## 1NC – T

#### Interpretation: “Appropriation of outer space” by private entities refers to the exercise of exclusive control of space.

TIMOTHY JUSTIN TRAPP, JD Candidate @ UIUC Law, ’13, TAKING UP SPACE BY ANY OTHER MEANS: COMING TO TERMS WITH THE NONAPPROPRIATION ARTICLE OF THE OUTER SPACE TREATY UNIVERSITY OF ILLINOIS LAW REVIEW [Vol. 2013 No. 4]

The issues presented in relation to the nonappropriation article of the Outer Space Treaty should be clear.214 The ITU has, quite blatantly, created something akin to “property interests in outer space.”215 It allows nations to exclude others from their orbital slots, even when the nation is not currently using that slot.216 This is directly in line with at least one definition of outer-space appropriation.217 [\*\*Start Footnote 217\*\*Id. at 236 (“Appropriation of outer space, therefore, is ‘the exercise of exclusive control or exclusive use’ with a sense of permanence, which limits other nations’ access to it.”) (quoting Milton L. Smith, The Role of the ITU in the Development of Space Law, 17 ANNALS AIR & SPACE L. 157, 165 (1992)). \*\*End Footnote 217\*\*]The ITU even allows nations with unused slots to devise them to other entities, creating a market for the property rights set up by this regulation.218 In some aspects, this seems to effect exactly what those signatory nations of the Bogotá Declaration were trying to accomplish, albeit through different means.219

#### Violations: private appropriation of extracted debris is distinct from appropriation “of” outer space. Despite longstanding permission of appropriation of extracted resources, sovereign claims are still universally prohibited.

Abigail D. Pershing, J.D. Candidate @ Yale, B.A. UChicago,’19, "Interpreting the Outer Space Treaty's Non-Appropriation Principle: Customary International Law from 1967 to Today," Yale Journal of International Law 44, no. 1

II. THE FIRST SHIFT IN CUSTOMARY INTERNATIONAL LAW’S INTERPRETATION OF THE NON-APPROPRIATION PRINCIPLE Since the drafting of the Outer Space Treaty, several States have chosen to reinterpret the non-appropriation principle as narrower in scope than its drafters originally intended. This reinterpretation has gone largely unchallenged and has in fact been widely adopted by space-faring nations. In turn, this has had the effect of changing customary international law relating to the non-appropriation principle. Shifting away from its original blanket application in 1967, States have carved out an exception to the non-appropriation principle, allowing appropriation of extracted space resources.53 This Part examines this shift in the context of the two branches of the United Nation’s customary international law standard: State practice and opinio juris. A. State Practice The earliest hint of a change in customary international law relating to the interpretation of the non-appropriation clause came in 1969, when the United States first sent astronauts to the moon. As part of his historic journey, astronaut Neil Armstrong collected moonrocks that he brought back with him to Earth and promptly handed off to the National Aeronautics and Space Administration (NASA) as U.S. property.54 Later, the USSR similarly claimed lunar material as government property, some of which was eventually sold to private citizens. 55 These first instances of space resource appropriation did not draw much attention, but they presented a distinct shift marking the beginning of a new period in State practice. Having previously been limited by their technological capabilities, States could now establish new practices with respect to celestial bodies. This was the beginning of a pattern of appropriation that slowly unfolded over the next few decades and has since solidified into the general and consistent State practice necessary to establish the existence of customary international law. Currently, the U.S. government owns 842 pounds of lunar material.56 There is little question that NASA and the U.S. government consider this material, as well as other space materials collected by American astronauts, to be government property.57 In fact, NASA explicitly endorses U.S. property rights over these moon rocks, stating that “[l]unar material retrieved from the Moon during the Apollo Program is U.S. government property.”5 The U.S. delegation’s reaction to the language of the 1979 Moon Agreement further cemented this interpretation that appropriation of extracted resources is a permissible exception to the non-appropriation clause of Article II. Although the United States is not a party to the Moon Agreement, it did participate in the negotiations.59 The Moon Agreement states in relevant part: Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or nongovernmental organization, national organization or nongovernmental entity or of any natural person.60 In response to this language, the U.S. delegation made a statement laying out the American view that the words “in place” imply that private property rights apply to extracted resources61—a comment that went completely unchallenged. That all States seemed to accept this point, even those bound by the Moon Agreement, is further evidence of a shift in customary international law.62 B. Opinio Juris: Domestic Legislation Domestic law, both in the United States and abroad, provides further evidence of the shift in customary international law surrounding the issue of nonappropriation as it relates to extracted space resources. Domestic U.S. space law is codified at Section 51 of the U.S. Code and has been regularly modified to expand private actors’ rights in space.63 Beginning in 1984, the Commercial Space Launch Act provided that “the United States should encourage private sector launches and associated services.”64 The goal of the 1984 Act was to support commercial space launches by private companies and individuals.65 It did not, however, specifically discuss commercial exploitation of space. The first such mention of commercial use of space appeared in 2004, with the Commercial Space Launch Amendments Act.66 This Act specifically aimed at regulating space tourism but did not explicitly guarantee any private rights in space.67 The most significant change in U.S. space law came with the passage of the Spurring Private Aerospace Competitiveness and Entrepreneurship (SPACE) Act in 2015. As incorporated into Section 51 of the Code, this Act provides: A United States citizen engaged in commercial recovery of an asteroid resource or a space resource under this chapter shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States.68 Whereas the idea that private corporations might go into space may have seemed far-fetched to the drafters of the Outer Space Treaty, the SPACE Act of 2015 was the first instance of a government recognizing such a trend and officially supporting private companies’ commercial rights to space resources under law. With the new 2015 amendment to Section 51 in place, U.S. companies can now rest assured that any profits they reap from space mining are firmly legal—at least within U.S. jurisdictions. Although the United States was the first country to officially reinterpret the non-appropriation principle, other countries are following suit. On July 20, 2017, Luxembourg passed a law entitled On the Exploration and Utilization of Space Resources with a vote of fifty-five to two.69 The law took effect on August 1, 2017.70 Article 1 of the new law states simply that “[s]pace resources can be appropriated,” and Article 3 expressly grants private companies permission to explore and use space resources for commercial purposes.71 Official commentary on the law establishes that its goal is to provide companies with legal certainty regarding ownership over space materials—a goal that the commentators regard as legal under the Outer Space Treaty despite the non-appropriation principle.72 The next country to enact similar legislation may be the United Arab Emirates (UAE). According to the UAE Space Agency director general, Mohammed Al Ahbabi, the UAE is currently in the process of drafting a space law covering both human space exploration and commercial activities such as mining.73 To further this goal, in 2017 the UAE set up the Space Agency Working Group on Space Policy and Law to specify the procedures, mechanisms, and other standards of the space sector, including an appropriate legal framework.74 C. Opinio Juris: Legal Scholarship Other major space powers are also considering similar laws in the future, including Japan, China, and Australia. 75 Senior officials within China’s space program have explicitly stated that the country’s goal is to explore outer space and to take advantage of outer space resources.76 The general international trend clearly points in this direction in anticipation of a potential “space gold rush.” 7 Mirroring the shift in State practice and domestic laws, the legal community has also changed its approach to the interpretation of the nonappropriation principle. Whereas at the time of the ratification of the Outer Space Treaty the majority of legal scholars tended to apply the non-appropriation principle broadly, most legal scholars now view appropriation of extracted materials as permissible.78 Brandon Gruner underscores that this new view is historically distinct from prior legal interpretation, noting that modern interpretations of the Outer Space Treaty’s non-appropriation principle differ from those of the Treaty’s authors.79 In contrast to earlier legal theory that denied the possibility of appropriation of any space resources, scholars now widely accept that extracting space resources from celestial bodies is a “use” permitted by the Outer Space Treaty and that extracted materials become the property of the entity that performed the extraction.80 Stressing the fact that the Treaty does not explicitly prohibit appropriating resources from outer space, other authors conclude that the use of extracted space resources is permitted, meaning that the new SPACE Act is a plausible interpretation of the Outer Space Treaty.81 However, scholars have been careful to cabin the extent to which they accept the legality of appropriation. For instance, although Thomas Gangale and Marilyn Dudley-Rowley acknowledge the legality of private appropriation of extracted space resources, they nonetheless emphasize that “[o]wnership of and the right to use extraterrestrial resources is distinct from ownership of real property” and that any such claim to real property is illegal.82 Lawrence Cooper is also careful to point out this distinction: “[t]he [Outer Space] Treaties recognize sovereignty over property placed into space, property produced in space, and resources removed from their place in space, but ban sovereignty claims by states; international law extends this ban to individuals.”83 Although there remain some scholars who still insist on the illegality of the 2015 U.S. law and State appropriation of space resources generally,84 their dominance has waned since the 1960s. These scholars are now a minority in the face of general acceptance among the legal community that minerals and other space resources, once extracted, may be legally claimed as property. 85 Taken together, the elements described above—statements made in the international arena, de facto appropriation of space resources in the form of moon rocks, the adoption of new national policies permitting appropriation of extracted space resources, and the weight of the international legal community’s opinion— indicate a fundamental shift in customary international law. The Outer Space Treaty’s non-appropriation clause has been redefined via customary international law norms from its broad application to now include a carve-out allowing appropriation of space resources once such resources have been extracted.

