# NC

## 1 - NC

#### The metaethic is constructivism – truth is not absolute but rather created by individuals based on their own individual perspective. Prefer it

#### [1] Opacity – we can never access another person’s perspective because we can never fully understand who someone else is or what they think. Every truth I create cannot be universalized because I can’t guarantee that they will create the same truth because they do what they want

#### [2] Linguistics – Truth is constructed by language, which is completely arbitrary. Nothing tells me that a chair is a chair; I only assign it that name arbitrarily because I want to. Meaning can’t be contained within language if we make it up ourselves, and truth doesn’t exist absent language.

#### But, the state of nature leads to infinite violence – competing truth claims means conflicts cannot be resolved. Two warrants:

#### [1] Ambiguity – everyone can assert their own claims to be true and refuse contestation – this means we always fight over who is correct. This is irresolvable because there is no mediator to adjudicate the dispute and tell who is correct – we just fight forever

#### [2] Self-Interest – everyone wants their truth claims to be true because it benefits them – this leads to conflict because we can’t divide limited resources and have to compete with each other – terminates in death because neither of us want to concede to the other

#### This state of nature is brutish and has no conception of morality because we don’t have any unified truth to guide us, and thus outweighs on magnitude. The solution is the creation of the sovereign to mediate what is true and enforce the law; she is the ultimate ruler and arbitrator. It must eliminate all conflicts to bring peace to our violent natures.

#### Therefore, the standard is adhering to the state’s perspective.

#### Impact Calculus: Only evaluate impacts to structural purpose –what you justify through doing the action. We can control what we justify but we can’t control what we cause.

#### Prefer my standard additionally

#### 1. Moral Discourse- outside of the state there is no regulative authority to ensure that individuals are capable of engaging in the same moral language. For example, one party can think good means x and another thinks that good means y. The state clarifies this dispute by being an ultimate arbiter and declaring what is good and bad. This means that absent my standard, moral language makes no sense.

#### 2. Infinite Regress- other moral theories inevitably fail because individuals can question why they follow them, but state basedmorality escapes this because individuals consent to the state by virtue of engaging in it.

#### 3. Constitutivism– other moral theories might matter in the abstract but obligations differ based on the nature of agency. For example, a janitor has different obligations than teachers, in the same vein the state has unique obligations that might be inconsistent with morality in general.

#### 4. TJFs – morality’s a definition of the word ‘ought’ which means it can be evaluated as a topicality issue

#### [a] Resolvability – other debates create a mess of weighing and link turns, but using Hobbes is easily resolvable because it becomes a question of what the sovereign believes. Independently indicts their framework, we can’t act on it if every action required endless consideration

#### [b] Political Education – politicians have to understand the social contract in order to know what powers they have and what they have to provide citizens, and debating about Hobbes helps us learn about that.

#### Now negate – the aff invites policy action, which in turn invokes the state to do something – a] we must adhere to the state’s perspective, which means the aff can’t create a universal obligation to make voting compulsory if some states decide not to do it and b] the aff attempts to make the state do something, which implies they think they are a greater moral arbiter – that’s wrong

## 2 – DA

#### The plan requires clarifying international space law---causes strategic bargaining to extract concessions

Alexander William Salter 16, Assistant Professor of Economics, Rawls College of Business, Texas Tech University, "SPACE DEBRIS: A LAW AND ECONOMICS ANALYSIS OF THE ORBITAL COMMONS", 19 STAN. TECH. L. REV. 221 (2016), https://law.stanford.edu/wp-content/uploads/2017/11/19-2-2-salter-final\_0.pdf

V. MITIGATION VS. REMOVAL

Relying on international law to create an environment conducive to space debris removal initially seems promising. The Virginia school of political economy has convincingly shown the importance of political-legal institutions in creating the incentives that determine whether those who act within those institutions behave cooperatively or predatorily.47 In the context of space debris, the role of nation-states, or their space agencies, would be to create an international legal framework that clearly specifies the rules that will govern space debris removal and the interactions in space more generally. The certainty afforded by clear and nondiscriminatory48 rules would enable the parties of the space debris “social contract” to use efficient strategies for coping with space debris. However, this ideal result is, in practice, far from certain. To borrow a concept from Buchanan and Tullock’s framework,49 the costs of amending the rules in the case of international space law are exceptionally high. Although a social contract is beneficial in that it prevents stronger nation-states from imposing their will on weaker nation-states, it also creates incentives for the main spacefaring nations to block reforms that are overall welfare-enhancing but that do not sufficiently or directly benefit the stronger nations.

