Why We Raced: An Analysis of John F. Kennedy's Support of the Space Program

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The icon of the largest and most expensive scientific competition in American history, President John F. Kennedy, emerged as a crusader for the space race for personal benefit. Shortly after World War II, space exploration began to take form with new advancements in rocket technology. Despite intense research by American scientists, the Soviet Union bested the United States on multiple occasions, being the first to accomplish a series of feats in space. Their apparent dominance of space spread great worry among American citizens, but not to one politician: Senator John F. Kennedy. Senator Kennedy did not deem space exploration sufficiently important to require significant investment from the government. When campaigning to be the Democratic nomination for the election of 1960, Kennedy recognized the importance of supporting the space race in order to gain votes. After securing the presidency, President Kennedy quietly hoped the space obsession would diminish; however, after a series of shameful events for the United States, the American people were dejected. President Kennedy needed to use the space race in order to combat accomplishments made by the Soviet Union accordingly. John F. Kennedy initially supported the space program in order to win the Democratic presidential candidate nomination; he then continued to support space exploration during his presidency in order to reinstitute the United States as a global superpower after multiple achievements made by the Soviet Union coupled with numerous shortcomings by the United States, leading to one of the greatest scientific accomplishments of the twentieth century.

The launch of the world's first artificial satellite into space, Sputnik I, by the Soviet Union in 1957 made many people, within the United States and around the world, believe the United States was overrated with regards to military and scientific advancements. The launch came as a shock for the United States and the rest of the world, and many nations began to view the Soviet Union as equal or superior to the United States 1. Sputnik I's success threatened the

United States' reputation as a modern, energetic, and powerful nation.2 Sputnik I had such impact because of the excitement and interest the satellite generated. No solid statistic could indicate the power of a nation; large-scale achievements were what remained in the minds of people world-wide. Sputnik I, the first satellite in space, grabbed international attention. While the United States could promote ideals such as freedom and opportunity, the abstract beliefs could not compete with the interest generated by the tangible success of having sent the first satellite into space.3 The United States could no longer assert itself as a global superpower, given that the Soviet Union's success in technology - along with the United States' failure to make their own significant advances - weakened American credibility. For many Americans at the time, Sputnik I dealt a devastating blow to their patriotic pride. Historian Gerard DeGroot captured the American ambience during the period, saying: "[the launch of Sputnik I] plunged the American people into black despair." 4 Shortly after Sputnik I's launch, Senator Lyndon B. Johnson of Texas summarized the feeling many Americans felt when he said: "I guess for the first time I started to realize that this country of mine might perhaps not be ahead in everything."5 The majority of the American population during the 1950s and 1960s lived through World War II, a time when patriotism flourished. The zeal spread beyond the soldiers fighting and into everyday citizens. Sheril Jankovsky Cunning, a woman who grew up during World War II, recalled her family's experiences, saying: "You got caught up in the mesmerizing spirit of patriotism." The patriotism led many Americans to believe that their country was the greatest in the world. Winning the war invigorated their pride and egotism further,7 and the feelings remained present until the launch of Sputnik. The Soviet Union beating the United States to send a satellite into space, however, dampened the pride of many Americans; the launch made many question the dominance of their country in the world. During a radio editorial, news

commentator Gabriel Heatter discussed the impact of Sputnik I by addressing the launch of the satellite directly: "You [Sputnik I] will never know how big a noise you made. You gave us a shock which hit many people as hard as Pearl Harbor. You hit our pride a frightful blow. You suddenly made us realize we are not the best in everything. You woke us up out of a long sleep. You made us realize a nation can talk too much, too long, too hard about money. A nation, like a man, can grow soft and complacent." In the twelve years following the end of World War II, Heatter, similar to many other Americans, reveled in the fulfillment of winning the second world war, which Heatter depicted as the "long sleep." Many countries spent the period following the end of the war rebuilding their losses, as did the United States; however, Americans won the war. While the country continued functioning and advancing, the pride of Americans grew due to their position as the world's superpower. Yet, as Heatter implies, they relished the glory for too long. However, soon after the launch, the Soviet satellite seemed to threaten more than just their pride; the satellite, Americans believed, posed a new danger to their safety.