#### Standards:

#### Limits – their interpretation means that affs about any outer space activity would be topical: mining, photography, sending rovers, collecting ice cores, launching satellites, deflecting debris, can’t sell rocks on EBAY, etc. This explodes neg prep burdens since outer space activity is so vague – no generics exist to answer both the photography and the rovers aff, so affs would just win with a tiny impact every round

#### Ground – allowing debates about extracting any space resource denies the neg links to core generics like space democracy bad, space colonization good, the moon pic, the property rights NC, etc. – that kills clash by forcing negatives to the fringes of argumentation that disagree with everything and kills fairness by giving the aff a major prep advantage since they only need to frontline the few negative arguments that link to their aff.

#### Fairness and education are voters – debate’s a game, and fairness is necessary to determine the winner of the game, and education is the reason why schools fund debate.

#### Drop the debater – dropping the argument doesn’t rectify abuse since winning T proves why we don’t have the burden of rejoinder against their aff.

#### Use competing interps – reasonability invites arbitrary judge intervention since there’s no consensus as to what’s reasonable.

#### No RVIs – fairness and education are logical litmus tests and they incentivize baiting theory and prepping it out which turns substance crowdout

## 1NC – CP

#### CP: The Republic of India and the Islamic Republic of Pakistan ought to:

-Pass binding legislation that prohibits nuclear or conventional escalation

-Adopt an operational No First Use policy

#### NFU creates a regime of nuclear restraint

Ramesh Thakur 17, Ph.D., director of the Centre for Nuclear Non-Proliferation and Disarmament (CNND) in the Crawford School, The Australian National University and co-Convenor of the Asia-Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament 12-05-17, “Japan and the Nuclear Weapons Prohibition Treaty: The Wrong Side of History, Geography, Legality, Morality, and Humanity,” Journal for Peace and Nuclear Disarmament, Vol. 1, Iss. 1, p. 11-31

The purposes of declaratory policy include providing intellectual guidance to military planners, deterring adversaries, and reassuring allies and friends. They also shape global nuclear norms like deterrence, non-proliferation, security, and non-use. The last in particular has come under severe strain, deepened still further by tweet-prone President Trump, from the fact that the strategic boundary between nuclear warheads and conventional precision munitions is being steadily eroded. An NFU policy would strengthen strategic stability, reinforce the normative boundary between nuclear and conventional weapons, deepen the illegitimacy of any first use of nuclear weapons, and devalue the currency of nuclear weapons.

In practice, first use of nuclear weapons lacks strategic logic. The moral opprobrium of using nuclear weapons against a non-nuclear country would be too high a price to pay for any security gains. This explains why Argentina invaded the Falkland Islands in 1982 despite the British nuclear deterrent: it was confident that the UK would not escalate to the use of nuclear weapons. Against nuclear adversaries, any first use would provoke a nuclear retaliation. Rather than sensible policy, therefore, a first-use policy is a commitment to mutual suicide. Because nuclear adversaries know this, the threat of first use is non-credible and no policy that is not credible can successfully deter any aggression.

NFU policy does not guarantee NFU, any more than a first-use policy guarantees first use. What are crucial are declarations, doctrines, postures, and deployments that reduce risks. An NFU policy would eliminate the rationale for forward deployment of US nuclear weapons on the territory of NATO allies in Europe (Cartwright and Blair, 2016; (Chalmers and Lunn, 2010; Norris and Kristensen, 2011; Podvig and Serrat, 2017):23 those based in Turkey were a matter of some concern during the failed coup attempt in July 2016.

China and India are the only two nuclear-armed states committed to NFU in current nuclear policies. If no other nuclear powers follow their examples, they too might abandon NFU and put some nuclear weapons on high alert (Kulacki, 2016, 1). If China follows the Russian and USA lead, how long before the posture proliferates to India and Pakistan? Conversely, the intent signalled by a declaration of NFU can be buttressed by a nuclear restraint regime. If adopted by all nuclear-armed states, NFU could become the centrepiece of a global nuclear restraint regime. Nuclear forces and infrastructure would be reconfigured to make them better suited to deterring nuclear attack and less fit for offensive actions

## 1NC – DA

#### JCPOA passes now, but it’s tentative and the window is closing

Norman 3/15 [(Laurence, deputy bureau chief at Dow Jones Newswires and The Wall Street Journal based in London) “Russia Softens Iran Demands, Re-Opening Way for Nuclear Deal,” The Wall Street Journal, 3/15/2022] JL

Russia walked back recently made demands on Washington related to the Iran nuclear deal, clearing the way for Tehran and Washington to revive the 2015 agreement, senior western diplomats said.

On Tuesday, after Russia’s Foreign Minister Sergei Lavrov met in Moscow with his Iranian counterpart, both Mr. Lavrov and Hossein Amir-Abdollahian said Russia wasn’t standing in the way of the accord.

Russia earlier this month had demanded guarantees from Washington that its economic ties with Iran wouldn’t be affected by the Western sanctions imposed on Moscow over Ukraine. The last-minute move was the driving factor that prevented a deal to revive the 2015 nuclear agreement over the past 10 days, western diplomats have said.

The European Union, which coordinates the talks, announced a break in the negotiations on Friday, blaming “external factors” for preventing a deal that is “essentially ready.”

A senior Western diplomat said Tuesday evening that Russia’s chief negotiator at the talks, Mikhail Ulyanov, had informed the EU that Russia would accept narrower guarantees ensuring that Russia could carry out the nuclear work it is mandated to do under the 2015 nuclear deal. That includes a uranium swap with Iran, the redesign of the Fordow nuclear facility and the provision of nuclear fuel to Iranian reactors.

“Russia says happy with guarantees on nuclear projects and not asking for anything else,” said the diplomat, who asked to remain unidentified because of the sensitive nature of the talks. “So we can go ahead with negotiations that are now exclusively US-Iran.”

State Department spokesman Ned Price said Tuesday evening that “we are not going to sanction Russia for undertaking, for participating in nuclear projects that are part of the” nuclear deal.

The negotiations, which have taken place for almost a year now, aim to reach agreement on the steps Washington and Tehran will take to return into compliance with the 2015 agreement, which lifted most international sanctions on Tehran in exchange for tight but temporary restrictions on Iran’s nuclear work.

After the Trump administration took the U.S. out of the accord and reimposed sweeping sanctions on Iran, saying the accord was too weak, Tehran expanded its nuclear work and has now gathered almost enough nuclear high-grade enriched uranium for a nuclear weapon, according to the United Nations nuclear agency.

Iran says its nuclear program is purely peaceful and U.S. officials have said there is no evidence Iran has decided to build a nuclear weapon.

Over the weekend, a senior U.S. official told The Wall Street Journal that only “a handful of issues left” remained between the U.S. and Iran to reach an accord, mainly on the issue of the scope of sanctions relief Iran would receive from Washington. The official said the U.S. side felt the resolution of these issues was “within reach.”

The U.S. official and senior European diplomats said they wouldn’t negotiate broad carve-outs from Western sanctions over Russia’s invasion of Ukraine with Moscow to save the nuclear deal. They warned that if Russia didn’t back off its demands, they would seek to complete an agreement with Iran, bypassing Russia.

Mr. Ulyanov said Tuesday evening on Twitter it was a lie that Russia had stood in the way of the accord with its demands for guarantees. He added that “some demands were accepted.” Iran, which has friendly ties with Moscow, has also continued to blame Washington for not completing the deal.

Negotiations between the U.S. and Iran could resume without negotiators returning to Vienna, where the talks have been held since April 2021, the senior western diplomat said. Iran so far has refused to talk directly with the Americans and instead have negotiated through the European powers at the talks. With so few issues still to be resolved, negotiators could work from capitals to resolve the remaining differences.

Time is pressing. U.S. and European officials say that Iran’s nuclear work has expanded close to a point that the deal’s main benefit to the West—keeping Iran months away from amassing enough nuclear fuel for a nuclear weapon—would be impossible.

European diplomats in particular have warned that with the war in Ukraine becoming ever-deadlier, the diplomatic window for concluding the deal is closing.

#### Space diplomacy directly trades off with nonproliferation agreements – finite manpower, money, and political will within the AVC

Johnson-Freeze 16 [(Joan, Professor and former Chair of National Security Affairs at the US Naval War College, Newport, Rhode Island) “Space Warfare in the 21st Century: Arming the Heavens,” Cass Military Studies, 11/8/2016] JL

 \*The plan is legislated in the AVC (same bureau of the State Department that’s concerned with the JCPOA)

Proactive policymaking takes commitment, manpower, and money. A quick look at the money and manpower devoted to diplomacy in the US State and Defense departments compared to the resources available for the hardwareproducing military–industrial complex efforts described in Chapter 5 is enlightening. The Assistant Secretary of State for Arms Control, Verification, and Compliance (AVC) leads space-related diplomacy in the State Department. The AVC Bureau is responsible for “all matters related to the implementation of certain international arms control, nonproliferation, and disarmament agreements and commitments; this includes staffing and managing treaty implementation commissions.”34 The AVC arms control portfolio includes nuclear, biological, and chemical weapons and all related issues. The AVC section charged with space issues is the Office of Emerging Security Challenges; this office also handles missile defense issues and the promotion of transparency, cooperation, and building confidence regarding cybersecurity. As of financial year 2013, AVC had a budget of $31.2 million and 141 employees35 to be active participants and leaders in all of these issues.

