[162]

In a subtler way, the representation of Komarov's death differed from that of Grissom, White, and Chaffee. Soviet journalists initially claimed that the *Soyuz 1* flight had taken place without incident until reentry.[163] This obscured the fact that Komarov had learned early in the flight that his left solar panel had failed to deploy and that his ship failed to automatically orient itself as designed. He succeeded in manually orienting the *Soyuz* for reentry, meaning he saved his own life for a very brief period.[164] The media coverage of the flight is therefore ironic in that no state run outlet reported these details, but these details would have enhanced the heroic image of Komarov. The reality of Komarov's skill under duress, which space historians now know, trumped the initial secretive reports of the Soviet media in this regard.

During the remainder of the 1960s, the iconic image of cosmonauts in Soviet media foundered. Whereas Americans such as Frank Borman and Armstrong earned iconic status in

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161 Raymond H. Anderson, "Thousands Pass Astronaut's Bier," *New York Times*, April 26, 1967

162 "Komarov to Have Hero's Burial in Kremlin Wall," *New York Times*, April 24, 1967.

163 Siddiqi, 587.

164 Burgess and French, *In the Shadow of the Moon*, 176-178.

the United States, cosmonauts could not escape the identification of the Soviet space program with tragedy and failure. The Soviet effort to reach the Moon did not rally following the death of Komarov, as the American effort did following the deaths of Grissom, White, and Chaffee. Georgi Beregovoi made the next piloted *Soyuz* flight in October 1968, but did not read his signal lights correctly and could not perform his scheduled docking with an unpiloted *Soyuz* vehicle. Two crews of cosmonauts aboard the *Soyuz 4* and *5* vehicles did dock successfully in January 1969, but the harrowing landing of *Soyuz 5* nearly killed Boris Volynov. In the meantime, the N-1 rocket needed to send cosmonauts to the Moon spectacularly failed during several test launches, while Soviet citizens plainly saw the American program succeed in sending men to the Moon. The Soviet method of withholding information about failures no longer worked, because the public realized that their country had been surpassed and rumors about the tribulations of the Soviet program began to spread. This meant that the aura of success Soviet citizens had once associated with Gagarin dwindled for late 1960s cosmonauts.[165]

Even more importantly, the reception of returning Soviet cosmonauts changed dramatically. A military officer attempted an assassination of premier Leonid Brezhnev in 1969 during a cosmonaut welcoming ceremony, but mistakenly fired shots at a group of cosmonauts instead. Following this event, the most prominent members of the Soviet government no longer attended ceremonies for returning cosmonauts.[166] Cosmonauts demonstrated their talent during later *Soyuz* flights, particularly as they began living aboard space stations for extended periods, but the international public no longer witnessed space travelers visit Lenin's Mausoleum and receive bear hugs from the Soviet premier. The image of the cosmonaut thus evolved from heroic ambassadors of Communism to merely respected workers by the late 1960s and early

[165] Gerovitch, "The Human Inside a Propaganda Machine," 89-90.
[166] Gerovitch, "The Human Inside a Propaganda Machine," 90.

1970s.[167] One can argue that these later cosmonauts performed tasks of greater difficulty than the early cosmonauts, in terms of docking, EVA, and long duration flight, but their status as icons plummeted in comparison.

Despite the aforementioned major differences in terms of national identity, religion, and gender, early space travelers of both nations appealed for many of the same reasons. A comparison of *Soviet Life* and *America Illustrated*, two magazines circulated in the opposite nation, demonstrates the common appeal of the space traveler. Writers in both magazines used danger narratives frequently to emphasize the physical and psychological demands of riding aboard spacecraft. Journalists portrayed the men as willing to tolerate those demands because they believed their nation deserved their personal sacrifice. Space travelers from White to Gagarin saw themselves portrayed also as homespun figures who enjoyed playing sports and spending time with family.[168] Soviet and American journalists operated on opposite ends of a spectrum, with the Soviets operating under governmental control and the Americans never operating under such a distinction. Yet all of them shared a common goal to shape the image of the space traveler for national consumption. As in the United States, journalists acted in concert with politicians in this task.

Khrushchev, the blustery Soviet premier from 1958 to 1964, believed in the power of cosmonauts to shape foreign perceptions of his nation. He understood that if his nation could rack up impressive firsts in human spaceflight, the Soviets could create at least the appearance of technological strength. He needed only the appearance of strength to intimidate his Cold War adversaries in America, and he could tout rockets and cosmonauts as symbols of strength just as

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167 Lewis, 160-161.

168 Rockwell, "They Remake Our Image of Mankind."

previous Soviet premiers had touted tractors and hydroelectric plants.[169] Two days after Gagarin made his *Vostok 1* flight, he and the members of the Council of Ministers greeted their hero with bear hugs at a Moscow airport.[170] While in Red Square, Khrushchev declared that the first cosmonaut would be honored with a bronze bust. He emphasized Gagarin's background as a man educated in Soviet schools and a firm believer in "the great Party of Lenin." He stated that Gagarin's achievement should prove to the world that "the movement of the peoples towards Communism…cannot be belittled or retarded."[171] A newsreel even showed Khrushchev wiping away his tears while delivering these remarks, emphasizing the personal affection that the premier felt toward the iconic cosmonaut. Khrushchev placed so much stock in the prestige garnered from Gagarin's achievement that it led him to believe that he could negotiate with President Kennedy from a position of strength at an upcoming summit.[172]

Though Gagarin only lived for seven more years, Soviet government officials fiercely defended the image of their first space traveler. He wanted to fly in space again, yet government officials considered his life too precious to risk it in another flight.[173] When Gagarin embarked on his aforementioned world tour, Khrushchev and the members of the Soviet Politburo counted on him to project a positive image. Gagarin suffered a gash over his left eye while philandering with a female nurse later that year, which prompted a reprimand from the Politburo.[174] Though nobody in the western world knew the truth of this incident until long after Gagarin's death, the reprimand demonstrated the strong Soviet interest in maintaining Gagarin's clean cut image.

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169 William E. Burrows, *This New Ocean: The Story of the First Space Age* (New York: Random House, 1998), 303.
170 Burrows, 315.
171 *The First Man in Space*, 30-31.
172 William Taubman, *Khrushchev: The Man and His Era* (New York: W.W. Norton & Company, 2003), 490-492.
173 Burgess and Hall, 273.
174 Burgess and Hall, 168-169, 183.

Khrushchev felt another very compelling motive to emphasize the feats of iconic cosmonauts: his effort to de-Stalinize Soviet society. He wished to marginalize as much as possible the memory of forced labor and brutal conditions in Soviet gulags, as well as Stalin's dictatorial rule that extended through his death in the 1950s. He removed Stalin's remains from Lenin's mausoleum and ordered the dismantling of Stalin statues, to be replaced by space related monuments. Khrushchev wished to give the message that Soviet citizens should not dwell on Stalin's reign of terror and the millions of deaths in World War II, but on the quest to send cosmonauts into space and expand scientific knowledge. Cosmonauts thus helped Khrushchev to reinforce the perception that Stalin represented the past and not the future, one of his goals as premier.[175] Instead he wished to identify with Lenin, the leader of the Bolshevik Revolution and whose body remained on display at the mausoleum where Khrushchev greeted cosmonauts. The public ceremonies for returning space heroes thus functioned as an attempt to eradicate recent memories and restore the utopian memory that Lenin represented.[176]

Premier Khrushchev also endorsed the selection of women cosmonauts and the June 1963 flight of Tereshkova. Khrushchev considered Tereshkova's background appealing for propaganda purposes, because she was attractive, hard-working, and hailed from a working class background. Her father had even worked on a collective farm and had been killed during the Soviet-Finnish War, meaning she hailed from a family that had sacrificed for the Soviet cause.[177] Khrushchev's interest in Tereshkova as a propaganda tool also stemmed from his previous speeches, in which he tried to display a positive attitude towards women. "Recall with what warmth and love Nekrasov, Pushkin, and our other writers wrote of Russian women," he stated

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175 Gerovitch, "The Human Inside a Propaganda Machine," 65.

176 Gerovitch, "Creating Memories: Myth, Identity, and Culture in the Russian Space Age," 214.

177 Burgess and Hall, 236.

in 1961. "Today, Russian women are all the women of the Soviet Union."[178] Americans often remember him best for the "kitchen debate" he held with then Vice President Nixon in 1959. Nixon pointed to an American kitchen model and stated, "In America, we like to make life easier for women." Khrushchev shot back with, "Your capitalistic attitude toward women does not occur under Communism."[179] Like Lenin before him, the Soviet premier believed that women had their best chance to make valuable contributions to society in a classless nation. Following Tereshkova's flight, Khrushchev even pressured her to pursue her romance with fellow cosmonaut Andrian Nikolayev. The premier felt great pride when the two cosmonauts married and gave birth to a healthy daughter in 1963.[180] The first "space couple" represented yet another propaganda coup that Khrushchev could claim for his country.

