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Position Papers for:

CRISIS 2025 NASA

Lance Fowler
Administrator of the Office of Communications
2025 NASA Space Race
Mayfield High School

The increased role of technology in the American society is prevalent amongst the population. As the Administrator of the Office of Communications, my job is to promote NASA's image, spread its message and engage the public. In today's social media focused age, being knowledgeable and involved in the various forms of media is necessary. With my background in social media platforms, I'm aware of the latest trends. The younger generation is increasingly involved in a social media focused world, and we must adapt to the trends. NASA, while constantly on the cutting edge of research and burgeoning technology, has lacked at reaching the younger generations in the way it once did. This has caused a decline in interest in NASA's programs, especially amongst the younger demographics in the general public. This declined interest is a pressing issue. We need the younger generation to stay invigorated with space, and excited about the prospects and projects the administration works so hard on.

Currently, NASA is exploring the logistics behind a Space Force, the questions of exploration and habitation and extraterrestrial life. These topics may seem boring with the younger generation. With the right press coverage, and media tactics, we can energize the youth, and general public to create a culture with a deep interest and appreciation for space exploration; a culture that will continue to support NASA's mission in the coming decades and beyond. My office and my unique personal background, are qualified to take on this challenge. We have listed some possible ideas to discuss further. The creation of trendy, short videos, informing about updates on the current events in NASA in a creating way can grab the short attention span of the youth to spur an interest in NASA. Another such idea is getting well known and important figures from the administration and directly connect them to the public, for example, having our Chairperson of Private Sector Outreach Elon Musk appear on the popular YouTube series, Meme Review. By reaching out to these social media influencers, we as an administration can extend our own influence. In order to reach the younger generation, the administration must learn to adapt to so called meme-culture of the current teen and young adult generations. Using social media is a historically proven method for NASA. For example, NASA interns in 2012 created a parody song and accompanying video for Psy's smash hit "Gangnam Style" which was titled "NASA Johnson Style" and became viral and was featured on multiple news sites and has millions of views on YouTube. We can capitalize on the social media crazed era to modernize and revitalize NASA's current lackluster social media presence. Furthermore, Aliens and extraterrestrials have long been present in the public's mind and in popular culture. This topic of NASA's research is perfect for utilizing previously mentioned public outreach propositions.

Press coverage is also a vital part of NASA's image. This past decade has seen a decline in our image. NASA's reputation of human space exploration has declined. But with increased interest in Mars exploration and habitation, NASA's image can surely turn around. The televised moon landing for which the organization was created, captivated all of America and fueled the American interest in space exploration. This future Mars exploration has the potential to regain the public's interest like the moon landings once did. NASA has the chance to prove to the public all the discoveries it has to offer are worth the time and money needed to see them to fruition. As the Administrator of the Office of Communications, I am dedicated to push NASA to the forefront of American society, and restore its glorious image to the youth. The topics to be

discussed at the 2025 NASA Space Race conference can be utilized to revive NASA's image with the aid of various promotional tactics. Together, we can breakthrough to the American public that NASA is essential to the development and research involving space affairs.

Barbara Snyder - Administrator for Governmental and Legislative Affairs
Represented by: North Olmsted High School

Position Paper for the 2025 NASA Space Race

In today's world, there are issues that affect not only the United States and NASA's ability to traverse and explore space, but the world as well. In the summer of 2018, then President Trump announced his plans for the creation of a "Space Force" to be constituted as a sixth branch of our Armed Forces. Also among these issues are the concerns regarding extraterrestrial life within our galaxy. Closely related to alien life, the idea of Martian exploration and habitation, which has a very real possibility of happening in the near future. The final issue however, the scarcity of Earth orbit sites, may prohibit the entirety of human space exploration and use if it is not remediated. All of these aforementioned issues will affect our capability of space travel, use, and exploration.

On July 18th of 2018, then President Trump announced his plans for a "Space Force" in a speech before the National Space Council. He outlined that this force would be a sixth branch of our Armed Forces, working to impose U.S. influence in space. Our current military facilities already are working in space in in terms of satellites, however this space force would serve a more present focus in space. This force would serve as the tool to project American influence in space and beyond. This is a result of countries such as China and Russia currently lightly testing their military capabilities in space. The major issue surrounding this space force is its budget, as it could vary into the billions of dollars depending how large of a role it would play in our country. One positive however is that this force would certainly establish or help to establish the infrastructure required to further our expansion and knowledge of space travel.

Before we even landed on the moon, Frank Drake created what is known as the Drake Equation. The equation is used to estimate the number of extraterrestrial lifeforms, if any, are capable to communicate with us. However, scientists have never been sure of the exact value of the required variables, such as number of planets capable of sustaining life, the number of civilizations advanced enough to send messages into space, as well as the length of time required for a message to travel. Currently NASA is working closely with the Search for Extraterrestrial Intelligence Institute, also known as SETI out of Mountain View, California. SETI uses large telescopic arrays known as Alien Telescope Arrays, or ATA. These arrays are used to survey the systems, stars, and planets that have the possibility to sustain life.

As early as 1975, NASA has been involved with Mars as it is very similar to the only planet that has sustained life, Earth. Viking 1 and Viking 2, sent up in 1975, were NASA's first landers sent to Mars. While the last human contact to any planet other than our own was in 1972, that was not on Mars. Many reasons complicate a possible human contact with the red planet. First, it requires

a lot more preparation to ready a human for contact with the planet. Not only would they need a lot of time to train, they would require resources not available on Mars or in space to survive. They would need to dedicate space on the ship to these resources, requiring more money to build and prepare for liftoff. Funding would be the ultimate barrier to overcome. As we've seen in the past, sending unmanned robots to space has already costed a substantial amount of resources and money. This would require the collaboration of many nations to achieve, but even if funding is garnered, it is still unlikely to create habitation on Mars in the near future. The most logical first step should be to establish a research colony on Mars to help us better understand how life would be on the planet and provide an initial step to build upon for the good of all nations alike.

The final and maybe most current issue this committee must face will be the lack of sites for space orbit. Many corporations already have occupied much of the space, mainly telecommunication companies. But as the future comes nearer and the necessity for more satellites to be sent into the orbit grows, the space will become scarcer and the chance of collisions will increase. This Has already been seen in 2009 when a deactivated soviet satellite crashed into an Iridium satellite. In order to limit collisions, we just, as NASA, limit private corporations and their use of this internationally scarce resource and must be allocated for use by governments with ideas of improving or revolutionizing space travel as we know.

