INTRODUCTION

When Germany lost World War II in 1945, there was a lot of joy and relief spread around the world. Unless one was part of the Axis, it was thought that the “good guys” won and the world would never have to deal with a global war again. The three main winners from the Allies side were the United States, Great Britain, and the Soviet Union. However, there was a political conflict between the United States and the Soviet Union. The United States promoted Democracy and Capitalism, while the Soviet Union promoted Communism and Marxism. There developed a great amount of strain on both sides, and a fear that nuclear war would break out between both nations, something that the world had never seen before. One of the major events that took place during the Cold War was the Space Race. The United States and the Soviet Union believed that if they controlled space, then they could control the world. After both nations realized that the other could control space, the race to space was on. It was the three presidential administrations, Kennedy, Johnson, and Nixon, that realized the importance of space exploration and their visions, maximum effort, and leadership made America the first nation to send a man to the moon and come back safely to Earth.

BACKGROUND INFORMATION

To this day, there are a lot of people that ask the question: Why did the space race become such a big deal? Those same people argue that the United States wasted 23 billion dollars to just put
an American flag on the moon and bring back moon rocks. Though that does sound wasteful, one has to understand the circumstances at the time. In the 1950s, there were two superpowers in the world; The United States and the Soviet Union. There was already some bad blood between the two nations that led to the Cold War. In 1955, both nations made an announcement, four days apart from each other, that they would be sending satellites into space.

The Race really began when the Soviet Union sent the first artificial satellite into space. That satellite was named Sputnik. That created a great crisis for the United States, as many Americans thought that the Soviet Union was going to control outer space. An American, Bernard Baruch, was one of many Americans that was concerned and wrote into the New York Herald Tribune saying, “The Soviet Union is conquering space... It is Russia, not the United States who has the skills to reach the moon and grab it. America is worried. It should be.” This was a huge wake up call for America. If the Soviet Union controlled outer space, they might have to control the world. When Sputnik was launched, no one knew what the Soviet Union was planning or what the satellite did. Some Americans thought that the device was meant to steal top secret information, while others thought it was a device to send an atomic bomb. Because of that Senate Majority Leader, Lyndon B. Johnson, challenged President Eisenhower to go to space, and go to the moon. Johnson then pushed President Eisenhower to sign the Space Act in 1958, and on that day, NASA was born.

Before America started building a rocket or a satellite to go into space, they needed a little help from a former enemy. Germany was the first country to have a major interest in space. Germany was first to see the importance of the Space Race, and they had rocket scientists exploring how to get to space before the Soviets and the United States. The Soviet Union and The United States tried to recruit Germany’s scientists and ideas. The United States recruited a highly recognized German scientist Wernher von Braun and his team of engineers to help America win the Space Race. This was called Operation Paperclip. Four months after the Soviet Union’s first successful satellite launch, The United States and NASA, helped by Wernher von Braun, launched their own successful satellite called Explorer One. Both the Soviet Union and The United States both succeeded in getting a man into space in 1961. The Soviet Union was the first country to put a man into space, Yuri Gagarin, on April 12, 1961. Later that year, America was able to put Alan Shepard, an American from New Hampshire, into space. Though it looked like the Soviet Union was winning the Space Race, America was putting more resources into space exploration. In the 1960s, it was really America that was ahead in the Space Race. The Space Race ended in 1969, when Neil Armstrong and Apollo 11 completed the trip to the moon. For many people going to the moon and getting rocks was not enough, but getting to the moon and beating the Soviet Union was rewarding and relieving to a lot of Americans. The three heroes of the space race were President Kennedy, President Johnson, and President Nixon because of their endless support and effort in America’s space exploration program. Americans do not realize that the United States beat the Russians to the moon, because of the great leadership of the three administrations. Presidents Kennedy, Johnson, and Nixon all had different views and strategies about America going into space, but they all envisioned going to the Moon, and exploring


space, no matter what the challenges were and they were determined to land the first human on the moon.

KENNEDY YEARS

It is hard to imagine now that President Kennedy was undecided about going into space in his first couple of months in office. Kennedy knew that it would cost a lot of money that could be used for different resources and he wanted to terminate the space program. After Kennedy won the 1960 election, it was not clear if Kennedy was going to keep the space program running. In an interview in 1961, President Kennedy was asked how they would catch up to the Soviets and his response was that The United States will work at, “other areas where we can be first and which will bring more long-range benefits to mankind.” No one knew exactly what those long-range benefits were. It did sound like President Kennedy conceded space to the Soviets. However, he did keep the space program running his first year.

