



CSMUN XV UN Security Council on Mars Chair: Tarek Jibawi

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Letter From The Chair

Dear Delegates,

Hello Delegates! My name is Tarek Jibawi and I will be your chair for the UN Security Council on Mars committee. I am currently a Junior at Sandburg and have been doing MUN for 3 years. This will be my first year chairing at CSMUN. Outside of MUN, I participate in the HOSA Medical Club, Student Council, and the Muslim Student Association. I've always been intrigued by the idea of colonizing Mars. I'm not super into keeping up with NASA and its missions but in general, space has always captured my attention. When I came up with this idea I immediately started brainstorming cool Sci-Fi technology and exciting scenarios that would work perfectly with this committee. I'm super excited and hope you are too!

The Security Council on Mars committee takes place in the year 3005, where a meteor with the size to wipe out all life on Earth is on course to hit the planet. You will be working with the leaders of other countries around the world to save the world from the apocalypse by expanding existing colonies on Mars to accommodate for rescued civilians, as well as researching possible life on Mars that humans may be able to utilize for their survival. Your goal in this committee is to act diplomatically and work together for the betterment of all of society. Researching experimental technology concerning the colonization of Mars based on the background guide as well as researching the resources Mars has to offer to civilization will be highly valuable. Keep in mind that this committee is completely fictional and will take inspiration from already existing media and technology relating to the colonization of Mars. What I'm looking for in a committee in terms of Model UN are people who can collaborate effectively with their fellow delegates, possess creative and well-thought-out crises, and can take charge and positively influence the committee. Kindness and respect to all delegates are necessary to have a fun and productive time during committee as well.

Remember that CSMUN is a learning conference. Please do not be afraid to ask questions if you're confused. I will happily stop and answer any questions you have if there is any confusion. Please do not be afraid to ask your other delegates for help as well. <u>This is also a no-tech conference</u>. Also, if you're more experienced in MUN and chairing please do not hesitate to correct me. This is my first time chairing and any help and feedback would be appreciated. **Position papers are due by 11:59 pm October 18th!** You can send them in by email the day before the committee. Delegates who submit papers late or do not submit them at all will not be considered for awards. If you have any questions please feel free to contact me at my email <u>260228@d230.org</u> (email position papers to this email as well). Have fun and come prepared!



Topic A: Expanding Colonies on Mars

History and Situation

Scientists have been researching the surface of Mars since the 1960s out of curiosity concerning the life that the planet might have contained and the life it might be able to sustain in the future. NASA (the National Aeronautics and Space Administration), has been a pioneer of space exploration and has completed many missions on and around the planet. The first significant exploration of Mars was the Viking 1 and 2 Mars landers of 1976. These landers



allowed for the first-ever close-up photos of the surface of Mars, sparking what would be the beginning of the **colonization** effort. Other notable early explorations of Mars include the twin Mars Exploration Rovers (MERs), Spirit, and Opportunity that lasted from 2004 to 2019. The data that these rovers collected confirmed that liquid water had once flowed on the surface of Mars through geological studies, further supporting that life could have been sustained in the past as well as in the

future. These early explorations built a foundation of hope and scientific interest in the Red Planet that would lead to its future colonization.

(From this point on the rest of Topic A will be fictional and will contain inspiration from real technology and science fiction).



Years into the future more unmanned missions were completed and NASA had an overwhelming amount of information on Mars. Their single biggest discovery was in 2029 when an unmanned rover by the name of Breakthrough discovered a massive section of buried ice under one of the poles of the planet. Only a few months later, an ice mass of similar size was found hidden under the second pole. The amount of ice, or soon-to-be water, was more than enough to potentially support farms and be filtered for drinking once melted. NASA's main operations from then on focused on the

development of technology that could sustain human society on Mars. NASA and SpaceX (Elon Musk's space research organization) united towards this cause and conducted even more research on Mars' soil, atmosphere, and ice masses.



From 2030 to 2093 NASA and SpaceX had accomplished what was previously considered science fiction. 2035 marked the first ever manned mission on Mars where the first ever permanent planetary base was built on the North Pole of Mars by a team of 3 astronauts, the first Mars colonizers. While only 100 square feet in size, it served as proof that the buried ice could be successfully and efficiently harvested using a newly developed drill that utilizes heat from solar energy to melt, boil, sterilize, and suction the water from the poles. As time passed, more and more ships were sent to Mars from a multitude of countries. As more ships came, the more advanced space travel technology got. SpaceX was able to develop vessels that could travel to Mars within only a few months compared to the 3 years the first mission took. This means that by 2093, around 50 million small house-sized bases were established, housing a total of 500 million people including scientists, agriculturalists, and volunteer civilians. Every base was connected to a gigantic glass dome called the **Singularity**. The Singularity is home to farms, water filtration/recycling facilities, oxygen-producing small forests, communications and research facilities, hospitals, and recreational facilities for civilians, all powered by solar panels.