Delegation: Assoc. Admin. Of Exploration and Ops
Represented by: Gilmour Academy

Position Paper for NASA 2025 Crisis Council

I. Scarcity of Earth Orbit Sites

As the demand for wireless structures increases in countries, Low Earth Orbit satellites are heavily used and thus occupying significant amount of space. I would like to express my concerns toward the scarcity of earth orbit sites, and space junk is the root cause of this problem. According to Japan Times, thousands of space junks including old satellites and rocket parts are circling around the Earth, forcing the International Space Station to change course 18 years. The more cluttered the space, the greater the chance for orbital collisions to happen. Collisions, once happens, can cause damage to telecommunication, defense, and transportation systems. I strongly believe that cleaning up space debris is necessary. I am willing to discuss sustainable plans for Low Earth Orbit sites with members of the council.

A consensus between all states is needed in order to remove space debris. All nations should be aware of the threats of space junks and work toward a common goal of cleaning up the space. The goal is to limit creation of new space debris and remove existing debris. If we do not start tackling this problem, it will become a requirement in a decade. NASA and other related agencies are trying their best to track space debris. However, if any satellites is out of fuel or out of human control already, then it would be hard to keep track of them. Only private companies will facilitate the development of technology, not the government. Most innovations are coming from private firms. Astroscale Holdings Inc., a Japanese company, has invented Astroscale, making it the pioneer technology in space debris removal. The removeDEBRIS satellite developed by Surrey Satellite Technology Ltd. incorporated mechanisms such as the net and the harpoon, which were tested as effective for cleaning space clutter.

All states should recognize that technologies in cleaning defunct satellites could also affect active satellites. According to Defense Intelligence Agency, of all 21,000 large pieces of object in space recorded, only 1,800 are active satellites. The International Space Community addresses the possibility for government to develop space junk cleaning technology as space weapons at the same time. China used a missile to destroy a defunct satellites in 2007, but it accidentally collided with a U.S. communication satellite. I encourage countries to be responsible for space junks created by their own.

II. Space Force

Space force has been a fraught issue ever since president Donald Trump's announcement regarding his intention to build the space force. The United States of America already has a space force. It is called the United States space command and is currently under the supervision of the air force. What the president is proposing is actually reasonable because NASA have the equipment and the technology to assist the space force in defending and solving crises.

Many states, such as China and Russia, already have set space force as a major part of the national defense program due to the importance of the telecommunication, defense, and transportation system. If America don't reorganizing the space force, America would be left behind with respect to national defense, leaving the nation defenseless when cyber attack took place.

The reorganization of the space force could also solve many of our current crises. For instance, space force can play a significant part in the current space debris crisis and Earth Orbit site overcrowding. The debris could be used as weapon to destroy the precious stateelie used for telecommunication or defense. Space force can regulate the spacial traffic and prevent crises from happening.

Delegation Of: Chairperson of Outreach - Elon Musk
Represented by: Laurel School

Position Paper for **The National Aeronautics and Space Administration 2025 Space Race (NASA)**

The questions before the National Aeronautics and Space Administration are addressing the issues of the US Space Force, extraterrestrial life, martian exploration and habitation, and the scarcity of earth orbit sites. The Chairperson of Outreach, Elon Musk, is esteemed to discuss these imperative questions with our fellow allies at this meeting of NASA directors, administrators, and department chiefs, and looks forward to discovering synergistic directives and solutions to these vital issues.

I. US Space Force, Extraterrestrial Life, Martian Exploration and Habitation, and the Scarcity of Earth Orbit Sites

Elon Musk, the Chairperson of Outreach, is honored to be present to discuss the pressing issues presented throughout the 2025 NASA Space Race. He intends to do so in a peaceful, efficient manner, and come to appropriate solutions. The delegation of Elon Musk fully recognizes the gravity of this situation, as he was hired by NASA to develop new and beneficial ways to interact with the private sector in the pursuit of effective organization diplomacy. Elon Musk proceeds towards efficient directives, to tackle the potential conflicts, while searching intently for investors to financially support travels to Mars, and other investments beneficial to the growing 2020 NASA Space Race. He realizes this while also apprehending the amount of conflict originating in the lack of stable relations and ample relationships between the bodies present in the creation of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (Outer Space Treaty) and treaties established after. With the rise of the United States Space Force, Elon Musk has shown significant support. Elon Musk acknowledges that asserting military dominance is a key factor which the United States must engage in, which holds true with the current goals of the Trump administration. In order to expand United States civilization and to ensure military defense within the boundaries of space, Musk exemplifies the importance of both domestic and multilateral support of this newfound US Space Force. Musk explains that the multilateral relationships between China, the United States of America, and Russia must look towards growth in economic, social, political and spacecraft operations. The diplomatic relations between these governing nations in regards to space exploration and activity date back to the original Outer Space Treaty of 1966, and as a result of this, the sovereignty of nations must not be impeded. Elon Musk believes that this is especially applies to the United States. Deepening these ties would further boost several aspects of economic and societal development, such as investment, trade, security, spacecraft development and cooperation, which would directly build the abilities of the US Space Force. This cooperation is crucial, in relation to the economic expenditures necessary for the advancement of the US Space Force. Elon Musk acknowledges the minimal amount of Nations with spacecraft technologies available and sees this as an expansive opportunity for the United States.

With the pressing issue that comes with expanded space travel and usage, the cluttering of space itself, and the scarcity of Earth orbit sites, Elon Musk, with his company SpaceX, has taken effective initiatives towards solving it. He is planning on achieving this with a project, Starlink, through sending satellites, only half of the original height from around 1,110 km, into the atmosphere to 550 km. This is extremely

vital, as typically satellites orbit at higher altitudes, which in this case, the lower altitude allows for less collisions, but also greater ease of disposal of the satellites because of the altitude difference.The delegation of Elon Musk is working to reach a solution which allows for ventures to Mars. With the long history of growing concern with extraterrestrial life as well as martian exploration and habitation in the United States and worldwide, nations must draw on the major breakthroughs which occurred with the Martian rover, 18 Curiosity. Musk elucidates the valuable data regarding Mars' topology, climate, and potential for microbial life. Musk sees the next major milestone lies in human exploration of its surface. Human exploration arrives with significant risk, and this drives Musk's financial motives towards this venture. As human exploration requires significant training time, life-support modules, and deep psychological endurance, Musk recognizes that it is logistically easier and less costly to send probes to celestial bodies, compared to humans; however, he draws on the importance of growing financial backing in order to proceed with the utilization of human life as opposed to probes.

