## 1

**The role of the ballot is to vote for the debater who proves the truth or falsity of the resolution through textual or conceptual args.**

**[a] – Inclusion. The Truth Testing role of the ballot allows for far more args then the assumed comparative worlds debate. This ROB includes all other args.**

**[b] – Reciprocity. Only way to weigh Ks and other args which test the truth of my position is the Truth Testing ROB.**

**[c] – Affirming or negating means assigning truth or falsity**

**Affirm means as per Dictionary.com – maintain as true**

**Negate means as per Dictionary.com - to deny the existence, evidence, or truth of**

**Presumption and permissibility flow aff: If I told you my name was Sid, you’d believe me. Theories are presumed true until proven false. IE. history; we can’t prove for sure that history is correct; we must presume its truth. If something has the chance or risk of being morally obligated, we should probably do it.**

**A prioris and semantics first – A priori ideas must be discussed first because they control the links to the ethics and framing issues in the comp worlds debate. Semantics too because we must understand the logic of the words we speak right now. Understanding linguistics is essential to figure out the true impacts of any claim.**

**1] – Curry’s Paradox – implies modus ponens; I say if my name is Sid, you affirm. Modus Ponens says that if the first statement is true then the second statement is true, and my name is Sid :)**

#### 2] – Aff gets 1AR theory; check back against infinite abuse from the neg. It’s DTD – DTA illogical; time skew; you can’t drop the arg if the round revolves around the arg which it does. No RVIs – illogical, baiting; people can bait theory, losing on calling out abuse makes people less comfortable to call out abuse, and you don’t win for proving you are fair. CI – race to the top for the best norms; reasonability is arbitrary and encourages judge intervention.

**3] – Principle of Explosion – [a] All movies star t.chalamet [b] Not all movies star t.chalamet [c] All movies star t.chalamet or you affirm. Since it is clear that all movies do not star t.chalamet, you affirm. Not the [a] point is considered true, and the [b] point is true, the first part of the [c] statement is false forcing, through the principle of explosion, the second part to be true, so you affirm.**

#### 4] – Contestation – Args that would contest parts of my position presuppose the validity and truth of our claims which means they are true.

#### 5] - Perf cons are independent voters. Any proven contradiction of my opponent destroys debatability because they turn into a moving target, and I don’t know which of my opponent’s points they are actually going for and which to actually attack. This creates grounds issues where I don’t know what I am debating, and time skew issues where I must give up my already limited time to either figuring out which point they mean or winning both. This decks fairness and education.

#### 6] – Reading the aff turns it into imagination in the mind which means that in some way/world the aff is already happening/happened which means the res is true.

**7] – Trivialism – All statements are true in the form that something is [a] or they are not [a] every other descriptor was just made up for semantic ease. Thus, the resolution is true.**

## 2

#### 1] Value morality

#### 2] Standard is mitigating existential risk

#### 3] Extinction first -- moral uncertainty.

**Bostrom 13** [Bostrom, Nick. “Existential Risk Prevention as Global Priority.” Existential Risk Prevention as a Global Priority, 2013, [www.existential-risk.org/concept.html./](http://www.existential-risk.org/concept.html./)] FMST

These reflections on moral uncertainty suggest an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate. **Our** present **understanding** of axiology might well be **confused**. We may not now know — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet be able to imagine the best ends of our journey. **If we are** indeed profoundly uncertain about our ultimate aims, then **we should** recognize that there is a great option **value** in preserving — and ideally improving — **our ability to** recognize value and to **steer the future** accordingly**. Ensuring** that there will be **a future** version **of humanity** with great powers and a propensity to use them wisely is plausibly the best way available to us to increase the probability that the future will contain a lot of value. To do this, **we must prevent** any **existential catastrophe**.

#### 4] Ethical policy making mitigates:

**Bostrom 2** [Bostrom, Nick. “Existential Risk Prevention as Global Priority.” Existential Risk Prevention as a Global Priority, 2013, [www.existential-risk.org/concept.html./](http://www.existential-risk.org/concept.html./)] FMST

We also note that an existential catastrophe would entail the frustration of many strong preferences, suggesting that from a preference-satisfactionist perspective it would be a bad thing. In a similar vein, **an ethical view emphasizing that public policy should be determined through informed democratic deliberation by all stakeholders would favor existential-risk mitigation if we suppose, as is plausible, that a majority of the world's population would come to favor such policies upon reasonable deliberation (even if hypothetical future people are not included as stakeholders).** We might also have custodial duties to preserve the inheritance of humanity passed on to us by our ancestors and convey it safely to our descendants.23 **We do not want to be the failing link in the chain of generations, and** **we ought not to delete or abandon the great epic of human civilization that humankind has been working on for thousands of years, when it is clear that the narrative is far from having reached a natural terminus.** Further, many **theological perspectives** deplore naturalistic existential catastrophes, especially ones induced by human activities: **If God created the world and the human species, one would imagine that He might be displeased if we took it upon ourselves to smash His masterpiece** (or if, through our negligence or hubris, we allowed it to come to irreparable harm).24 We might also consider the issue from a less theoretical standpoint and try to form an evaluation instead by considering analogous cases about which we have definite moral intuitions. Thus, for example, if we feel confident that committing a small genocide is wrong, and that committing a large genocide is no less wrong, we might conjecture that committing omnicide is also wrong.>25 **And if we believe we have some moral reason to prevent natural catastrophes that would kill a small number of people, and a stronger moral reason to prevent natural catastrophes that would kill a larger number of people, we might conjecture that** **we have an even stronger moral reason to prevent catastrophes that would kill the entire human population.**

#### 5] Ethics can’t be proven for sure i.e. debating them is infinitely regressive and pointless, and infinite ethics/worlds exist.

#### 6] Whatever Sid says is the index.

#### 7] Debate is roleplaying policy making, so we mitigate.

#### 8] All other fws collapse because we can’t not look evaluate consequences, and extinction independently outweighs.

## 3

#### Plan text: States ought to ban commercial space exploration.

#### Deep space exploration is a shared goal that prevents escalation of US-Russia tensions.

CSIS 18 [(Center for Strategic and International Studies), “Why Human Space Exploration Matters,” August 21, 2018 https://www.csis.org/blogs/post-soviet-post/space-cooperation] FMST

U.S.-Russian space cooperation continues to be a stated mutual goal. In April 2018, President Putin said of space, “Thank God, this field of activity is not being influenced by problems in politics. Therefore, I hope that everything will develop, since it is in the interests of everyone…This is a sphere that unites people. I hope it will continue to be this way.” During his statement at a recent event at CSIS, NASA Administrator Jim Bridenstine said, “[space] is our best opportunity to dialogue when everything else falls apart. We’ve got American astronauts and Russian cosmonauts dependent on each other on the International Space Station, which enables us to ultimately maintain that dialogue.” The U.S. and Russia both benefit from the ISS partnership. Russia provides transportation to the ISS for U.S. astronauts, from which Russia receives an average of $81 million per seat on the Soyuz (and recognition of its status as a space power). The U.S. also benefits from Russia’s technical contributions to the ISS while Russia benefits The U.S. and Russia signed a joint statement in 2017 in support of the idea of collaborating on deep space exploration, including the construction of the Lunar Orbital Platform-Gateway, a research-focused space station orbiting the moon. Through agreements on civilian space exploration, such as the Lunar Orbital Platform-Gateway or future Mars projects, that have clear benefits to both sides, some degree of cooperation will remain in both countries’ interest. The high price tag for pursuing space exploration alone and opportunities for sharing and receiving technical expertise encourages international partnerships like the ISS. However, at least three factors, apart from the overall deterioration of U.S.-Russia relations, threaten this cooperation. First, growth of the private sector space industry may alter the economic arrangement between the U.S. and Russia, and ultimately lower the benefits of cooperation to both countries. The development of advanced technologies by private companies will give NASA new options to choose from and reduce the need to depend on (and negotiate with) Russia. If NASA and its Russian counterpart, Roskosmos, have no need to talk with one another, they probably won’t in the face of tense political relations. The U.S. intends to use Boeing and SpaceX capsules for human spaceflight beginning in 2020, and a Congressional plan in 2016 set a phase out date of Russian RD-180 rocket engines by 2022.