Ironically, the end of Khrushchev's rule coincided with the *Voskhod 1* mission in October 1964. Shortly following the return to Earth of Komarov, Feoktisov, and Yegorov, a coup resulted in Khrushchev's removal as Soviet premier and replacement with Leonid Brezhnev. The overthrow of Khrushchev proved notable for the erasing of his name from the mass media. Even when he died in 1971, *Pravda* contained only a one line announcement of his death. Similarly, photos of Gagarin and Khrushchev together were retouched to remove the image of the deposed Soviet premier.[181] This raises an important point about regime change among the two Cold War superpowers. Following President Kennedy's murder, President Johnson honored the memory of the fallen leader and the pledge to send men to the Moon by decade's end. Though Nixon represented the opposing political party, he also honored the pledge and praised

178 *The First Man in Space*, 32.

179 "The Kitchen Debate," Teaching American History, http://teachingamericanhistory.org/library/index.asp?document=176 (accessed March 3, 2012).

180 Burgess and Hall, 243.

181 Taubman, 490-492.

the *Apollo* astronauts who carried out Kennedy's vision. Yet Brezhnev and the state-run Soviet media apparatus viewed the Khrushchev era as a blight upon Soviet history. The memory of Kennedy factored into the positive image of astronauts and their missions in the United States, whereas Soviet citizens could no longer even see photos of Gagarin and Khrushchev together. The retouched photos showed Gagarin alone, as if he had no government support.

Brezhnev governed in a style characterized less by braggadocio and bluster than Khrushchev and this approach extended to the Soviet space program. A 2006 poll found that 61 percent of respondents favored Brezhnev's style of leadership, which removed Khrushchev's cult of personality and favored a conservative approach to problems.[182] During Brezhnev's tenure as premier from 1964 through decade's end, far fewer space "spectaculars" took place than during Khrushchev's tenure. The human spaceflight effort took on a steadier pace without the preoccupation of "one-upmanship" that characterized the early 1960s. This approach resulted in less brazen risk taking, but also damaged the iconic status of cosmonauts. No achievement of cosmonauts caused Brezhnev to utter a statement like President Nixon's after *Apollo 11*: "This is the greatest week in the history of the world since the Creation, because as a result of what happened in this week, the world is bigger, infinitely."[183] Brezhnev's personality also precluded such statements. He did not want himself to be associated with the hyperbole of Nixon or Khrushchev in his own country.

The failures of the *Soyuz* program could have provided Brezhnev or other government officials a chance to laud the cosmonauts for their courage. When the *Apollo 13* crew returned home safely following the infamous oxygen tank explosion that nearly cost them their lives,

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182 Ben Evans, *Foothold in the Heavens: The Seventies* (Chicester, U.K.: Praxis, 2010), 47.

183 Richard M. Nixon, "Remarks to *Apollo 11* Astronauts Aboard the U.S.S. Hornet Following Completion of Their Lunar Mission," July 24, 1969, The American Presidency Project, http://www.presidency.ucsb.edu (accessed March 2, 2012).

Nixon took full advantage of the opportunity to advance a narrative of triumph over adversity: "Confronted suddenly and unexpectedly with grave peril in the far reaches of space, he demonstrated a calm courage and quiet heroism that stand as an example to men everywhere."[184] Brezhnev could have remarked that Volynov kept his composure when the *Soyuz 5* braking rockets failed upon his return to Earth and he broke his front teeth.[185] Volynov had survived his return to Earth after a near death experience, just as the *Apollo 13* crew did. Yet while the *Apollo 13* crew received acclaim from journalists, the president, and even a movie made two decades afterwards, Volynov did not receive similar acclaim from Brezhnev due to the desire to keep details about his flight secret. Brezhnev thus did not have a chance to draw political capital from his remarks about cosmonauts in the same way as Nixon. The public ultimately needed the research of space historians to even know what had happened.

Despite the reality of the Soviet human spaceflight effort falling far behind the American effort, Khrushchev and Brezhnev successfully inflamed the myth of Soviet cosmonauts alongside journalistic treatments through the 1960s. Kennedy did this in the U.S. through his public statements linking the astronauts' achievements with his "New Frontier" mythology. Yet the two Soviet premiers operated on a different level, because journalists lacked freedom of the press. Particularly in the Brezhnev era, when criticism of the government in newspapers was even more tightly suppressed than during Khrushchev's tenure, the intentions of Soviet government leaders and journalists coincided far more closely than in the United States.[186] Politicians, and the journalists restricted from independent thought and analysis, enhanced the image of cosmonauts as role models who believed unabashedly in Communist values.

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184 Richard M. Nixon, "Remarks on Presenting the Presidential Medal of Freedom to *Apollo 13* Astronauts in Honolulu," April 18, 1970, The American Presidency Project, http://www.presidency.ucsb.edu (accessed March 2, 2012).

185 Evans, 29-30.

186 Gerovitch, "Creating Memories: Myth, Identity, and Culture in the Russian Space Age," 223.

In order to test the effectiveness of that message, it is instructive to mention the cosmonaut image in the post-Soviet era. About twenty years have passed since the hammer and sickle flag last flew over Moscow, yet the lack of Communism has not deterred Russian citizens from claiming Gagarin as their own and taking solace in his image. Biographer Andrew Jenks has revealed one important example of this: the willingness of Russian Christians to believe that Gagarin was secretly one of their own, despite official statements in support of atheism. Russian Christians point out that his spaceflight took place on April 12, near the date of Christ's resurrection, and he died at the same age as Jesus.[187] This demonstrates that in today's Russia, citizens have freedom to add to Gagarin's image and no longer have to conform to the rigid values of the Soviet Union. This also demonstrates a similarity between American and Russian space travelers, in that varying groups of people not related to the spaceflight community tried to claim Armstrong and Gagarin as their own (Muslims claimed a connection to Armstrong and Christians to Gagarin). Unlike Armstrong, Gagarin is no longer alive to debunk these notions so the Russian's legend has grown. The Gagarin image actually bears similarity to an even more iconic American figure: Abraham Lincoln. Lincoln also died very young, at a time close to Christ's resurrection,[188] and he appears on money just as Gagarin appears on Russian coins today. With Gagarin as their Lincoln like figure, surveys have shown that Russian citizens still rank spaceflight as one of their country's greatest accomplishments, just behind defeating the Nazis.[189] The heroic perception of early cosmonauts remains in place in contemporary Russia, even over twenty years following the Soviet Union's collapse.

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187 Andrew Jenks, "Gagarin as Christ," The Russian History Blog, entry posted November 2, 2011, http://www.russianhistoryblog.org/2011/11/gagarin-as-christ (accessed March 2, 2012).

188 Andrew Ferguson, *Land of Lincoln: Adventures in Abe's America* (New York: Atlantic Monthly Press, 2007), 8.

189 Richard Manly, "Book Focuses on the Cosmonaut Who Couldn't Stop Smiling," California State University Long Beach, http://www.csulb.edu/misc/inside/?p=24083 (accessed October 19, 2011).

Chapter Three

The Self-Image of Early Space Travelers

In the midst of ticker tape parades, award ceremonies, celebratory magazine articles, and statements by politicians, how did the early space travelers perceive themselves? Historians have no shortage of memoirs by astronauts and cosmonauts, as well as books based on extensive astronaut interviews like Andrew Chaikin's, to examine in answering that question. The astronauts began to share their own insights through their writing in the 1970s, following the day that Cernan took the last human footsteps on the Moon. The timing of this process owed not only to the end of the *Apollo* lunar missions, but also American culture in that era. Americans of the late 1960s and early 1970s read books and watched movies that celebrated the antihero. In this environment, books and articles that emphasized the astronauts' patriotic values no longer provided enough insight to satisfy readers.[190] Beyond their allegiance to NASA and America, readers wanted to know details such as how the astronauts perceived their colleagues, the frustrations they felt on the job, and whether any infidelities existed in the astronaut corps. Some of the astronauts embraced this desire to give the public a more candid version of their profession than previously available. "Instead of letting us be human, they wanted us to be Boy Scouts, live in a monastery," remembered Walter Cunningham of NASA officials. "It wasn't so much what

[190] Andrew Chaikin, "Live from the Moon: The Societal Impact of *Apollo*," in *Societal Impact of Spaceflight*, eds. Steven J. Dick and Roger D. Launius (Washington D.C.: NASA SP-2007-4801, 2007), 59-61.

you did as what it looked like."[191] Mike Collins and Cunningham acted as trendsetters in terms of giving the public a more candid perspective, as they each wrote books in the 1970s.