The delegation of Elon Musk is willing to take the necessary measures to actively and efficiently form directives and solutions in order to stabilize the growing issues at hand in regards to the 2025 NASA Space Race. With Musk's power of connection to the technological world, and plans for financial growth of the United States presence within NASA, along with the company SpaceX, Musk holds fundamental aspects necessary to ensure the development of new and beneficial ways to interact with the private sector in the pursuit of effective organization diplomacy. He are here to assist fellow allies in these solutions. Elon Musk is acutely aware of the importance which lies in the growth of the US Space Force and the other issues at hand from extraterrestrial and martian exploration and habitation, to space clutter, to the scarcity of earth orbit sites. Musk shall abide by all NASA terms, as well as the terms presented throughout previously developed treaties.

Delegation: Sruthi Venkatachalam, Chief Engineer
Represented by: Beachwood High School
Committee: 2025 NASA Space Race

The time for renewed scientific spirit in the form of space exploration approaches, and rapidly so. As Chief Engineer of NASA, I look forward to discussing with the committee all prospective projects regarding aeronautics advancements, especially considering the topics of a Space Force, extraterrestrial life, Martian exploration and habitation, and scarcity of Earth Orbit Sites.

Position Paper for 2025 NASA Space Race

The realm of knowledge and intellectual advancement has historically permeated into sectors far beyond the scientific—namely, governmental and military. A brief glance at US - USSR relations in the late twentieth century reveals precisely this; it must be recalled that a core manifestation of the notorious Cold War was the so-called 'Space Race', or the employment of aeronautical and space engineering as a secondary front for competition. From the October 4, 1957 *Sputnik* launch to the July 20, 1969 *Apollo 11* landing on the moon—some of the most incredible feats in the space frontier occurred in this era. The prestige of aerospace science has since dwindled in the public view, although on July 18, 2018, Donald J. Trump announced the addition of a Space Force, which would focus on imposing military influence on current space traffic. Though merely a conceptual idea, some are interested in the likelihood of it bolstering US defense and expansion. On a different note, research into the existence of extraterrestrial life could potentially provide us the tantalizing possibility of interplanetary communication and exchange of information. Since *Curiosity*'s achievement in 2012 in providing valuable data regarding Mars's topology, climate, and potential for microbial life, research into extraterrestrial life has increased along with scientific interest towards space in general. However, this interest is countered by the fear of space clutter, which can severely hinder modern achievements and damage developed technology; and while several attempts at clean-up operations are already underway, largely from private bodies, a NASA-certified method is bound to increase awareness of the problem and efficiency in solving it. Finally, private or international enterprises with competing interests may clash with NASA's intentions, and therefore a new perspective on how to tackle the problem of extraterrestrial exploration must first be found before satellites are gone to waste as victims of failure.

If anything, history has demonstrated clearly that competition benefits the scientific community in terms of productivity of output. Yet in an age of information and extensive military mobilization, the threat of escalation in a competitive environment as seemingly harmless as a scientific standoff is greater than ever. Reflecting on the aforementioned historical trends, I see no reason to *not* engage responsibly in a space war, seeing as nothing incentivizes progress more than pride and dignity, although special care must be taken to avoid weaponization, militarization, and nuclearization. In such a situation, the space and aeronautics program would be revitalized and American scientific spirit rekindled—so long as we steer clear of a total war and adhere firmly to a friendly competition. As Chief Engineer of NASA and manager of the Engineering Department's annual strategic plan, I have the scope of authority to oversee responsible engineering output and have thorough experience as to how to maximize efficiency in the workplace to carry out this mission. Furthermore, since I oversee the design of all engineering projects, I understand better than all others the necessity of competition in

catalyzing new technological advances and scientific discoveries. With the addition of the Space Force to the list of conceptual ideas scientists are grappling with, it becomes clear that extraterrestrial exploration is a topic the scientific community is willing to delve into. It is evident that current society is eager to discuss subjects such as alien existence and Martian habitation, and their curiosity is not unpredictable. In past years, we have inched closer to the possibility of human exploration on Mars through multiple scientific advancements, and the age in which humanity will be able to communicate to other lifeforms through innovative, still-undiscovered ways approaches more rapidly than ever. To act upon these developments as early on as possible will only benefit US in power and prestige, but will also encourage breakthroughs around the world and further human welfare.

I cannot stress enough my hope that some limited form of competition will win the favor of the committee. It is only through competition that the program would actively remain at America's core of pride, translating to better research funds from the government, better technology and laboratories, and better results in terms of space achievements and breakthroughs—it is time for the nation to truly appreciate its space program once more, for the sake of intellectualism and scientific improvement. Moreover, not only will America benefit from a space race, but internationally, this mission could be an incense for further development of modern technology. In considering the last Cold War and space race, there are several critical mistakes that can be avoided. First, a comprehensive treaty system with realistic measures to monitor and enforce it must be implemented to ensure that an active scientific engagement such as the one in question would not evolve into a full-fledged war; naturally, it is in the interest of all nations involved to ratify such an agreement, as demonstrated in the past space race. Moreover, an extensive public awareness project should be launched; *not* a propaganda campaign, rather one to disclose to the public in precisely *what* their pride should lay. Finally, we must refrain from the assumption that we are in fact far ahead in the race; while it was not at all a downfall in the first space race, such an assumption in the race distinctly raised public anxiety levels and neared the brink of actual war. To that extent, all measures must be taken to keep a wary eye on progress made by competitors so that no disheartening surprise must be faced. With that being said, I think it would be most timely to begin habitation and exploration of Mars and space in general through development of food, water, energy, communication, and health systems—while ambitious and expensive, it's about time for renewed creativity. I truly believe that space exploration is crucial to cure the ailments that humanity suffers while on Earth. The committee should also look into funding research into potential space debris cleaning mechanisms, long-range space communication through quantum-entanglement, satellite consolidation projects, and other prospective undertakings as its capacity as a body grows. In regard to President Trump's proposed Space Force: I favor a consolidation of research facilities and funds, but to only allow limited, monitored weaponization strictly of scientific matters that pertain directly to national security issues. It is now my wish, more than ever, that in due time, American scientific prowess shall be reaffirmed.

