



ACADEMY MODEL UNITED NATIONS 2010
BERGEN COUNTY ACADEMIES

JOINT CRISIS COMMITTEE: INDIA

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Hello delegates!

Our names are Dennis Katsnelson and Lauren Villano and we will be chairing the Joint Crisis Committee for the Academy Model United Nations conference this coming January. We are both seniors in the Academy of Business and Finance and share an interest in Model United Nations. Lauren has participated in AMUN 2009 in the DISEC committee and represented Haiti as a delegate. Dennis has taken the Model UN elective offered at BCA and has donated his time to helping set up AMUN 2009. In the process, he has sat in on committees and gained experience through observation. Together, we will be chairing the Indian Joint Crisis Committee for AMUN 2009. We genuinely look forward to the 2010 AMUN conference and are excited to take advantage of the opportunity to chair such a fun committee.

The majority of this topic paper will focus on India's involvement in the race to space and the progress it has made. Our objective is to provide an overview of India's development of its space programs and how its past and current programs relate to other countries' in the year 2031. We also intend to explore and investigate India's chief steps of progression in order to uncover a better understanding of our stance in space in 2031. Although India's space program has a shorter history than those of Russia and the United States, India's promising financial future will allow the nation to move forward significantly in its efforts for control in space.

Sincerely,

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History to 2009

Early Indian people used the sun, stars, and moon for keeping time and predicting the weather, but there was little interest in the development of an Indian space program until the 1920s, when the country's scientists first looked to the cosmos. Among these pioneering space scientists were S. K. Mitra, C. V. Raman, and Meghnad Saha, who observed the atmosphere, the moon, and the stars, developing mathematical models that would one day be relevant to space exploration.

Despite the new research, India's government did not fund a space exploration or research program until 1950, when Homi Babha took charge of the Department of Atomic Energy. With funding from both India and the United States, a wave of programs sprang up, including the Uttar Pradesh State Observatory and the Rangpur Observatory.

Outside of India, though, the United States and Russia were vying for control of the heavens. The space race came to a head when, on October 4, 1957, Russia launched Sputnik 1, meaning "traveler," into low altitude elliptical orbit. As the two titans set their sights on the moon, India redoubled its efforts to launch a satellite into space. Unlike Russia and the United States, India's space program focused not on military power, but on technological progress. As Vikram Sarabhai, a physicist and chief promoter of India's space program in the 50's, said, "We are convinced that if we are to play a meaningful role nationally, and in the community of nations, we must be second to none in the application of advanced technologies to the real problems of man and society."

In the early 1960's, at the behest of Sarabhai and Bhabha, the groundwork for the Indian Space Research Organization (ISRO) was laid. By 1962, India had built the Thumba Equatorial Rocket Launching Station (TERLS), and on November 21, 1963, TERLS launched its first rocket, the Nike-Apache. More successes followed and TERLS became an international site for rocket-launching.

On April 19, 1975, the first Indian satellite, "Aryabhata" (constructed by ISRO), was launched into space from a Soviet cosmodrome, Kapustin Yar. Aryabhata gathered information about the geography of outer space. The second satellite, "Bhaskara" (also built by the ISRO), was launched on June 7, 1979, again from Russia. A bigger and more durable satellite, Bhaskara weighed 44-kg and was intended to observe earth rather than outer space. It carried radiometers and infrared television cameras designed to collect data regarding hydrology, forestry, oceanography, and meteorology. The third Indian satellite, Rohini (RSI), was launched from India on July 18, 1980. Dr. APJ Abdul Kalam contributed a great deal to the development of India's first indigenous satellite launch vehicle (SLV-3).

Improvements were made to the RSI model and, on April 17, 1983, the Rohini – 2 (RSD 2) was put into Low Earth Orbit. The improved model marked the completion of the SLV – 3 series and ultimately the beginning of Augmented Satellite Launch Vehicles (ASLVs) which could hurl even larger satellites into space. Furthermore, PSLV's had the ability to place satellites in geosynchronous orbit.