The two reasons that Kennedy still kept the space program running initially were his Vice President’s support, and because Kennedy won the state of Texas in the 1960 election. President Kennedy narrowly beat out Republican-nominated candidate Richard Nixon in Texas by two percent that year to gain all 24 electoral votes. If President Kennedy were to dismantle the space program, a lot of jobs and support would be lost in Texas for the next election. So, Kennedy still kept the space program that year, and wanted to work with the United States and to show Russia’s rocketry to the world.

President Kennedy’s view on space exploration changed drastically on April 12, 1961, when Yuri Gagarin became the first human to go into space. This became a great fear for the American people, as it was the Soviet Union becoming more technologically advanced. The problem was that nobody knew what the Soviets were doing, or what their motivation was for going into space. It was not until public reaction that Kennedy realized why it was important to keep up and be ahead of the Soviet Union in technological advances. Later that month, Kennedy’s advisor, Ted Sorenson, persuaded Kennedy about a moon landing, and that led to the famous speech on May 25th, 1961. Kennedy proposed more money and effort into the space program and told everyone that his main goal was a moon landing.

I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth. No single space project in this period will be more impressive to mankind, or more important for the long-range exploration of space; and none will be so difficult or expensive to accomplish.

Kennedy did a complete turnaround in his view of the space program in just five months in office. It was clear that President Kennedy wanted the United States to be the first country to land on the moon, and he was determined to get that job done by the end of the decade.

President Kennedy encountered a problem in 1963 when public support was lacking in the United States due to its lack of production and spending for the NASA program.1 The problem was that both the United States and the Soviets were not making tangible economic progress into outer space and thus, questioned why the country was spending billions of dollars. Many Americans thought that those billions of dollars should go to something else like education, solving poverty, etc. At the time, President Kennedy realized that

public support was wearing down and he met with NASA administrator James Webb on September 18th, 1963 at the White House. This was a taped conversation that was released on the 50th anniversary of his speech to Congress about space exploration. A few things that were discussed in that conversation were whether President Kennedy was still going to be president when the United States landed on the moon. (Thinking that if Kennedy won the re-election in 1964). Kennedy also asked if landing on the moon was a viable option and if NASA could use any cheaper parts. At this time President Kennedy was looking at running for re-election, and he needed a reason to keep the space program, even though it was so expensive, with very little progress.

Well I talked to the other day, about 2 weeks ago, to McNamara and Gilpatric for a few minutes and said that I thought the space program, looking ahead, unless the Russians did something dramatic and we don't have anything dramatic coming up for the next 12 months, so it's going to be an attack on the budget, but this looks like a hell of a lot of dough to go to the moon when you can go - you can learn most of that you want scientifically through instruments and putting a man on the moon really is a stunt and it isn't worth that many billions. Therefore the heat's going to go on unless we can say this has got some military justifica-

tion and not just prestige.

For President Kennedy, he knew that he would have to sell going to the moon as more than just what people felt like a stunt. There had to be something more than just prestige for the country in order to gain public support again. They used military defense and national security as justification for the public to keep supporting NASA and space exploration.1 President Kennedy also confirmed

that in his meeting with James Webb, by saying "the only way we can defend ourselves is if we put a national security rather than a prestige label on this."1 This was enlightening to see President Kennedy question one of his goals about going to the moon. After Kennedy made his "We choose to go to the moon" speech a year earlier, he appeared adamant about the United States going to the moon. However, to first ask the head of NASA, James Webb, if going to the moon was a good idea, and to question that decision did not sound like the President Kennedy that most people are accustomed to. It still sounded like President Kennedy was supportive of America's space exploration program. However, he was very cautious about it and he was not sure how to explain to the American people that this was a good idea.

Though Kennedy was still interested in going into space, he wanted to work with the Soviet Union or at least make peace with them. Just ten days before the Kennedy assassination, Kennedy wrote a letter claiming that scientists from both countries should work together on moon landing programs. "These proposals should be developed with a view to their possible discussion with the Soviet Union as a direct outcome of my September 20 proposal for broader cooperation between the United States and the USSR in outer space, including cooperation in lunar landing programs."2 After one read what Kennedy wrote, it was hard to understand why the President would want to work with a rival nation to get a man into space and a man to the moon. The strain between the two nations had been tense for a decade and a half.