Delegation from Mentor High School
Representing Nathan Callithen, Chief Financial Officer

2025 NASA Space Race

Nathan Callithen stands before this committee in order to offer financial guidance as well as opinions on how to alter the budget or current finances in order to create the best solutions and directives with any crisis to arise. Callithen is prepared to take on the topics of, a space force, extraterrestrial life, scarcity of Earth orbits, and martian exploration and habitation.

Space Force

Seven years ago, former president of the United States of America, Donald J. Trump, gave his approval for expanding the military into a new medium, that being interstellar. A space force would allow the government to expand surveillance on its home nation as well as others, if the need arises. A space force would act as an opportunity to control and observe all space traffic, of satellites and even crafts. In 2019, of NASA's 19.5 billion dollar budget, 3.013 billion were allocated to space travel and spacecrafts, two instrumental aspects of a United States funded military force in the form of a space force. In order to make this more of a reality, more funds, at least 1.0 billion, must be relocated to these fields within the budget, if no additional funds can be provided to the overall budget of the NASA entity.

Extraterrestrial Life

Since the 1960s, visionaries and scientists such as Frank Drake have been hypothesizing the likelihood of the existence of civilizations within our galaxy that have the potential for communication. Considering the notion that it is entirely likely for at least one civilization with the possibility for communication to be in existence, Nathan Callithen believes it to be an entirely plausible idea for a larger portion of the yearly NASA budget to be put towards the research of extraterrestrial life. US agencies such as SETI (the Search for Extraterrestrial Intelligence) have been working with NASA as a primary research contributor on the issue of extraterrestrial life. Aside from mere human curiosity, the potential for communication with other civilizations in the galaxy comes with the potential for an expansion of knowledge and technology that could offer several advantages to life on Earth. Putting more funding toward the study of extraterrestrial life could help the SETI make even more advancements and improve existing technologies such as the Allen Telescope Arrays. These advancements could lead to the discovery of more habitable zones and exoplanets, overall furthering the research and bringing NASA even closer to the discovery of intelligent extraterrestrial life.

Scarcity of Earth Orbits

As of 2019, there are approximately 2500 satellites orbiting earth, but due to the amount of orbital space in the GEO belt, becoming low, action must be taken in order to allow for more active satellites to be deployed. Currently there are a multitude of inactive satellites in the GEO belt, and due to the nature of Earth's gravitational pull, a plan must be set into action in order to make more space for future satellites. A massive amount of funding must be rearranged in order to fund mission that will allow for the retrieval of no longer active orbiting objects, where a launch, crew, and return must be paid for, per satellite. Currently the satellite sector of the budget is moderately low, and funds may need to be reallocated in order to put a new plan into place.

Martian Exploration and Habitation

For years, the knowledge of Mars' relative similarity to Earth has led to the hope for establishing permanent settlements on the planet. In 2012 the Mars Rover, *Curiosity* collected data about Mars' topology, climate, and potential for microbial life. This major breakthrough supported the idea that Mars is able to sustain life, strengthening that hope for permanent settlements. While NASA has sent crafts such as Viking 1 and Viking 2 landers to Mars, human exploration has never been put to action. In consideration of the exponential advancements of artificial intelligence, Nathan Callithen believes it to be easier, safer, and less costly to use a portion of NASA's budget to sending probes to Mars rather than man. The last time man was sent to a terrestrial body was 1972, and human exploration would come with not only several safety risks and complications (for example, multiple environmental threats), but also financial risks. Due to these observations, Nathan Callithen thinks that it would be far more financially sound to put more emphasis on sending AI to explore Mars rather than astronauts.

Colby Saxton: Chief Information Officer
Represented by: Mayfield High School

Position Paper for United Nations Crisis Committee Crisis 3: 2025 NASA Space Race

Although the topics of Extraterrestrial Life and Martian Exploration and Habitation are important for the upcoming future of the space race, the topics of Space Force and the Scarcity of Earth Orbit Sites are far more urgent due to the potential threats posed by these respective topics and should, thus, be discussed before considering the former topics.

As the Chief Information Officer of Nasa, I believe that the Space Force should be given serious consideration due to the importance of regulating traffic of low earth orbit (LEO) objects, such as satellites which could, in theory, be attacked in times of war. As the world has already seen from China's military tests, attacks such as these that allow for the disruption of national communication are a very real possibility and could be devastating during war times.

The topic of the Scarcity of Earth Orbit Sites also poses a threat to the safety of information for the United States. According to NASA scientist Donald Kessler's theory, proposed in 1978, a high density of space clutter and debris within the LEO zone would result in a series of catastrophic collisions rendering the zone useless. Although the United States has placed a cautionary measure to reduce space debris, there is currently no international treaty requiring this regulation. As a result, debris left in space by other countries participating in the space race could prove detrimental to all participants and should be prevented before the problem escalates further.

Additionally, the organizations able to access the information generated from any of these topics will have to be discussed. For instance, if news of proof for extraterrestrial life gets to the public prematurely, it may induce mass panic, as seen in The War of the Worlds (radio drama) incident; though it was not real, the response was. As for the case for military pursuits as in the Space Force, many measures will need to be taken to keep crucial information from reaching the public and foreign nations and such.

On the topic of colonizing Mars, if we are to do so, we might as well try to be the first and be very involved. Our involvement in the process will not only give us experience, it would give us significant leniency in the development of policy for Martian governments. Though it may be far into the future, it does not mean it should be put aside as something that we should not take steps toward.

I will be looking forward to the collaboration of other officials on these topics and hope to achieve a directive that can be agreed on as a whole.

Delegation of: **Chief Science Officer**
Represented by: **Solon High School**

Position Paper for the NASA 2025 Committee

The National Aeronautics and Space Administration (NASA) committee should address the following topics: the utilization of a "Space Force", the potential existence of extraterrestrial life, the colonization and habitation of Mars, and the scarcity of low earth orbit sites. As Chief Science Officer, I am designated by the NASA organizational manual that research programs are widely regarded as scientifically and technologically well founded and appropriated for their intended applications. Prior to any drastic measures, thorough and concrete research must be conducted to establish a solid foundation to ensure the safety and integrity of the NASA. However, the unpredictable nature of space leads to situations in which the process of bureaucracy is compromised and elicits immediate action. Keeping that in mind, all resolutions should be discussed in this committee, yet we should remain logical and factual in our approach.