One of the most notable developments in India's space exploration was the stabilized geo-stationary satellite called APPLE, developed by the Indian Space Application

Centre (ISAC) and launched from French Guyana. APPLE facilitated telecommunication, through a TV and meteorological network., and was one of the first Indian satellites of its kind. Moreover, India's Satellite Telecommunication Experiment Project (STEP) had allowed ISRO to conduct experiments in remote area communications.

India also experienced its failures within its space programs, such as its first "multipurpose satellite" INSAT – IA. It was initially built for ISRO and was intended to create momentum for a joint effort toward Operation Space System, which was planned to identify social economic objectives and national requirements utilizing telecommunication meteorology, TV relay and radio broadcasting. The satellite malfunctioned.

Another success, however, came in 1989, when Rakesh Sharma was launched into space - a first for India - on the Soviet rocket Soyuz. It was a historic moment for the country. Currently, India is preparing to launch its INSAT - D series of satellites.

History to 2031

October 10, 1967 - "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies," better known as the Outer Space Treaty, goes into effect. As of 2008, 99 countries have signed and ratified the treaty, including all nations who have sent manned and unmanned missions into space.

1975- The European Space Agency (ESA) forms with the mission: "to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens

of Europe and the world."

Summer 2009 - Pakistan clears last remaining Taliban pockets from Swat Valley and turns attention to militants along Afghani border. Robert Birsel of Reuters writes, "Some al Qaeda-linked factions of groups nurtured in the 1990s to battle Indian forces in the disputed Kashmir region have also 'gone rogue' and are attacking the Pakistani state." On June 26, the Taliban takes credit for a suicide bombing in Pakistani-administered Kashmir that kills two soldiers and wounds three. Tensions between the Taliban and Pakistan in Kashmir escalate throughout July. By the end of August, the two sides are stalemated.

September 29, 2009 - As monsoon season comes to a close, India attacks "terrorist camps" in Pakistani-administered Kashmir with 3,000 infantry supported by Indian Air Force (IAF) strike planes. Pakistan counter-attacks with 4,000 infantry and strikes IAF bases. India commits more infantry.

October 12, 2009 - Stalemated in Kashmir, India attacks Pakistan's southern plains with its three armor-heavy "Strike Corps." Within hours, Pakistan announces that it has destroyed CARTOSAT 2A, an Indian reconnaissance satellite launched on April 28, 2008. Pakistan threatens to destroy more satellites if India does not retreat. "Will India nuke Pakistan?" becomes a press cliché.

October 18, 2009 - At an emergency meeting of the United Nations Security Council, the United States harshly rebukes both India and Pakistan. Russia censures only Pakistan, while China remains silent. Nevertheless, the Security Council unanimously passes a resolution calling for

an unconditional surrender from both parties.

October 19, 2009 - India and Pakistan declare a ceasefire. Russia hosts negotiations. To Pakistan's chagrin, India is not asked to withdraw from the newly occupied regions of Kashmir. On the last day of negotiations, the Pakistani delegate signs the agreement and storms out.

December 23, 2011 - *The New York Times* reports that India has destroyed INSAT-1B, a weather satellite launched in 1983, with a kinetic kill device. The Indian government promptly takes responsibility for the test. The United States and Russia both issue critical statements calling for transparency in matters of space technology.

January 29, 2013 - India sends its first manned mission into Low Earth Orbit (LEO), three years ahead of initial estimates by the Indian Space Research Organization (ISRO). This is due in part to a series of increases in the ISRO budget, starting in 2010 and peaking in 2012. While initial estimates placed the cost of the mission at the equivalent of \$3 billion, the ISRO is (at this point) the most amply funded space agency on earth, boasting a budget of \$27.24 billion. Compare this to NASA's 2012 budget of \$20.69 billion.

August 12, 2015 - An Islamic Fundamentalist terror movement destroys the U.S. embassy in Riyadh, Saudi Arabia, with three long-range rockets stolen from a Russian installation. Including diplomats, embassy workers, and civilians, 217 people are killed. A US spy satellite picked up the launch 2 minutes and 30 seconds after its occurrence, but US fighters and missiles could not close the distance to interception.