It is unclear what President Kennedy's motive was, however it is clear that Kennedy wanted to be make peace with the Soviets. Kennedy also wrote a letter to the director of the CIA on that same day November 12, 1963 to send secret documents about UFOs that the CIA had collected. In that year, there were a lot of UFO sightings in

2 John F. Kennedy, Martin W. Sandler, Letters of John F. Kennedy. (Bloomsbury, 2015.)
the Soviet Union, and Kennedy wanted to confirm that those UFOs were not from America to spy on the Russians as some Soviet Union officials believed to be true. Kennedy wrote, “It is important that we make a clear distinction between the knowns and the unknowns in the event that the Soviets mistake our extended cooperation, as a cover for intelligence gathering of their defense and space programs.”

This was interesting to see that President Kennedy wanted to make sure that those supposed UFOs were not from America trying to steal Soviet technology. Ten days later, after writing both letters, President Kennedy was assassinated in Dallas, Texas. It is interesting to see a different side of President Kennedy on how he wanted to work with the Soviets to go into space.

CONTEXT IN THE SOVIET UNION SETBACK, 1966

The major turning point in the Space Race was the rocket itself. The United States, led by Von Braun, built a rocket called the Saturn V. Meanwhile, the Soviet Union built a rocket called the N1. While the Soviets were building their N1 rocket, they experienced a major setback when the Soviet Space Leader Sergei Korolev, passed away in 1966, and the Soviet space program was never the same. The Americans were having a lot of success with their Saturn V rockets. With Apollo Missions 7-10, it felt like every mission that was done America was getting closer and closer to the moon. While Von Braun and his team of scientists were having successful missions, the Soviets were not. It was apparent that the N1 was not designed well for humans to travel in and a few weeks before Apollo 11 took off, the N1 exploded. Once Apollo 11 landed on the moon, public support in the Soviet Union to go to the moon faded away for two reasons. First, they would have to start their space program from scratch and it would cost billions of dollars. The other reason is that they would always be second to go to the moon. The space race was symbolically over when Neil Armstrong and his crew stepped foot on the moon.

LYNDON B. JOHNSON YEARS

John F. Kennedy was a man that questioned the Space Race from the start, however he quickly came around when the Soviets sent the first man to orbit the moon. His successor, Lyndon B. Johnson was a different president. He was a huge supporter of the space program from the very start when he was the United States Senate Majority Leader and challenged then President Eisenhower that we need to go to the moon. One of President Johnson’s most memorable quotes was, “I do not believe that this generation of American citizens is willing to resign itself to going to bed each night by the light of a communist moon.”

After Johnson pushed space exploration further into Congress, President Eisenhower signed the Space Act on July 29th, 1958. Johnson’s support of space exploration did not just stop there, and it only increased when he was the Vice President of the United States. When President Kennedy was first elected, he advised Lyndon B. Johnson to be the chairman of the space council. Kennedy put Johnson in charge, not only because he was a huge supporter, but due to his time as a Texas senator, Johnson knew more about the space program than Kennedy did. It did not take long for Johnson’s expertise to help Kennedy make a decision on the space program. Once public support for America to catch up to the Soviets picked up, President Kennedy wrote a letter to Vice President Johnson asking for help, and to check on the state of NASA on April 20, 1961 (8 days after Yuri Gargain became the first human to enter space). President Kennedy asked his Vice President, “Do we have a chance of beating the Soviets by putting a laboratory in space, or by trip around the moon, or by a rocket to land on the moon and back with a man. Is there any other

1 John F. Kennedy, Martin W. Sandler, Letters of John F. Kennedy.

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space program which promises dramatic results in which we could win?" The public pressure was heating up on President Kennedy and the US Government to put more time, money, and effort to prevent the Soviets from controlling space. Kennedy was looking for options and was looking for ways to make it look like the United States won the Space Race. Vice President Lyndon B. Johnson responded to Kennedy's letter by saying that the best option for the United States was a manned moon landing with a safe return. Johnson mentioned that the Soviets already have the capabilities for putting a laboratory in space. The Soviets had the capabilities for making a "soft landing" on the moon. Also, the Soviets had already crash-landed on the moon. The only option left was a manned trip to the moon and a safe return home. Johnson assessed that, "Neither the U.S. nor the USSR has such capabilities at this time, so far as we know.... With a strong effort, the United States could conceivably be the first in those two accomplishments by 1966 or 1967." From Johnson's research, he knew that the only way to be the first to do something in space was to have a man step on the moon and come back to Earth. Johnson and NASA concluded that the Soviets had the capabilities to put a laboratory in space, and they already crash-landed on the moon with their "Luna 2" Mission. The United States was already behind the Soviets on three out of the four space missions. Johnson thought that America's best option was to have a manned moon landing because neither nation had the capabilities to achieve that mission, and if America

gives strong effort that mission will be successfully completed at the end of that decade.