The very nature of the Trump administration's proposal of a "Space Force" is a cause of interest. As this ultimately lowers the autonomy of NASA's right to government-influenced Outer Space expeditions and this could cause a divergence in budget from NASA to the Department of Defense: which occurred under the control of the JFK administration, seeing a 400% spike in NASA's operating budget in 1967. In addition, the creation of a "Space Force" would already take away the power of the Air Force Space Command (AFSPC) which already deals with the idea of space warfare. Conversely, the potential presence of extraterrestrial life should be noted logically. Currently, there is no true evidence of extraterrestrial life lying beyond planet Earth, however there are some potential homes for life. According to former Chief Science officer James Green, the planet of Mars and the outer planet moons of Titan, Europa, and Enceladus hold potential for extraterrestrial life. Moreover, especially on Titan, this life would not be carbon-based but rather methane-based. At the same time, a mars expedition should be carefully planned out in multiple stages over multiple missions. However, the current presence of rovers on Mars should only increase as rovers provide crucial data that can be used to produce a better plan for future Mars habitation. In spite of, the growing global space exploration program the crucial poses a potential detriment. With the increase of debris in Low-Earth orbit (LEO) increases the danger of sending spacecraft into orbit itself. As debris causes a more cluttered orbit it is paramount that the committee address the concern that debris blocks potential space endeavours, hindering some nations' ability to explore. It is essential that an entity is created to supervise and regulate the international policy of LEO.

When we look at solutions to these issues and potential issues we have to work from the inside out. First, the debris in LEO should be decreased significantly. This can be achieved by incorporating reusable rocket parts similar to those used in SpaceX rockets, and potentially using an orbital net comprised of carbon nanotubes that catches debris and when filled would eject the debris into the atmosphere to burn up. Second, a concept of "Space Force" should ultimately be shelved and direct the funding for the program into the AFSPC and NASA. Third of all, we should increase the funding and destination of the rover program beyond the current program on mars. Finally, extraterrestrial contact should not be focused unless first contact is established. If that happens, the committee should follow the already established protocol.

Delegation from: Director of the Kennedy Space Center
Represented by: St. Vincent-St. Mary High School

Position Paper for the 2025 NASA Space Race

This committee is faced with many topics regarding how to best advance the American space program. Firstly, the creation of a Space Force, which would serve as a sixth branch of the US Armed Forces, has become a consideration of the government and NASA. The ability to protect Earth and territory in space must be weighed against the monetary and personnel cost of such as program. I believe that a Space Force could be beneficial to the country given it were created in a cost-effective manner. Secondly, extraterrestrials have been a topic of discussion through the past few centuries. They have served as a focal point of space exploration and the quest for life. With the unlimited vastness of space, other-worldly life is almost a guarantee. I wholeheartedly believe the world needs to be prepared for the possibility of other-worldly life, friendly or hostile. Thirdly, the settling of Mars has been a top priority in the space race, and a topic of investigation in research facilities. The possibilities of humans living anywhere other than Earth has excited scientists for years. More research can be provided in order to test the livability of Mars and other Earth-like planets. Finally, the lack of orbital sites around Earth is an issue of increasing concern as the development of new technologies requires even more satellites than ever before. It is my belief that the committee should work together to find a way to destroy debris orbiting the Earth or find a way to retrieve and repurpose it.

The Kennedy Space Center has a rich history when it comes to influence on space. It is NASA's main launch station for human space travel and has launched many important shuttles. One of the most prominent lift-offs that have come out of Kennedy Space Center is the Apollo 11 mission. This mission is most famously notable for bringing the first humans to the moon. While we are responsible for bringing people to the moon, we are also responsible for bringing people to live in space. The Skylab Space Stations were famous for their contributions to space research. The Kennedy Space Center is also responsible for the launching of many shuttles into our space. While the Space Center operates as NASA's main manned mission launching center, it also functions as a tourist attraction with informational exhibits and interactive experiences. Throughout the past years, the Space Center has been focused on educating the public and reaching the unknown.

Space is the final frontier, and as the leader of the free world, America has a responsibility to explore and protect it. In order to do this, we as a committee must focus on devoting more resources to the development and launch of new technologies and innovations. In order to do this most effectively, NASA should work to improve existing facilities and research projects. In all of its actions, the committee should prioritize protecting American innovations and information. As Director of the Kennedy Space Center, I am dedicated to assisting my fellow NASA scientists and administrators in taking these actions and ensuring that America's space program is second to none.

Sidd Hariharan: Director of the Glenn Research Center
Represented by: Rocky River High School

Position Paper for 2025 NASA Space Race Committee

The topics before the 2025 Nasa Space Race Committee are: The Space Force, Extraterrestrial Life, Scarcity of Earth Orbit Sites, Martian Exploration and Habitation. I am committed to finding collaborative solutions to ensure the safety and care of people, aliens, and resources on Earth and in space.

I. Space: The Final Frontier

Ever since I was a mere boy, I have dreamt big and now I hope, nay, ***dream***, that we can work together as a committee to protect this spaceship we call Earth.

My primary goal in this committee is to keep everyone on Earth happy and at peace with their inner self. That's why many might be shocked with my stances. First, the Space Force. We all already know how evil the United States government is, so why would we let them have arms in space? As a NASA employee, and therefore government worker, I know how far this thing goes. Wake up sheeple. Giving the United States another branch of the army will only cause more tension between countries. We are demanding something that no other country has. Once we have an advantage, others will be trying to outdo us. Do we want another Cold War? I personally think that this is a disastrous idea. Further, the cost of it will not outweigh the benefits. Next, the topic of aliens is also concerning. What would we be dealing with? Would it be a *Battle Los Angeles* situation where the aliens do not even want to try negotiating and only want to take us out? Or would it be more of *Arrival* situation where everything is pretty chill. Either way a good government system has to be in place to deal with any kind of threat. I propose a three-prong plan in response to the inevitable alien invasion. First, citizen evacuation is essential. People pods (aka evacuation buses- we want a nice ring to it) will take them wherever is safest. Next, we need a diplomatic approach to them. This is where the movie *Arrival* comes in. We need to communicate with them to see why they have arrived on Earth. At this point, we could call it "negotiating" but really we would be giving into every one of their demands. They came here from space with technology we have never seen. Do you really want to mess with that? Finally, if it gets violent, we need a global counter strike. I say we nuke them. Lord knows we got enough fire power. That gets rid of our nuclear weapon problem as well as our alien problem-- a two for one deal, if you will.