#### Space missions prove vital for cooperation between Russia and The US, Biden and Putin know, first steps have already been made

Luxmoore 11/03 [U.S. and Russia Find Some Common Ground—in Space, https://foreignpolicy.com/2021/11/03/us-russia-space-cooperation-nasa-sirius/, Foreign Policy, /] FMST

MOSCOW—Ashley Kowalski has spent much of her career advancing international space cooperation at the nonprofit Aerospace Corporation in California, most recently as a project manager. Now, the 32-year-old American is going to put her passion to the test—by locking herself in a hermetically sealed capsule with five strangers for an eight-month simulated mission to space. “Throughout my life I’ve tried to marry my work in the space industry with my love for different cultures,” said Kowalski, who has done previous fellowships in Germany, Russia, and China. “So this program stood out for me.” On Nov. 4, Kowalski will join one other American, three Russians, and an Emirati inside the confined facility in a Soviet-era building on the outskirts of Moscow that’s meant to mimic as much as possible the conditions on long space journeys, including both the physiological and the psychological challenges. A barrage of daily tests will record the changes the aspiring astronauts undergo and relay the data to a team of researchers at Moscow’s Institute of Biomedical Problems, which has teamed up with NASA to launch the Scientific International Research in Unique Terrestrial Station, or SIRIUS. The project is meant to gather data on how people cope physically and mentally with long-term confinement, a necessary prelude to longer space journeys to the moon or even Mars; the data will be made available to various space agencies. The international component of the experiment is important, because scientists hope that international crews working together on land could smooth the path to eventual joint exploration of Mars. SIRIUS and similar experiments not only could pave the way for future joint missions but also show how 30 years after the end of the Cold War, and amid sharply rising tensions between Washington and Moscow, space remains a rare field of cooperation. The United States depended on Russia for years to deliver its astronauts to the International Space Station (ISS), an arrangement that bolstered Russia’s reputation as a reliable partner and ensured a steady revenue stream. In April, Russia extended its space cooperation agreement with the United States until 2030, ensuring joint work on the ISS will continue. But that has been overshadowed in recent years by Russia’s adventurism in Europe, meddling in U.S. elections, devastating cyberattacks against U.S. targets, use of the energy weapon to choke Europe, and a sudden breakdown in relations between Russia and NATO this fall. In June, at a bilateral summit in Geneva, U.S. President Joe Biden and Russian President Vladimir Putin zeroed in on common interests such as cybersecurity and arms control as a way of maintaining some cooperation, and the Biden administration has [continued](https://www.nytimes.com/2021/10/31/world/europe/biden-putin-russia-united-states.html) to look for ways to reduce tension; space also fits the bill perfectly. “There are areas where there’s a mutual interest for us to cooperate, for our people—Russian and American people—but also for the benefit of the world,” Biden said after the summit. Six folks in a tube may not be enough to defuse all the tensions between the two geopolitical rivals. But for those going inside—and the scientists watching from the outside—the stakes are still high. Humans have evolved over hundreds of millennia to thrive in an environment with oxygen, water, and gravity. NASA has spent years conducting earthbound experiments to see what happens when those basic conditions are missing, including paying people to lie in bed for months and experience the effects of muscle loss and bone degradation, which accelerates rapidly in an atmosphere of weightlessness. The SIRIUS volunteers won’t have to worry about either weightlessness or cosmic radiation. But the simulation offers them a chance to prove they have the right stuff and could meet at least some of the criteria for future travel to space. “The process is somewhat similar to astronaut selection,” said Igor Kofman of NASA’s Human Research Program, which chose the two U.S. participants and two backups for this year’s mission, known as SIRIUS-21, from a pool of hundreds of candidates. In the past, far less attention was paid to the mental well-being of the Mercury, Gemini, and Apollo crews who pioneered early space exploration in the 1960s and 1970s. With longer missions on the horizon, a good psychological fit becomes even more important. The current crop of volunteers is being evaluated on their ability to adapt to new situations they cannot change, tolerance for isolation and confinement, and the unflappability required to spend extended periods of time with relative strangers. Reinhold Povilaitis, a participant in the four-month SIRIUS mission in 2019 and now an employee of NASA’s Human Research Program, said he found it hard initially to adapt to the customs of his crew members, like the constant tea-drinking sessions of the Russians. “They may have bonded prior to going in, but they haven’t lived together,” he said of the current crop of volunteers. “And what they can tolerate at the beginning might not be the same at the end. So they find balance, hopefully, in the course of eight months.” “This is a stressful situation,” said Oleg Blinov, a 43-year-old Russian space industry worker who will serve as captain of SIRIUS-21 and be responsible for safeguarding a sociable atmosphere among members of the crew and resolving any conflicts. “If we don’t remain upbeat, it’ll be difficult to get through it.” Many previous ground simulations had only American participants, but Kofman said the international crew of SIRIUS-21 likely reflects the space crews of the future. “We’re hoping future missions will be multicultural,” he said. “That’s why it’s important to simulate those parameters and those conditions.” Those conditions include plenty of physical discomforts to go with the isolation. Most of the time an astronaut spends on the ISS is spent assembling and maintaining the spacecraft, and the SIRIUS-21 volunteers will be subject to a daily schedule that is timed to the minute and designed to counteract boredom and mimic the workload of a real space flight. Exercise is daily; showers are once a week. Food rations include freeze-dried meals and powdered substances that solidify when mixed with hot water, and bathrooms are around the size of those on a Russian train. Communication with friends and family will be limited to an occasional email. “This means being away from your family, from home comforts. That’s the sacrifice,” said Abdalla al-Hammadi, 35, a former Emirati test pilot and father of two who was chosen from around 1,000 applicants to take part in SIRIUS. The United Arab Emirates has a burgeoning space sector and plans to send its first astronauts to Mars in 2117. Hammadi hopes his involvement with SIRIUS will increase his grandson’s or great-grandson’s chances of being on that Mars mission. “I am giving this to my son, my son will give it to his son, and it will carry on,” he said. (Just before the experiment started, Hammadi learned that another Emirati volunteer would take his spot, and he would act as a backup.) The UAE’s ambitions represent a shifting of the center of gravity in the space race. Russia for decades was one of the dominant powers, and even more so after the United States wound down its Space Shuttle program. But last year, SpaceX completed the first manned orbital flight from U.S. soil in almost a decade, breaking Russia’s monopoly and ushering in a new era of competition. Delivering astronauts to space on a rocket designed and manufactured by a private U.S. company, the SpaceX launch culminated a decadeslong effort to transform space into a new sphere of capitalist competition and rattled dominant Russian state enterprises that had inherited Soviet technology. (But not Soviet-level budgets: In 2020, the [budget](https://tass.ru/ekonomika/7734535) of Russian space agency Roscosmos was around $2.4 billion at current exchange rates; NASA’s was $22.6 billion.) “From a historical point of view, Russia played a major role in space. But from today’s perspective, its influence is rapidly waning,” said Ivan Moiseyev, head of the Institute of Space Policy in Moscow. “The U.S. is an economic powerhouse in space, and Europe and China are beginning to exceed Russia in their potential.” The end goal for most of the volunteers is to participate in a real orbital flight in the years to come, with SIRIUS a preview of that ultimate challenge. But if the space simulation is not enough to qualify them, it’s all in the name of advancing science, too. “This is probably the largest amount of data from an analog data study that anybody has ever collected,” Kowalski said. “At the end of the day, we’re doing something that’ll help human space flight. Maybe being an astronaut is not part of my future, maybe I don’t stay in the space industry. But at least I know that I was part of something bigger.”