One of the common insights from these astronauts was that beneath their laudatory public image, each of them worked in a deeply competitive environment. In the *Mercury* era, a corps of only seven astronauts competed for flight assignments. Yet nine additional men joined the corps in 1962, followed by fourteen in 1963, six in 1965, and nineteen in 1966.[192] The presence of dozens of astronauts resulted in fierce competition for the very limited number of seats aboard *Gemini* and *Apollo* spacecraft. Though the men enjoyed the perks that came with the job—the money from the *Life Magazine* contract and the special deals on Corvette automobiles—their fame hardly mattered to them compared to the goal of being selected for a flight.[193] One of the prominent themes in virtually every astronaut memoir concerns the wounded egos the men felt when they saw their colleagues selected ahead of them and their vain hope to understand the crew selection process in the first place. "As we sit here nursing our beer and wounded pride, all those guys who had already flown, those with a ton of experience, and the ones already in the pipeline, were lining up for the early *Apollo* missions," remembered Gene Cernan.[194] Brian O'Leary remembered, "the competitive attitude becomes the most important aspect of astronaut life."[195] Comments such as these indicate that although the astronauts admired each other, each of them would welcome a departure from the corps because it would clear a spot on a mission for

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191 Howard Muson, "Comedown From the Moon—What Has Happened to the Astronauts," *New York Times*, December 3, 1972.

192 NASA, "Astronaut Biographies: Former Astronauts," Johnson Space Center, http://www.jsc.nasa.gov/Bios/astrobio_former.html (accessed October 20, 2011).

193 Chaikin, 1: 61.

194 Cernan, 86.

195 O'Leary, 117.

themselves. This thought ran counter to the image of astronauts as a united team presented in 1960s popular media.

The early American astronauts did not always stand united with outsiders to their culture either. Most of the men did not feel a kinship with the scientists who supported their flights from the ground. The men distrusted the doctors who could ground them from flying and cluttered their flight plans with medical experiments.[196] NASA announced the selection of the first scientist-astronauts in 1964, meaning scientists infiltrated the test pilot culture and caused unease among the first three classes of astronauts. The pilots distrusted these scientists because the latter did not share their background in the dangerous act of reacting to emergencies in high-speed flight. "If an alarm came on, there would be no time to ask some professor to carry his share of the load," Cernan explained.[197] Even scientists who also had backgrounds as military pilots, such as Buzz Aldrin and Rusty Schweickart, fell short of receiving universal admiration among the longer tenured astronauts in the corps. During a conference prior to the launch of *Apollo 8*, Aldrin remembered Frank Borman telling him, "Goddamn it, Aldrin, you have a reputation for screwing up other peoples' missions with this nitpicking planning."[198] Aldrin's background in academia made him an outlier in the astronaut corps and earned him distrust with men such as Borman who were more concerned about completing their missions than with scientific matters. Schweickart remembered the same attitude among the earlier astronauts.[199]

The literature on early spaceflights is naturally dominated by the pilots, who comprised the vast majority of the corps. But Brian O'Leary's book *The Making of an Ex-Astronaut*,

196 Chaikin, 1: 82-83.
197 Cernan, 84.
198 Hansen, 358.
199 Burgess and French, *In the Shadow of the Moon*, 333.

published in 1970, offered an outsider's viewpoint. Upon his selection as one of eleven scientist-astronauts in 1967, O'Leary makes clear that he did not fit the typical astronaut mold: he was a youngest rather than eldest child, felt sick when flying planes, and felt annoyed at America's political establishment for the Vietnam War. He did not hunt, sail, or race cars like many of his pilot colleagues in Houston.[200] This was clearly not the clean cut, patriotic astronaut who journalists and politicians had idolized for years. O'Leary helped to supplement the image of a courageous pilot and his control stick with the image of an academic. The life experiences of these men revolved around research and dissertations, rather than shooting down enemy planes over Korea. One Houston newspaper even ran a cartoon in the late 1960s showing an astronaut wearing a tweedy suit with baggy pants, and government employees expressing surprise at his occupation.[201] O'Leary represented a new breed of astronauts that persists to this day.

O'Leary's book does not contain long descriptions of the thrill of launch or weightlessness, because he spent just seven months as an astronaut and never flew in space. Deke Slayton told the group after they reported to Houston, "I might as well warn you troops that you won't be seeing any action for quite some time."[202] But this did not stop O'Leary from criticizing what he viewed as NASA's "test pilot culture" that marginalized the contributions of scientist-astronauts. "To hell with the scientific community," he remembered Borman saying at one astronaut office meeting.[203] Even after *Apollo 11* and his departure from the corps, he felt bitter about this blasé attitude. He even took a swipe at Bill Anders for his description of Earth during *Apollo 8*, as well as the lack of emphasis on science during the lunar excursions of *Apollo 11* and *12*. If human spaceflights are ever to become worthwhile, he reasoned, scientists must fly

200 O'Leary, 119.
201 O'Leary, 93-94.
202 O'Leary, 61.
203 O'Leary, 131.

because a pilot "is not a skilled, meticulous observer in space." He chastised Americans for failing to give scientists a chance whereas the Soviets had already launched scientists.[204]

O'Leary was unique among early astronauts in that his autobiography's criticisms of NASA culture outweigh his compliments. His NASA career was both much shorter and less cherished than all other 1960s astronauts. One can argue that his criticisms are unfair because several pilot astronauts did take science seriously, even passionately, and produced meaningful scientific results. *Apollo 15* commander Dave Scott especially embraced the desire to make scientific knowledge one of the primary goals of the flight.[205] Some of the pilot astronauts felt angry about O'Leary's views following the publication of his book. Tom Stafford blasted O'Leary in 1970, calling him a "pseudo-hippie" and "malcontent" in the *Houston Chronicle*. Stafford denied that O'Leary's opinions were widely held in the astronaut office and denied that he had even been an astronaut because he had not even made it through flight training.[206] Nonetheless, O'Leary's perspective demonstrates the diversity in the astronaut office. The editors of *Life Magazine* could not have foreseen this when their coverage portrayed the original *Mercury* astronauts as straight arrows who were fully committed to NASA and their country. The decision to bring scientists into the corps resulted in wounded egos and bitterness, because the scientists were outsiders in a test pilot culture.

Only one such outsider managed to travel to the Moon: Harrison "Jack" Schmitt on *Apollo 17*. Schmitt had joined the astronaut corps in 1965 with only geologic experience to draw upon, rather than pilot experience. He even undercut the traditional image in another way because he was a bachelor. Chris Kraft, the new director of the Manned Spacecraft Center,

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204 O'Leary, 165-169.

205 Chaikin, 3: 36-37.

206 "Stafford Rips 'Pseudo-Hippie' Ex-Astronaut," *Chicago Tribune*, May 18, 1970.

remembered Slayton as deeming scientists unworthy of *Apollo* missions. Slayton himself eventually wrote that he ranked Schmitt below former X-15 pilot Joe Engle in determining who would fly on the last lunar mission. Even Cernan, the commander of *Apollo 17*, emphasized in his memoir that he did not consider Schmitt a good friend: "On a first introduction, he usually came across as unlikable, and his taciturn nature and brashness made it hard for people to get close to him. He didn't seem to care a whit."[207] Like the other scientists, a culture gap separated Schmitt from his peers in the astronaut office. He also had to displace a well respected pilot astronaut in Engle to gain his seat on *Apollo 17*, which only exacerbated the problem. But unlike O'Leary, Schmitt ultimately earned the praise of his colleagues. He proved that if a scientist astronaut learned to fly jets and helicopters, learned to operate the Lunar Module systems well, and made use of his scientific skills, he could bridge that culture gap. "He was an outstanding Lunar Module pilot," Cernan wrote, establishing that there was room in the astronaut office for outsiders.[208]

Even pilot astronauts expressed unconventional attitudes that marked them as unique from most of their colleagues. Authors such as Norman Mailer and Dora Jane Hamblin had presented astronauts to the public as a strictly conservative group, who dressed formally, wore crew cuts, and whose backgrounds placed an emphasis on traditional values such as patriotism and Protestantism. Media publications indicated that the astronauts were mainly "square" figures. Yet this media presentation did not have a complete basis in fact, as already mentioned with O'Leary. Schweickart represented another example, as he considered himself a liberal on most social issues. He supported the environmental movement and even led a literary discussion

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[207] Melvin Croft, "One More Time," in *Footprints in the Dust: The Epic Voyages of Apollo, 1969-1975*, ed. Colin Burgess (Lincoln: University of Nebraska Press, 2010), 312-318.
[208] Croft, 318-319.

group, interests not shared by many of his colleagues.[209] "He was a really cultured man," confirmed Scott in remembering his crewmate aboard *Apollo 9*. "He had brought quotations from Elizabeth Barrett Browning and Thornton Wilder along on the flight" and "also wanted to listen to a cassette of classical music during the mission."[210] The other astronauts with interests outside the mainstream included Ed Mitchell. He performed an ESP experiment during his *Apollo 14* mission and believed that his journey to the Moon could help lend insight to studies of human consciousness. Following his departure from NASA, he even expressed controversial views regarding the sighting of UFOs.[211] The interests of Schweickart and Mitchell indicated that being an astronaut involved more than simply reporting on the technical details of their flights. These men felt that their experiences could contribute on a deeper level to understanding causes such as human consciousness or environmentalism. In addition, these men proved that astronauts were not exclusively "square" figures and could possess unconventional interests.