Martian exploration and habitation is also important. We are polluting the Earth, and eventually we will not have any choice but to leave. Mars is our next best option. NASA must start putting out missions. Opportunity was just phase one. We need to discover if there is water or a way to pull what Matt Damon did in *The Martian*. I'm sure NASA can figure out the environmental risks and how to solve them. My suggestion is a big plastic bubble- a human fish tank if you will- that is pumped with oxygen to make sure we stay alive up there. Maybe they can all have little rover-like dogs up there. Who knows. Finally comes the issue of the scarcity of Earth orbit satellites. I think the best way to free up space is to shoot down the satellites of countries that make us mad (Russia, I am looking at you). If an entire country's cable is down, how are they going to fight us. They aren't. It is a foolproof plan and frankly, the only one in my opinion.

Thank you.

MY BATTERY IS LOW AND IT'S GETTING DARK- OPPORTUNITY (RIP)

Position: Director of Human Resources
Represented by: Mayfield High School

N.A.S.A. Space Race 2025

Ever since the creation of N.A.S.A. in 1958, the primary objective of this organization has been to further research and exploration of outer space. The organization saw a slow decrease in funding from 1990-2010; however, recently the national government has increased its budget allocated towards N.A.S.A., which allows for more ongoing projects. In the past ten years, numerous other nations have made large strides in the development of new technology and space. There are still many issues at hand, and as a valuable member of this organization, I find it fitting to explain what topics are of utmost concern.

In 1978, Donald Kessler theorized that eventually, launching and maintaining Low Earth Orbit Satellites would be impossible due to the vast amount of "space clutter" occupying the atmosphere. Sadly, this theory has become a reality—the amount of softball and golf-ball sized debris traveling hundreds of miles per hour has posed too much of a threat. Any delicate electronic or structural components on the exterior of a spacecraft will easily be damaged, throwing out more space debris and worsening the problem. Essentially, the high-speed debris has formed a "prison" around this planet, and until an effort is put in to restore the cleanliness of the atmosphere, the future space exploration and development looks grim. Although this issue became apparent almost ten years ago—and technology had been developed to clean up space debris—ultimately, the cleanup of the atmosphere had been ignored in favor of other projects. Now that N.A.S.A. wishes to catch up in the global space race, I believe we have begun to feel the repercussions of our previous ignorance.

Towards the end of 2018, President Donald Trump created the Space Force, a sub branch of the military that would develop and engineer weaponry that would be used in outer space. According to Trump, space would be the "new frontier" for battle. Since then, this has become a reality, as numerous other countries have begun deploying advanced weaponry into Low Earth Orbit, despite the amount of space debris. I believe that cleaning up floating satellite parts should still be N.A.S.A.'s number one priority, however, foreign technology still pose a threat. Building and developing our own space weaponry may seem like a good idea, though I feel the best course of action would be to either call for the U.S. government to negotiate peace treaties to help alleviate any concern or tension caused from the possibility of an orbital strike. The alternative I propose would be to begin building weaponry that would act as a counterattack in the event of a satellite firing missiles our other explosives. Previous technology has been developed that could strike down a trans-oceanic nuclear warhead launch, so the process of modifying past designs to counter an attack from outer space should not take long.

As the Director of Human Resources, I hope to allocate part of our increased budget to finding new talent, such as aerospace and chemical engineers. More manpower would allow for faster innovation and increased productivity Additionally, I will be able help negotiate potential agreements with private firms, such as SpaceX, to find other parties that would be willing to contribute to N.A.S.A.'s effort in gaining an advantage in the global space race, as well as fending off domestic and interplanetary threats.

Ashley Watts: Director of Research Center
Represented by: Rocky River High School

Position Paper for the 2025 NASA Space Race

The Crisis Committee is addressing the topics for concern: The newly created Space Force, further research towards extraterrestrial life, the potential of martian exploration and habitation, and the concern over the scarcity of Earth orbit sites. As Director of Research Center, I am a proponent for the drive of the current Space Race to enhance friendly relations between nations, drive scientific progress without political or monetary influence, and to continue the struggle for gender equality in these endeavors as women make up nearly half of NASA's Astronaut Class.

I. Space Force

The past half century has seen great advancements in the exploration and usage of space for numerous nations around the globe, and has served as a unifying force for humanity as a whole. For this reason, I believe that space should remain free of extensive military utilization, such as which would result from the United State's creation of a Space Force, which would be headed by NASA.

The current usage of space for military use by the United States is sufficient in increasing national security, with the ability to aid terrestrial military operations by the tracking of satellites. The creation of a Space Force has the potential to disrupt peace, and would result in a gigantic cost for the 2020 fiscal year of 3.32 billion, a cost of which our nation does not have the budget for. Funding towards NASA should remain for peaceful missions with scientific purposes.

II. Extraterrestrial Life

NASA, and the Johnson Space center, stand at the forefront of expanding the known knowledge of the universe: its history and all of its parts. NASA's fields of study and exploration include Astrobiology, or the study of the possibility of extraterrestrial life in the universe. NASA has launched programs such as the Mars rovers and Curiosity to search for life on Mars, and has plans for future missions, such as the Exoplanet Expedition in the 2020s, that aims to discover foreign planets that could habitat life.

I stand with NASA in exploring all realms of possibility in the Drake equation that suggest habitable planets in our universe. It is essential to conduct research on these concepts and to dedicate time to investigate. I however, believe in using a rational amount of NASA's resources for these programs, as there are several other prospective programs for other areas of space exploration that NASA hopes to conduct in the near future.

III. Martian Exploration and Habitation

The Johnson Space Center believes that human exploration of space and the possible future of habitation on planets such as Mars starts with the International Space Station Program and the readiness of their off-earth astronauts. Leading missions that last 6-12 months aboard the ISS, as Director of the Johnson Space center, I stand by standard precautions to the care of the mental and physical health of our astronauts before seeking out risky endeavours. When it comes to martian exploration, I hope the committee can seek a resolution that is geared towards scientific gain rather than political or monetary advantage.

I maintain to follow NASA's pioneering principles which are: Enabling human exploration through science, advancing new technologies for future use, building on near-term robotic and human missions for more complex future missions by, and developing commercial business and international partnerships. Recently, the Johnson Space Center implement a research analog. The crew will remain isolated in a mock spacecraft for 45 days to study the physical and mental effects of being in space by mimicking those conditions. Prior to any missions, I encourage fellow space centers to take the necessary steps to guide their astronauts. A mistake to rush the process can lead to greater errors. If our astronauts in any way feel unsafe or concerned about certain aspects of the mission, it would be our responsibility to take their concerns in high regard because it is their lives we are responsible for.