By way of comparison, the Space Security and Defense Program, a joint program of the DoD and the Office of the Director of National Intelligence (ODNI) was programmed for a similar budget amount in financial year 2015: $32.3 million. That program is described as a “center of excellence for options and strategies (materiel, non-materiel, cross-Title, cross-domain) leading to a more resilient and enduring National Security Space (NSS) Enterprise.”36 A majority of SSDP funding is allocated to the development of offensive space control strategies. So basically, the same budget is allocated for all US global space diplomacy efforts as for an in-house Pentagon think tank to devise counterspace strategies.

Within the Pentagon, the Deputy Assistant Secretary of Defense for Space Policy is charged with all issues related to space policy, including diplomacy. The responsibilities of the Space Policy office are to:

• Develop policy and strategy for a domain that is increasingly congested, competitive, and contested

• Implement across DoD — plans, programs, doctrine, operations — and with the IC and other agencies

• Engage with allies and other space-faring countries in establishing norms and augmenting our capabilities.37

The breadth of those responsibilities, which includes reviewing space acquisitions, means that there may be only a handful of individuals actually engaged in multilateral diplomatic efforts, acting, for example, as advisors to diplomatic discussions such as those through the United Nations. Additionally, the expanse of the Pentagon results in a chain of command that makes organizational competition for attention to subject matter challenging at best. The Deputy Assistant Secretary of Defense for Space Policy reports to the Assistant Secretary of Defense for Homeland Defense, who then reports to the Principle Deputy Secretary of Defense for Homeland Defense and Global Security, who then reports to the Under Secretary of Defense for Defense Policy. There are also a multitude of space players in other governmental organizations to coordinate and contend with, particularly within the Air Force and intelligence communities. Personnel are spread thin.

US government-wide space diplomacy needs a mandate, manpower, and a supporting budget. Diplomacy, especially multilateral diplomacy, can be timeconsuming, manpower-intensive, and frustrating; and patience is not a strong American virtue. The recent experience in the UN LTS Working Group is emblematic of everything that causes the United States to shun multilateralism. Under the auspices of this group, countries had worked in good faith over the past five years to develop technical guidelines as reciprocal constraints, as insisted upon by the developing countries when they rejected the ICOC. Yet group success appeared thwarted at the February 2016 meeting of the LTS Working Group by one country, Russia.

#### The JCPOA returns Iran to global oil markets – increased supply and perception solve market volatility

Shokri 3/3 [(Omid, visiting research scholar at the School of Policy and Government at George Mason University and is an analyst at Gulf State Analytics (GSA) who specializes in energy security, author of US Energy Diplomacy in the Caspian Sea Basin: Changing Trends Since 2001) “Can Iranian oil stabilize a volatile market?” Atlantic Council, 3/3/2022] JL

As fuel prices skyrocket following the Russian invasion of Ukraine, another major supplier of oil and natural gas is poised to play an important role.

Before Donald Trump‘s withdrawal from the 2015 nuclear deal and the imposition of sanctions on Iran’s oil exports, Iran produced 3.8 million barrels of oil per day. Afterwards, this dropped as low as 1.9 million barrels and currently it is about 2.4 million barrels. It will take time for the country’s production to return to pre-sanction levels due to this significant drop as well as low levels of investment in recent years. However, Iran’s oil and gas condensate reserves in tankers, as well as onshore oil storage facilities, will help Iran accelerate its exports which currently total more than 1 million barrels per day.  Some sources predict that with the lifting of the sanctions, Iran could ship an additional 500,000 barrels of oil per day to international markets from April to May, and by the end of this year this figure could reach an additional 1.3 million barrels per day.

All of this assumes that current talks in Vienna on reviving the Joint Comprehensive Plan of Action (JCPOA) are successful. Without sanctions relief, any new disruptions in US supplies could boost oil prices beyond $100 a barrel to as high as $150. As reported by GasBuddy**,** the United States is already struggling to cope with its highest level of inflation in four decades. The price of gasoline has risen about $4 a gallon in many parts of the country since the Ukraine crisis began.

Iran has said that it is ready to increase its oil exports significantly if sanctions imposed by the Trump administration are lifted, but it will take time to restore relationships with customers in Europe and Asia. In February, officials from the National Iranian Oil Company (NIOC) traveled to Seoul, the capital of South Korea, to hold talks with several refineries on the prospects for resuming oil deliveries.

The International Energy Agency (IEA) has increased its forecast for demand growth in 2022, stating that global demand for oil will increase by 3.2 million barrels per day this year to a record 100.6 million barrels per day. These forecasts show that there is a market for more oil and that this is an opportunity for producers to increase oil sales and export revenues.

Iran will clearly be a major beneficiary of this increase if it can resolve its problems with the United States over a return to the JCPOA.  Iran is asking the US government to remain committed to the deal in the event of a change of administration in Washington. But this is something that President Joe Biden, or any other US leader, cannot promise. Tehran must decide whether it is worthwhile to reach an agreement that could last only three years.

After the JCPOA went into implementation in 2016, Iran increased its oil production much faster than expected. Most analysts had predicted that Iran would increase its production by 500,000 barrels per day within a year after the lifting of sanctions, but in fact Iran reached this figure in less than four months, and by the end of the year had increased production by nearly one million barrels.

After sanctions were reimposed following the US withdrawal from the JCPOA in 2018, Iran stored oil in tankers. It is estimated that Iran has stored more than 85 million barrels of oil and gas condensate at sea. These supplies can be exported rapidly if sanctions are lifted.

The elimination of important oil exporting countries from the market has major ripple effects. Other producers often raise prices and pursue their own interests. Even if Iran returns to the market, not all problems of oil and gas will be solved, but an Iranian return can have a major psychological impact in helping the oil market move towards equilibrium. There is also the possibility that Iran can play a role in replacing Russian gas exports to Europe.

#### High oil prices and volatility cause nuclear war

King 8 [(Neil King, Global Economics Editor for the WSJ), Peak Oil: A Survey of Security Concerns, Center for a New American Security, September, http://www.cnas.org/files/documents/publications/CNAS\_Working%20Paper\_PeakOil\_King\_Sept2008.pdf] TDI