Journalists had worked to cultivate the notion of astronauts as devoted family men, but this image also suffered with the release of astronaut memoirs following *Apollo's* end. Cunningham was one of the most responsible culprits, as he devoted an entire chapter to this aspect of the job in his 1977 book *The All-American Boys*. According to Cunningham, many astronauts felt as if they cheated their wives because their training schedules allowed very little time to spend with them. Yet the men knew that seeking a divorce would create negative publicity for NASA, so they refused to do so. Not until 1969 did *Apollo 7* veteran Donn Eisele become the first veteran astronaut to divorce his wife. Cunningham wrote that his former

209 Burgess and French, *In the Shadow of the Moon*, 334.

210 Scott and Leonov, 237.

211 Philip Baker, "Science and a Little Golf," in *Footprints in the Dust: The Epic Voyages of Apollo, 1969-1975*, ed. Colin Burgess (Lincoln: University of Nebraska Press, 2010), 195-196.

crewmate Eisele "had broken the ice for those who felt trapped in dead-end marriages."[212] By the time *Apollo* ended in the 1970s, seven of the astronauts who flew aboard the *Mercury*, *Gemini*, and *Apollo* spacecraft sought a divorce.[213]

Cunningham was hardly the only astronaut to regret his lack of time to enjoy family life. Jim Irwin, Collins, Charlie Duke, Cernan, and John Young each noted their own sense of regret.[214] While the astronauts flew across the country as part of their training, from the *Apollo* spacecraft plant in Downey, California to the Kennedy Space Center in Florida, their wives and children had to stay home in Texas. Often, they could only hope to see their family member for a few hours per week. Irwin even remembered thinking that he could not concentrate on his job in the midst of emotional turmoil at home.[215] *Life Magazine* readers may have seen images of close-knit astronaut families, but behind the scenes many of the men have perceived themselves quite differently. The men recognized that "I had to eat, drink, sleep, and dream my work," as Irwin wrote,[216] a reality far different from the one that journalists had tried to promote.

The astronauts also perceived themselves as possessing Type A personalities, which influenced their attitudes towards family and work.[217] The men knew they were part of one of the most elite fraternities in the world and reaching that fraternity in the first place required ambitious and competitive personalities characteristic of Type A. Furthermore, all but two of the twenty-nine men who flew aboard *Apollo* spacecraft through the last lunar landing were the

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212 Walter Cunningham, *The All-American Boys* (New York: Macmillan Publishing Co., Inc., 1977), 188-191.

213 W. Cunningham, 191.

214 James B. Irwin and William A. Emerson, *To Rule the Night: The Discovery Voyage of Astronaut Jim Irwin* (Philadelphia: A.J. Holman Company, 1973), 215-216, Collins, 454, Charlie Duke and Dotty Duke, *Moonwalker* (Nashville: Oliver-Nelson, 1990), 236, Cernan, 176-177, and Andrew Smith, *Moondust: In Search of the Men Who Fell to Earth* (New York: HarperCollins, 2005), 225.

215 Irwin, 215-216.

216 Ibid.

217 Smith, 282-283.

eldest sons in their families. Psychologists have long recognized that the eldest son in a family has a built-in advantage to succeed and develop a Type A personality. Over half of U.S. presidents have been eldest sons and the early astronauts demonstrated this phenomenon to an even more striking degree.[218] The deep sense of competition astronauts felt in being selected to crews was also consistent with the Type A personality. The drive to succeed in their jobs meant that their jobs took precedence over the concerns of their wives and children, which manifested itself in the high divorce rate. But one of the strongest indicators of the Type A personality concerned the astronauts' attitudes after leaving the corps. Many of the men who left the astronaut office had a great deal of difficulty in finding another walk of life that would suit their competitive personalities. "Some unfortunate ones didn't have a dream to replace the dream of going to the Moon," explained Alan Bean.[219] None of the NASA training exercises helped astronauts understand how to adjust to life after the astronaut corps, nor did the American public generally see astronauts as struggling to get their lives in order.

The life of one man especially epitomized the advantages and disadvantages of the Type A personality: Aldrin. This personality type had helped him immensely when it came to training, studying, and operating high performance machinery. Yet Aldrin's life following his departure from NASA proved far more difficult than those of his colleagues. His life had progressed from one space mission to the next, but now no mission awaited him. He subsequently divorced his first wife, drank excessive amounts of alcohol, and suffered from depression. He made his experiences public in his first book, *Return to Earth*, in 1973.[220] Aldrin's public bouts with alcoholism and depression proved that even waves of public acclaim

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218 Edgar Cortwright, ed., *Apollo Expeditions to the Moon* (Washington D.C.: SP-350, 1975), Ch. 8-5.

219 Thompson, 439.

220 Chaikin, 3: 296-297.

did not make astronauts immune from such personal issues. No matter how many parades or award ceremonies he participated in, and no matter how many words were written about him, he could not shield himself from the same two hardships (depression and alcoholism) that afflicted millions of Americans. Since Aldrin told his story in public, he helped these millions of people to understand that they were not alone.[221] Yet in doing so, he also cut against the grain of the astronaut image *Life Magazine* readers had presented. Photos of Aldrin with his son at an amusement park ride and kissing his wife at home conjured the image of an astronaut with his life in order, not the life that Aldrin experienced following the Moon landing.[222]

Despite the hardships of life as an early astronaut, the men earned reputations as national heroes. The astronauts consistently tried to deflect attention away from themselves, however, stating that they do not deserve such accolades. Collins expressed this view best in 2009 when he stated, "We astronauts were good; we worked hard; we did our jobs to near perfection, but it was what we had signed on to do…It was not heroism."[223] Most astronaut memoirs also confirmed that the men by and large did not seek fame. "I didn't become an astronaut for fame or fortune, and I don't think that there was one guy in the program for that reason," wrote Duke.[224] Slayton enjoyed the chance to fly on the *Apollo-Soyuz* joint mission with the Russians in 1975, but when he described the public relations aspects of the flight he declared himself happy to have missed "all of that crap" when he was grounded.[225] Even the most famous astronauts shunned the idea that fame was important to them. Alan Shepard, America's first man

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221 Ibid.

222 Gene Farmer, "Buzz Aldrin Has 'the Best Scientific Mind We Have Sent Into Space,'" *Life Magazine*, July 4, 1969, 25.

223 Space.com staff and NASA, "Michael Collins: *Apollo* Astronauts Worked Hard, But Aren't Heroes," Space.com, http://www.space.com/7017-michael-collins-apollo-astronauts-worked-hard-heroes.html (accessed October 27, 2011).

224 Duke, x.

225 Deke Slayton and Mike Cassutt, *Deke! U.S. Manned Space from Mercury to the Shuttle* (New York: Forge Books, 1994), 324.

in space, stated that "the true pilot" is never motivated to fly missions by fame.[226] Young, America's longest serving astronaut, reflected on his forty-two year career by modestly stating, "It's not extraordinary at all—anybody could have done it, I'm sure. You've just got to hang in there."[227] Armstrong, the most publicly renowned astronaut of all, tried to stay out of the public eye following *Apollo 11*. Even in the midst of great interest among journalists, he did not seek the spotlight that would have been available to him as the first man to set foot on another world.[228] Journalists and politicians strove to make him and his colleagues icons, but not because the astronauts wanted this distinction.