The 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (more commonly known as the Outer Space Treaty) is the foundation for current international space law.50 All major spacefaring nations are signatories. Article VIII of this treaty is the largest legal barrier to space debris removal efforts. This article stipulates that parties to the treaty retain jurisdiction over objects they launch into space, whether in orbit or on a celestial body such as the Moon. This article means that American organizations, whether private firms or the government, cannot remove pieces of Chinese or Russian debris without the permission of their respective governments. Perhaps contrary to intuition, consent will probably not be easy to secure.

A major difficulty lies in the realization that much debris is valuable scrap material that is already in orbit. A significant fraction of the costs associated with putting spacecraft in orbit comes from escaping Earth’s gravity well. The presence of valuable material already in space can justifiably be claimed as a valuable resource for repairs to current spacecraft and eventual manufacturing in space. As an example, approximately 1,000 tons of aluminum orbit as debris from the upper stages of launch vehicles alone. Launching those materials into orbit could cost between $5 billion and $10 billion and would take several years.51 Another difficulty lies in the fact that no definition of space debris is currently accepted internationally. This could prove problematic for removal efforts, if there is disagreement as to whether a given object is useless space junk, or a potentially useful space asset. Although this ambiguity may appear purely semantic, resolving it does pose some legal difficulties. Doing so would require consensus among the spacefaring nations. The negotiation process for obtaining consent would be costly.

Less obvious, but still important, is the 1972 Convention on International Liability for Damage Caused by Space Objects, normally referred to as the Liability Convention. The Liability Convention expanded on the issue of liability in Article VII of the Outer Space Treaty. Under the Liability Convention, any government “shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft, and liable for damage due to its faults in space.”52 In other words, if a US party attempts to remove debris and accidentally damages another nation’s space objects, the US government would be liable for damages. More generally, because launching states would bear costs associated with accidents during debris removal, those states may be unwilling to participate in or permit such efforts. In theory, insurance can partly remediate the costs, but that remediation would still make debris removal engagement less appealing.

A global effort to remediate debris would, by necessity, involve the three major spacefaring nations: the United States, Russia, and China.53 However, any effort would also require—at a minimum—a significant clarification and—at most —a complete overhaul of existing space law.54 One cannot assume that parties to the necessary political bargains would limit parleying to space-related issues. Agreements between sovereign nation-states must be self-enforcing.55 To secure consent, various parties to the change in the international legal-institutional framework may bargain strategically and may hold out for unrelated concessions as a way of maximizing private surplus. The costs, especially the decision-making costs, of changing the legal framework to secure a global response to a global commons problem are potentially quite high.

#### Russia uses negotiations to push the PPWT---erodes US space dominance---unilat solves

Michael Listner 18, JD, Regent University School of Law, the founder and principal of the legal and policy think-tank/consultation firm Space Law and Policy Solutions, Sept 17 2018, "The art of lawfare and the real war in outer space", The Space Review, www.thespacereview.com/article/3571/1

A battle for primacy in outer space took place on August 14, 2018, among the Russian Federation, the United States, and, indirectly, the People’s Republic of China. This battle did not involve the exotic technology of science fiction, antisatellite weapons (ASATs), or the incapacitation of satellites; it was not part of a hot war and did not even occur in outer space. Rather, it took place in the halls of the Conference of Disarmament in Geneva, Switzerland, and concerned the interdiction of the hypothetical deployment of instrumentalities of a hot war in outer space. The carefully orchestrated arena for this battle by the proponents of banning so-called space weapons involved methodologies, institutions, and agents of international law but was undermined by a vigorous counterattack by the United States using the same forum and suite of instruments so skillfully levied against it.1 This battle, of course, is not a single instance but the latest skirmish of a much larger conflict involving real war in space.