The civilians that came to Mars had volunteered through a volunteer program hosted by NASA in 2085. The program consisted of an online waiver that was open until the 500 million person limit was reached. These volunteers would be sent in groups periodically to live on Mars indefinitely. Although true the reason behind it was never revealed to the public. This reason was the worsening conditions of Earth. By the year 2093, every island in the world had been completely submerged due to rapidly rising temperatures melting the ice caps. With a population of 14 billion people, engineers on Earth have developed underground **bunkers** for people to live in which have become common. Efforts have been made to better the conditions but it seems Earth may be completely uninhabitable soon enough.

Bigger Issue

Despite the deteriorating conditions on Earth, one final threat emerges. A meteor by the



name of "Stellafissure-12" has been in the sights of scientists since the early 2000's. Its orbit was erratic and unpredictable, making it hard for NASA to pinpoint its location and probability of impacting Earth. This supermassive meteor has been a looming threat to NASA for years and for this reason, the public was never made aware of its existence. In the wake of the Mars colonization movement, the meteor was almost entirely forgotten and research on it ceased. Now, this has proven to be a terrible mistake.



During the year 3004 (one year before the start of committee), a supermassive object suddenly appeared on NASA radars. This object was none other than Stellafissure-12. The meteor had completely entered Earth's orbit where its movement became stabilized and trackable. Its entry into Earth's orbit made it a great concern to NASA. Their response was to dedicate a research team separate from the Mars effort to investigate this anomaly. After collecting satellite data surrounding the meteor the scientists had uncovered a devastating truth. If their calculations were correct, the meteor would hit Earth with the power of thousands of nuclear bombs potentially destroying all life on the planet in one year. This news was sent to every government organization on the planet. As soon as the news was sent, world leaders from the UN Security Council and their families were issued a space shuttle with direct transport to Mars. There, the leaders would be safe to plan the rescue of Earth.

The dire situation on Earth has remained the same since 2093. It was almost as if the entirety of humanity collectively gave up on trying to save the planet. Out of the now 15 billion people on earth, around 8 billion live in underground societies that have expanded vastly. Although they are underground, they won't be safe from the inevitable impact of the meteor. Earthquakes will destroy underground **infrastructure**, the heat of the impact will vaporize all surface dwellers, and anyone who is left will be subjected to tsunamis that will wipe out all possible shelter.

As soon as the UN Security Council and their families arrived safely on Mars, a nationwide broadcast was sent to every hologram television in the world. The blatantly informational broadcast stated this, "Citizens of Earth. A supermassive meteor by the name of Stellafissure-12 is set to impact the Earth in approximately 5 months. Since a shuttle takes around 4 months to reach Mars and our limited number of shuttles, only approximately <u>800,000,000 people will be able to be transferred.</u> This is a tragedy for all of humanity, but one that is unavoidable. Humanity must continue despite all of this tragic sacrifice. Goodbye."

Recent Updates (Happening during the beginning of committee)

One month after the broadcast went live, the people of Earth have been thrown into complete chaos. At first people all around the world were in shock, not believing what they had heard on their hologram televisions, but it did not take much time for reality to sink in. The meteor could be seen faintly with the naked eye by all civilians on Earth. Terror spread like a wildfire. Any stores providing resources required for survival have been raided and stored in underground bunkers that have been reinforced in hopes of surviving the impact. On the other hand, the surface population is violently protesting around space shuttle launch sites around the globe demanding transport on the ships. Many deaths of innocent people have occurred because of these protests. They have yet to get in, but security is getting weaker and weaker by the day as more destruction takes place.



As for the situation on Mars, no shuttles have been transported to the colonies as of the start of committee, it is the Security Council's responsibility to make those decisions. The UN Security Council is safely based in the Singularity where all operations will be decided.