Many commentators in the United States and abroad have begun to wrestle with the question of whether soaring oil prices and market volatility could spark an outright oil war between major powers—possibly ignited not by China or Russia, but by the United States. In a particularly pointed speech on the topic in May, James Russell of the Naval Postgraduate School in California addressed what he called the increasing militarization of international energy security. “Energy security is now deemed so central to ‘national security’ that threats to the former are liable to be reflexively interpreted as threats to the latter,” he told a gathering at the James A. Baker Institute for Public Policy at Houston’s Rice University.6 The possibility that a large-scale war could break out over access to dwindling energy resources, he wrote, “is one of the most alarming prospects facing the current world system.”7 Mr. Russell figures among a growing pool of analysts who worry in particular about the psychological readiness of the United States to deal rationally with a sustained oil shock. Particularly troubling is the increasing perception within Congress that the financial side of the oil markets no longer functions rationally. It has either been taken over by speculators or is being manipulated, on the supply side, by producers who are holding back on pumping more oil in order to drive up the price. A breakdown in trust for the oil markets, these analysts fear, could spur calls for government action—even military intervention. “The perceptive chasm in the United States between new [oil] market realities and their impact on the global distribution of power will one day close,” Mr. Russell said. “And when it does, look out.”8 The World at Peak: Taking the Dim View For years, skeptics scoffed at predictions that the United States would hit its own domestic oil production peak by sometime in the late 1960s. With its oil fields pumping full out, the U.S. in 1969 was providing an astonishing 25 percent of the world’s oil supply—a role no other country has ever come close to matching. U.S. production then peaked in December 1970, and has fallen steadily ever since, a shift that has dramatically altered America’s own sense of vulnerability and reordered its military priorities. During World War II, when its allies found their own oil supplies cut off by the war, the United States stepped in and made up the difference. Today it is able to meet less than a third of its own needs. A similar peak in worldwide production would have far more sweeping consequences. It would, for one, spell the end of the world’s unparalleled economic boom over the last century. It would also dramatically reorder the wobbly balance of power between nations as energy-challenged industrialized countries turn their sights on the oil-rich nations of the Middle East and Africa. In a peak oil future, the small, flattened, globalized world that has awed recent commentators would become decidedly round an d very vast again. Oceans will reemerge as a hindrance to trade, instead of the conduit they have been for so long. An energy-born jolt to the world economy would leave no corner of the globe untouched. Unable to pay their own fuel bills, the tiny Marshall Islands this summer faced the possibility of going entirely without power. That is a reality that could sweep across many of the smallest and poorest countries in Africa, Asia, and Latin America, reversing many of the tentative gains in those regions and stirring deep social unrest. Large patches of the world rely almost entirely on diesel-powered generators for what skimpy electricity they now have. Those generators are the first to run empty as prices soar. A British parliamentary report released in June on “The Impact of Peak Oil on International Development” concluded that “the deepening energy crisis has the potential to make poverty a permanent state for a growing number of people, undoing the development efforts of a generation.”9 We are seeing some of the consequences already in Pakistan – a country of huge strategic importance, with its own stash of nuclear weapons – that is now in the grips of a severe energy crisis. By crippling the country’s economy, battering the stock market, and spurring mass protests, Pakistan’s power shortages could end up giving the country’s Islamic parties the leverage they have long needed to take power. It’s not hard to imagine similar scenarios playing out in dozens of other developing countries. Deepening economic unrest will put an enormous strain on the United Nations and other international aid agencies. Anyone who has ever visited a major UN relief hub knows that their fleets of Land Rovers, jumbo jets and prop planes have a military size thirst for fuel. Aid agency budgets will come under unprecedented pressure just as the need for international aid skyrockets and donor countries themselves feel pressed for cash. A peaking of oil supplies could also hasten the impact of global climate change by dramatically driving up the use of coal for power generation in much of the world. A weakened world economy would also put in jeopardy the massively expensive projects, such as carbon capture and storage, that many experts look to for a reduction in industrial emissions. So on top of the strains caused by scarce fossil fuels, the world may also have to grapple with the destabilizing effects of more rapid desertification, dwindling fisheries, and strained food supplies. An oil-constricted world will also stir perilous frictions between haves and have-nots. The vast majority of all the world’s known oil reserves is now in the hands of national oil companies, largely in countries with corrupt and autocratic governments. Many of these governments—Iran and Venezuela top the list—are now seen as antagonists of the United States. Tightened oil supplies will substantially boost these countries’ political leverage, but that enhanced power will carry its own peril. Playing the oil card when nations are scrambling for every barrel will be a far more serious matter that at any time in the past. The European continent could also undergo a profound shift as its needs—and sources of energy—diverge all the more from those of the United States. A conservation-oriented Europe (oil demand is on the decline in almost every EU country) will look all the more askance at what it sees as the gluttonous habits of the United States. At the same time, Europe’s governments may have little choice but to shy from any political confrontations with its principal energy supplier, Russia. An energy-restricted future will greatly enhance Russia’s clout within settings like the UN Security Council but also in its dealings with both Europe and China. Abundant oil and gas have fueled Russia’s return to power over the last decade, giving it renewed standing within the UN and increasing sway over European capitals. The peak oil threat is already sending shivers through the big developing countries of China and India, whose propulsive growth (and own internal stability) requires massive doses of energy. For Beijing, running low on fuel spells economic chaos and internal strife, which in turn spawns images of insurrection and a breaking up of the continent sized country. Slumping oil supplies will automatically pit the two largest energy consumers—the United States and China—against one another in competition over supplies in South America, West Africa, the Middle East, and Central Asia. China is already taking this competition very seriously. It doesn’t require much of a leap to imagine a Cold War-style scramble between Washington and Beijing—not for like-minded allies this time but simply for reliable and tested suppliers of oil. One region that offers promise and peril in almost equal measure is the Artic, which many in the oil industry consider the last big basin of untapped hydrocarbon riches. But the Artic remains an ungoverned ocean whose legal status couldn’t be less clear, especially so long as the United States continues to remain outside the international Law of the Sea Treaty. As the ices there recede, the risk increases that a scramble for assets in the Artic could turn nasty.

#### The plan definitely entails government action – if they contest the link, this becomes a voting issue:

#### ‘Resolved’ preceding a colon indicates a legislative forum.

Blanche Ellsworth 81, English professor at SFSU and M.A. in English from UC Berkeley, 1/1/1981, *English Simplified*, 4th Edition, cc

A colon is also used to separate 3. THE SALUTATION OF A BUSINESS LETTER FROM THE BODY, Dear Sir Dear Ms. Weiner NOTE: In an informal letter, a comma follows the salutation: Dear Mary, Dear Uncle Jack 4. PARTS OF TITLES, REFERENCES, AND NUMERALS. TITLE: Principles of Mathematics: An Introduction REFERENCE: Luke 3:4—13 NUMERALS: 8:15 PM 5. PLACE OF PUBLICATION FROM PUBLISHER Indianapolis: Bobbs-Merrill 6. THE WORD RESOLVED FROM THE STATEMENT OF THE RESOLUTION. Resolved: That this committee go on record as favoring new legislation.

#### Justice is a policy question

Merriam Webster ND [(Mesrriam Webster) “Justice” https://www.merriam-webster.com/dictionary/justice] BC

Essential Meaning of justice

1: the process or result of using laws to fairly judge and punish crimes and criminals

#### Vote neg for ground and topic ed – their interpretation justifies infinite non-inherent, private actor fiat affs, which zero politics and process debates – key check against new affs that specify forms of appropriation – outweighs because 1NC construction is the locus of clash – AND implementation is the core question of real-world multilateral agreements – c/a paradigms

## 1NC – CP

#### CP: The appropriation of outer space by private entities for on-orbit servicing and active debris removal is unjust except for in the United States. The United States should submit an environmental impact assessment of the appropriation of outer space by private entities for on-orbit servicing and active debris removal to the UN Office of Outer Space Affairs for public comment, modification, and approval. The United States federal government should implement the approved version of the submitted proposal.

**Counterplan competes and creates the least environmentally damaging version of the aff.**

William R. **Kramer**, PhD Polisci/Futures Studies @ U of H Manoa, Currently HDR Inc. Extraterrestrial Environmental Analyst, **’14**, “Extraterrestrial environmental impact assessments A foreseeable prerequisite for wise decisions regarding outer space exploration, research and development” Space Policy 30 (2014) 215-222

To be most effective, all spacefaring nations and enterprises would voluntarily participate in assessing their extraterrestrial environmental impacts prior to undertaking actions in space. A hypothetical chronology of such a process might include: (1) Impact assessments are prepared by the action proponent and submitted to an impartial international panel or board; (2) The panel determines the assessment's sufficiency; (3) The assessment is published in an electronic or other format accessible to the public followed by a comment period; (4) The action proponent addresses comments and submits responses to the panel; (5) The panel publishes its approval or concerns; (6) The action proceeds, is **modified or is abandoned**; and (7) should the action proceed, periodic reports of the action's progress and impacts are filed for future reference in a digital format to allow broad access. The process would support the spirit of both **NEPA** to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations” (42 USC x4331(b)(1)) and Article 4(1) of the Moon Agreement's directive that “due regard shall be paid to the interests of present and future generations.” Given the likelihood that all states would appreciate the need for maintaining extraterrestrial environments and landscapes for both future research and exploitation, pressure from peer states and space industries may be sufficient to **encourage a trend of compliance**.

Such a review and approval system (perhaps similar to NEPA's relationship with the Council on Environmental Quality and its oversight function) could be attempted within the structure of the UN, such as within the **UN Office of Outer Space Affairs**. The spirit of an extraterrestrial environmental assessment program would be likely to fit within the mandate of the organization. However, amending the Outer Space Treaty or otherwise developing an administrative UN capacity to achieve the goals proposed in this paper would require a level of international commitment and cooperation that may be both lengthy and difficult to achieve. Spacefaring nations and international organizations are already invited to submit annual reports on their space activities and research to the UN Committee on the Peaceful Uses of Space, **so a precedent for reporting exists.** **Presently, however, reports tend to document positive actions and research, not details of extraterrestrial environmental impacts**.

**Extinction. EIA is key to preserve space resources, stop resource wars, and extra-terrestrial environmental damage.**

William R. **Kramer**, Hawaii Research Center for Futures Studies @ University of Hawaii, **'17**, In dreams begin responsibilities – environmental impact assessment and outer space development, ENVIRONMENTAL PRACTICE, VOL. 19, NO. 3, 128–138

**Benefits of extraterrestrial environmental impact assessment** Most publications regarding outer space resources maintain that those resources are nearly limitless, and many business models for exploitation do not imagine that resources on Mars, for example, will ever be exhausted (Lewis, 1996; Zubrin, 1996; Renstrom, 2016). Ever is a long time. While the statement may be figuratively true for some mineral ores that may last through an individual company’s project timeline, it is not necessarily true for long-term planning. **There will likely be competition for the rarest (most valuable) minerals**. Without some form of planning and regulation, they may be extracted in an inefficient and environmentally damaging manner and be **quickly depleted** (as exemplified by hydraulic mining for gold on Earth, which wasted much of the resource and resulted in extensive environmental damage) (Merchant, 1998).

How might resources be put to their highest and best use unless regulated? Both the Moon and Mars have water ice which will be **crucial for human survival**, but water also has lucrative industrial uses; it is potentially the raw material for manufacturing both rocket fuel and oxygen. **Conflicts over resource allocation** may be better addressed during an **assessment process** that seeks to balance highest and best use with discovery and first use. Who gains access to specific areas for mining becomes more problematic in that the Outer Space Treaty does not allow “ownership” of extraterrestrial territory; there is no guarantee that companies such as those listed previously will gain access to the most productive sites. The China National Space Administration is planning to place a crew on the Moon by 2024, so **competition for the best sites will be intense** (Kramer, 2015b; China Digital Times, 2012).