November 21, 2015 - An August 12 incident

report filed by the US government reveals that the spy satellite's information could have been used in conjunction with interceptor missiles based in space to successfully intercept the three terrorist-launched missiles before detonation in Riyadh.

February 14, 2016 - The United States formally withdraws from the Outer Space Treaty, citing a need to defend against global and potentially space-based terrorism. Global community is suspicious. Its efforts to prevent the US from developing a space-based weapons platform, however, are futile.

December 4, 2018 - Chinese military designs two types of ground-based lasers that have the capability of rapidly destroying space machinery. Missiles are perceived by global community as a strategic deterrent to orbiting weapons platforms.

2019 - India has developed technology that can be used for hacking other countries' satellites. The technology is still at a primitive stage, so India still relies on its own satellites and resolves to use the technology rarely. Only India's government knows about this.

January 15, 2019- The ESA, which thanks to the political and economic stability of Europe, has enjoyed steady and ready funding implores other space programs to focus on space exploration. The ESA, due to its scientific focus and focused resources, had the most advanced non-weapon space technology (communication, intelligence, maneuverability)

October 2, 2019 - US completes its design and construction of the space weapons platform. It is scheduled to be operational as of July 2024. Scheduled to be sent up in

parts and assembled in space, it will require 16 separate shuttle missions before completion.

2020- The ESA announces its decade goal of sending a massive manned expedition to either Mercury or Mars.

September 29, 2020 - The United Nations General Assembly (UNGA) meets to discuss the military ambitions of the United States in space at the 75th session. Strong anti-weaponization positions are put forth by many non-spacefaring nations, but all the major spacefaring nations present (including all involved in this JCC) decline to comment extensively. Nonetheless, A/Res./75/34 is passed, recommending further review of this issue by the UN Security Council.

December 19, 2020 - UNSC quickly tables the topic after it becomes apparent that a majority of the P-5 (US/China/Russia) will not pass a resolution condemning the actions of the United States.

May 22, 2022 - Russian scientists announce breakthrough in ion acceleration technology. The technology allows for the propulsion of craft in outer space, at an efficiency never seen before. American and Russian investors pour capital into start-up ventures.

December 2022 - Russian physicist Igor Galitskiy manages to create a working plasma fusion reactor, one that delivers 20MW of sustained power. Further experiments show that the toroid fusion reactor created by Galitskiy is more powerful, efficient, and safe than the nuclear fission reactors in widespread use. Fusion looks to become the alternative energy of choice.

February 2023 - The United States, crippled by welfare spending, enters a long, deep depression. As unemployment hits 24 percent, the country's space weapons plans are tabled.

March 2023- China demands that the US renounce its plans for the completion of its space weapons platform, which was scheduled to be operational as of July 2024.

May 2023- The US declares that the completion of the space weapons platform will resume as soon as possible. At the same time, the US voices concerns about the ever expanding space arms of China and urges for a cessation.

2024- India declares its plans for its own space station.

2025 – By this time, the additional satellites launched into orbit by various nations as they achieve the capability combine with the space arms established by the US, China, and India to form considerable debris in space.

October 2025- Russia, a vehement opponent of space weapons, gains control of the global economy thanks to its toroid fusion reactor sales that make up 68 percent of the alternative energy market. The US emerges from its depression as unemployment reaches 11 percent.

March 16th 2026- The debris, which was considered not yet large enough to be problematic, strikes a Chinese satellite and destroys it. China, thinking itself to be under attack from the US, retaliates and quickly wipes out 14 US satellites.

March 17th 2026- The US, still weak from the depression and shocked by the extent of the attack, is hesitant to declare war on

China. During this lull, China realizes its mistake and starts negotiations.

April 2026- the global community, realizing a need for the restriction on China's powers, collectively condemn China and call for cessation of all Chinese space weapons. The value of the Yuan is forcibly raised, decreasing Chinese profits in its exports and lessening its hold on the global market. With the prices of the Chinese goods raised, India grabs a bigger share of the market but still remains inferior to Russia in terms of economic power.

June 2026-Russia spearheads the movement to strip China of all space weaponry. Russia calls China a "irresponsible, volatile terror upon the world." China is forced to reduce its program but refuses to acquiesce. Russia threatens of both economic and military action. Russian troops are seen training near the Chinese border.