There’s been significant attention—and overstatem­ent— about the effect of a proposed Space Force by the United States, including an arms race and dominance as articulated by the United States,2 yet little attention has been given to the contest that continues to be fought over outer space using the tools of international law and policy, both of which are instruments of “lawfare.” Maj. General Charles N. Dunlap, Jr. (retired)3 first defined lawfare in the paper “Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts,” as “a method of warfare where law is used as a means of realizing a military objective.”4 This definition can be expanded to the use of hard law, soft law, and non-governmental organizations and institutions within the international arena to achieve a national objective and geopolitical end that would otherwise require the use of hard power. As observed by General Dunlap, lawfare imputes the teachings of Sun Tzu in particular this teaching: “The supreme art of war is to subdue the enemy without fighting.”5

Lawfare is not a new concept and has been used in many domains, but the tools brought to bear have become more prolific, and the domain of outer space has been and continues to be a theater where it is applied. The earliest example of lawfare (even though the term was not yet coined) in outer space occurred pre-Sputnik with Soviet Union attempting to use customary law to make claims of sovereignty extending beyond the atmosphere to the space above its territory. This claim was preempted by the launch of Sputnik 1 and the act of the satellite flying over the territory of other nations.6 The Eisenhower Administration saw this as an opportunity to meet a national space policy goal and likewise used customary law as an implement of lawfare and successfully created the principle of free access to outer space, which it utilized for photoreconnaissance activities in lieu of overflights of another nation’s sovereign airspace.7 The Soviet Union unsuccessfully attempted to defeat this move using lawfare in the United Nations through a proposal that would have prohibited the use of outer space for the purpose of intelligence gathering.8

Since that setback, the art of lawfare in outer space has settled on the objective ascribed to another teaching of Sun Tzu:

“With regard to precipitous heights, if you proceed your adversary, occupy the raised and sunny spots, and there wait for him to come up. Remember, if the enemy has occupied precipitous heights before you, do not follow him, but retreat and try to entice him away.”9

The second part of this teaching exemplifies the role of lawfare in the present war in outer space: to employ the tools and institutions of international law as a means to legally corner an adversary and gain geopolitical advantage in soft power, with the aim of slowing and eroding the advantage that adversary has attained through preeminence in the domain of outer space, and replace it with their own. This objective is accomplished by two general means: legally-binding measures, most commonly in the form of treaties, and so-called non-binding measures couched as sustainability.

Lawfare in space continued in the intervening years between Sputnik-1 and the signature and ratification of the Outer Space Treaty and afterward. The weapon of choice: disarmament proposals for outer space. Provisions for banning so-called space weapons in the Outer Space Treaty were rejected by the Soviet Union in favor of separate arms control measures.10 These measures included proposals, some of which related to the proscription of ASATs, designed to not only gain an advantage in outer space but to gauge political intent and resolve.11

The lawfare offensive escalated after the proposed Strategic Defense Initiative with an effort curtail space-based missile defense technology through a ban on so-called space weapons and a proverbial arms race in outer space. The Prevention of an Arms Race in Outer Space (PAROS), introduced in 1985, continues to seek a legally binding measure to place any weapon in outer space, including those designed for self-defense. It spawned measures such as the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT), co-sponsored by Russia and China. This and other measures have met resistance as unverifiable and certainly are not likely to gain the advice and consent of the US Senate for ratification. The end game of the use of lawfare in the form of efforts like PAROS—the latest attempt at which was defeated in Geneva—is to propose legally binding measures that proponents would ignore to their advantage in any event. The sponsors and advocates of these hard-law measures recognize they will not come to fruition but, in the process of promoting them, will enhance their soft power and moral authority, which can be applied to entice their adversary down.