Space industries generally are not considering that their proposed actions may preclude alternative uses such as scientific research and human settlement. There will be a stream of not yet imagined uses that could be adversely affected or foreclosed. Many of the same conflicts between land use and human habitation experienced on Earth may emerge on extraterrestrial sites. On the Moon, for example, there are preferable sites for collecting solar energy. These “peaks of eternal light” are areas nearly always or constantly exposed to sunlight at the poles. They are very limited in both distribution and size (Elvis, Milligan, and Krolikowski, 2016). If a mining operation were to determine such areas suitable for their operations, or if mining created a constant plume of dust that would diminish the effectiveness of solar panels, how might such a situation be resolved?

Should potentially dangerous industries such as fuel manufacturing or storage be located near living areas? Would hydraulic fluid pipelines be closely monitored for leaks that may affect subsurface ice deposits mined for drinking water? How might vibrations from detonations affect unrelated structures or scientific instrumentation, such as telescopes? And how might a search for life, whether extinct or still living, be affected by human presence and our trail of bacteria and organic wastes? Humans’ biological pollution of Mars, for example, may greatly affect the results of any search for extraterrestrial life there (Kramer, 2009; McKay, 2009). Peter Doran of the Planetary Protection Subcommittee of the NASA Advisory Council offered, “The big issue with all missions to Mars is we don’t want to create a situation where we are impacting future life-detection science. Picture humans … walking around shedding microbes everywhere we go. Space suits as we know them do not take care of this problem (Mack, 2016).”

## 1NC – Case

### 1NC – Space War

1. **No dual-use – 1AC Chow observes that states could pursue dual-use and says ADR is peaceful now – make them read evidence about which states have tried – in blue**

In June 2018, the United Nations Office for Outer Space Affairs will celebrate the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space. The conference is an opportunity “for the international community to gather and consider the future course of global cooperation for the benefit of humankind.”1 Indeed, there is much to celebrate since the space age began because the world has reaped abundant benefits from satellites. We have established five treaties and a number of transparency and confidencebuilding measures for space activities.2 But, in spite of countless efforts, these treaties and measures focus on civil and commercial activities and cannot control space weapons other than weapons of mass destruction in orbit. One of the greatest emerging threats in space comes from unmanned proximity operations. These operations require maneuvering a spacecraft close enough to another object in space to make physical contact with the other object or affect the object in some way.3 To date, the intent of unmanned proximity operations has been for peaceful purposes such as active debris removal (ADR) or on-orbit servicing (OOS). However, a spacecraft that can perform ADR or OOS can also be readily commanded to grapple and destroy an adversary’s satellite. Currently the United States, China, Russia, the European Union, and other countries are pursuing R&D programs for satellites to perform ADR and OOS. Each nation is planning to provide such services in early 2020 and beyond. To perform these peaceful services, a country needs to master the skill of unmanned proximity operations.

1. **Their inherency ev is only about US private companies – no chance the aff solves internal links about Chinese and Russian RPO, which are state-owned**

Thompson 20 [(Cort, military intelligence officer in the United States Army and previously served as a MQ-5B Hunter UAS operator and mission commander) “Russia’s Recent Space Activity Is a Return to Old Form,” 4/20/2020] JL

The U.S. Space Force [stated](https://time.com/5779315/russian-spacecraft-spy-satellite-space-force/) on Feb. 10 that there have been several recent instances of Russian satellites maneuvering into similar orbital paths as known U.S. spy satellites, specifically USA-245. While some commentators have [suggested](https://www.cbsnews.com/news/russian-satellites-fly-near-us-government-satellite-activity-unusual-disturbing-space-command/) that these may be “inspector satellites,” whose purpose is to examine the U.S. satellites and determine their capabilities, this activity likely signals a return to form of Russian anti-satellite (ASAT) weapons testing.

Russia has [historically relied](https://www.popularmechanics.com/space/satellites/a9620/the-hidden-history-of-the-soviet-satellite-killer-16108970/) on co-orbital ASAT weapons to counter adversary space assets. The recent satellite maneuvers suggest that Russia is conducting dry runs to prepare to intercept strategic space assets with other orbital vehicles. These maneuvers, and other rendezvous and proximity operations (RPO), can publicly be presented by the Kremlin as peaceful demonstrations to test the ability to refuel or repair other satellites while hiding their second-order purpose of testing co-orbital intercept capabilities.

#### Chinese ASATs are state-owned – can’t solve

Chow and Kelley 8/21 [(Brian G., policy analyst for the Institute of World Politics, Ph.D in physics from Case Western Reserve University, MBA and Ph.D in finance from the University of Michigan,and Brandon, graduate of Georgetown’s School of Foreign Service ) “China’s Anti-Satellite Weapons Could Conquer Taiwan—Or Start a War,” National Review, 8/21/2021] JL

If current trends hold, then China’s[Strategic Support Force](https://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/china-perspectives_13.pdf) will be capable by the late 2020s of holding key U.S. space assets at risk. [Chinese military doctrine](https://nationalinterest.org/blog/reboot/nowhere-earth-will-be-safe-us-china-war-172523), statements by senior officials, and past behavior all suggest that China may well believe threatening such assets to be an effective means of deterring U.S. intervention. If so, then the United States would face a type of “Sophie’s Choice”: decline to intervene, potentially leading allies to follow suit and Taiwan to succumb without a fight, thereby enabling Xi to achieve his goal of “peacefully” snuffing out Taiwanese independence; or start a war that would at best be long and bloody and might well even cross the nuclear threshold.

This emerging crisis has been three decades in the making. In 1991, China watched from afar as the United States used space-enabled capabilities to obliterate the Iraqi military from a distance in the first Gulf War. The People’s Liberation Army quickly set to work developing capabilities targeted at a perceived Achilles’ heel of this new [American way of war](https://nationalinterest.org/feature/secrets-and-lies-role-truth-great-power-information-warfare-170579): reliance on vulnerable space systems.

This project came to fruition with a direct ascent[ASAT weapons test](https://fas.org/sgp/crs/row/RS22652.pdf) in 2007, but the test was limited in two key respects. First, it only reached low Earth orbit. Second, it generated thousands of pieces of long-lasting space junk, provoking immense[international ire](https://spacenews.com/u-s-official-china-turned-to-debris-free-asat-tests-following-2007-outcry/). This backlash appears to have taken China by surprise, driving it to seek new, more usable ASAT types with minimal debris production. Now, one such ASAT is nearing operational status: spacecraft capable of rendezvous and proximity operations (RPOs).

#### Zero risk of escalation from ASATs

**Pavur and Martinovic 19** [James Pavur and Ivan Martinovic, May 2019, "The Cyber-ASAT: On the Impact of Cyber Weapons in Outer Space," ResearchGate, 11th International Conference on Cyber Conflict: Silent Battle [https://www.researchgate.net/publication/334422193\_The\_Cyber-ASAT\_On\_the\_Impact\_of\_Cyber\_Weapons\_in\_Outer\_Space accessed 12/10/21](https://www.researchgate.net/publication/334422193_The_Cyber-ASAT_On_the_Impact_of_Cyber_Weapons_in_Outer_Space%20accessed%2012/10/21)]Adam

A. Limited Accessibility

Space is difficult. Over 60 years have passed since the first Sputnik launch and only nine countries (ten including the EU) have orbital launch capabilities. Moreover, a launch programme alone does not guarantee the resources and precision required to operate a meaningful ASAT capability. Given this, one possible reason why space wars have not broken out is simply because only the US has ever had the ability to fight one [21, p. 402], [22, pp. 419–420].

Although launch technology may become cheaper and easier, it is unclear to what extent these advances will be distributed among presently non-spacefaring nations. Limited access to orbit necessarily reduces the scenarios which could plausibly escalate to ASAT usage. Only major conflicts between the handful of states with ‘space club’ membership could be considered possible flashpoints. Even then, the fragility of an attacker’s own space assets creates de-escalatory pressures due to the deterrent effect of retaliation. Since the earliest days of the space race, dominant powers have recognized this dynamic and demonstrated an inclination towards de-escalatory space strategies [23].

B. Attributable Norms

There also exists a long-standing normative framework favouring the peaceful use of space. The effectiveness of this regime, centred around the Outer Space Treaty (OST), is highly contentious and many have pointed out its serious legal and political shortcomings [24]–[26]. Nevertheless, this status quo framework has somehow supported over six decades of relative peace in orbit.

Over these six decades, norms have become deeply ingrained into the way states describe and perceive space weaponization. This de facto codification was dramatically demonstrated in 2005 when the US found itself on the short end of a 160-1 UN vote after opposing a non-binding resolution on space weaponization. Although states have occasionally pushed the boundaries of these norms, this has typically occurred through incremental legal re-interpretation rather than outright opposition [27]. Even the most notable incidents, such as the 2007-2008 US and Chinese ASAT demonstrations, were couched in rhetoric from both the norm violators and defenders, depicting space as a peaceful global commons [27, p. 56]. Altogether, this suggests that states perceive real costs to breaking this normative tradition and may even moderate their behaviours accordingly.