Early Soviet space explorations, including Sputnik I, created a fear within the United States of the Soviet Union using space for hostile purposes, which added to the pressure for the United States government to respond with space exploration success. After Sputnik I's successful launch, space seemed to be controlled by the Soviet Union. They, therefore, posed a new threat to Americans, as the United States had little defense against an attack from space, and a new fear began to spread among Americans of the Soviets destroying American cities with ballistic missiles. At a Democratic conference in 1958, Senator Lyndon B. Johnson summarized his view of the issue, stating: "The Roman Empire controlled the world because it could build roads... the British Empire was dominant because it had ships. In the air age we were powerful because we had airplanes. Now the Communists have established a foothold in outer space." 10

Furthermore, he admonished that "control of space means control of the world." Senator Johnson depicted the fear many Americans held: if the Soviet Union gained control of space, they posed a grave threat to the United States. To worsen the panic among Americans, a leaked classified government report exposed the United States' vulnerability to a nuclear attack from the Soviet Union, instituting more fear into the public. 12 The fear led to government action, with the National Aeronautics and Space Administration created shortly after Sputnik I's launch. 13 While Sputnik I's launch immediately influenced the American people and government, the satellite also had an effect on a future president of the United States.

Understanding the importance of having a symbol of American dominance over the Soviet Union, John F. Kennedy supported space exploration in order to win the Democratic nomination for the presidential election of 1960. John F. Kennedy's support of the space program, despite contradictory public statements, was not fueled by a desire for scientific advancement. Professor Jerome Weisner, a science advisor close to Kennedy, discussed the necessity of the space race with Kennedy often. On one occasion, Kennedy – according to Professor Weisner - stated: "Well, it's your fault. If you had a scientific spectacular on this earth that would be more useful - say desalting the ocean - or something that is just as dramatic and convincing as space, then we would do it."14 President Kennedy believed space exploration to be nothing greater than a symbol for the United States. He did not desire science advancement as much as he sought an opportunity for the United States to exhibit dominance over the Soviet Union. He previously neglected the importance of the space program during his time in the Senate, 15 but he realized the value space exploration held in the minds of the American people. 16 President Dwight D. Eisenhower deemphasized Sputnik I, calling the satellite "one small ball in the air."17 However, due to their fear of the Soviet Union controlling space, the American people desired for their government to take action. Senator Kennedy's primary opposition for the Democratic nomination, Senator Lyndon B. Johnson, was already promoting space exploration, and he won great popularity because of his support of a strong space program. During his campaign for the Democratic nomination, Senator Johnson advocated for government investment in the space program. He admonished: "before long the Russians will be dropping bombs on us from space like kids dropping rocks onto cars from freeway overpasses." 18 Senator Johnson's promotion for government investment into the space program answered the desperate need for action many citizens felt. Senator Kennedy – despite having contradictory personal beliefs – understood the value that prevailing over the Soviet Union in a scientific accomplishment held in the minds of many citizens. 19 Therefore, Kennedy began promoting the idea of space exploration, and using space as a platform for inspiration speeches, he was able to win the nomination for the Democrat party and later the presidency.

Soon after his inauguration, President Kennedy and his administration experienced a series of shameful events for the United States which further undermined the United States' position as a global superpower. On April 12, 1961, the Soviet Union sent Vostok I into orbit, the first manned spaceflight in history. 20 Falling to the Soviets once again in another space accomplishment, the blame fell onto the champion of the space race: President Kennedy. Months prior to Vostok I's launch, he delivered a caution to the American people about risking lives for the sake of competition. President Kennedy stated: "We are very concerned that we do not put a man in space in order to gain some additional prestige and have a man take disproportionate risk, so we are going to be extremely careful in our work." Americans fell into deep shame for being bested by the Soviet Union once again. 21 The responsibility fell onto President Kennedy, as he was the leader of the United States and of the space race. 22 Some even felt President Kennedy's

again.23 Additionally, multiple polls taken after Vostok I's orbit showed Europeans to believe the Soviet Union to be the militarily and technologically superior nation.24 News outlets around the world praised the Soviets for their achievement, with one newspaper stating the launch of Vostok I as more significant than the discovery of the New World and the inventions of the wheel and the printing press.25 Further American embarrassment continued when, five days after Vostok I's flight, the Cuban Revolutionary Armed Forces demolished the Bay of Pigs Invasion.26 For President Kennedy, the humiliation was particularly severe because as president, he authorized the invasion.27 Finally, American disgrace reached a peak after two failed rocket launches in late April of the same year. The rockets strayed from course and were detonated within a minute after launch.28 In the span of a month, President Kennedy and his administration dealt with multiple embarrassments degrading the United States' global position, and he began to feel obliged to take action.