Possible Solutions

Possible solutions to this problem will be complex. No matter what the Security Council decides, billions of civilians will be subjected to a horrible death. Ultimately, the Security



Council must do what will be best for the continuation of mankind on Mars. Solutions could focus on the expansion of the colonies. This could include shipping resources to Mars to expand colonies, shipping resources to sustain colonies that are already established, or utilizing them in a different way that benefits the colonies. The Council will need to decide how much to expand the colonies and what methods to utilize to maintain them properly. Solutions could also focus on solely rescuing civilians, although conflicts among members of the Security Council may arise from this decision depending on what countries are prioritized. A solution could be to prioritize people with skills that can help the colonies despite their heritage. This would help ensure the sustainability of the colonies in the long term.

Committee Involvement

The Security Council's role in this committee is to save humanity and sustain the safety, integrity, and longevity of the Mars colonies as well as expand them to the Council's desire. In this committee, the Council will be deciding what happens around 5 months before the impact of the meteor. Despite how furious the people of Earth are, there is no way to save them all. It is the Security Council's responsibility to decide what is best for humanity as a whole using creative, concrete, and well-thought-out solutions.

Committee's Ability to Function and Responsibilities Pertaining to the Topic

To eliminate any long-winded government processes, the responsibility of continuing the human race depends solely on the decisions of the Security Council. The UN Security Council's powers include the following: deciding who gets priority on the shuttles to Mars bases from Earth, ordering engineers to expand Mars colonies, deciding how many shuttles will contain resources and which will contain civilians, directly contacting anyone on Earth, and overall every decision concerning transport off of Earth and the safety of the Mars colonies. Keep in mind that there is a limited amount of transport available for resources and civilians. Hypothetically, if all the shuttles were used to transport civilians (which is advised against since resources are required for the expansion and survival of the colonies) they could fit a total of



800,000,000 people (obviously during committee I will be flexible concerning this number since it's hard to be exact).

Questions to Consider

- Considering the amount of shuttles available, will rescuing civilians or transporting resources to Mars be prioritized?
- 2. How will civilians and/or resources be safely transported despite the violent protesters?
- 3. What measures will be taken to ensure the safety and sustainability of the colonies in the long term?
- 4. What plans are in place to address potential psychological challenges and social dynamics that may arise among the evacuees during their time on Mars?
- 5. How will the UN Security Council regain and maintain the trust of the Mars colonies?
- 6. What new laws and regulations will be implemented to maintain order among the colonies?
- 7. Will the desolate Earth be considered in plans for the future?

Defining Terms

- Colonization- The act of setting up a colony away from one's place of origin.
- Singularity- The point in the space colony where all operations and activities are centralized, characterized by advanced technology and infrastructure.
- Infrastructure- The basic physical and organizational structures and facilities needed for the operation of a society or enterprise.





• Bunker- Strongly built shelters typically underground, used during wartime.



Topic B: Establishing the Sustainability of Mars



History and Situation

Life as we know it requires water to exist. Information from Mars orbiters has led scientists at NASA to believe that Mars once may have had a global layer of water that was about 394 feet deep. The fact that led scientists to this conclusion was the river-like formations that are present on the surface of Mars. These rivers and drainage systems could only have been caused by water erosion on the surface of the planet. Scientists also concluded that at one point, Mars lost its atmosphere, for unknown reasons, and caused the water to

freeze underground. The fact that water once flowed on the surface of Mars proves that there was a high possibility of **microbial** life at one point on the planet. Another early discovery of potential life on Mars occurred in the 1990s when NASA discovered mineral features that could have been formed by biological activity and possible microscopic fossils of primitive, bacteria-like organisms in a Mars sample. Up until recently, scientists have debated the true cause of these minerals. Some claim it was human **contamination** that caused them, some say they were just chemical reactions within the rock.

(From this point on the rest of Topic B will be fictional and contain inspiration from real technology and science fiction).

During the 2035 manned mission to Mars took place and the first permanent Mars base was established. At this point, this is common knowledge to all of the civilians of Mars and makes it a sort of national landmark among the general population. What the civilians are not aware of is what currently lies within this restricted access base. During the aforementioned mission, one of the astronauts had been tasked by NASA to plant an oak tree seed into a patch of Mars soil fertilized with water from the planet. In a few days, to the surprise of the astronaut, a blue plant had sprouted from the ground. The other two astronauts were informed and the sample was analyzed in the base and results were sent back to NASA on Earth.