The public perception of astronauts cast them as clean-cut, patriotic figures who were mainly united in the national goal of reaching the Moon. But this perception does not take into account what the astronauts have written and said in the years since: that they formed cliques, suffered wounded egos, and did not always value the advice of colleagues who did not share the same background. *Life Magazine* readers of the 1960s did not read statements such as "You didn't have to be around Shepard too long to find out how well he thought of himself; he was dripping with arrogant self-confidence."[229] But when Chaikin did write this statement in his 1994 book *A Man on the Moon*, following extensive interviews with 23 of the 24 men who traveled on lunar missions, he helped to deconstruct the notion of astronauts as saintly or generic. Behind the smiling faces in the 1960s publicity photos, the astronaut corps contained a diverse collection of men.

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226 Chaikin, 2: 174.

227 Gwyneth K. Shaw and Michael Cabbage, "Young Praised for Legendary NASA Career," *Orlando Sentinel*, December 8, 2004.

228 Hansen, 605-609.

229 Chaikin, 1: 79.

Yet the journalists and politicians who lauded astronauts did not entirely miss the mark. The Americans who voyaged into space clearly felt pride in their nation, as the reporters at the Dolley Madison house had emphasized as far back as 1959. Most of the early astronauts hailed from the military, where their job required them to fly jets in service to their nation. Astronauts such as Shepard, Glenn, Young, White, Scott, Collins, and Aldrin[230] had fathers with military backgrounds, meaning these men placed a strong value on patriotism from a young age. Cernan, for instance, remembered seeing video of World War II fighter pilots as a young boy and feeling inspired to serve his nation as a pilot.[231] According to Cernan, in the late 1960s a group of veteran astronauts even volunteered to fly combat missions in the Vietnam War. Though Pentagon officials quietly shelved this idea, the astronauts demonstrated their patriotism by volunteering for duty.[232] "I had always been patriotic, and now I was busting at the seams with love for my country," explained Duke as he saluted the American flag during *Apollo 16*.[233]

Several astronauts also emphasized their interest in religion and spirituality in reflecting on their spaceflights. Their own backgrounds are consistent with this interest, as a high number of the men who flew aboard *Apollo* missions served as stewards, deacons, or vestrymen.[234] These men saw their home planet from afar, which prompted them to consider whether their flights were about more than just engineering and science. Cernan remembered standing on the Moon, looking back on the blue Earth, and thinking, "*Too much logic*. *Too much purpose*. *Too beautiful to have happened by accident*." He thus viewed his journey as a spiritual experience.[235]

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230 Thompson, 10, John Glenn, *John Glenn: A Memoir* (New York: Bantam Books, 1999), 3, and Burgess and French, *In the Shadow of the Moon*, 5, 19, 79, 104, 123.

231 Cernan, 21.

232 Cernan, 163-164.

233 Duke, 174.

234 Cortwright, Ch. 8-4.

235 Cernan, 347.

But two of the twelve moonwalkers especially espoused this viewpoint: *Apollo 15's* Irwin and *Apollo 16's* Duke. "I felt an overwhelming sense of the presence of God on the Moon," Irwin remembered.[236] After his flight, he established a nonprofit missionary foundation called High Flight and preached religious messages around the world.[237] Duke also felt a strong religious impulse following his own lunar voyage. "I have been before kings and prime ministers, junta leaders and dictators, businessmen and beggars, rich and poor, black and white—giving the same message that Jesus is the answer," he wrote in his memoir.[238] Even though the astronauts spent day after day training to operate their machines, the lunar voyagers especially have confirmed their interest in the larger meaning of flying in space. This interest augmented what journalists had reported since that first press conference at the Dolley Madison house in 1959.

The early astronauts also expressed pride for their status as pilots during their missions, rather than passive observers. Before any human had yet traversed space, Slayton made the thoughts of the *Mercury* astronauts clear. "I hate to hear anyone contend that present day pilots have no place in the space age and that non-pilots can perform the space mission effectively," he stated at a 1959 speech before the Society for Experimental Test Pilots. High ranking NASA officials from Kraft to Bob Gilruth agreed, understanding the reliability and flexibility a trained person would provide to a spaceflight.[239] Shepard offered the most exuberant description of the astronauts' attitudes on the subject in a book he co-wrote with Slayton. In reflecting on the manual control he had exerted over *Freedom 7*, he remarked "Manual control of a spaceship!

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236 Irwin, 18.

237 Irwin, 233-234.

238 Duke, 275.

239 Roger D. Launius, "First Steps into Space: Projects *Mercury* and *Gemini*," in *Exploring the Unknown: Selected Documents in the History of the U.S. Civil Space Program, Vol. VII: Human Spaceflight, Project Mercury, Gemini, and Apollo*, eds., John M. Logsdon with Roger D. Launius (Washington: NASA SP-4407, 1995), 23-26.

Dyn-o-mite!'" He knew he had bested Yuri Gagarin with this achievement.[240] When reflecting on the last flight of the *Mercury* program, Gordon Cooper unapologetically cited his effort in making a manual reentry as crucial to the mission's success.[241] During the *Gemini* program, astronaut control of a spacecraft was never more crucial than during the brief emergency confronted by the *Gemini 8* crew. A stuck thruster on the vehicle forced Neil Armstrong to end the mission prematurely, but crewmate Scott remembered, "Only our intensive training and Neil's calm and cool demeanor under conditions of extreme danger pulled us through."[242] Particularly in looking back on these *Mercury* and *Gemini* missions decades later, astronauts believe that their flights verified the value of having qualified pilots onboard. This viewpoint augmented the views expressed by journalists and politicians at the time.

The *Apollo* missions also demonstrated the value of having human beings onboard, in different ways. The astronauts understood that their insight would prove invaluable in landing the Lunar Module on the surface of the Moon. "The people sitting behind consoles were there to help, but the bottom line was that they were not flying the spacecraft," Cernan wrote when reflecting on the last lunar landing. "I was the guy sitting at the controls, with the ultimate responsibility of getting our asses back home again." Cernan described this feeling as the classic mindset of a pilot. His experience landing Navy planes on carriers especially convinced him that people onboard must react to emergencies, not people in a flight control room.[243] The men also understood that their minds provided an asset on the surface of the Moon, where they explored and analyzed their surroundings for scientists back home. Even while the Soviets sent robotic

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240 Alan Shepard and Deke Slayton with Jay Barbree and Howard Benedict, *Moonshot: The Inside Story of America's Race to the Moon* (Atlanta: Turner Publishing, Inc., 1994), 118.

241 Burgess and French, *Into That Silent Sea*, 276-277.

242 Scott and Leonov, 170.

243 Cernan, 331.

rovers to collect lunar material, *Apollo 15* commander Scott maintained that only human beings could make the voyage using "trained eyes and trained minds."[244] No astronaut proclaimed the value of humans on the Moon more effusively than *Apollo 17's* Schmitt, the only professional geologist to visit. "The Soviet probes provided such a small sample and no contextual information such as the *Apollo* crews provided," Schmitt remembered.[245] Naturally, the astronauts do not want to give in to the scientists who support unmanned exploration as a cheaper alternative to sending people.

Early cosmonauts also shared thoughts on their careers, both during the highly secretive era of the Soviet Union and afterwards. The cosmonauts were similar to the astronauts in many ways, such as their youth and virility, military backgrounds, and their willingness to place their lives on the line in the interest of serving their nation. Yet one essential difference remained: the cosmonauts did their work in an authoritarian, secretive environment. After the fall of the Soviet Union, historians uncovered new details about the risks cosmonauts took and statements they made that previously were unavailable. As mentioned previously, Soviet journalists did not report on several life threatening events from the *Vostok* through *Soyuz* eras. The Soviets designed their state run media to instill pride in their nation and their writing about cosmonauts accomplished this task. Yet how does the self-image of cosmonauts compare with this objective and with the self-image of American astronauts?

The cosmonauts differed because they had grown up in Russia during World War II. For the 1960s era cosmonauts, the war was typically among their first memories. No nation's people suffered more as a result of this conflict than Russia, and the cosmonauts were no exception.

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244 Chaikin, 3: 51.

245 Harrison H. "Jack" Schmitt, Interview by Carol Butler, 14 July 1999, Transcript, Johnson Space Center Oral History Project, Houston, TX, 61.