In order to regain a dominant world image for the United States, President Kennedy sought to find an area of space exploration in which the United States could beat the Soviet Union. While under tremendous pressure, President Kennedy only expressed patience and bravery publically; however, in private, he did not conceal his worries.29 Discussing future programs with space experts at the White House, President Kennedy asked: "Is there any place we can catch them?"30 Discussing the space program further, he stated: "When we know more, I can decide if it's worth it or not. If somebody can just tell me how to catch up. Let's find somebody, anybody, I don't care if it's the janitor over there, if he knows how. There's nothing more important."31 President Kennedy understood the necessity of giving Americans something to be proud of, so he asked Vice President Lyndon B. Johnson to find an area of space

exploration where the United States could beat the Soviet Union. Kennedy asked: "Do we have a chance of beating the Soviets by putting a laboratory in space, or by a trip around the moon, or by a rocket to land on the moon, or by a rocket to go to the moon and back with a man? Is there any other space program which promises dramatic results in which we could win?"32 Senate Space Committee staffer Glen Wilson noted the phrasing of the president's statement: "He didn't say: 'What can we do to advance the scientific effort here; what can we find out if we send scientists to the moon? He didn't say any of that stuff. He said: 'what can we do to beat the Russians?"33 Vice President Johnson, in a memorandum for President Kennedy, addressed Kennedy's concerns, stating: "Dramatic accomplishments in space are being increasingly identified as a major indicator of world leadership."34 Furthermore, Johnson depicted the goal the United States needed to have. The goal had to be significantly more complicated than what had been previously completed by the Soviet Union, and the goal needed to incorporate areas in which the United States were more advanced: telecommunications, electronics, and guidance.35 The goal, Vice President Johnson determined, needed to be landing an American on the moon.36 After receiving information about the potential new objective, President Kennedy supplied the American space program with extensive resources in order to beat the Soviet Union in the race to reach the moon.

President Kennedy's promotion and funding towards the space program instilled an expectation and pressure for the United States to win the space race, and Kennedy could not, therefore, retract any resources from the space program. To fund the space program, Kennedy requested a five-year pledge of seven to nine billion dollars from Congress including five hundred and thirty-one million dollars for the fiscal year 1962.37 The requested pledge added to nearly ten percent of the total federal budget for 1961. To be put in perspective, a total of one

point eight billion dollars was given to Lyndon B. Johnson's War on Poverty, and roughly two billion was given to elementary and secondary education.38 Yet even President Kennedy's large requested pledge was deemed to be an underestimate by former Budget Director and new NASA Administrator James Webb, who predicted an eventual rise to forty billion dollars in total costs for the space program. 39 Because of the substantial funding the space program received, members of Congress and citizens nationwide held a similar expectation to win the space race. Kennedy, too, recognized the necessity of reaching the moon before the Soviet Union; in a meeting with the NASA administrator, Kennedy stated: "If we get second to the moon, it's nice, but it's like being second any time... So that if we're second by six months, because we didn't give it the kind of priority, then of course that would be very serious. So I think we have to take the view that this is the top priority with us."40President Kennedy, as the leader and icon of the space race, championed its importance, and were the United States to fail, the responsibility would fall onto him. Furthermore, Kennedy could not halt the space program due to the emphasis he had put on its vitality to American safety and national prestige.41 He was therefore bound by his own self-created craze, as he had used this popular enthusiasm for his own benefit.42 Additionally, an attempt to reduce resources for the space program would be seen as contradictory for his own image, and the worry of many citizens about Soviet domination of space would resume. Professor Weisner, summarizing his opinion on Kennedy, stated: "If Kennedy could have opted out of a big space program without hurting the country... he would have... I think he became convinced that space was the symbol of the twentieth century. It was a decision he made cold bloodedly."43 Professor Weisner descried the extent of the pressure President Kennedy felt, and he detailed how little the actual idea of exploring space interested Kennedy. However, President Kennedy, as Professor Weisner stated, could not retract his

advocacy for the space race because he would be contradicting his own opinion, as well as a goal that Americans obsessed over. President Kennedy was therefore bound to the space program; his final option for reducing the economic strain caused by the race was a collaboration with those who the United States was competing against.