IV. Scarcity of Earth Orbit Sites

With the growing use of commercial flying and wireless technology, there must be regulations keeping pace in the direct or indirect use of low Earth Orbit sites and satellites. It is imperative that the road of scientific progress does not become warped with international companies that are cluttering the LEO for capital gain.

Although the United States has domestic regulations concerning the management and use of LEO, the cooperation over the international world is encouraged not only to do the same but agree on global terms. The threat of clutter and debris is an international risk. While accidents in the past have occurred, I suspect in the future that the use of LEO will be used by foreign actors for a country's defense. The realms of the sky are not any one nations; we live under one and we should abide by the same rules.

Elliott Klein
Represented by: Berea-Midpark High School

Position Paper for 2025 NASA Space Race

The topics facing this crisis committee on the issue of the 2025 NASA Space Race are; Space Force, Extraterrestrial Life, Martian Exploration and Habitation, and Scarcity of Earth Orbit Sites. I would like to express my view of urgency on this topic and that I am eager to help resolve the issues to the best of our abilities.

Space Force

The issue of the space force is very important to me as I feel that we will need force behind our peaceful interactions with life forms in the future. The space force could be beneficial to us as we explore deep space. In my job, I must consider the interactions we have in space as members of a nation, planet, and as life forms in the universe. I respect the previous agreements between nations of the UN to not allow weapons in space, yet a space force could be helpful in our pursuits.

Extraterrestrial Life

The topic of extraterrestrial life is important to me as I manage the deep space communication network. This network would be used to try to make contact with other intelligent life in our galaxy. Find new signs of extraterrestrial life would bring about major new projects for any organization or company currently holding the power of space travel.

Martian Exploration and Habitation

As our civilization expands, we look towards the red planet as a potential second home. If we look towards our future we can see that the red planet is not a matter of if we make it, but when. I believe that exploration of foreign planets is crucial to our success as a society. Mars exploration and the habitation of a new planet will neither be easy nor inexpensive. As we look towards this goal, I feel as though we should work alongside as many other nations and corporations as possible for potential insight and for mutual gain.

Scarcity of Earth Orbit Sites

The topic of Scarcity of Earth orbit sites holds much weight for me and the rest of the Jet Propulsion Lab. We have to take these sites and the clutter into account for many of our studies and projects to avoid the clutter of objects in the LEO (Low Earth Orbit). It is important that the LEO can be cleared of unnecessary debris to prevent any accidents or even intentional destruction of satellites.

Character: Jason Guo
Represented by: Fairport Harding High School

Position Paper for The Crisis Committee: 2025 NASA Space Race

The NASA Crisis Committee is focused on four major topics including; Space Force, extraterrestrial life, Martian exploration and habitation, and scarcity of earth orbit sites. I, Jason Guo, believe that NASA needs to take measures to ensure that the United States is at the forefront of these four issues.

Ⅰ. Space Force

Creating a Space Force would be a difficult, but necessary feat to accomplish. There are a few downsides to creating this force, such as possible strained relations with other nations who may view this as breaking the 1967 Outer Space Treaty. The 1967 Outer Space Treaty states "Exploration and use of outer space, and celestial bodies such as the moon must be used peacefully and for scientific purposes." But thinking realistically, there have been many times in history where agreements have been broken. Breaking this treaty and making a Space Force might make other countries fear us, as we would have military dominance over them. Being in the unclaimed territory first, rather than some other nation possibly breaking the treaty before us to assert dominance, would be beneficial for our nation.

One way in which we can gain more backing for this program would be to call it Space Support, as opposed to a Space Force. Since weapons are not allowed by the UN Treaty there is no use in calling it a force. Rather, this sixth military branch would be a support system for the five other currently deployed either in the air and on ground. With the help of high technological satellites the United States will be able to get a first-hand look as to what is below on earth before we deploy more men and women. It could even possibly detect IEDs and other bombs. But in general it would be a beneficial source of technology for our military.

It would be impossible to secretly create this space force even if the United States wanted to keep it quiet. Rockets used to get payloads to space are visible from hundreds of miles away and are also very loud. It is most likely if these weapons were put in space they would be used as a cushion to make sure other countries don't make threats towards our country or our allies. So far nobody has broken this treaty of the friendly use of space, and it may be dangerous to execute this movement. We would have to see if the decision to break the treaty would really be worth it for just getting weapons in space. There are things like military satellites already in orbit, though, which are used for secure communications and possibly spying. Things like this are allowed even though they might be used for military purposes.

Making a space force would be very difficult and also cost billions of dollars. This may be a problem, but with funding from the government, it is possible. Large projects like these have a tendency to go way over budget, but they also tend to be successful. NASA is a well-established organization that has completed unthinkable tasks in the past. If NASA has the proper amount of funding regardless of how expensive it will be, this is a project that must happen. This price would be worth it to make sure the United States is kept as a military leader. The United States is

in the position it is in today because it was able to fend for itself with technological advancements. Space is the next frontier that the United States can continue its explorations.

Space is like the center of the oceans, land that is owned by nobody, and where there are little rules. Both the ocean and space are grey areas, nobody truly owns it, and it is an area of assumed friendships. We need to have protection for our space explorations, as we need a navy to protect our ships. Building this space force would be protection for defensive purposes on our space journeys. The only thing holding other nations from assuming dominance of space first is a fifty year old treaty. This treaty is vague and outdated, no other treaties have been made to hold countries accountable for their actions.

With the help of our country and NASA providers we could get the money to begin this new space project in the hopes of using our resources before us before other certain countries try for it. Being the first country to add a space military in order to get ahead of military issues would put us at a slight advantage and give the United State dominance.

Ⅱ. Extraterrestrial Life

NASA has many other projects in the works and even some still trying to accomplish their goal, such as the SETI Institute. Though this institute was founded in 1984, they have yet to prove any other life exists in the universe. They continue year after year coming up with new technology to help in the search for life throughout the universe.

Ⅲ. Martian Exploration and Habitation

Mars has always been a possible place for life since NASA started doing research on it. A lot of time, money, and research has been put towards the idea of having humans live on Mars. Though we haven't had human exploration on Mars yet, there is a chance after more information is received from NASA's *InSight* lander mission. Mars is still very unsafe, and anyone willing to go would have to go through some serious conditioning before-hand. Though this idea is still years away from happening, NASA needs more money for research. Due to the inhospitable conditions on Mars, there are necessary technological advancements that need to be in place before a viable Mars mission is possible.