One further factor supporting this norms regime is the high degree of attributability surrounding ASAT weapons. For kinetic ASAT technology, plausible deniability and stealth are essentially impossible. The literally explosive act of launching a rocket cannot evade detection and, if used offensively, retaliation. This imposes high diplomatic costs on ASAT usage and testing, particularly during peacetime.

C. Environmental Interdependence

A third stabilizing force relates to the orbital debris consequences of ASATs. China’s 2007 ASAT demonstration was the largest debris-generating event in history, as the targeted satellite dissipated into thousands of dangerous debris particles [28, p. 4]. Since debris particles are indiscriminate and unpredictable, they often threaten the attacker’s own space assets [22, p. 420]. This is compounded by Kessler syndrome, a phenomenon whereby orbital debris ‘breeds’ as large pieces of debris collide and disintegrate. As space debris remains in orbit for hundreds of years, the cascade effect of an ASAT attack can constrain the attacker’s long-term use of space [29, pp. 295– 296]. Any state with kinetic ASAT capabilities will likely also operate satellites of its own, and they are necessarily exposed to this collateral damage threat. Space debris thus acts as a strong strategic deterrent to ASAT usage.

1. **No space war – insurmountable barriers and everyone has an interest in keeping space peaceful**

**Dobos 19** [(Bohumil Doboš, scholar at the Institute of Political Studies, Faculty of Social Sciences, Charles University in Prague, Czech Republic, and a coordinator of the Geopolitical Studies Research Centre) “Geopolitics of the Outer Space, Chapter 3: Outer Space as a Military-Diplomatic Field,” Pgs. 48-49] TDI

Despite the theorized potential for the achievement of the terrestrial dominance throughout the utilization of the ultimate high ground and the ease of destruction of space-based assets by the potential space weaponry, the utilization of space weapons is with current technology and no effective means to protect them far from fulfilling this potential (Steinberg 2012, p. 255). In current global international political and technological setting, the utility of space weapons is very limited, even if we accept that the ultimate high ground presents the potential to get a decisive tangible military advantage (which is unclear). This stands among the reasons for the lack of their utilization so far. Last but not the least, it must be pointed out that the states also develop passive defense systems designed to protect the satellites on orbit or critical capabilities they provide. These further decrease the utility of space weapons. These systems include larger maneuvering capacities, launching of decoys, preparation of spare satellites that are ready for launch in case of ASAT attack on its twin on orbit, or attempts to decrease the visibility of satellites using paint or materials less visible from radars (Moltz 2014, p. 31). Finally, we must look at the main obstacles of connection of the outer space and warfare. The first set of barriers is comprised of physical obstructions. As has been presented in the previous chapter, the outer space is very challenging domain to operate in. Environmental factors still present the largest threat to any space military capabilities if compared to any man-made threats (Rendleman 2013, p. 79). A following issue that hinders military operations in the outer space is the predictability of orbital movement. If the reconnaissance satellite's orbit is known, the terrestrial actor might attempt to hide some critical capabilities-an option that is countered by new surveillance techniques (spectrometers, etc.) (Norris 2010, p. 196)-but the hide-and-seek game is on. This same principle is, however, in place for any other space asset-any nation with basic tracking capabilities may quickly detect whether the military asset or weapon is located above its territory or on the other side of the planet and thus mitigate the possible strategic impact of space weapons not aiming at mass destruction. Another possibility is to attempt to destroy the weapon in orbit. Given the level of development for the ASAT technology, it seems that they will prevail over any possible weapon system for the time to come. Next issue, directly connected to the first one, is the utilization of weak physical protection of space objects that need to be as light as possible to reach the orbit and to be able to withstand harsh conditions of the domain. This means that their protection against ASAT weapons is very limited, and, whereas some avoidance techniques are being discussed, they are of limited use in case of ASAT attack. We can thus add to the issue of predictability also the issue of easy destructibility of space weapons and other military hardware (Dolman 2005, p. 40; Anantatmula 2013, p. 137; Steinberg 2012, p. 255). Even if the high ground was effectively achieved and other nations could not attack the space assets directly, there is still a need for communication with those assets from Earth. There are also ground facilities that support and control such weapons located on the surface. Electromagnetic communication with satellites might be jammed or hacked and the ground facilities infiltrated or destroyed thus rendering the possible space weapons useless (Klein 2006, p. 105; Rendleman 2013, p. 81). This issue might be overcome by the establishment of a base controlling these assets outside the Earth-on Moon or lunar orbit, at lunar L-points, etc.-but this perspective remains, for now, unrealistic. Furthermore, no contemporary actor will risk full space weaponization in the face of possible competition and the possibility of rendering the outer space useless. No actor is dominant enough to prevent others to challenge any possible attempts to dominate the domain by military means. To quote 2016 Stratfor analysis, "(a) war in space would be devastating to all, and preventing it, rather than finding ways to fight it, will likely remain the goal" (Larnrani 20 16). This stands true unless some space actor finds a utility in disrupting the arena for others.

#### MAD checks space escalation – nuclear response and debris

Bowen 18 [Bleddyn Bowen, Lecturer in International Relations at the University of Leicester. The Art of Space Deterrence. February 20, 2018. https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/]

Fourth, the ubiquity of space infrastructure and the fragility of the space environment may create a degree of existential deterrence. As space is so useful to modern economies and military forces, a large-scale disruption of space infrastructure may be so intuitively escalatory

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#### No one’s going to war over a downed satellite

Bowen 18 [Bleddyn Bowen, Lecturer in International Relations at the University of Leicester. The Art of Space Deterrence. February 20, 2018. https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/]

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

#### Use or lose is wrong – It’d be irrational AND never be contemplated by any state.

Kroenig 18 Matthew Kroenig, Associate Professor in the Department of Government and the Edmund A. Walsh School of Foreign Service at Georgetown, The Logic of American Nuclear Strategy: Why Strategic Superiority Matters, Oxford UPress, pp. 137-142

The second, and more common, argument as to why nuclear superiority might be destabilizing is because the state in the position of nuclear inferiority (in this case, America’s adversaries) may feel “use ’em or lose ’em” (UELE) pressures, but this argument also withers under interrogation.26

According to strategic stability theorists, a US nuclear advantage increases the danger of nuclear war because the inferior opponent may fear that its nuclear arsenal is vulnerable to a first strike. Rather, than wait for the adversary (in this case the United States) to move first and wipe out, or seriously blunt, its strategic forces, the argument goes, the inferior state may decide to intentionally launch a nuclear war early in a crisis in order to avoid suffering a disarming first strike. This is the logic most often invoked by strategic stability theorists when they claim that US nuclear advantages are destabilizing. This is also the precise problem identified and inspired by Wohlstetter’s basing studies.

Use ’em or lose ’em enjoys a certain superficial plausibility, but, upon closer inspection, there are two fundamental reasons why the logic simply does not hold up. First, it ignores the fact that the superior state retains a healthy ability to retaliate. So, even if the inferior state is worried about having its nuclear weapons eliminated in a first strike, the decision to launch its nuclear weapons first as a coping mechanism would be a decision to intentionally launch a nuclear war against a state with at least a secure, second-strike capability. This means that even if the inferior state launches its nuclear weapons first, it will be virtually guaranteed to suffer devastating nuclear retaliation. Moreover, given that it is in a situation of extreme inferiority (so extreme that it might even be vulnerable to a preemptive nuclear strike), this would mean intentionally launching a devastating nuclear war that will likely turn out much worse for itself then for its opponent. It would simply be irrational for a state to intentionally launch a nuclear war against a state with an assured retaliatory capability.

Let us consider a concrete example. The United States maintains nuclear superiority over China, as we have seen in previous chapters. Strategic stability theorists want us to believe that if the United States takes additional steps to further enhance its superiority, then China would face even greater temptations to launch a nuclear first strike against the US homeland in the event of a serious crisis. In other words, strategic stability theorists hold that China would be so worried about losing a devastating nuclear war against United States that it would intentionally choose to start a devastating nuclear war against the United States. The argument does not make sense.