Gagarin remembered his house being occupied by German soldiers, forcing him and his family to live in a dug-out. He recalled hearing the sound of artillery in the distance and seeing planes drop leaflets containing Adolf Hitler's face.[246] Alexei Leonov remembered his family being instructed to dig a trench in case of a German air strike and hearing that his sister had been injured in a German attack on a chemical plant. Four of his uncles and six of his cousins died in the fight against the Nazis.[247] Valentin Bondarenko lived in a city under harsh German occupation and witnessed his father serve as a partisan scout for the Soviet resistance movement.[248] Whereas Americans had to travel overseas to experience World War II, the conflict came right to the homes of Russians. The struggle to fight a fascist enemy on home ground, and the knowledge that 20 million Russians lost their lives in the war,[249] filled the future cosmonauts with a sense of resolve to serve their nation. That resolve led them to the Soviet military, where they trained to fly jet fighter planes, and then to the cosmonaut corps.

By 1960, the first 20 cosmonauts had begun training for spaceflight at a temporary facility in Moscow. The cosmonauts felt pride in their nation and joined the corps as skilled fighter pilots, but the behavior of some of these men proved difficult to admire. As with the Americans, their personal behavior deconstructs the myth of the saintly space hero. Leonov, for instance, remembered that four cosmonauts drank heavily one night at a restaurant and picked a fight with one of the waiters. The other cosmonauts voted these four—Grigory Nelyubov, Mars Rafikov, Valentin Filatyev, and Ivan Anikayev—out of the corps the next day.[250] Several cosmonauts also developed reputations as womanizers, which they shared with some of their

246 Gagarin, 10-13.
247 Scott and Leonov, 17-18.
248 Burgess and Hall, 36.
249 Scott and Leonov, 18.
250 Scott and Leonov, 86-87.

American colleagues. Gherman Titov confessed near the end of his life that "I had to limit myself" in terms of the number of women he let share his bed. "It would be one thing for a simple pilot, but not for a cosmonaut because of the reputation," he said.[251] The cosmonauts therefore were not immune to the temptations of fame. Previously hidden behind the smokescreen of Soviet propaganda, this troubling behavior is now public knowledge. Since Leonov wrote his book in 2004, he had free rein to share his candid thoughts and thus challenge the saintly image of cosmonauts that journalists and politicians had promoted.

One of the other consequences of the secrecy in the Soviet space program was that the cosmonauts took far greater risks than the public knew at the time. This is especially evident when examining Gagarin's flight. Gagarin was not only an excellent representative of Communism, as newspaper accounts and his ghostwritten book *Road to the Stars* had proclaimed, he also willingly flew aboard a spacecraft that did not have the ability to land safely. This would have prevented American engineers from letting an astronaut fly in the first place, but Soviet engineers forced Gagarin to risk his life ejecting from an uncompleted spacecraft. When the cable between the crew cabin and equipment module failed to separate, Gagarin recalled, "I waited for separation, but separation did not occur. The wait was terrible. It was as if time had stopped. Seconds felt like long minutes."[252] This recollection differed substantially from the proud, patriotic image that Gagarin displayed for the media. After surviving the reentry and ejecting from the *Vostok*, he reported on his experiences so as to aid the safety of future cosmonauts. Gagarin accomplished all of this as a 27 year old, which made his success as a

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[251] Burgess and Hall, 168, 181-183.

[252] Colin Burgess and Francis French, *Into That Silent Sea: Trailblazers of the Space Era, 1961-1965* (Lincoln: University of Nebraska, 2007), 23-24.

cosmonaut and global ambassador even more impressive.[253] If the public had known all of these details at the time, the knowledge would have undermined confidence in Soviet space technology but enhanced confidence in Gagarin as a risk taker willing to bear great burdens for his country. In this way, the real Gagarin was even more extraordinary than the publicity surrounding him.

The two *Voskhod* flights demonstrated this same point about his fellow cosmonauts. The first such mission in 1964 required the modification of the *Vostok* design to carry three crewmembers, so the Soviets could set a new record for number of passengers. This resulted in the elimination of pressure suits and ejection seats for the crew to use in case of emergencies. "Since these were rather scary decisions that had to be made, I thought it would be necessary that I would be the first to fly on this new craft," recalled Konstantin Feoktisov, an engineer at the design bureau tasked with these changes.[254] Feoktisov felt such a sense of risk in the *Voskhod* design that he felt obligated to ride onboard himself, which he did. Sergei Korolev's deputy at the design bureau, Vasily Mishin, summed up the mission even more candidly years later: "In fact it was a circuit act, for three people couldn't do any useful work in space. They were cramped just sitting—not to mention it was dangerous to fly."[255] If the Soviet public had known the real feelings of Feoktisov at the time, they would have understood he and his crewmates as even more courageous than newspapers proclaimed. The three cosmonauts were at the mercy of a risky mission conceived for propaganda purposes, but they still adhered to the long tradition of warriors by volunteering for the sake of their country.

The next mission proved even more perilous. When Leonov became the first human to perform an extravehicular activity (EVA) in 1965 aboard *Voskhod 2*, he could not reenter his

253 Burgess and French, *Into That Silent Sea*, 27.
254 Burgess and French, *Into That Silent Sea*, 338.
255 Burgess and French, *Into That Silent Sea*, 349.

craft's airlock feet first due to the deformation of his suit. His only choice was to bleed his suit of oxygen and climb inside the airlock head first. "I knew that if my physical training had not been so intensive I would never have been able to perform the complicated maneuvers that had saved my life," he freely admitted years later. Soviet citizens listening on radio and television did not know about the dramatic turn of events, because transmissions from the vehicle were cut off.[256] If the public had known at the time what Leonov publicly admitted in 2004, it would have enhanced his image as a masculine, physically fit cosmonaut. According to Leonov's own words, no ordinary citizen could have recovered from the emergency; only an iconic cosmonaut could have reentered the airlock. The public also did not know that *Voskhod 2* landed off target in a Siberian forest; the survival skills of Leonov and his commander Pavel Belyayev also would have enhanced their stature if they had been free to speak about this.[257]

By contrast, Valentina Tereshkova's earlier flight aboard *Vostok 6* demonstrated the opposite point: that the cosmonauts did not always perform their tasks to perfection. She did not manually orient her spacecraft on the second day of her mission, even though the flight plan called for her to do so. She also never carried out the onboard biological experiments and never described the sensations of the reentry to the flight controllers. Though Tereshkova proved very adept in her post-flight activities as a Soviet ambassador, as a test pilot she did not perform well. Tereshkova defends herself to this day, stating in a recent interview about her critics, "I cannot understand why people denigrate and distort achievements in this way."[258] Like Scott Carpenter in the American program, her in-flight performance prompted criticism from high-ranking space

256 David Scott and Alexei Leonov, *Two Sides of the Moon* (New York: St. Martin's Press, 2004), 108-110.
257 Burgess and French, *Into That Silent Sea*, 366-367.
258 Burgess and French, *Into That Silent Sea*, 318-323.

officials. If the public knew the true details about the controversy at the time, this would have affected her iconic status.

In reflecting on their flights, early cosmonauts lamented the fact that they could not exert more control over their spacecraft. From the *Vostok* through *Soyuz* eras, Soviet engineers argued that automation of their vehicles would increase flight safety and reduce the burden on cosmonauts. The cosmonaut on board could make errors and prove to be the weak link in the operation, these engineers feared. The cosmonauts did not have nearly as much education or experience in the way of high speed flight as their American counterparts, but they shared a desire to exert control. Cosmonauts such as Georgi Beregovoi argued the same principle as the astronauts: that pilot intervention would add reliability and flexibility to a mission.[259] The cosmonauts also believed that the flights lent credence to their argument. On *Voskhod 2*, Belyayev oriented the spacecraft manually after the automatic guidance system failed shortly before the retrofire that sent him back to Earth. "This was no easy task, but Pasha performed it brilliantly," remembered Leonov.[260] When Gagarin witnessed the death of his friend Vladimir Komarov aboard *Soyuz 1*, he exclaimed, "What could we have done without a human?" He believed that Komarov's problem solving helped to save the defective vehicle, until the return to Earth when the parachute release (an automatic system) failed.[261] The cosmonauts yearned to have trust placed on their shoulders and agreed wholeheartedly with the opinion voiced by Slayton in 1959.

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[259] Slava Gerovitch, "Human-Machine Issues in the Soviet Space Program," in *Critical Issues in the History of Spaceflight*, eds. Steven J. Dick and Roger D. Launius (Washington D.C.: NASA SP-2006-4702), 119.

[260] Scott and Leonov, 112-114.

[261] Gerovitch, "Human-Machine Issues in the Soviet Space Program," 123.