Non-binding resolutions and measures in the form of political agreements and guidelines are being used concurrently in the lawfare engagement in outer space, where proposals for legally binding measures alone fall short of the goal of creating hard law and challenging dominance in outer space. These resolutions and measures, which emphasize sustainability, are designed to perform an end run around the formalities of a treaty to entice agreement on issues that would otherwise be unacceptable in a hard-law agreement. These measures have the dual effect to create soft-power support on the one hand and hard law on the other. This tool of lawfare, which uses clichés of cooperation and sustainability, is a ploy that applies the ambiguous nature of customary international law to achieve what cannot be done through treaties: to “entice the adversary away” and create legal and political constraints to bind and degrade its use of outer space or prevent it from maintaining its superiority, all the while allowing others to play catchup and replace one form of dominance with another. While lawfare is by nature asymmetric, this indirect approach could be considered a subset an irregular tactic of lawfare, as opposed to the use of formal treaties in lawfare.

The crux is that, like space objects used in outer space, international law and its implements are dual-use in that they can be used for proactive ends or weaponized, with those using the appliances of lawfare to encourage cession of the high ground choosing the latter rather than the former. The decision to weaponize international law and its institutions to prosecute this war in space brings into question the efficacy of new rules or norms. Indeed, the idea of expanding the jurisprudence of outer space through custom, as being suggested by the United States, and more recently gap-filling rules being suggested by academia that could become custom, presents the real chance that, rather than the creation of the ploughshare of sustainability, new and more effective swords for lawfare will be forged.

To paraphrase Sun Tzu, “all war is deception.” In the case of outer space, the pretext in the current war in space is that an arms race and a hot war in outer space is inevitable, and can only be avoided by formal rules or international governance. Conversely, a hot war can be prevented in no small part by using lawfare to engage in the contemporary war in space using the tools of, and the abundant resources found in, the experience of attorneys and litigators in particular to supplement and support diplomats to extend the velvet glove when applicable, and bare knuckles when necessary. If the August 14 statement in Geneva is any indicator, the United States may have just done that and begun the shift from light-touch diplomacy to bringing its legal warriors to bear in full-contact lawfare to engage and win the current war in outer space and help deter a more serious hot war from occurring without sacrificing the superiority it possesses in outer space.

#### The PPWT prohibits space-based missile defense

Jack M. Beard 16, Associate Professor of Law at the University of Nebraska College of Law, Feb 15 2016, "Soft Law ’s Failure on the Horizon: The International Code of Conduct for Outer Space Activities", University of Pennsylvania Journal of International Law, Vol. 38, No. 2, 2016, <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1086&context=spacelaw>

B. Avoid Arms Control Traps in Space

Any successful effort to achieve legally binding restrictions on military activities or weapons in space must focus on specific, definable, and limited objectives or run afoul of issues that have historically ensured deadlock among suspicious and insecure adversaries.306 Some seemingly desirable goals, however, are likely to ensure failure.

The first such problematic goal involves attempting to use arms control agreements or other instruments to comprehensively ensure peace in space. Unfortunately, the integration of modern military systems on earth, sea, air and space guarantees that at some point states seeking to disrupt or deny the ability of an adversary (such as the United States) to project power will find space capabilities to be a particularly appealing target, especially in the early stages of a crisis or conflict.307 The presence of so many things of military value in space thus makes actions by an adversary to neutralize, disrupt or destroy these things likely during a major conflict on earth.308

The second problematic arms control goal in space that seems certain to ensure stalemate involves attempting to define and prohibit military technologies with a view to broadly prevent the weaponization of space. Clearly defining a space weapon for purposes of any legally binding arms control agreement is a daunting task, one which is made particularly challenging by the “essentially military nature of space technology.”309 As noted, space technologies are routinely viewed as dual-use in nature, meaning that they can be readily employed for both civilian and military uses. Determining the ultimate purpose of many space technologies may thus depend on discerning the intentions of states, a process perhaps better suited for psychological than legal evaluation. 310

Further complicating the classification of space military technologies is the inherent difficulty in distinguishing most space weapons on the basis of their offensive and defensive roles or even their specific missions.311 For example, this problem lies at the heart of debates over the status and future of ballistic missile defense (BMD) programs, since the technology underlying BMD systems and offensive ASAT weapons is often indistinguishable.312 Vague and broad soft law instruments do not resolve this problem, but create instead their own confusion and insecurity. Vague and broad provisions in legally binding agreements that do not or cannot distinguish between these missions are similarly problematic.