### 1NC – South Asia

#### India is counterforce-capable – if a war starts India will wipe out Pakistan’s nukes

Clary and Narang 19 – Christopher, assistant professor of political science at the University at Albany, State University of New York, and Vipin, associate professor of political science at the Massachusetts Institute of Technology, “India’s Counterforce Temptations”, International Security, Vol. 43, No. 3

Is India shifting to a nuclear counterforce strategy? The conventional wisdom is that India only reluctantly acquired nuclear weapons and has been a restrained nuclear weapons power that adheres to a no-first-use (NFU) policy and rejects the possibility of nuclear warfighting. Although the empirical record largely bears out its reluctance to acquire nuclear weapons,1 India’s continued nuclear restraint is less certain. Specifically, India is developing a suite of capabilities and increasingly making statements about preemption and counterforce that appear inconsistent with its professed strategy of assured retaliation or minimum deterrence. This article identifies, and attempts to explain, why India has devoted considerable resources since 2003 to develop and acquire capabilities that exceed what is required for a strictly retaliatory nuclear arsenal. Specifically, why has India sought to build a diverse and growing number of accurate and responsive nuclear delivery systems at higher states of readiness, an increasing array of surveillance platforms, and both indigenous and imported air and ballistic missile defenses? Moreover, these capability developments have emerged alongside an increasing number of public statements by serving and retired Indian national security officials arguing that preemptive counterforce options against Pakistan are permissible doctrinally and advantageous strategically.2 We argue that these apparently discrepant capability developments are most likely the result of India’s conscious pursuit of more flexible options beyond countervalue targeting—namely, counterforce options against Pakistan’s longer-range nuclear systems—and are largely not the product of either technological drift or strategic confusion. If our assessment is correct, then these developments are an early indication of India’s exploration and development of options to target Pakistan’s strategic nuclear systems in a conflict. Unlike India’s nuclear strategy toward China, which appears to remain countervalue assured retaliation, available evidence suggests that India may be developing options toward Pakistan that would permit it to engage in hard nuclear counterforce targeting, providing India a limited ability to disarm Pakistan of strategic nuclear weapons.3 Such a development would entail a decoupling of India’s nuclear strategies toward its two neighbors. A shift to incorporating nuclear counterforce options may be an attempt to escape India’s strategic paralysis following Pakistan’s development of tactical nuclear weapons, which Pakistan threatens to use against Indian conventional forces should they cross certain red lines. What can India do if Pakistan uses one or several tactical nuclear weapons against Indian forces? India’s official nuclear doctrine explicitly threatens massive retaliation against any such use, which outside observers have widely interpreted as implying a major countervalue strike against Pakistani cities. Nevertheless, many have questioned the credibility of massive retaliation—whether any Indian leader would in fact order the killing of millions of innocent Pakistani civilians in response to nuclear use on Indian forces operating on Pakistani soil.4 If India chose not to retaliate with massive force, it could attempt a proportional tit-for-tat response. Such a response, however, would cede the nuclear initiative back to Pakistan, which, retaining its long-range strategic nuclear weapons, could respond by destroying one or several Indian cities. Further, pursuing such graduated options would place enormous pressure on India’s command and control system.5 Thus, some Indian policymakers appear to be attracted to a third option: a hard counterforce strike against Pakistan’s relatively small number—perhaps several dozen—strategic nuclear assets on land (and eventually at sea) to eliminate its ability to destroy Indian strategic targets and cities. Such a strategy would be consistent with India’s doctrine of massive retaliation—massive retaliation strategies need not be countervalue—while avoiding the credibility issues associated with a countervalue targeting strategy following Pakistan’s use of nuclear weapons on the battlefield. One problem with a counterforce option, however, is that, seized with the fear of a disarming strike, Pakistan would have an incentive to unleash its entire arsenal first before losing it, which in turn would encourage India to attempt a counterforce strike preemptively—a problem given India’s NFU commitment, which most commentators have assumed would oblige India or its forces to suffer a nuclear detonation before retaliating. We argue that these preemptive pressures associated with counterforce targeting may explain why a number of influential Indian officials have made a persistent and otherwise puzzling argument either that India should revise its NFU policy to permit preemption or that preemptive use upon warning of imminent Pakistani launch is consistent with its existing NFU policy. India’s adoption of potentially preemptive counterforce options—even as a choice on a menu that otherwise consists of countervalue retaliation options— would mark a seismic shift in Indian nuclear strategy and the death knell of so-called credible minimum deterrence. Furthermore, if India construes preemption as consistent with its NFU policy and therefore preemptive counterforce as a form of massive retaliation, it may decide that no overt changes to its declaratory doctrine are necessary. As India’s former National Security Adviser Shivshankar Menon recently stated, “India’s nuclear doctrine has far greater flexibility than it gets credit for.”6 In short, India’s national security officials may have already quietly concluded that preemptive counterforce options—and associated increases in strategic force capabilities—are consistent with India’s existing nuclear doctrine. Therefore, there may be no explicit acknowledgment or indicators of this shift, which may force Pakistan to adjust its nuclear posture and strategy on the fear that it has already occurred. Eliminating Pakistan’s strategic nuclear weapons would be tempting for India. Rather than current military plans that aim to punish Pakistan for future provocations while avoiding Pakistan’s nuclear red lines, plans for a counterforce-capable India would be able to wage whatever conventional war it prefers by eliminating the nuclear threat altogether. India might be able to reestablish deterrence against Pakistani terrorist attacks on Indian territory in ways that aborted adjustments to its conventional doctrine have failed to do.

#### It'll be successful, because India has supersonic missiles. BMD doesn’t work against those.

Christine Leah 18, visiting fellow at the Centre for International Strategic Studies (CISS), working on conventional arms sales and conventional and nuclear arms control in South Asia, “Counterforce to counter what?”, https://nation.com.pk/31-Jan-2018/counterforce-to-counter-what

With India developing its indigenous defence industry, and acquiring technology from the West as well, it seems to be on a track to gain an edge over its South Asian neighbors, especially Pakistan. This includes the acquisition/development with other countries on technology such as cruise missiles, Airborne Warning and Control Systems (AWACS), and strike aircraft. Of these, inciting concern is India’s growing air combat and ground strike capacity based on Su-30 MKI, Mirage-2000H, Jaguar strike aircraft, Tu-22M backfire bombers, and more recently, C-295 transport aircraft, and the French Rafale which augment its capacity to go after its counterforce targets. Moreover, major arms sales to India in the last decade include U.S. F-16s and guided bombs for Jaguar aircraft. From France, the sales include 36 French-built Rafale planes, six Scorpene submarines, upgrades to 49 Mirage-2000-5, air-to air missiles for these planes and a huge sale of 126 multi-role medium combat aircraft. Similarly, Russia has exported combat aircraft such as 270 Su-30s, 45 naval Mig-29Ks, 150 Mi-17 transport helicopters and ten Ka-31 helicopters. In 2006, the DRDO and a Russian venture jointly developed the BrahMos cruise missile — a supersonic missile that combines Russian propulsion technology and new Indian guidance technology. BrahMos cruise missile can reach supersonic speed and thus bypass surface-to-air missile defense systems. Israel has also transferred electronic warfare technology and precision-guided munitions. The Indian-Israeli arms trade amounts to more than $2 billion annually. In 2004, the British company BAE Systems won a deal to sell advanced jet trainers to the Indian Air Force. In 2007, India paid the United States $50 million for the amphibious USS Trenton, and in 2009, Boeing won a $2 billion order for eight P-8 maritime reconnaissance aircraft and Lockheed Martin won a $1 billion contract for six C-1301J transport aircraft. Together with former U.S. President Barack Obama also offered to sell C-17 and F-414 aircraft. More so, India’s inclusion into the Missile Technology Control Regime gives it access to technology that is normally restricted for non-members. By stark contrast, the Pakistan Air Force has been denied state of the art aircraft acquisitions for two decades, and has been limited to refurbishing older high-performance aircraft. India is also expanding its naval capabilities, including a sea-based strike force as the logical step in its quest for an assured retaliatory capability. In turn, Pakistan’s naval nuclear developments are fueled by nuclear developments on the Indian side, an understandable reaction but one which has drawn considerable criticism. The drone technology which has been easily accessible to India is another controversial issue. Recently, the U.S. made a sales agreement with New Delhi for naval drones. It has been reported that Washington does not deem its sale of naval drones to India to be threatening for Pakistan, as it considers that these are not armed but are only intended for surveillance across the Indian Ocean. However, AWACS, drones, and other sophisticated surveillance and reconnaissance capabilities make India’s conventional strikes more effective, as well as enabling it to achieve air superiority more quickly. The accumulation of all this has increased threat to the survivability of Pakistani nuclear delivery systems. Indeed, it is capabilities like precision-guided munitions/guided bombs, in this particular strategic context, that make Pakistan more vulnerable to an Indian pre-emptive strike.