It is also worthwhile to examine Soviet plans for a lunar landing and compare them to American plans with respect to control over the lander. Several cosmonauts trained to undertake landings aboard the L-3 spacecraft, but once again the engineers of the vehicle favored automated control. The cosmonauts, particularly Leonov, felt very disturbed by the lack of control they would have exerted if the Soviet moon program had succeeded. "I had argued that what I needed once a flight was in progress was as little communication as possible from the ground," he later wrote, "since it served mainly to distract me from what I already knew was necessary."[262] The experience of the first *Apollo* moon landing supported Leonov's argument well, since Armstrong manually guided *Eagle* onto a safe landing spot and did so without the input of flight controllers. Leonov's words also complemented very well what Cernan wrote about the last lunar landing. Leonov and Cernan may have been on opposite sides of the space race, but each of them thus expressed their strong opinion that explorers should have the prerogative to direct the path of their voyages. The difference in Leonov's case was that his position undermined the position of top space officials such as Vasily Mishin.

Early cosmonauts expressed other opinions at odds with the Soviet space establishment. These disagreements included space policy. Journalistic treatments may have treated cosmonauts as united with the ideals of Communism and national leadership at the time, but the cosmonauts' own words suggest otherwise. One early example of this involved a complaint against the heavy training regime in 1963. On a more substantial level, six cosmonauts signed a letter of complaint that their training instructor Kamanin sent to Leonid Brezhnev in 1965. The *Gemini* program was clearly challenging Soviet leadership in human spaceflight, the letter stated, and only the highest ranking government officials could help the Soviet Union maintain their

[262] Scott and Leonov, 189.

lead.[263] As the Soviet human spaceflight effort foundered, the complaints continued. Leonov, for instance, remembered his frustration following the death of Korolev in 1966 and his replacement with Mishin as Chief Designer of the Soviet space program. Leonov considered Mishin very reluctant to take risks, stating that he could have personally flown on a circumlunar mission aboard a modified *Soyuz* spacecraft if only Mishin had committed the program to that task.[264] He also felt a great deal of frustration with the *Soyuz 11* disaster, during which three colleagues returning from the *Salyut* space station died in 1971. Leonov felt certain that his crew would have manually closed the *Soyuz* air vents that caused the disaster and lamented the very preventable deaths of his colleagues.[265] The early cosmonauts were not simply mouthpieces for their country; they did possess a streak of independence.

When the Soviet space establishment introduced civilians into the cosmonaut corps, the earliest cosmonauts did not react with great enthusiasm. As in the American astronaut corps, a rift developed between the pilots selected early in the program and the civilians selected later. "I had many enemies who did not want me to make that flight," remembered Feoktisov, the first such engineer to fly in space aboard *Voskhod 1*.[266] But not until Mishin took over as Chief Designer in 1966 did the first group consisting entirely of civilians join the cosmonaut corps. Since the civilians did not have to endure the harsh physical tests as the pilots selected from the military, and since the pilots believed Mishin favored the civilians in selecting flight crews, the earliest cosmonauts distrusted these later additions.[267] Air Force officials made clear they were also firmly against the selection of non-pilots for the cosmonaut corps, but Mishin overruled

263 Gerovitch, "The Human Inside a Propaganda Machine," 85-87.
264 Scott and Leonov, 249.
265 Scott and Leonov, 264.
266 Burgess and French, *Into That Silent Sea*, 344.
267 Scott and Leonov, 146.

them.[268] Thus the American and Russian space travelers each fiercely defended their culture as pilots, believing their background made them the best suited to lead their nations into space. Yet in each case, the expanding number of seats on spacecraft meant that vehicles could carry more passengers of varying disciplines by the *Apollo* and *Soyuz* eras.

The introduction of women represented another example of outsiders entering the cosmonaut corps. "Military discipline in general was for us an alien and difficult concept," remembered Valentina Ponomareva, one of five women selected for *Vostok* training in 1962. This comment echoes what O'Leary wrote about civilians in the American astronaut corps. The Soviet women had no background placing their lives on the line as military pilots, which meant they did not fit the traditional image of a cosmonaut. Their male colleagues mocked them for entering what Titov privately described as a man's job only.[269] When Tereshkova made her flight, Khrushchev declared that her voyage demonstrated the equality of Soviet society. The words of the women cosmonauts indicate that they did have to cope with sexism, Communist propaganda notwithstanding.

Yet the cosmonauts expressed positive memories in terms of their admiration for the Chief Designer of their program. Korolev, whose design bureau produced the *Vostok* spacecraft that took the first Russians into space, was known only as the "Chief Designer" in the western world because Politburo officials did not want to share his identity. He knew the cosmonauts well from their visits to his bureau and provided his input on which men should be the first to represent the Soviet Union in space.[270] "We could not find words to express our admiration,"

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[268] Burgess and French, *Into That Silent Sea*, 335.
[269] Burgess and French, *Into That Silent Sea*, 303.
[270] Burgess and Hall, 109-110.

remarked Gagarin of the Chief Designer and the spacecraft he designed.[271] Titov considered Korolev the driving force behind the Soviet effort to send men there, because "He knows every line, every pound, every piece of metal and glass in his creation."[272] Leonov felt similarly, remembering his "deepest respect and great love" for the Chief Designer and that Korolev's death in 1966 marked one of the turning points in the Soviets relinquishing their manned spaceflight lead to the U.S.[273] Korolev withstood the scorn of his scientific colleagues for believing as early as the pre-World War II era that his country could explore space. As a wise spaceflight visionary, he motivated the younger cosmonauts to accomplish his long-held dream under his guidance. The cosmonauts thus saw themselves as carrying on the mantle of Korolev's generation, just as the first astronauts carried on the dreams of Manned Spacecraft Center director Gilruth.[274]

Astronauts and cosmonauts have expressed similar attitudes in one other area as well: their reaction to fame. The space travelers from both nations went into their line of work to effectively operate a flying machine, not pander to the public. One difference was that the cosmonauts received several hours of instruction in Marxism-Leninism and were encouraged to learn about foreign cultures as part of their training.[275] This meant that cosmonauts received more formal training than astronauts on projecting the proper image to the public. Yet this did not mean the cosmonauts enjoyed this part of the job. Gagarin privately stated that the most difficult part of being a cosmonaut was not to sit atop a rocket, but to cope with the demands of fame. The lines of people forming to see him even appeared in his nightmares, he claimed. Like

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271 Gagarin, 120.

272 Gherman Titov and Martin Caidin, *I Am Eagle* (Indianapolis: Bobbs-Merrill, 1962), 113-114.

273 Scott and Leonov, 145.

274 Launius, 9.

275 Gerovitch, "The Human Inside a Propaganda Machine," 72.

Glenn and Armstrong in the United States, Gagarin's fame resulted in his elimination from future space missions. Like those two Americans, he did not take pride in this fact because he wanted to be known as a flyer, not a symbol. The stream of propaganda activities and public attention made Titov and Tereshkova privately irritated as well.[276] Even from the opposing side of the Cold War, cosmonauts could have sympathized with the astronauts' reluctant attitudes toward fame.

For all of the hype surrounding the Cold War space race, the irony was that the people who launched atop rockets possessed many similarities. Each of them sacrificed their family lives, weathered infidelities, and tended to defend the traditional image of the space traveler as a military pilot. But most of all, astronauts and cosmonauts perceived themselves as performing a job that was worth the effort, regardless of the iconography that surrounded them. Near the dawn of human spaceflight, social theorist Daniel Boorstin defined a celebrity as "a person who is well-known for their well-knownness" and is "fabricated on purpose to satisfy our exaggerated expectations of human greatness."[277] Astronauts never wanted their legacy defined in such terms and strove to reach for new achievements rather than simply rest on their celebrity status. Shepard remarked in reflecting on his NASA years, "You put it in a box, put a ribbon around it, and move on to something else." *Apollo 12* commander Pete Conrad remembered that he did not want to be defined by his past: "Don't ever look back…How about some old guy sitting around telling you about he played football for good ol' Yale University and was the world's greatest quarterback—that's all the bastard ever talks about. Okay?" Young was the ultimate example of an astronaut who refused to rest on his celebrity, because he never left the astronaut corps until

[276] Gerovitch, "The Human Inside a Propaganda Machine," 77-81.
[277] Graeme Turner, *Understanding Celebrity* (London: Sage Publications, 2004), 5.

his retirement in 2004. "I live the space program," he said in the 1980s. "I breathe it. I eat it. I sleep it…I'm not willing to give it up as long as I can make a contribution to it."[278]

The early cosmonauts who survived past that first decade of human spaceflight also strove for new achievements. Following the collapse of the Soviet Union, Titov served in Russian Parliament for the last five years of his life just as some of his American counterparts served in U.S. Congress. Tereshkova followed the politics path as well, serving in the Soviet Women's Committee and Central Committee of the Communist Party. Pavel Popovich devoted his life after the cosmonaut corps to the Institute of Land Ecosystem Monitoring, allowing him to serve as a steward to the Earth he had once seen from afar. Like Young in the United States, Leonov believed his skills best suited continued service in his country's cosmonaut corps. The first man to perform an EVA served actively in the cosmonaut corps until 1982 and then oversaw cosmonaut training until 1991.[279] The earliest astronauts and cosmonauts did not choose "celebrity" as their career of choice because they had never actively sought the role of public icon in the first place; it had been thrust upon them due to the nature of their work. Whether American or Russian, it is easy to imagine the world's first space travelers echoing Armstrong's words following the touchdown at Tranquility Base: "Okay, let's get on with it."[280]

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278 Chaikin, 3: 279-301.