#### It’s make or break for the relationship—Ukraine, decline of US moral authority on international affairs puts us at the brink of the end of Russian diplomacy and even war

Weir 21 [(Fred Weir has been the Monitor's Moscow correspondent, covering Russia and the former Soviet Union, since 1998. He's traveled over much of that vast territory, reporting on stories ranging from Russia's financial crash to the war in Chechnya, creeping Islamization in central Asia, Russia's demographic crisis, the rise of Vladimir Putin and his repeated returns to the Kremlin, and the ups and downs of US-Russia relations). “Worse than the Cold War? US-Russia relations hit new low.“ Christian Science Monitor 4-20-2021 https://www.csmonitor.com/World/Europe/2021/0420/Worse-than-the-Cold-War-US-Russia-relations-hit-new-low] FMST

Russia’s relations with the West, and the United States in particular, appear to be plumbing depths of acrimony and mutual misunderstanding unseen even during the original Cold War.After years of deteriorating relations, sanctions, tit-for-tat diplomatic expulsions, and an escalating “information war,” some in Moscow are asking if there even is any point in seeking renewed dialogue with the U.S., if only out of concern that more talking might just make things worse. Events have cascaded over the past month. Russia’s treatment of imprisoned dissident Alexei Navalny, who has been sent to a prison hospital amid reports of failing health, underlines the sharp perceived differences between Russia and the West over matters of human rights. Meanwhile, a Russian military buildup near Ukraine has illustrated that the conflict in the Donbass region might explode at any time, possibly even dragging Russia and NATO into direct confrontation. With its relations with Washington at a nadir, Russia is eyeing a more pragmatic, if adversarial, relationship with the U.S. in the hopes of getting the respect it desires. President Joe Biden surprised the Kremlin by proposing a “personal summit” to discuss the growing list of U.S.-Russia disagreements in a phone conversation with Vladimir Putin last week. He later spoke of the need for “disengagement” in the escalating tensions around Ukraine, and postponed a planned visit of two U.S. warships to Russia-adjacent waters in the Black Sea. But days later he also imposed a package of tough sanctions against Russia, for its alleged SolarWinds hacking and interference in the 2020 U.S. presidential elections, infuriating Moscow and drawing threats of retaliation. Last month, after Mr. Biden agreed with a journalist’s intimation that Mr. Putin is a “killer,” the Kremlin ordered Russia’s ambassador to the U.S. to return home for intensive consultations, an almost unprecedented peacetime move. Over the weekend, Russian Foreign Minister Sergey Lavrov suggested that the acting U.S. ambassador to Moscow, John Sullivan, should likewise go back to Washington for a spell. On Tuesday, Mr. Sullivan announced he would do just that this week. And there is **a growing sense in Moscow** that the downward spiral of East-West ties has reached a point of no return, and that **Russia** should **consider abandoning hopes of reconciliation** with the West and seek permanent alternatives: perhaps in an intensified compact with China, and targeted relationships with countries of Europe and other regions that are willing to do business with Moscow. “Things are at rock bottom. This may not be structurally a cold war in the way the old one was, but mentally, in terms of atmosphere, it’s even worse,” says Fyodor Lukyanov, editor of Russia in Global Affairs, a Moscow-based foreign policy journal. “The fact that Biden offered a summit meeting would have sounded a hopeful note anytime in the past. Now, nobody can be sure of that. A hypothetical Putin-Biden meeting might not prove to be a path to better relations, but just the opposite. It could just become a shouting match that would bring a hardening of differences, and make relations look like even more of a dead end.” Room for discussion Foreign policy experts agree that there is a long list of practical issues that could benefit from purposeful high-level discussion. With the U.S. preparing to finally exit Afghanistan, some coordination with regional countries, including Russia and its Central Asian allies, might make the transition easier for everyone. One of Mr. Biden’s first acts in office was to extend the New START arms control agreement, which the Trump administration had been threatening to abandon, but the former paradigm of strategic stability remains in tatters and requires urgent attention, experts say. “If you are looking for opportunities to make the world a safer place through reason and compromise, there are quite a few,” says Andrey Kortunov, director of the Russian International Affairs Council, which is affiliated with the Foreign Ministry. “There are also some areas where the best we could do is agree to disagree, such as Ukraine and human rights issues.” The plight of Mr. Navalny, which has evoked so much outrage in the West, seems unlikely to provide leverage in dealing with the Kremlin because – as Western moral authority fades – Russian public opinion appears indifferent, or even in agreement with its government’s actions. Recent surveys by the Levada Center in Moscow, Russia’s only independent pollster, found that fewer than a fifth of Russians approve of Mr. Navalny’s activities, while well over half disapprove. An April poll found that while 29% of Russians consider Mr. Navalny’s imprisonment unfair, 48% think it is fair. Russian opposition figure Alexei Navalny, shown here during a hearing in the Babuskinsky District Court in Moscow Feb. 12, 2021, is in poor health amid his hunger strike while in prison in Russia. He was recently moved to a prison hospital. Tensions around the Russian-backed rebel republics in eastern Ukraine have been much severer than usual, with a **spike in violent incidents** on the front line, a **demonstrative Russian military buildup** near the borders, and **strong U.S. and NATO affirmations** of support for Kyiv. The Russian narrative claims that Ukrainian President Volodymyr Zelenskiy triggered the crisis a month ago by signing a decree that makes retaking the Russian-annexed territory of Crimea official Ukrainian state policy. Mr. **Zelenskiy** has also **appealed to** the U.S. and Europe to **expedite Ukraine’s membership** in NATO, which Russia has long **described as** a “red line” that would lead to war. But Russian leaders, who have been at pains to deny any direct involvement in Ukraine’s war for the past seven years, now say openly that **they will fight to defend the two rebel republics**. Top Kremlin official Dmitry Kozak even warned that if conflict erupts, it could be “the beginning of the end” for Ukraine. “This is a very desperate situation,” says Vadim Karasyov, director of the independent Institute of Global Strategies in Kyiv. “We know the West is not going to help Ukraine militarily if it comes to war. So we need to find some kind of workable compromises, not more pretexts for war.” Time to turn eastward? In this increasingly vexed atmosphere, the Russians appear to be saying there is no point in Mr. Putin and Mr. Biden meeting unless an agenda has been prepared well in advance, setting out a few achievable goals and leaving aside areas where there can be no agreement. “Russia isn’t going to take part in another circus like we had with Trump in Helsinki in 2018,” says Sergei Markedonov, an expert with MGIMO University in Moscow. “What is needed is a deeper dialogue. That could begin if we had a real old-fashioned summit between Biden and Putin, one that has been calculated to yield at least some positive results. We need to find a modus vivendi going forward, and the present course is not leading there.” Alternatively, Russia may turn away from any hopes of even pragmatic rapprochement with the West, experts warn. Mr. Lukyanov, who maintains close contact with his Chinese counterparts, says they felt blindsided at a summit with U.S. foreign policy chiefs in Alaska last month, when what they expected to be a practical discussion of how to overcome the acrimonious Trump-era legacy in their relations turned into what they saw as a U.S. lecture about how China needs to obey the “rules-based” international order. “It was the **Chinese, in the past, who were very cautious about participating” in anything that looked like an anti-Western alliance**, says Mr. Lukyanov. “We are hearing a new tone from them now. Now our growing relationship with China isn’t just about compensating for a lack of relations with the U.S. It’s about the need to build up a group of countries that will resist the U.S., aimed at containing U.S. activities and policies that are harmful to our two countries.”