#### Otherwise, Pakistan’s nukes are vulnerable – causes global nuclear war

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But a suicide bomber in Pakistan rammed a car packed with explosives into a jeep filled with troops today, killing five and wounding as many as 21, including several children who were waiting for a ride to school. Residents of the region where the attack took place are fleeing in terror as gunfire rings out around them, and government forces have been unable to quell the violence. Two regional government officials were beheaded by militants in retaliation for the killing of other militants by government forces. As familiar as this sounds, it did not take place where we have come to expect such terrible events. This, unfortunately, is a whole new ballgame. It is part of another conflict that is brewing, one which puts what is happening in Iraq and Afghanistan in deep shade, and which represents a grave and growing threat to us all. Pakistan is now trembling on the edge of violent chaos, and is doing so with nuclear weapons in its hip pocket, right in the middle of one of the most dangerous neighborhoods in the world.The situation in brief: Pakistan for years has been a nation in turmoil, run by a shaky government supported by a corrupted system, dominated by a blatantly criminal security service, and threatened by a large fundamentalist Islamic population with deep ties to the Taliban in Afghanistan. All this is piled atop an ongoing standoff with neighboring India that has been the center of political gravity in the region for more than half a century. The fact that Pakistan, and India, and Russia, and China all possess nuclear weapons and share the same space means any ongoing or escalating violence over there has the real potential to crack open the very gates of Hell itself. Recently, the Taliban made a military push into the northwest Pakistani region around the Swat Valley. According to a recent Reuters report: The (Pakistani) army deployed troops in Swat in October 2007 and used artillery and gunship helicopters to reassert control. But insecurity mounted after a civilian government came to power last year and tried to reach a negotiated settlement. A peace accord fell apart in May 2008. After that, hundreds — including soldiers, militants and civilians — died in battles. Militants unleashed a reign of terror, killing and beheading politicians, singers, soldiers and opponents. They banned female education and destroyed nearly 200 girls' schools. About 1,200 people were killed since late 2007 and 250,000 to 500,000 fled, leaving the militants in virtual control. Pakistan offered on February 16 to introduce Islamic law in the Swat valley and neighboring areas in a bid to take the steam out of the insurgency. The militants announced an indefinite cease-fire after the army said it was halting operations in the region. President Asif Ali Zardari signed a regulation imposing sharia in the area last month. But the Taliban refused to give up their guns and pushed into Buner and another district adjacent to Swat, intent on spreading their rule. The United States, already embroiled in a war against Taliban forces in Afghanistan, must now face the possibility that Pakistan could collapse under the mounting threat of Taliban forces there. Military and diplomatic advisers to President Obama, uncertain how best to proceed, now face one of the great nightmare scenarios of our time. "Recent militant gains in Pakistan," reported The New York Times on Monday, "have so alarmed the White House that the national security adviser, Gen. James L. Jones, described the situation as 'one of the very most serious problems we face.'" "Security was deteriorating rapidly," reported The Washington Post on Monday, "particularly in the mountains along the Afghan border that harbor al-Qaeda and the Taliban, intelligence chiefs reported, and there were signs that those groups were working with indigenous extremists in Pakistan's populous Punjabi heartland. The Pakistani government was mired in political bickering. The army, still fixated on its historical adversary India, remained ill-equipped and unwilling to throw its full weight into the counterinsurgency fight. But despite the threat the intelligence conveyed, Obama has only limited options for dealing with it. Anti-American feeling in Pakistan is high, and a U.S. combat presence is prohibited. The United States is fighting Pakistan-based extremists by proxy, through an army over which it has little control, in alliance with a government in which it has little confidence." It is believed Pakistan is currently in possession of between 60 and 100 nuclear weapons. Because Pakistan's stability is threatened by the wide swath of its population that shares ethnic, cultural and religious connections to the fundamentalist Islamic populace of Afghanistan, fears over what could happen to those nuclear weapons if the Pakistani government collapses are very real. "As the insurgency of the Taliban and Al Qaeda spreads in Pakistan," reported the Times last week, "senior American officials say they are increasingly concerned about new vulnerabilities for Pakistan's nuclear arsenal, including the potential for militants to snatch a weapon in transport or to insert sympathizers into laboratories or fuel-production facilities. In public, the administration has only hinted at those concerns, repeating the formulation that the Bush administration used: that it has faith in the Pakistani Army. But that cooperation, according to officials who would not speak for attribution because of the sensitivity surrounding the exchanges between Washington and Islamabad, has been sharply limited when the subject has turned to the vulnerabilities in the Pakistani nuclear infrastructure." "The prospect of turmoil in Pakistan sends shivers up the spinesof those U.S. officials charged with keeping tabs on foreign nuclear weapons," reported Time Magazine last month. "Pakistan is thought to possess about 100 — the U.S. isn't sure of the total, and may not know where all of them are. Still, if Pakistan collapses, the U.S. military is primed to enter the country and secure as many of those weapons as it can, according to U.S. officials. Pakistani officials insist their personnel safeguards are stringent, but a sleeper cell could cause big trouble, U.S. officials say." In other words, a shaky Pakistan spells trouble for everyone, especially if America loses the footrace to secure those weapons in the event of the worst-case scenario. If Pakistani militants ever succeed in toppling the government, several very dangerous events could happen at once. Nuclear-armed India could be galvanized into military action of some kind, as could nuclear-armed China or nuclear-armed Russia. If the Pakistani government does fall, and all those Pakistani nukes are not immediately accounted for and secured, the specter (or reality) of loose nukes falling into the hands of terrorist organizations could place the entire world on a collision course with unimaginable disaster. We have all been paying a great deal of attention to Iraq and Afghanistan, and rightly so. The developing situation in Pakistan, however, needs to be placed immediately on the front burner. The Obama administration appears to be gravely serious about addressing the situation. So should we all.

#### Even if Pakistan retaliates, no extinction now – India has BMD and it works to protect cities from current Pakistani nukes

Zachary Keck 18, very intelligent, Public Affairs Fellow at the Nonproliferation Policy Education Center, "India's Missile Defenses Can Now Take On Decoys. That's a Really Big Deal.", National Interest, https://nationalinterest.org/blog/buzz/indias-missile-defenses-can-now-take-decoys-thats-really-big-deal-28627

India’s efforts to build a homegrown ballistic missile defense system achieved a major success. On August 2nd, India tested its Advanced Area Defence (AAD)/Ashvin Advanced Defense interceptor missile against decoy targets for the first time. “One target among simultaneously incoming multiple targets was selected on [sic] real time, the weapon system radars tracked the target and the missile locked on to it and intercepted the target with a high degree of accuracy,” India’s government announced in [a press release](http://pib.nic.in/newsite/PrintRelease.aspx?relid=181451) . The test was against a medium-range ballistic missile with a range of 1,500 kilometers. Franz-Stefan Gady of The Diplomat [speculates that this](https://thediplomat.com/2018/08/indias-advanced-air-defense-interceptor-shoots-down-ballistic-missile-target-in-test/) was the first test of the new indigenous imaging infrared (IIR) seeker, which was developed to help the interceptors distinguish warheads from decoy/dummies. This capability is increasingly necessary as countries like China and [Pakistan](https://thediplomat.com/2017/01/why-pakistans-newly-flight-tested-multiple-nuclear-warhead-capable-missile-really-matters/) develop multiple independently targetable reentry vehicles (MIRV) and multiple reentry vehicles (MRVs). MIRVs allow a single missile to aim warheads at different targets whereas MRVs contain multiple warheads but at the same target. The use of decoys are a more cost effective way to try to confuse missile defense systems enough so that the warheads get through to their target. Either way, though, India’s missile defense systems will need to be able to engage multiple targets simultaneously. The most recent test was overseen by the Defense Research Development Organization (DRDO), the premier defense technology agency within India’s Ministry of Defense. It took place at Abdul Kalam Island, Odisha in the Bay of Bengal. The AAD is a single-stage solid-fueled hit-to-kill interceptor missile that destroys hostile missiles in the terminal phase of flight. The press release says it is capable of destroying targets at altitudes of 15 and 25 kilometers. The AAD had been tested at least five times before this most recent one. Those include tests in December, March and February 2017 as well as one a piece in 2016 and 2015. The Diplomat’s Gady says the earlier tests were all against Prithvi-II or III short-range ballistic missiles. Given the range cited in the press statement, the test this month was against a different and more powerful missile. The Prithvi missiles are also the basis for the other missile defense system that India is seeking to build. The Prithvi missile defense interceptors are used for exo-atmospheric intercepts (i.e. those outside the atmosphere) whereas the AAD are for endo-atmospheric intercepts. Prithvi Air Defense missile is more developed than the AAD having [been first tested](https://nationalinterest.org/blog/the-buzz/americas-killer-m1-abrams-tank-now-has-its-own-shields-22719) in 2007. Besides trying to build its own missile defense systems, India is also looking to purchase them from abroad. For years there have been reports that India is interested in buying Russia’s S-400 air and missile defense system. At the October 2016 BRICS summit in Goa, Indian Prime Minister Narendra Modi and Russian President Vladimir Putin [announced a $5 billion deal](http://www.news18.com/news/india/brics-summit-2016-india-to-buy-5-billion-air-defence-system-from-russia-1301952.html) for Delhi to acquire the S-400 Triumf air defense system. There was increased chatter that a deal was imminent in December 2017. "We hope that the S-400 deal will be signed with India soon," Russian Vice-Premier Dmitry Rogozin [said late](http://tass.com/defense/983372) last year. Around the same time, Viktor N. Kladov, director for international cooperation and regional policy of Rostec, a massive Russian conglomerate, made similar comments, saying that negotiations over the S-400 had reached a “very profound stage.” It appears that this sale might have been slowed because of fears that the United States would sanction India for purchasing the Russian system. The recently passed 2019 National Defense Authorization Act (NDAA) [provided a waiver](https://timesofindia.indiatimes.com/india/us-congressional-conference-report-paves-way-for-caatsa-waiver-for-india/articleshow/65112640.cms) for India from Russia related sanctions. Thus, the deal might soon go through. India also recently announced it would spend $1 billion to purchase a National Advanced Surface to Air Missile System-II (NASAMS-II) to protect the capital city of Delhi. Built by the U.S. firm Raytheon and the Norwegian company Kongsberg Defense and Aerospace, India intends to use the NASAMS to deal with cruise missile and other aerial threats against the capital. “Once the Phase-I of the BMD [ballistic missile defense] system is operational,” [a source told the Times of India](https://timesofindia.indiatimes.com/india/like-washington-moscow-delhi-too-to-get-missile-shield/articleshow/65181833.cms) , referring to the AAD and Prithvi systems, “it will be deployed to protect cities like Delhi and Mumbai... The NASAMS, in turn, is geared towards intercepting cruise missiles, aircraft, and drones.”