On May 25, 1961, President Kennedy gave a famous speech to Congress expressing the importance of putting more money into the space program. One year later on September 12, 1962, President Kennedy gave his famous speech at Rice University, "We choose to go to the moon." This speech described Kennedy's choice to go to the moon, and to support the Apollo program to the nation. Kennedy would end up never seeing Neil Armstrong visit the moon. On November 22, 1963 President Kennedy was assassinated by Lee Harvey Oswald in Dallas, Texas. Later that evening Vice President Lyndon B. Johnson took the Oath of Office to become the 36th president of the United States. Twelve months later Lyndon B. Johnson won the 1964 presidential election by a wide margin. President Johnson got 486 electoral votes compared to his competitor Barry Goldwater's 52 electoral votes. Though there was a new president in the White House, there was very little doubt that the focus of the space program was going to change as indicated in his 1964 inaugural address. “Fourth, we must assure our pre-eminence in the peaceful exploration of outer space, focusing on an expedition to the moon in this decade—in cooperation with other powers if possible, alone if necessary.”

Lyndon B. Johnson was a huge supporter of going into space and landing a man on the moon and returning him safely, he also ran into a problem: the Vietnam War. As the Vietnam War grew, it became Lyndon B. Johnson's war as he was the one that was sending more and more Americans to the South Asian country. Not only were

1 John F. Kennedy, Martin W. Sandler, Letters of John F. Kennedy.

1 Eric Foner, Give Me Liberty!: an American History. (W.W. Norton & Company, 2017.)

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the number of troops increasing, so was the cost of the war. Johnson knew that he could not spend money on the war and NASA's Apollo missions at the same time. Johnson did not have to choose between the Vietnam War or space exploration, he just needed to find a way to cut expenses to pay for the war and space exploration.

Due to the expenses of the Vietnam War and NASA, Johnson proposed the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies." This was a treaty that was signed by over 100 nations, though at the time it was mainly focused on the United States, Great Britain, and the Soviet Union. For the most part, the deals in the treaty were that space exploration was for the best interest for mankind, free exploration for all nations, and that nations should not use nuclear weapons in outer space. One of the most important articles in the treaty is Article Two claiming, "Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means." This meant that any nation that is the first to land on the moon does not have ownership of it and cannot count it as part of its territory, thus making outer space for research and science only. It came as a surprise to many, that the Soviets signed the bill, though it was thought at the time that they were still ahead in the Space Race. While the Soviets appeared like they were ahead in space exploration compared to other nations, the lack of production from the N1 rocket, combined with Sergei Korolev passing away, made it look more like a Russian disaster. The treaty by all three nations was signed on January 27th, 1967, the same day that Apollo 1 blew up on a test and killed three astronauts. The Apollo missions still continued despite the Apollo 1 tragedy and the last Apollo mission in Johnson's presidency was Apollo 8. Johnson did not run for re-election, and thus came a new era of leadership to take America to the moon.

THE NIXON YEARS

On November 5th, 1968, Republican-nominated candidate Richard Nixon won the 1968 United States presidential election by beating the democratic-nominated candidate Hubert Humphrey and Independent candidate, George Wallace. Nixon became the 37th president of the United States of America. Nixon supported exploration into space, even when he was running for the United States Presidency in 1960. It was clear that Nixon understood what to expect with the space program and promised to the American people that America would not come in second place to any other country when it came to space exploration. On October 25th, 1960, just a couple weeks before the 1960 election, Republican-nominated candidate, Richard Nixon, gave a speech in Cincinnati, Ohio talking about his views on space exploration. In his speech, Nixon claimed,

This I pledge: If the responsibility becomes mine on January 21, 1961, America will be second to no one in the long stride into space... Even if the Soviet Union had not challenged us in this forward thrust into the future, America would confront the choice of meeting or ignoring its responsibility to extend man's horizons of knowledge. In this respect we cannot, and we will not, fail.

Nixon knew and understood fully the importance of space exploration in his speech and almost predicted the steps that NASA was going to take correctly. He predicted that there would be a man-landing on the moon in the early 1970s. He knew that the cost was going to be expensive too, but he knew that it would be better for America and mankind to explore knowledge in outer space.

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2 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies, signed on January 27th, 1967. 11/29/17

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Though Nixon did not win the 1960 presidential election, he did win the 1968 presidential election.