President Kennedy, in order to attempt to escape the financial burdens of the space race, sought to collaborate with the Soviet Union. On February 21, 1962, Kennedy released a statement describing a phone call with Nikita Khrushchev, the leader of the Soviet Union during the period, where Khrushchev suggested a mutual collaboration in space.44 Kennedy stated, "... it would be beneficial to the advance of science if our countries could work together in the exploration of Space."45 An astonishing statement given the intense tensions with the Soviet Union, Kennedy explained his opinions, stating "I regard it as most encouraging... We believe that when men reach beyond this planet they should leave their national differences behind them. All men will benefit, if we can invoke the wonders of science instead of its terrors."46 Collaborating with the Soviet Union on a joint space operation would have benefitted both nations by preventing the countries from further hurting themselves financially, and the collaboration could have also induced a foreign policy breakthrough.47 With tension between the United States and the Soviet Union peaking due to the Cold War, a collaboration would allow for both nations to build a stronger relationship.48 President Kennedy did not fail to scrutinize the opportunity; however, due to the situation both nations were in, this collaboration could not transpire.

The only remaining possibility for financial escape of the space race – collaboration with the Soviet Union – proved impossible due to the competitive spirit which drove both nations' focus on their space programs. Both countries expended considerable energy into their space

programs. Their goal was to outshine the other nation; however, without this competition, both countries lost their principal reason for pursuing space exploration. Soviet space agency member Leonid Sedov described the situation, stating: "If we really cooperated... neither country would have a program because the necessary large support in money and manpower was only because of the competitive element." ⁴⁹ The second complication regarding a collaboration with the Soviet Union was the worry that when joining the Soviets, countries and citizens world-wide might have assumed the United States to be junior partners in the project due to the Soviet Union's success in space exploration and the United States' recent failures. ⁵⁰ The United States could be viewed as the provider for the funding of the project, but the advanced science and technology would stem from the Soviet Union. Future achievements would consequently be thought of as Soviet-led. A joint enterprise proved unworkable, and President Kennedy decided the best option to be to continue funding and supporting space exploration. Through the remaining time before his assassination, President Kennedy maintained his endorsement for the space race, and his actions constructed a prominent legacy to which many future space endeavors were dedicated to.

President John F. Kennedy's journey to become the icon of the space race originated during his time in the Senate, where he originally opposed the necessity of a substantial, government-funded space program. However, Kennedy began advocating for the space program to win the Democratic nomination after realizing the appeal of the space program to many throughout the nation. He then used the space race as a means of hope for many distraught Americans following international humiliation. Bound to the program because of his self-created craze, President Kennedy's final option of eluding the financial burdens of the space race — collaboration with the Soviet Union — proved impossible despite significant enthusiasm for the possibility. Nonetheless, President Kennedy and his administration invested great sums of money

into space exploration, leading to one of the largest and most expensive space programs in the world. NASA's workforce increased at the fastest rate in the organization's history during Kennedy's presidency. Before Kennedy's assassination, NASA employed over 10,000 workers, which later in the decade grew to over 36,000.51 The funding given to NASA during the space race was approximately four percent of the federal budget per year, a significant increase compared to the half percent given in 2016.52 While criticized for the costs of the space program, President Kennedy's efforts helped the United States reclaim international respect, and he revived the American people's self-esteem. The space race will forever hold a notable position in President Kennedy's legacy. Future scientists should be thankful for President Kennedy's contributions to science, and ordinary citizens should appreciate the pride Kennedy allowed Americans to have. Most Americans agree that the United States proved dominant over the Soviet Union in space exploration, as the space race appeared to end after the United States planted a flag on the moon. The United States appeared to conquer what was possible at the time, but this leads to the possibilities for future space exploration as technology advances, and the question arises as to which country will prove superior in the next space race.

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⁴ DeGroot, "The Dark Side of the Moon."

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⁶ Winkler, Allan M. "Campaigns and Popular Culture during World War II." *American Society at War*. Harlan Davidson, 2016.

⁷ DeGroot, "The Dark Side of the Moon."

⁸ Behind the Front Page, "Thank You, Mr. Sputnik," Mutual Broadcasting System, first broadcast January 1958, hosted by Gabriel Heatter.

⁹ DeGroot, "The Dark Side of the Moon."

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