#### Conflict is in danger of going nuclear – Cold War but worse

**Simon 19** [Saradzhyan, Simon. “How High Is Risk of Nuclear War between Russia and US?” Belfer Center for Science and International Affairs, Belfer Center for Science and International Affairs, 6 Aug. 2019, [www.belfercenter.org/publication/how-high-risk-nuclear-war-between-russia-and-us./](http://www.belfercenter.org/publication/how-high-risk-nuclear-war-between-russia-and-us./)] FMST

However contestable the points in Moniz’s and Nunn’s scenario, that does not mean we should be complacent about the growing risk of nuclear war. In fact, a number of experts concur with the risk assessment made by Nunn and Moniz (the latter has made such an assessment on a [number](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=2ahUKEwjM6_aY3e7jAhUy1lkKHQo8Cd0QFjADegQIBBAB&url=https%3A%2F%2Fwww.axios.com%2Fobama-ernest-moniz-iran-deal-nuclear-weapons-risk-e9f84165-6e41-4fb6-85de-a2ba94bfd297.html&usg=AOvVaw27v5vXtJ5cnyABSTwbHueT) of [prior occasions](https://www.theguardian.com/world/2018/feb/15/nuclear-weapons-ernest-moniz-accident-risk), too). For instance, **Ambassador William Burns** of the Carnegie Endowment for International Peace has [reportedly](https://www.express.co.uk/news/world/1076617/world-war-3-nuclear-tensions-cuban-missile-crisis-russia-usa-china-inf-treaty-davos) assessed that **nuclear tensions** are **now at** their **highest point** **since the** October 1962 **Cuban Missile Crisis**, while some go back even further. For instance, Director of the U.N. Institute for Disarmament Research Renata Dwan has [stated](https://www.businessinsider.com/risk-of-nuclear-war-now-highest-since-ww2-un-arms-research-chief-says-2019-5) earlier this year that “**the risks of the use of nuclear weapons … are higher now than at any time since World War II**." Former U.S. Secretary of Defense William Perry is also apprehensive about that risk. Perry has warned that “because of the **ongoing hostility between the U.S. and Russia**, we are recreating the conditions that could **lead to a nuclear war** by miscalculation.” “Today, just as in the Cold War, we face the possibility of an accidental war destroying our civilization,” he [wrote](https://thehill.com/blogs/pundits-blog/foreign-policy/330418-have-we-forgotten-the-cold-war-nuclear-threat-more-real). Professor Timothy Colton of Harvard University has also [warned](https://books.google.com/books?id=CPxUswEACAAJ&dq=everybody+loses&hl=en&sa=X&ved=0ahUKEwjw7uuaw-3dAhWhmeAKHZaeBaIQ6AEIOjAE) that “there is a **very real risk of** returning to a time when miscalculations in Moscow or Washington can at any moment lead to **the destruction of life** on earth.” In addition, Stephen Cohen of New York University has [warned](https://www.thenation.com/article/cold-war-russia/) of the “**looming danger of war with Russia**” and so [have](https://www.washingtonpost.com/opinions/were-as-close-to-doomsday-today-as-we-were-during-the-cold-war/2018/01/25/181ae8aa-0145-11e8-8acf-ad2991367d9d_story.html?utm_term=.03ec995881da) Lawrence Krauss and Robert Rosner of the Bulletin of the Atomic Scientists (though the last two did not specify with what country). On the Russian side, foreign policy expert Sergei Karaganov has [stated](https://eng.globalaffairs.ru/number/Taking-a-New-Look-at-Nuclear-Peace-18752) that in his view the risk of war is increasing, and “in many ways, it is more dangerous than it was in the last twenty-five years of the Cold War era.” Russian Deputy Foreign Minister Sergei Ryabkov has also warned that U.S. deployment of land-based missile systems near Russia’s borders after the [demise of the INF Treaty](https://www.russiamatters.org/analysis/expert-survey-nuclear-arms-control-dead-or-can-new-principles-guide-it) could lead to a stand-off comparable to the Cuban Missile Crisis. “We could find ourselves in a situation where we have a rocket crisis close not just to the crisis of the 1980s, but close to the Caribbean crisis,” Ryabkov said.

#### Nuke war causes extinction AND outweighs other existential risks

* Checked

PND 16 [internally citing Zbigniew Brzezinski, Council of Foreign Relations and former national security adviser to President Carter, Toon and Robock’s 2012 study on nuclear winter in the Bulletin of Atomic Scientists, Gareth Evans’ International Commission on Nuclear Non-proliferation and Disarmament Report, Congressional EMP studies, studies on nuclear winter by Seth Baum of the Global Catastrophic Risk Institute and Martin Hellman of Stanford University, and U.S. and Russian former Defense Secretaries and former heads of nuclear missile forces, brief submitted to the United Nations General Assembly, Open-Ended Working Group on nuclear risks. A/AC.286/NGO/13. 05-03-2016. <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/Documents/NGO13.pdf> //Re-cut by Elmer]

Consequences human survival 12. Even if the 'other' side does NOT launch in response the smoke from 'their' burning cities (incinerated by 'us') will still make 'our' country (and the rest of the world) uninhabitable, potentially inducing global famine lasting up to decades. Toon and Robock note in ‘Self Assured Destruction’, in the Bulletin of Atomic Scientists 68/5, 2012, that: 13. “A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self assured destruction. Even a 'small' nuclear war between India and Pakistan, with each country detonating 50 Hiroshima-size atom bombs--only about 0.03 percent of the global nuclear arsenal's explosive power--as air bursts in urban areas, could produce so much smoke that temperatures would fall below those of the Little Ice Age of the fourteenth to nineteenth centuries, shortening the growing season around the world and threatening the global food supply. Furthermore, there would be massive ozone depletion, allowing more ultraviolet radiation to reach Earth's surface. Recent studies predict that agricultural production in parts of the United States and China would decline by about **20 percent** for four years, and by 10 percent for a decade.” 14. A conflagration involving USA/NATO forces and those of Russian federation would most likely cause the deaths of most/nearly all/all humans (and severely impact/extinguish other species) as well as destroying the delicate interwoven techno-structure on which latter-day 'civilization' has come to depend. Temperatures would drop to below those of the last ice-age for up to 30 years as a result of the lofting of up to 180 million tonnes of very black soot into the stratosphere where it would remain for decades. 15. Though human ingenuity and resilience shouldn't be underestimated, human survival itself is arguably problematic, to put it mildly, under a 2000+ warhead USA/Russian federation scenario. 16. The Joint Statement on Catastrophic Humanitarian Consequences signed October 2013 by 146 governments mentioned 'Human Survival' no less than 5 times. The most recent (December 2014) one gives it a highly prominent place. Gareth Evans’ ICNND (International Commission on Nuclear Non-proliferation and Disarmament) Report made it clear that it saw the threat posed by nuclear weapons use as one that at least threatens what we now call 'civilization' and that potentially threatens human survival with an immediacy that even climate change does not, though we can see the results of climate change here and now and of course the immediate post-nuclear results for Hiroshima and Nagasaki as well.