NASA proceeded to analyze the information sent from Mars and came to an unbelievable conclusion. The minerals in the Mars water somehow altered the plant's ability to grow without abundant oxygen. Scientists cannot deduce why the minerals affect life in this way despite their analysis. In the background of the Mars colonization effort, this phenomenon was carefully studied in secret. As research continued, scientists were able to extract this mineral from a physical sample of soil and in 2097, chemically engineered a tree seed that could grow in the soil



of Mars with water lacking the mineral. This seed, once properly tested and verified in a controlled environment, was eventually made known to the Security Council which would decide what to do with this new development.

Bigger Issue



corroded the environment until there was nothing left. This brings up the question, would humanity do it again?

Mars is covered in lush blue vegetation. Due to the efforts of NASA scientists and colonizers, trillions of the previously mentioned "Martian Seeds" were planted across the surface of Mars. Scientists have made the hypothesis that these plants were likely the same plants that covered Mars billions of years ago without human intervention. Scientists have also estimated that in under a thousand years, these plants may be able to form a stable atmosphere and terraform, (transform a planet so as to resemble the Earth, especially so that it can support human life), Mars. This means that if the beautiful ecosystem of Mars is maintained, it could one day be a second Earth.

That brings up the previous question, would mankind destroy another planet if presented with the opportunity? Hypothetically, if the terraformation of Mars continues on this positive path, life other than plants could develop and thrive with human intervention, the atmosphere could one day be able to support humans without isolated bases and domes, and it could become a second Earth. To maintain this vision of the future, mankind must change the fundamental urge to pillage, exploit, and destroy. To truly benefit mankind and continue its existence, learning from mistakes and taking care of this planet will be necessary.

To accomplish this, the concern for Earth's well-being that humanity ignored in the past must be embraced. If factories, transportation, non-renewable resources, and harmful chemicals





are likely to develop in the future, laws must be placed now to prevent any damage to the Red Planet. During the Industrial Revolution on Earth, humanity was ignorant of the harmful effects of our actions on the environment. Now, armed with the knowledge of the past and the technology and resources to implement laws and infrastructure that will prevent Mars from befalling the same fate as Earth, humanity can fix mistakes made in the past. All that matters now is how the Security Council acts on this knowledge.



Recent Updates

Recently, the engineers of the colonies have been concerned about the workload and effort that expanding the colonies without automated machinery will require. The technology required to maintain the quality of the Mars bases as well as accommodate the growing population is getting more advanced and physically large. The engineers have brought up the idea of converting some unoccupied bases and diverting resources into building a factory that can

produce this technology and infrastructure.

Despite the concerns of the Security Council and the general public, the factory was constructed. The people of the colonies unanimously seemed to agree that this was for the betterment of the colonies. However, concern for this factory's future was not clearly expressed among the civilians.

Possible Solutions

Some possible solutions to this problem could include utilizing ideas from past organizations on Earth to keep the environment safe, coming up with new solutions to better fit the situation on Mars, conducting research on the already existing Mars forests, and so on. Solutions like these are straightforward and can be carried out without much conflict. However, support from the civilians of Mars will have to be considered before taking on this endeavor. The Council does not want to come off as dictators to the people. Throughout the entire process of creating laws and infrastructure, the civilians of Mars need to be put first.

Solutions pertaining to the safety and prosperity of the terraforming of Mars could include regulations on deforestation, researching technology that can benefit the health of the plant life, dedicating more time to the terraformation effort, and so on. This aspect of the topic should not be ignored, for it secures the safety and prosperity of future generations of Mars colonies. Overall, solutions must be complex, creative, and realistic (for the most part).



Committee Involvement

The UN Security Council's main objective is to successfully terraform Mars and utilize it to advance the colonies in a manner in which the planet is not destroyed and exploited as was Earth. This is of utmost importance if the Security Council wishes for life on Mars to become just like life back on Earth before its destruction. This responsibility is a great one, but if carefully and thoughtfully executed, it can promise a safe and healthy future for mankind, and the Red Planet.



Committee's Ability to Function and Responsibilities Pertaining to the Topic

This committee has the responsibility of protecting Mars from humanity's destructive tendencies. Since all of the governments on Earth have been wiped out and no official government system has been decided on, the UN Security Council is the standing government body of the colonies and is responsible for enacting

laws and maintaining order. The powers that the Security Council has to carry out this responsibility include creating laws that protect the environment, developing eco-friendly technologies to uphold these laws, and gaining support from the Mars civilians to carry out the council's vision.