Ⅳ. Scarcity of Earth Orbit Sites

In Low Earth Orbit, debris has become a huge issue. Some of this debris could be used to sabotage working satellites currently in space. Since there is no treaty for LEO, it is in the best interest of the United States if much of this space junk was deorbited, which would cause this junk to break up in the atmosphere during re-entry.

Overall, NASA needs to be the world leader when it comes to space exploration. With the backing of the U.S. government, this can become a reality. We don't want to take a backseat to other nations when we have the resources and the technology to take us to the final frontier.

Crisis Committee:2025 Nasa Space Race
Represented by: North Olmsted High School

Position Paper for the 2025 NASA Space Race

The Issues before the *2025 NASA Space Race* committee are the Space Force, Extraterrestrial Life, and the Scarcity of Earth Orbit Sites.

In January of 2019, President Trump addressed the American Farm Bureau Federation convention in New Orleans with intentions of expressing his incentives in the expansion of a sixth military branch -- the Space Force. Trump stated that space now represents, "a new warfighting domain" [1]. He expresses that the budget invested into a space-based missile defense layer technology will play a vital role into the nation's defence and offense, but is this what the United States needs at this time? Threats from nations such as the Russian Federation and the People's Republic of China have pushed not only pushed the hands of American politics, but of mere rationality. Although the Space Force is expected to be within budget of five billion dollars,[2] the United States is stretching within wars overseas and internal struggles in terms of political morality, a strained relationship with immigration, and a growing social divide; it is imperative that the nation's sight is set on eliminating and diminishing issues plaguing the world on Earth before expanding sights beyond the stratosphere.

As research on extraterrestrial life continues and is technologically expanded throughout the world, a new tool from SETI has been launched to track results. The new tool, Technosearch, is a "database that includes all published SETI searches between 1960 and the present day." [3] Although speculations of extraterrestrial life have been around since the mid-20th century, the lack of versatile and capable technology has hindered further search. Since the 1940s, a group of astronomer's has listened into their telescopes to a faint radio signal, but its source is still currently unknown. The launch of the Hubble Telescope in 1990 was a stepping stone in providing a more accurate and dependable source, yet as of 2019, no definite answer has been assumed to confirm life beyond our world. The exploration of Mars in 2020 will divulge into the evidence-based possibilities of extraterrestrial life, but there is little planned on chance of confirmation. It is pivotal that the implementation of regulations in regards to extraterrestrial life is sought out. With the size of the Universe as we believe it to be, the likeliness of life beyond our solar system is not to be disregarded, but there remains the chance that these other beings do not desire to be found, and it is in the best benefit of the United States and all nations to refrain from crossing ethical boundaries if such life is ever to be confirmed.

With Earth orbit sites becoming increasingly scarce, there is a demandingly crucial need for an efficient regulatory system. On December 3, 2018, a Falcon 9 rocket made by SpaceX exploded into the sky. Objects such as the Falcon are technologically advanced low-Earth-orbit (LEO) satellites, which are designed to orbit the planet only a couple kilometers above the surface. It is vital to note that the great majority of these LEO satellites are operated by private companies, which provides NASA with a challenge, as it makes it increasingly more difficult to regulate sites. [4] With number of satellites looking to double by 2027, a system

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[1] https://www.nbcnews.com/politics/white-house/trump-touts-space-force-plans-pentagon-n959861
[2] https://www.reuters.com/article/us-usa-military-space/proposed-u-s-space-force-budget-could-be-less-than-5-billion-deputy-defense-secretary-idUSKCN1NK2GJ
[3] https://www.space.com/42961-seti-technosearch-tool-tracks-alien-searches.html
[4] https://www.economist.com/leaders/2018/12/08/the-coming-of-low-earth-orbit-satellites

limiting private corporations to only a number of satellites available to be launched is in the best interest of all parties. Telecom networks would benefit from a less crowded LEO, but security sources are limited and would require grave expansion if such system would be implemented within the next decade.

A shared goal among countries worldwide is to increase human knowledge and opportunities regarding outer space. This has been shown through many governmental programs, such as NASA, world wide that are created to ensure that this goal be achieved. All though a nation cannot simply jump into a program that will give immediate results, in the past 53 years that space has been explored, one solution has been made to increase earth to space connection. Though it is merely a baby step into the future, the Low Earth Orbit has been utilized for its close proximity to earth to hold satellites that enhance telecommunication. The devices are becoming especially prominent with the increasing demands for wireless demand in infrastructure. Unfortunately, though, they are a great tool in enhancing human technology and knowledge in space, objects in LEO have a short life span due to the orbit's thin atmosphere and space debris. Before jumping to the next step in galactal research, and in order to keep telecommunication satellites, we must be able to develop more sustainable uses of Low Earth Orbit.

There are many precautions and procedures that can and must be taken to increase stability in the LEO, as this is a pivotal part in human presence beyond earth. Primarily, it is believed that decreasing excess space debris can increase lifespan of satellites that live in the LEO; in order to protect said satellites and future technologies, orbital debris extractors should be placed into orbit. Such extractors have been introduced by private or global agencies. "The European Space Agency is considering several kinds of 'capture mechanisms' to pick up the debris, such as nets, harpoons, robotic arms and tentacles."[5] Because atmosphere drag is so great in the LEO, even a piece of paper will have the impact of a gunshot; this is why we must cooperate to extinguish any threats with orbital debris extractors. Secondly, there a plethora of ways to sustainably use Low Earth Orbit. Another possible strategy would be to simply go through it, extending our reach into space. "The next rung of the ladder [the next step] is probably getting all the way out of Earth's gravitational well. Starting from the surface of the Earth with a speed of 11.2 km/s, you would have enough energy to leave and never come back—we call this speed the escape velocity."[6] In order to maintain the LEO as well as further our space exploration process, why not just start on a completely new level? No person wishes to harm the LEO atmosphere intentionally. A much more beneficial strategy for human exploration as well as LEO would be to take the next step in orbital science, and jump into the future, (future as in space exploration).

For the benefit of the human race as well as scientific advancements, Orbital debris extractors and extension to exploration are the best options to help sustain the Low Earth Orbit. The LEO holds great potential for a promising future; it can do and provide much more for society with these advancements. It is greatly urged that the committee adopts such operations to secure, advance, and utilize the Low Earth Orbit for the greater good, and for a brighter future.

[5] https://www.space.com/24895-space-junk-wild-clean-up-concepts.html
[6] https://www.wired.com/2015/09/whats-special-low-earth-orbit/