## 4

#### Government space exploration is essential to CCP authority

**CSIS 14** [Lewis, James Andrew. “Space Exploration in a Changing International Environment.” Space Exploration in a Changing International Environment | Center for Strategic and International Studies, CSIS, 4 July 2014, [www.csis.org/analysis/space-exploration-changing-international-environment](http://www.csis.org/analysis/space-exploration-changing-international-environment).] FMST

Manned spaceflight demonstrates to China’s neighbors the seriousness of China’s claim to regional leadership and makes the point that under the party’s leadership, China has arrived as a world leader. The manned space capsule Shenzhou 6 carried seeds from Tai- wan in a symbolic assertion of China’s sovereignty over the island. **China sees its space programs** as a strategic activity **to gain political** and military **advantage**, but the **primary purpose** of China’s manned space program is political. For China, it is especially important to show that it has reclaimed its place among the leading nations of the world. China’s successes in space reinforce its claims to regional dominance by demonstrating that it is the most advanced among Asian nations, with technology and resources that others cannot match. The manned **space program** also serves an **important domestic political purpose by enhancing the legitimacy of the Communist Party**. **China’s leaders need** and use manned **spaceflight** in a way that other nations do not, **to reinforce the political legitimacy** of the party and show the Chinese people the progress the party is making in restoring China’s global position. This ensures that **China’s space pro- gram has greater political support by national leaders** than is the case in other countries.

#### Government good because China’s space groups are public which allows them to keep domestic power.

**Hines 5/7** [Hines, Lincoln R. “Can China's Commercial Space Sector Achieve Lift off?” East Asia Forum, 7 May 2021, [www.eastasiaforum.org/2021/05/05/can-chinas-commercial-space-sector-achieve-lift-off/](http://www.eastasiaforum.org/2021/05/05/can-chinas-commercial-space-sector-achieve-lift-off/).] FMST

**China’s space industry** is **dominated by** two **state-owned enterprises** (SOEs): the China Aerospace Science and Industry Corporation (CASIC) and the China Aerospace Science and Technology Corporation (CASC). These massive **SOEs and their subsidiaries have allowed China to send humans into outer space** and a probe to the far side of the Moon. Like in the United States, the emergence of commercial space companies — **those which seek profits rather than simply implementing government goals** — is changing the landscape of China’s space industry. By focusing on private investment, **commercial space companies may be more agile** than SOEs in navigating market pressures, and thus produce more cost-effective and innovative capabilities. For example, in the **United States, SpaceX has pioneered** reusable rocket technology which [could reduce](https://www.inverse.com/innovation/spacex-elon-musk-falcon-9-economics) costs for spaceflight. But critics [claim](https://foreignpolicy.com/2019/08/22/america-is-losing-the-second-space-race-to-china/) **the opposite is happening** in China. **Propped up by the state**, Chinese **companies** are **insulated from market pressures**. This protection might even allow Chinese space companies to provide more affordable launches, satellites and imaging services than their genuinely private American counterparts. But the reality is more complex than either of these arguments suggest. [China’s commercial space sector](https://www.ida.org/-/media/feature/publications/e/ev/evaluation-of-chinas-commercial-space-sector/d-10873.ashx) consists of state-owned, mixed-ownership and private companies. Many of these **companies** are also **supported by** provincial **governments** rather than Beijing, which provides for considerable autonomy in their operations. **China’s commercial space companies** play a largely **complementary role to government-sponsored activity.** Whereas SOEs are tasked with [high-profile projects](https://www.eastasiaforum.org/2020/06/05/lm-5-and-lm-5b-giant-leaps-for-chinas-space-dream/) such as landing on the [Moon](https://thediplomat.com/2019/01/coping-with-the-challenge-of-chinas-growing-space-power/) and [Mars](https://www.worldpoliticsreview.com/articles/29004/china-s-space-program-is-driven-by-a-desire-for-prestige-not-military-might), commercial companies fill niche gaps overlooked by state players. The majority of Chinese space companies focus on building satellites and their components, including microsatellites and small satellite constellations in low Earth orbit. Exceptions include the firms Landspace, iSpace and OneSpace, which focus on small launch vehicles. Yet, expanding beyond this marginal role in China’s overall space ecosystem may bring China’s private space companies into competition with the **SOEs that currently dominate the industry**. Insulated from market pressures, these SOEs tilt the playing field to their advantage over commercial space companies. And although it may be in China’s economic interests to increase competition domestically, it is **hard to imagine the** Chinese Communist Party (**CCP**) **abandoning** its **national champions, which have allowed it to accrue prestige** with domestic audiences.

#### Companies which are all public are a way for China to gain prestige and governmental support.

**Mitter and Johnson 21** [Rana Mitter and Elsbeth Johnson, [Rana Mitter](https://hbr.org/search?term=rana%20mitter&search_type=search-all) is a professor of the history and politics of modern China at Oxford. [Elsbeth Johnson](https://hbr.org/search?term=elsbeth%20johnson&search_type=search-all), formerly the strategy director for Prudential PLC’s Asian business, is a senior lecturer at MIT’s Sloan School of Management and the founder of SystemShift, a consulting firm. May-June 2021, "What the West Gets Wrong About China," Harvard Business Review, [https://hbr.org/2021/05/what-the-west-gets-wrong-about-china accessed 12/14/21](https://hbr.org/2021/05/what-the-west-gets-wrong-about-china%20accessed%2012/14/21)] Adam

In China, however, growth has come in the context of stable communist rule, suggesting that democracy and growth are not inevitably mutually dependent. In fact, many Chinese believe that the country’s recent economic achievements—large-scale poverty reduction, huge infrastructure investment, and development as a world-class tech innovator—have come about because of, not despite, China’s authoritarian form of government. Its aggressive handling of Covid-19—in sharp contrast to that of many Western countries with higher death rates and later, less-stringent lockdowns—has, if anything, reinforced that view.

China has also defied predictions that its authoritarianism would inhibit its capacity to [innovate](https://hbr.org/2011/06/what-the-west-doesnt-get-about-china). It is a global leader in AI, biotech, and space exploration. Some of its technological successes have been driven by market forces: People wanted to buy goods or communicate more easily, and the likes of Alibaba and Tencent have helped them do just that. But much of the technological progress has come from a highly innovative and well-funded military that has invested heavily in China’s burgeoning new industries. This, of course, mirrors the role of U.S. defense and intelligence spending in the development of Silicon Valley. But in China the consumer applications have come faster, making more obvious the link between government investment and products and services that benefit individuals. That’s why ordinary Chinese people see Chinese companies such as Alibaba, Huawei, and TikTok as sources of national pride—international vanguards of Chinese success—rather than simply sources of jobs or GDP, as they might be viewed in the West.

Thus July 2020 polling data from the Ash Center at Harvard’s Kennedy School of Government revealed 95% satisfaction with the Beijing government among Chinese citizens. Our own experiences on the ground in China confirm this. Most ordinary people we meet don’t feel that the authoritarian state is solely oppressive, although it can be that; for them it also provides opportunity. A cleaner in Chongqing now owns several apartments because the CCP reformed property laws. A Shanghai journalist is paid by her state-controlled magazine to fly around the world for stories on global lifestyle trends. A young student in Nanjing can study propulsion physics at Beijing’s Tsinghua University thanks to social mobility and the party’s significant investment in scientific research.