Questions to Consider

- 1. Will more factories be produced after the initial factory?
- 2. What energy will these factories use to function?
- 3. What regulations will be implemented to prevent pollution and the spread of greenhouse gases?
- 4. What regulations will be set to ensure the continuation of the terraformation of Mars and the protection of life?
- 5. How would the Council go about the extraction of natural resources to maintain the expansion of colonies?



6. What technological advancements will be researched and executed to enact and enforce these regulations?

Defining Terms

- Terraform- To transform a planet so as to resemble the Earth, especially so that it can support human life. B
- Contamination- The presence of an unwanted constituent, contaminant, or impurity in a material or environment. B
- Microbial- Refers to microscopic organisms, especially bacteria, viruses, or fungi. B
- Exploitation- The action or fact of treating someone unfairly in order to benefit from their work. B

Suggested Sources

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Position List

<u>*The specific skills outlined for each character do not have to be your sole focus in committee, just</u> <u>a skill you can utilize</u>

<u>Current Members of the UN Security Council:</u>

1. China - Li Wei



Li Wei, a former Minister of Science and Technology, has a strong background in engineering and innovation. His leadership in China's space exploration initiatives and his understanding of technological development make him a key figure in advancing Mars colony infrastructure.

2. France - Lucie Morel

Lucie Morel, a former French Minister of the Environment, has a wealth of knowledge in environmental policy and sustainable development. Her expertise is vital for ensuring that Mars' terraforming efforts prioritize ecological balance and long-term sustainability.

3. Russia - Mikhail Petrov

Mikhail Petrov, a former Russian Deputy Prime Minister, has significant experience in overseeing large-scale projects and managing national resources. His skills in logistics and resource allocation are essential for maintaining the stability and growth of the Mars colonies.

4. The United Kingdom - Oliver Bennet

Oliver Bennet, a former UK Secretary of Defense, provides expertise in security and defense. His background in military strategy and crisis response is critical for protecting the Mars colonies and ensuring the safe transport of civilians and resources.

5. The United States of America - Grace Mitchel

Grace Mitchel, a former U.S. Secretary of State, has extensive experience in international diplomacy and crisis management. Her strategic vision and negotiation skills are crucial for coordinating the global efforts required for the Mars colonization and addressing the immediate threat of the meteor.

6. Japan - Haruto Yamamoto

Haruto Yamamoto, a former Minister of Education, Culture, Sports, Science and Technology, brings a strong focus on research and innovation. His experience in advancing Japan's scientific endeavors is key to developing new technologies for the Mars colonies.

7. <u>Republic of Korea - Minho Lee</u>

Minho Lee, a former South Korean Minister of Unification, is skilled in conflict resolution and cooperation. His experience in fostering collaboration and unity is important for maintaining harmony among the diverse Mars colonist population.

8. Switzerland - Lukas Müller

Lukas Müller, a former Swiss Minister of Economy, is adept at managing economic policies and financial stability. His expertise is vital for ensuring the economic sustainability of the Mars colonies and managing resources efficiently.



9. Mozambique - Amina Silva

Amina Silva, a former Minister of Health, has extensive experience in public health and humanitarian efforts. Her knowledge is crucial for addressing the health and well-being of Mars colonists, especially during the initial stages of colony expansion.

10. Algeria - Youssef Benali

Youssef Benali, a former Minister of Energy, has a background in energy management and sustainable practices. His expertise is essential for developing renewable energy solutions to power the Mars colonies.

11. Malta - Gabriel Borg

Gabriel Borg, a former Minister of Foreign Affairs, has a strong background in international relations and diplomacy. His skills are important for fostering cooperation among the various nations involved in the Mars colonization effort.

12. Ecuador - Diego Mendoza

Diego Mendoza, a former Minister of Agriculture, brings expertise in sustainable agriculture and food security. His knowledge is crucial for developing efficient and sustainable farming practices on Mars.

13. Slovenia - Matej Novak

Matej Novak, a former Minister of Infrastructure, has extensive experience in managing infrastructure projects. His skills are essential for building and maintaining the physical infrastructure of the Mars colonies.

14. Sierra Leone - Amara Kamara

Amara Kamara, a former Minister of Social Welfare, has a background in social policy and community development. Her expertise is important for ensuring the social well-being and cohesion of the Mars colonist community.

15. Guyana - Ravi Singh

Ravi Singh, a former Minister of Natural Resources, brings experience in resource management and environmental conservation. His skills are crucial for managing Mars' natural resources responsibly and sustainably.