279 Burgess and French, *Into That Silent Sea*, 124, 326, 196, 380.

280 Hansen, 475.

Conclusion

The television anchor Walter Cronkite, a strong admirer of America's space program, once admitted that "we were quite aware that the image that NASA was trying to project was not quite honest. But at the same time, there was a recognition that the nation needed new heroes."[281] Cronkite spoke for both sides in making this statement. From James Reston to the two *Pravda* writers who ghostwrote Gagarin's memoir *Road to the Stars*, from John F. Kennedy to Nikita Khrushchev, journalists and politicians on both sides of the Cold War presented space travelers as noble figures fit for public consumption. When the typical American citizen turned on his television set in the 1960s, he could expect to see reports of protests on college campuses and the casualty count from Vietnam. Soviet citizens lived in a nation devastated by a recent war and characterized by secrecy and repression. Yet astronauts and cosmonauts provided an escape from the stream of negativity. The public felt captivated by the notion of youthful, vigorous men (and one woman) volunteering to ride on launch vehicles that could easily kill them in case of a mishap, and doing so in the name of peaceful space exploration rather than the desire to kill an enemy. The public also exhibited a high degree of interest in the astronauts and cosmonauts due to the novelty of their enterprise. Today, few people in either country stop to consider that human beings have worked aboard the International Space Station every day since 2000. The people who voyage into space today are not household names and their flights take them no physically further than the earliest space travelers. But in the 1960s, the novelty of spaceflight

[281] Burrows, 300.

and the pronounced destination so easily visible in the night sky—the Moon—appealed to the popular imagination.

The heroic image of the space traveler remains a topic ripe for historical research. Future scholars should move the topic forward into the Space Shuttle era, answering questions such as: why did the heroic image of the American astronaut fade in the 1980s? Was it desirable for journalists and the public to view shuttle astronauts in more ordinary terms than their *Mercury*, *Gemini*, and *Apollo* predecessors? By contrast, did the *Challenger* and *Columbia* accidents succeed in focusing the media narrative on the heroism of deceased astronauts? Finally, how do the shuttle astronauts themselves perceive their presentation in the media? In 1979, British journalist Henry Fairlie defended the goal of sending human beings into space and lamented the lack of astronaut heroes compared to the *Apollo* era: "We need someone with eyes like our own, with a mind and soul like our own, to look at the vastness and interpret it for us."[282] Historians should analyze media sources with an eye toward determining how well shuttle astronauts fulfilled Fairlie's wish for heroes.

Many of the 1960s era astronauts, today in their 70s or 80s, remain figures of widespread acclaim. Neil Armstrong, Gene Cernan, and Jim Lovell made headlines in 2010 by signing a letter addressed to President Barack Obama. This letter expressed their deep frustration with the president's initiative to cancel the Constellation program aimed at returning humans to the Moon. The men made remarks on television and before the U.S. Congress criticizing this change of strategy. Buzz Aldrin supported the initiative, however, even appearing at Obama's speech

[282] Henry Fairlie, *The New Republic*, 1979, James R. Hansen Papers on Neil Armstrong, Archives and Special Collections, Purdue University Libraries, Box 2, Icon, Astronaut As, Folder.

announcing the decision that spring.[283] More recently, the public celebrated the 50th anniversary of John Glenn's flight in 2012. "I'm not looking for a celebration, but it's good to look back and see where we can go in the future," the 90-year-old said at an event in his native Ohio, attended by about 800 people.[284] Why do journalists and the public continue to attach such significance to the words of former astronauts, even a half decade after their achievements? How does the adulation for the early astronauts in the 21st century compare with the adulation at the time of their achievements? How well did dramatic productions such as Ron Howard's *Apollo 13* and Tom Hanks's *From the Earth to the Moon* succeed in rekindling interest in the early astronauts? Historians could seek to answer these questions by pursuing the study of historical memory. Memory is one of the fastest growing historiographical fields in areas such as the American Civil War and as the years pass since the dawn of the space age this may also become a fruitful field in space history.

Scholars should also study how the memory of heroic cosmonauts continues to inspire Russians today, about two decades following the Soviet Union's demise. French philosopher Jacques Derrida once stated that we must "learn to live with ghosts."[285] When Russian schoolchildren open textbooks today, they must grapple with the memory of "ghostly" figures such as Vladimir Lenin and Joseph Stalin. How do "ghostly" figures such as Yuri Gagarin or Gherman Titov fit into the memory of the Soviet Union for these Russians? Have any new cultural artifacts such as movies, artwork, or monuments affected this memory since the fall of the Soviet Union? Among the early cosmonauts who still live in Russia today, such as Valery Bykovsky, Valentina Tereshkova, and Alexei Leonov, how does the adulation that surround

283 "Neil Armstrong Condemns Barack Obama Space Plan, But Buzz Aldrin Backs It," *The Australian*, April 2010.

284 Andy Ouriel, "John Glenn Speaks About Space Experiences," *Sandusky Register*, March 11, 2012.

285 Alexander Etkind, "Post-Soviet Hauntology: Cultural Memory of the Soviet Terror," *Constellations*, Volume 16, Number 1 (2009): 198.

them today compare to the adulation in the socialist society where they originally lived? A new Gagarin biography by Andrew Jenks, called *The Cosmonaut Who Couldn't Stop Smiling* and due for release in May 2012, will analyze issues such as these.[286] Despite the language barrier, American historians should continue researching in Russian archives and finding new details about other cosmonauts.

Future historians may also wish to perform more research into comparative studies. How did the iconic image of astronauts and cosmonauts compare with the image of early aviators or mountain climbers from various countries? This thesis hints at the connection between space travelers and earlier explorers, but a much more comprehensive answer to that question remains worthwhile. In addition, how did the iconic image of space travelers compare with that of other space related figures such as flight directors, center directors, or administrators? The number of people who contributed to the goal of landing Americans on the Moon totaled 400,000,[287] from the women who sewed together spacesuit components, to the engineers in corporations across the country. But if all the people who contributed to early spaceflight are placed on a pyramid, according to their public recognition, astronauts and cosmonauts are at the tip of the pyramid.

No matter what path future research takes, the perspective of the early space travelers themselves bears emphasis. These people who sat atop rockets were far more complex figures than their presentation in the media would suggest. The downside of sanitized media coverage in *Life Magazine*, *Pravda*, *Izvestia*, and other publications was that it undermined the unique qualities of the early astronauts and cosmonauts. For instance, men such as Frank Borman and Neil Armstrong felt motivated by the test piloting challenge inherent in traveling to the Moon.

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286 Manly, "Book Focuses on the Cosmonaut Who Couldn't Stop Smiling."

287 Hansen, 650.

By contrast, Jack Schmitt felt motivated by the challenge of understanding the Moon's geologic history. Historians should not view these explorers, therefore, as generic figures who simply smiled from magazine covers and uttered statements about God, family, and country. Each of them brought their own skill sets and interests to the table, which resulted in a stronger program. The explorers did not always match the heroic image presented in the media, but this did not matter much to them. "It is awkward to be seen a super-ideal person," Gagarin privately lamented. "One shouldn't idealize a person. One should take him just as he is in real life. It's annoying when I'm portrayed as a 'sugar boy,' who is so sweet that it's nauseating."[288] Gagarin and his colleagues forged a legacy as highly trained and disciplined figures who served their nations while overcoming troublesome issues such as the competition from their colleagues, the sacrifice of much of their family lives, and death on the job. By cutting away the media image and taking them as they are in real life, as the world's first space traveler requested, the human beings at the "tip of the pyramid" remain admirable.

[288] Gerovitch, "The Human Inside a Propaganda Machine," 81.

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