#### Privatization threatens declining CCP credibility which is disastrous. Declining credibility causes Taiwan war

**Blumenthal 20** [Dan Blumenthal, senior fellow and the director of Asian studies at the American Enterprise Institute9-28-2020, "China's aggressive tactics aim to bolster the Communist Party's legitimacy," American Enterprise Institute - AEI, <https://www.aei.org/articles/chinas-aggressive-tactics-aim-to-bolster-the-communist-partys-legitimacy/>] FMST

Why does China seem to be on the warpath? In the first half of the 2020, Chinese soldiers killed dozens of Indian troops over disputed borders, sank a Vietnamese fishing vessel, and launched a record number of incursions into Taiwanese airspace. Beyond military coercion, China’s belligerence included selling arms to Serbia despite concerns expressed by NATO about military dependence, pressuring the WHO to censor anti-China content, and sentencing a Canadian national to death. and placing crushing tariffs on Australia for criticizing Beijing’s handling of the coronavirus. The prevailing wisdom is that Beijing is more aggressive now because it is ascendant and the United States is distracted and declining. This “Chinese ascendancy school” argues that President Xi Jinping has successfully consolidated domestic power and built China’s military and economic might to enable his vision of an aggressive, revisionist foreign policy. But this account is **overly-simplistic**: **Chinese aggression is not merely a result of China’s** strength, but also of its weakness. Xi Jinping’s **overwhelming concern** with **domestic stability**, the **C**hinese **C**ommunist **P**arty**’s** (CCP) **legitimacy** and **party unity** are **crucial drivers** of **China**’s **bellicosity**. China has faced two disasters in 2020—the coronavirus and historic floods—which exposed its fragilities and created internal unrest. Its response to both was the same: escalating aggression against its neighbors. China’s economic and military power made these provocations possible, but its need to suppress internal divisions made them necessary. The question is not why China has disputes with neighbors, but why now. If China’s aggression were only a result of its economic and military strength, then it could have paused its aggressive foreign policy as the political leadership back in Beijing refocused on dealing with the destructive wages of the coronavirus. Typically, governments in chaos have little time for adventurism abroad and must focus on remedies at home. In fact, many experts predicted that China would **face inward** during 2020, to focus on restarting economic growth and preventing new coronavirus cases. Yet for the CCP, external aggression is a necessary tool to combat internal weakness. The CCP is obsessed with its fragilities, such as the threat of losing popular support and legitimacy and demands for more justice and freedoms. When Chinese people criticize their government, China must act more **aggressively** abroad. Beijing uses external aggression to fan Chinese **nationalism** and cast the CCP as the protector of the people and champion of a new era of Chinese glory. Coronavirus was a true moment of weakness for the CCP, as it exposed fissures in China’s overcentralized authoritarian political system to light. A now-infamous example of Chinese paranoia over potentially out-of-control domestic crises was the case of Dr. Li Wenliang. On February 7, Li, a doctor who warned of the coronavirus but was quickly censored by the Wuhan police, died from the virus himself. Li’s death quickly became the top trending topic on Chinese social media with hashtags such as “We want freedom of speech.” The CCP censored all mentions of Li or any coronavirus failings, fearing more organized protests. Simultaneously, the coronavirus battered China’s economic growth, which underpins the CCP’s claim to legitimacy, with an unprecedented 6.8 percent Q1 contraction. Far from the unified front which Beijing seeks to project, the coronavirus revealed the CCP’s dysfunction. For example, Dali, a midsize city, intercepted and distributed a shipment of surgical masks headed to the hard-hit municipality of Chongqing. Similarly, the City of Qingdao instructed customs officials to hold on to a shipment of masks and medical products headed to Shenyang. At the same time, Hong Kong dealt the CCP a major political embarrassment when it halted traffic coming in from the mainland. These reports demonstrate the government’s inability to enforce basic order among competing cities and provinces. In response to the tumult caused by the coronavirus crisis, the CCP mobilized popular support by **reigniting conflicts** with its neighbors. On April 2, during the peak of the coronavirus, a Chinese maritime security vessel sank a Vietnamese fishing boat near the Parcel islands. Just two weeks later on April 16, China escalated a month’s long standoff with Malaysia by deploying the coast guard to a disputed oil shelf. China also stepped up its military activities targeting Taiwan—who’s coronavirus response was strong and effective—with as many as three incursions in a single week in June. These episodes were widely condemned by the international community, but greeted with nationalist revelry at home. The need to project strength and unity domestically explains the timing of China’s border dispute with India. In May, violent brawls broke out between Chinese and Indian soldiers near Sikkim. On June 15, the Indian government reported that twenty Indian soldiers were killed by Chinese soldiers in the Galwan River Valley, a disputed border region controlled by India but claimed by China. The CCP has made full use of the crisis to rally nationalism. China’s foreign ministry issued statements blaming India for the clashes and state-propaganda popularized the slogan “China is not afraid.” The Global Times, a propaganda outlet, cast the clashes as an Indian invasion, saying “India has illegally constructed defense facilities across the border into Chinese territory in the Galwan Valley region.” Importantly, Chinese state-owned news outlets were also running news about India’s poor coronavirus response at the time, in contrast to its own “successes.” The recent border clashes mirror China’s 2017 standoff with India at Doklam, a strategic point near Bhutan. During the conflict, Foreign Minister Wang Yi made statements that cast the conflict as an Indian attack upon China, and state media circulated images from the 1962 Sino-Indian War, to remind the China populace that Beijing had defeated Delhi before. The India clashes coincided with another threat to CCP legitimacy: a fight to remove pro-democracy advocates from the Hong Kong Legislative Council. China ended up harshly cracking down on the supposedly autonomous city as well. Understanding China’s weaknesses is essential for policymakers attempting to make sense of its aggression. This dynamic is not only a Xi Jinping phenomenon: China’s modern history shows that domestic crises are often followed by belligerence. A study that pre-dated Xi’s rule, with a dataset of over three thousand interactions between the United States and China, found that the CCP was twice as likely to initiate disputes when the Shanghai Stock Exchange (SSE) experienced a substantial drop. The SSE is a barometer of elite sentiment in China because the government pledges to protect elite investments and uses SSE listings to reward party insiders. Insight into the CCP’s domestic political objectives helps determine the magnitude of the conflict and appropriate response. The editor of the Global Times wrote that a belligerent foreign policy was “necessary to satisfy the Chinese people.” Policymakers can use history to deduce what levels of aggression are “necessary” for the CCP’s goals. In India, it is unlikely that clashes will escalate into invasion because the current skirmishes satisfy the CCP’s purpose of bolstering legitimacy. However, Taiwan may be in particular **danger** from China’s reactionary aggression. This is because the ways in which conflict with Taiwan would **bolster the CCP’s legitimacy** align more closely with more violent coercion—reunification is a **core element** of the CCP’s platform and Taiwan’s clear success fighting the coronavirus is a **major blow** to Beijing’s legitimacy. Because **Taiwan’s “threat” to the CCP stems from its mere existence**, it is particularly vulnerable to reactionary aggression. Xi is a self-proclaimed follower of Mao. So, the 1958 Taiwan Strait Crisis is a powerful example; Mao needed to generate support for the great leap forward and deflect criticism from poor economic growth. To stir the nation, Mao seized islands controlled by Taiwan and threatened an invasion of the country until restrained by American nuclear brinksmanship. Over the last three months, China has faced another crisis in the form of historic floods. The Yangtze river basin has been inundated, affecting sixty-three million Chinese and inflicting over twenty-five billion dollars in direct damages. Many Chinese have raised concerns that the government’s massive infrastructure projects have worsened the crisis by draining wetlands and promoting development in flood-prone areas. Poor transparency has stirred more backlash as the CCP has been accused of hiding the extent of damages and censoring criticism. One political commentator in Beijing even predicted that the “Chinese public will question Beijing from this year’s continuous natural and man-made disasters, and even question China’s governance model and its effectiveness.” Instead of hoping that the crisis created by the current floods will give China’s neighbors breathing space, the United States should brace itself for the possibility of renewed aggression. The CCP must prove its worthiness to the tens of millions of displaced people across China, making it prone to lashing out. Taiwan may be an appealing target; it has been spared from flooding and has been visible in assisting neighboring countries like Japan with post-flood reconstruction. Already, China has begun live-fire sea-crossing drills near Taiwan. Recognizing the nature of the problem is the first step to successfully confronting China’s threats. China’s aggression is enabled by its power but motivated by its fragility. The coronavirus crisis makes it clear that the CCP views external aggression as a key tool to shore up its domestic support and legitimacy. Instead of viewing China’s aggressions merely as a “natural” function of its supposedly inevitable ascendency, neighbors, policymakers should start examining China’s weaknesses for signs of looming threats. The United States and its allies can both better prepare for onslaughts of aggression and devise better deterrent policies.