When President Nixon was inaugurated on January 20th, 1969, it was clear that America was getting ready to go to the moon. There were a couple more flights to test, but it looked clear that the United States was headed towards the moon, either in 1969 or 1970 with major technical advantages. America had a couple of good space explorations with Apollo 8 and Apollo 9, proving that the Lunar Module worked. When Apollo 10 launched in May 1969, NASA viewed this mission as a “dress rehearsal” for the Apollo 11 mission. If it was successful, America was ready for the first manned moon landing in space. It was to test all the actions that Apollo 11 would have to take in the operation. Apollo 10 was launched on May 18th, 1969 and lasted for eight days. Their mission went according to plan, and even took video of the earth rising from the moon’s point of view. Apollo 10 was indeed successful, and the next mission was for a man to get on the moon and be able to come back safely. President Nixon really did not have to do a whole lot with the space program before the moon landing, because NASA’s operation was close to completing its mission when President Nixon became the President of the United States in 1969.

Two months after Apollo 10’s “dress rehearsal” was a success, Apollo 11 was about to launch, but this time their mission was to land on the moon and come back to earth safely. The three-man crew consisted of Neil Armstrong, Edwin “Buzz” Aldrin, and Michael Collins. Apollo 11 launched on July 16th, 1969, and soon the entire world saw mankind step foot on the moon for the first time, with American muscle on their side. There was a lot of discussion and debate about if the astronauts were going to come back home safe, because this had never happened before. It was not one hundred percent clear if the astronauts would come back or not, and that was why President Nixon, had prepared a speech just in case a disaster happened. As the President of the United States, Nixon had to prepare for the best and worst. Nixon had a short statement, but just in case Neil and Buzz did not come back, Nixon said “Others will follow and surely find their way home. Man’s search will not be denied. But these men were the first, and they will remain in the foremost in our hearts.”

This was a very unusual piece that Nixon would have to deliver. It is very interesting to think that these astronauts were risking their lives for their country, and no one could imagine what they were thinking when the possibility of not making it back home ran across their minds.

Fortunately, Nixon did not have to read that speech. He instead received a phone call from the Sea of Tranquility. On July 20th, 1969, Neil Armstrong became the first American and human to step foot on the moon, claiming his famous line “That’s one small step for [a] man, one giant leap for mankind.” The moon landing was broadcast for all the world to see, as America was the first nation to reach the moon. While on the moon, Neil and Buzz received a phone call from President Nixon congratulating them on their success and wishing them a safe trip back to Earth. It was a short phone call, but Nixon claimed that “this certainly has to be the most historic telephone call ever made from the White House.” It was a huge celebratory moment and for President Nixon, a priceless moment. “For one priceless moment in the whole history of man all the people on earth are truly one—one in their pride in what you have done and one in our prayers that you will return safely to Earth.”


mankind reach new limits in a new world. It was such a great time, as the news was heard all around the world. The next day people all around the world looked at the New York Times heading “MEN WALK ON MOON-Astronauts Land On Plain; Collect Rocks, Plant Flag.”1 An article stated, “It was man’s first landing on another world, the realization of centuries of dreams, the fulfillment of a decade of striving, a triumph of modern technology and personal courage, the most dramatic demonstration of what man can do if he applies his mind and resources with single-minded determination.”2 This article really summed up the Space Race, because a lot of people did not think that a man would ever land on the moon, but three men had faith in the space program, and envisioned an American walking on the moon, and those three presidents were Kennedy, Johnson, and Nixon. On July 24th 1969, Neil Armstrong, Edwin Buzz Aldrin, and Michael Collins all returned back to Earth safely, thus making America the winner of the Space Race.

CONCLUSION

The Space Race has a huge place in the 1960s history because it was a major part of the Cold War between the United States and the Soviet Union. Going to the moon and exploring space was more than science but was also a political battle too. The reason that the United States delved into the space program was because their rival was doing it, and no one knew what would happen if the Soviets controlled space. The Cold War had an impact, not only on the growth of technology in America, and on how America did not just catch up to the Soviets, but also on the Space Race over the Soviets in technology growth by the end of the 1960s. It was amazing to look at the outlooks of the three presidential administrations on space exploration. President Kennedy was undecided at the beginning about going into space, but then realized the importance of it through public reaction. President Johnson was for it before he was the Vice President but had other interests like the Vietnam War that took spending out of NASA. Finally, President Nixon, who was behind space exploration even when he was running for president in 1960, and eventually became the one to talk to Neil and Buzz at the Oval Office through telephone. All three presidents who envisioned Americans setting foot on the moon came to fruition. It is amazing to look up at the moon in today’s world and to think that we were once up there, but for everyone that lived in the 1960s they saw it and lived to believe it.

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