These issues, particularly difficulties in distinguishing ASAT and BMD systems, have figured prominently in complicating negotiations on space weapons over previous decades.313 Similarly, these concerns were a significant factor in initial U.S. opposition to the arms control measure proposed by China and Russia (the PPWT) since it prohibits states from placing any type of weapon in outer space (regardless of its military mission), thus effectively prohibiting the deployment of ballistic missile defense systems. 314 Furthermore, even if clear legal restrictions could be developed, verifying compliance with respect to technology in orbit around Earth would be very difficult (a point conceded even by China with respect to its own proposed PPWT).315

#### Causes rogue state missile threats---that escalates

Patrick M. Shanahan 19, Acting Secretary of Defense from January to June 2019, previously vice president and general manager of Boeing Missile Defense Systems, Jan 2019, "2019 MISSILE DEFENSE REVIEW", US Department of Defense, https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF

U.S. Homeland Missile Defense will Stay Ahead of Rogue States’ Missile Threats

Technology trends point to the possibility of increasing rogue state missile threats to the U.S. homeland. Vulnerability to rogue state missile threats would endanger the American people and infrastructure, undermine the U.S. diplomatic position of strength, and could lead potential adversaries to mistakenly perceive the United States as susceptible to coercive escalation threats intended to preclude U.S. resolve to resist aggression abroad. Such misperceptions risk undermining our deterrence posture and messaging, and could lead adversaries to dangerous miscalculations regarding our commitment and resolve.

It is therefore imperative that U.S. missile defense capabilities provide effective protection against rogue state missile threats to the homeland now and into the future. The United States is technically capable of doing so and has adopted an active missile defense force-sizing measure for protection of the homeland. DoD will develop, acquire, and maintain the U.S. homeland missile defense capabilities necessary to effectively protect against possible missile attacks on the homeland posed by the long-range missile arsenals of rogue states, defined today as North Korea and Iran, and to support the other missile defense roles identified in this MDR.

This force-sizing measure for active U.S. missile defense is fully consistent with the 2018 NPR, and in order to keep pace with the threat, DoD will utilize existing defense systems and an increasing mix of advanced technologies, such as kinetic or directed-energy boost-phase defenses, and other advanced systems. It is technically challenging but feasible over time, affordable, and a strategic imperative. It will require the examination and possible fielding of advanced technologies to provide greater efficiencies for U.S. active missile defense capabilities, including space-based sensors and boost-phase defense capabilities. Further, because the related requirements will evolve as the long-range threat posed by rogue states evolves, it does not allow a static U.S. homeland defense architecture. Rather, it calls for a missile defense architecture that can adapt to emerging and unanticipated threats, including by adding capacity and the capability to surge missile defense as necessary in times of crisis or conflict.

In coming years, rogue state missile threats to the U.S. homeland will likely expand in numbers and complexity. There are and will remain inherent uncertainties regarding the potential pace and scope of that expansion. Consequently, the United States will not accept any limitation or constraint on the development or deployment of missile defense capabilities needed to protect the homeland against rogue missile threats. Accepting limits now could constrain or preclude missile defense technologies and options necessary in the future to effectively protect the American people.

As U.S. active defenses for the homeland continue to improve to stay ahead of rogue states’ missile threats, they could also provide a measure of protection against accidental or unauthorized missile launches. This defensive capability could be significant in the event of destabilizing domestic developments in any potential adversary armed with strategic weapons, and as long-range missile capabilities proliferate in coming years.

U.S. missile defense capabilities will be sized to provide continuing effective protection of the U.S. homeland against rogue states’ offensive missile threats. The United States relies on nuclear deterrence to address the large and more sophisticated Russian and Chinese intercontinental ballistic missile capabilities, as well as to deter attacks from any source consistent with long-standing U.S. declaratory policy as re-affirmed in the 2018 NPR.

# AC

## A2 Framing

#### 1] Calc indicts matter – if util can’t be applied in the real world, there’s no reason to accept it as a moral framework.

#### 2] Counterexamples disprove the framework: any framework that contradicts our baseline intuitions like slavery bad is probably false.