#### Taiwan war goes nuclear

**Sweeney 21** [Sweeney, Mike. “Why a Taiwan Conflict Could Go Nuclear.” Defense Priorities, Defense Priorities, Mar. 2021, [www.defensepriorities.org/explainers/why-a-taiwan-conflict-could-go-nuclear](http://www.defensepriorities.org/explainers/why-a-taiwan-conflict-could-go-nuclear).] FMST

The preferred U.S. style of warfare—to conduct attacks deep throughout an enemy’s territory rather than simply meeting them at a forward line of engagement—also presents problems and contains the prospect that non-nuclear strikes might **unintentionally trip Chinese redlines regarding nuclear use**. Within the U.S. academic community, this has produced a small, but important body of literature focused on the subject of “entanglement,” or the co-mingling of systems with both conventional and nuclear applications.48 This discussion has primarily focused on China’s ballistic missile force, as most of its systems are capable of firing both nuclear and non-nuclear warheads.49 China’s increasing reliance on road-mobile ICBMs (such as the DF-31 variants and the new DF-41) complicates this problem, creating the potential for their misidentification as shorter-range systems, such as the road-mobile DF-21 and DF-26, that might be used against U.S. ships or regional bases.50 **Analysts have also expressed concern over the potential for U.S. forces to inadvertently sink a Chinese SSBN as part of its ASW campaign during a Taiwan conflict**, a fear that echoes similar worries from the U.S.-Soviet struggle.51 Recall again the **private comments of Chinese officials** about conventional attacks on nuclear systems **nullifying its NFU policy.** Entanglement issues are far from the whole of the problem. There is still a fundamental misreading—perhaps on both sides—of the ability to manage escalation in Taiwan contingencies for reasons beyond strict operational matters. The very fact of China attempting something as complex and challenging as an amphibious invasion of an island of 24 million people would show an unwelcome tolerance for risk. For that matter, U.S. efforts to defend said island—halfway around the world on another nuclear power’s doorstep—also shows a fair amount of audacity. Put differently, the **act of aggression against Taiwan** and the effort to repel such an attack both demonstrate that **each side** is **willing to take actions** which could be viewed as **inherently risky**. Through that lens, the additional step to unwanted **nuclear escalation is not a great leap**. States act rationally, right up until they do not. In considering how a Taiwan contingency would play out, it would therefore be prudent to assume that **nuclear use is** more **viable** than cold assessments of each side’s pre-conflict intentions suggest. If academic surveys of Chinese strategic literature are correct, overoptimism on the ability to manage **escalation** once hostilities commence is **not confined** to the U.S. side.52 The summation to the issues discussed in this paper is thus not a traditional list of hard policy recommendations but more the urging of a specific mindset moving forward. While all those attempting to think through U.S. policy on Taiwan should be commended for contributing to the debate, the starting and end point for such discussions must be strategic stability between the United States and China. **Nuclear issues**—more than any other aspect—**have to be foremost** as the United States reexamines strategic ambiguity and debates defense planning options for Taiwan. To do **otherwise is ultimately faulty policymaking.**

#### Nuke war causes extinction: cross apply PND 16 which proves

## 5

#### Unchecked Commercial Appropriation causes Space Conflicts.

Perez 21 Veronica Delgado-Perez. 12/14/21. Argument | The Commercialization of Space Risks Launching a Militarized Space Race. <https://www.theintlscholar.com/periodical/12/14/2020/analysis-commercialization-space-risk-international-law-military-space-race> [Veronica Delgado-Perez is a Staff Writer at The International Scholar.] // CVHS SR