July 2026 – The United States, the "victim" resumes its space weapons unopposed, although there is some dissent from Russia. The US works to rebuild all the satellites that were destroyed to finish its weapons platform. The US unveils a plan to create an ablation program (Laser Broom) that will clear the orbit of the debris caused by the Chinese attacks plus as well as the pre-existing masses.

2027 – The ESA announces that the destination of the decade voyage will be Mars and that preparations are ahead of schedule.

2028 – Tensions between Russia and China mount and Russia threatens both economic and military action. Russian troops are seen training near the Chinese border. Although weakened economically and militaristically,

China still possesses a space arms program slightly superior to that of the US.

2029 – India demonstrates capability of rapidly destroying space machinery.

2030 – The ESA launches a manned mission to Mars, comprising of 8 ships.

Feb 12th, 2031- The US program for ablation is complete.

Chair Positions

Lauren Villano is the Prime Minister of India.

Dennis Katsnelson is the President of India.

Delegate Positions

Atul Patel is the Minister of External Affairs. He is a firm believer in scientific research, however, looks down upon war and doesn't think that too much money should be spent.

Vijay Shah is the Minister of Defense. He thinks that there is no point to science, and that the answer is in war and fighting. Money should be utilized, especially for war.

Rohit Mehta is the Minister of Finance. Rohit shows an interest in the development of scientific research, but is not 100 percent for it. He does not like war, but if necessary, he will agree for it. He is well known for liking to spend money.

Ritika Iyer is the Minister of Commerce and Industry. She thinks that science may be helpful, but totally dislikes war. However, she does believe in making use of money to solve problems.

Sonali Gopaldaswami is the Chief of Army Staff of the Indian Army. She does not know what she thinks about science; she is neither for nor against it. As the Chief of Army Staff, she believes in her people and is an advocate for war, but thinks that money should be saved and not spent.

Krishna Ramanarayan is the Director of the Research and Analysis Wing. As the Director of Research, science is very crucial to her and fully accepts it. Based on her analysis, she thinks that war may sometimes be needed, and that money should always be used to the country's advantage.

Gurdip Singh is the Space Chief Marshall. He is against scientific research, but is for war. Although he has made up his mind for those two, he is neutral on spending money, and does not lean in any way.

Pooja Vajpayee is the Administrator of the Indian Space Research Organization. As an administrator, she trusts in the research of science and thinks that spending money is essential. However, she is not very fond of war, but if need be, she will be for it.

Aishwarya Bajwa is the Chair of the Armed Forces Advisory Council. As the Chair of the Armed Forces, Aishwarya is completely for war. She says, "Who needs scientific research and why spend money?!"

K. N. Pattabiraman is the President of the Indian Academy of Sciences. For being so into science, K. N. was chosen appropriately for his job title. He thinks that in order to have good scientific research, money needs to be spent, and less war has to go on.

Arjun Chandrasekhar is the Deputy Administrator of the Indian Space Research Organization. Arjun is a firm believer in science and its research, yet has no opinion on war and the spending of money; he is neutral on the latter two.

Salman Sharif is the Deputy Minister of Space (under Prime Minister). For him, war means everything. There is no need in science, and there's rarely a need to spend a lot of money.

Committee regulation

As the chairs of a joint crisis committee, we hope to run the committee in moderated caucus for the majority of the three days. We expect the moderated caucus to be a more open form while still maintaining a controlled setting. Since we have an entire history of a country plus additional years up to 2031 to discuss, we would like to regulate a consistent debate to continue the momentum.

However, we do not want a free-for-all atmosphere with an unmoderated caucus. An unmoderated caucus may happen occasionally on a specific request to do so with reasonable cause. We want to avoid chaos and confusion at all costs since we are only two chairs.

The speakers' list will most likely be unnecessary since we will be making decisions almost every ten minutes, and covering six months time during those ten minutes. Again, it seems more sensible to run in moderated caucus to satisfy the happy medium we hope to achieve – a structured yet mildly flexible setting.