Fundamentals of the Final Frontier It is a geopolitical imperative to determine what, if any, commercial activities and use of extraterrestrial resources are permitted within the confines of international law. Without clear-cut agreements on what activity is recognized by international law, the world will undoubtedly see states push the boundaries ever further in an attempt to gain the edge over geopolitical competitors — even more-so in an era of renewed great power competition. Yet to date, there exists no comprehensive treaty or legal reference to commercial activity in space. However, this should come as no surprise. It has only been since the turn of the century that technology and markets have progressed to the point where commercial space exploration and exploitation has become possible. Only recently have experts and analysts of geopolitics and international law begun to seriously examine questions surrounding the legal framework that would govern extraterrestrial resource-mining and other commercial activities. In the last decade, the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) dealt with commercial aspects in outer space. In one of their last reports, the Committee expressed that the era of the commercial utilization of outer space’s resources is intrinsically linked to the escalation of international competition over resources, which could threaten international peace and security. By encouraging the international community to engage in outer space’s activities for the benefit of humankind as a whole, “some delegations” have expressed that states should avoid the promotion of laws and regulations related to the commercialization of outer space, arguing that it should be considered the heritage of all humanity. In that regard, states must then ensure that domestic law on the use of outer space complies with international space law, which means that states should respect the principles outlined in the Outer Space Treaty and ensure that national regulations do not contravene international provisions. Even though the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (which entered into force in 1967), refers to the exploration and use of outer space, it does not address questions of a commercial nature, which compromises the ability of states and international actors to address new challenges to extraterrestrial activities. In several provisions, the treaty highlights that these activities may be carried out for peaceful purposes and the benefit of all people, reaffirming that outer space is not subject to national appropriation. Were outer space not considered a global commons, that would imply that the resources and results of commercial exploration may fall within the jurisdiction of a country. It is thus incumbent upon Washington — and its commercial enterprises — to demonstrate how American commercial exploration of space benefits other countries and complies with international space law, or otherwise to adhere to the spirit of past treaties which emphasize the impartiality of outer space until such time as the law is clarified. International Law is Adrift in Space The potential benefits of commercial space exploration cannot be ignored. From an economic standpoint, the space industry would generate a significant economic boon for both states and private companies, due to the abundance and variety of resources — particularly scarce minerals that are difficult to extract on Earth. As one example of the vastness of resources held in outer space, one asteroid has the potential to contain more than the total supply of platinum extracted throughout the history of mankind. It may very well open the door to an advanced era of space navigation, building extraterrestrial infrastructure that facilitates the exploration and use of space’s resources, and extra-planetary human habitation. Inevitably, there are significant drawbacks to the commercialization of space exploration. These can vary, for instance, from the commercial dominance of space’s natural resources only by those states with the technical and financial capital to support space missions, to geopolitical competition over extraterrestrial resources that threatens world peace and security, to the potential for the monopolization of extraterrestrial resources by states and private companies. As was the case during the Cold War, the Soviet Union and the United States began a Space Race in which they struggled to achieve supremacy in space exploration and domination of science. Today, the number of space powers has increased thanks to continual advancements in flight, combustion, and fueling technologies. In the three decades since the end of the Cold War, technologically advanced countries like China, Japan, and France which previously had no space program have successfully navigated to the top tier of space-faring agencies and programs. In 2018, the U.S. allocated $41 billion to space programs, followed by China at $5.8 billion, and Russia at $3.1 billion. Collectively, the three major space powers control almost 65% of the global industry, showing space powers are monopolizing space and reinforcing the inequality gap between states that do not have sufficient economic and technological capacity to invest. With new actors on the game stage, conflicts of interest may arise. There is a risk that each actor adopts a kind of short-term Realist approach to space policy — one which is driven by self-interest in reaping the greatest benefits of extraterrestrial exploration and commercialization while controlling access to others. If unmitigated, states may choose to militarize outer space to gain a strategic edge over competitors and adversaries. This process has already begun. Under the Trump administration, the Pentagon established the U.S. Space Force as a new branch of the Armed Forces to protect the country and allied interests in space. Already, Delta 4 — one of the U.S. Space Force’s missions — conducts strategic and theater missile warnings, manages weapon systems, and provides information to missile defense forces. The measure shows that for the U.S., outer space is not only a domain of scientific exploration but has the potential to become increasingly securitized. With the impending expiration of the Strategic Arms Reduction Treaty (START) between the U.S. and Russia on February 5, 2021, a number of security dilemmas could arise. If the world’s two largest nuclear powers do not edge toward extending the treaty, Washington and Moscow risk returning to the era of unrestricted expansion of launch platforms and strategically-deployed nuclear warheads — potentially with the aid of military infrastructure in space. Although President-elect Biden has expressed his interest in negotiating an extension of New START, how Moscow and Washington might proceed remains an open question. Bilateral progress towards a new arms-control regime would require establishing limits on the number and range of long- and mid-range missiles, establishing measures to limit the expansion of traditional missile deployment to space, and banning the deployment of nuclear weapons and weapons of mass destruction in outer space. More than the risk of the securitization of space, state, and private actors could begin to claim exclusive legal rights over the resources they discover. Indeed, the U.S. Commercial Space Launch Competitiveness Act, which came into force in 2015, expressly recognizes the right of U.S. Citizens to possess, own, transport, use, and sell space resources. By this means, domestic law already acknowledges the legal claim to property by individuals, which is prohibited by international law. Under the Outer Space Treaty, states renounced any traditional form of acquisition of territories and agreed not to foray unilaterally into space to extend their national policies on Earth or to exercise any kind of sovereignty over celestial bodies or resources. The absence of a modern international treaty that addresses these issues should be received with grave concern, as there is significant potential for risk to become reality. Existing UN treaties lack the technological context and foresight to address legal questions regarding the potential for commercial exploration and exploitation of outer space or its resources. During the sixties and seventies, when international instruments like the Outer Space treaty were conceived, the principal aim of states was to support and expand the scale of the state’s national capacity for operation in space and the development of legal instruments to guide state’s international cooperation in the peaceful exploration of outer space. These instruments were never designed to respond to commercial questions over mining or tourism in space, private investment in space activities, or the emergence of non-state private enterprises operating in space. As a result, private enterprises operating in the vacuum of space also float in an unstable legal vacuum which threatens to implode in geopolitical competition. Beyond Stars and States In an increasingly commercial outer space in which there are no set limits to the exploitation of resources or claim to property, states and private companies will inevitably pursue the development of new extraterrestrial industries to suit their geoeconomic interests. If unchecked, the legal protection of outer space as a domain of exploration for the benefit of all humanity would functionally fail. To protect investments and profit from national space industries, states would likely resort to military force to protect and secure private assets. Over time, space would ultimately become a fourth border domain over which states claim, exercise, and defend sovereignty — including through the use of force. The challenge is thus to prevent the circumstances that could lead to space-borne conflict before it is made possible. Notwithstanding, commercial exploration and the use of natural resources need not lead to predation among actors involved in space. The potential rewards — both technological and environmental — that could come from investment in the harvesting of resources in space are immense. International law cannot afford to wait for the security dilemma posed by commercial activity in space to manifest before addressing it but must anticipate and proactively adopt measures to address future issues that govern extraterrestrial human activity. The only remedy for the lack of legal governance over commercial activity in space is the creation of new international laws through a comprehensive international treaty on commercial operations in space. The new treaty must expressly regulate commercial activities by states and private companies, enshrine an international liability and compensation regime covering damages caused with workable sanction provisions, and reinforce norms that restrict any militarization of outer space. The international community should focus its efforts on establishing a legal regime, with mandatory provisions (rather than non-binding resolutions, observations, commentaries, and conclusions) which generate both international responsibility and provide enforceable sanctions in the event of violations. The effort should be borne out by expanding the scope and strengthening the oversight powers of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), rather than creating a new organ with redundant bureaucracy. Beyond the tasks of encouraging space research programs, studying space activities, and addressing legal questions, COPUOS should be granted the necessary powers to perform control and oversight monitoring functions. Experience has taught the international community that cooperative arrangements between states and international organizations can prevent competition for resources from escalating to kinetic conflict. Through cooperation, there is a chance to preserve extraterrestrial resources for future generations, secure an equitable allocation of resources and benefits with a mind to each country’s specific needs, and prevent the expansion of geopolitical conflict to the domain of space. Space powers must recognize the value in partnering with other states to advance the development of space programs more efficiently. It should be clear now that all nations could reap the benefits of collective action, exploration, and commercialization of resources from beyond Earth’s atmosphere while preventing a drawn-out international conflict to the final frontier. The will of states not to jeopardize the fundamental basis of international law must be reflected in coordination and surveillance efforts to ensure that the advantages derived from space exploration allow humanity to continue evolving.

#### Space conflicts cause Nuclear War.

Gallagher 15 “Antisatellite warfare without nuclear risk: A mirage” <http://thebulletin.org/space-weapons-and-risk-nuclear-exchanges8346> (interim director of the Center for International and Security Studies in Maryland, previous Executive Director of the Clinton Administration’s CTBT Treaty Committee, an arms control specialist at the State Dept., and a faculty member at Wesleyan)//Elmer

In recent decades, however, as space-based reconnaissance, communication, and targeting capabilities have become integral elements of modern military operations, strategists and policy makers have explored whether carrying out antisatellite attacks could confer major military advantages without increasing the risk of nuclear war. In theory, the answer might be yes. In practice, it is almost certainly no. Hyping threats. No country has ever deliberately and destructively attacked a satellite belonging to another country (though nations have sometimes interfered with satellites' radio transmissions). But the United States, Russia, and China have all tested advanced kinetic antisatellite weapons, and the United States has demonstrated that it can modify a missile-defense interceptor for use in antisatellite mode. Any nation that can launch nuclear weapons on medium-range ballistic missiles has the latent capability to attack satellites in low Earth orbit. Because the United States depends heavily on space for its terrestrial military superiority, some US strategists have predicted that potential adversaries will try to neutralize US advantages by attacking satellites. They have also recommended that the US military do everything it can to protect its own space assets while maintaining a capability to disable or destroy satellites that adversaries use for intelligence, communication, navigation, or targeting. Analysis of this sort often exaggerates both potential adversaries’ ability to destroy US space assets and the military advantages that either side would gain from antisatellite attacks. Nonetheless, some observers are once again advancing worst-case scenarios to support arguments for offensive counterspace capabilities. In some other countries, interest in space warfare may be increasing because of these arguments. If any nation, for whatever reason, launched an attack on a second nation's satellites, nuclear retaliation against terrestrial targets would be an irrational response. But powerful countries do sometimes respond irrationally when attacked. Moreover, disproportionate retaliation following a deliberate antisatellite attack is not the only way in which antisatellite weapons could contribute to nuclear war. It is not even the likeliest way. As was clearly understood by the countries that negotiated the Outer Space Treaty, crisis management would become more difficult, and the risk of inadvertent deterrence failure would increase, if satellites used for reconnaissance and communication were disabled or destroyed. But even if the norm against attacking another country’s satellites is never broken, developing and testing antisatellite weapons still increase the risk of nuclear war. If, for instance, US military leaders became seriously concerned that China or Russia were preparing an antisatellite attack, pressure could build for a pre-emptive attack against Chinese or Russian strategic forces. Should a satellite be struck by a piece of space debris during a crisis or a low-level terrestrial conflict, leaders might mistakenly assume that a space war had begun and retaliate before they knew what had actually happened. Such scenarios may seem improbable, but they are no more implausible than the scenarios that are used to justify the development and use of antisatellite weapons.

#### Cross apply PND 16 again for extinction.