#### 3] Induction fails—it assumes that things will always happen the same way in the future as they have in the past. But this begs the question of how we know what happened in the past will happen in the future. Also means no predictions

#### 4] Infinite regress – every consequence causes another consequence ad infinitum, so any arbitrary action causes infinite pain and infinite pleasure, which triggers presumption.

#### 5] Incommensurability objection – can’t compare different forms of happiness like friendship v ice cream – means aggregation impossible

#### 6] Util could justify horrific conclusions, which must be grounds to reject it since it challenges assumptions about intrinsic, unconditional badness. No action could be intrinsically bad from this standpoint, even genocide or gruesome torture – this makes debate unsafe by claiming any action is potentially permissible or even obligatory if performing it led to better consequences.

#### 7] Util can’t account for the particularity of ethics - pleasure is only good if appropriate – e.g. pleasure from watching someone else be tortured would be bad, meaning the framework fails to be universal

#### 8] Util incorrectly takes an impersonal view of pleasure and pain since goodness and badness of sentiments are always particular -- e.g. a murderer who feels pain because of their guilt should feel worse than an innocent person

#### 9] Util is terrible at handling exceptions – [A] if a utility monster gained infinite pleasure from eating everybody that’s still a bad thing [B] if all of humanity was put into pleasure machines that injected pleasure into our brains yes that maximizes pleasure but it fails to respect value to life [C] things like slavery can never be justified but util justifies one instance of slavery lifting a billion people out of poverty for the rest of their lives

#### [10] Hobbes hijacks: a] subjective interpretations of everything like pain, pleasure, etc. means your morality fails unless a sovereign can reconcile different understandings of morality b] Even if util is true, people only follow it to look good to others and feel good about themselves, so it collapses to self-interest anyway c] The state of nature contains infinite actions that cause pain, so the only way to ensure util is upheld is through the existence of a sovereign.

#### No extinction first – a] causes policy paralysis, anything can cause decisions so we’ll never be able to decide on actions b] means we’ll never focus on issues that are happening every day

## A2 Case

#### 1] Yes alt cause to collision - space exploration and development from non-private entities. Even if private entities are banned, government agencies will still be present. The ones listed in the card are only in the U.S – other international agencies also exist.

Georgetown Law 20 (Georgetown Law. “Space Law: The Law of Outer Space: Other U.S. Government Agencies Involved in Space Policy &amp; Regulation.” Guides, Georgetown Law, 8 Dec. 2020, guides.ll.georgetown.edu/c.php?g=1037047&amp;p=7762102.)// DebateDrills AY

In addition to the [NASA](https://www.nasa.gov/), which is responsible for the U.S. civilian space program and for aeronautical and space-related research, many other U.S. federal agencies are involved in the development of space policy and in the regulation of space-related activities.  Listed below are links to the websites of selected federal agencies that play a significant role in formulating and implementing U.S. space policy, particularly as it relates to national security and to the emerging commercial space industry. U.S. Department of Commerce The Commerce Department helps to promote economic growth by gathering economic and demographic data to facilitate decision making by government agencies and private industry, and by helping to establish uniform scientific and industrial standards. National Oceanic and Atmospheric Administration NOAA is a scientific agency within the Department of Commerce. [Office of Space Commerce](https://www.space.commerce.gov/) This NOAA office coordinates the development of [commercial space policy](https://www.space.commerce.gov/policy/noaa-commercial-space-policy/) within the Department of Commerce.  Its mission is to facilitate the development of emerging space-related industries. [National Environmental Satellite, Data, and Information Service](https://www.nesdis.noaa.gov/)The NESDIS manages data and information collected by meteorological satellites. [Commercial Remote Sensing Regulatory Affairs](https://www.nesdis.noaa.gov/CRSRA/licenseHome.html) The CRSRA licenses the commercial use of remote sensing satellite technologies, which collect images of the Earth's surface and related data, by individuals and entities who are subject to the jurisdiction of the U.S. [National Telecommunications and Information Administration](https://www.ntia.doc.gov/) The NTIA is a scientific agency within the Department of Commerce.  Along with the [Federal Communications Commission (FCC)](https://www.fcc.gov/engineering-technology/policy-and-rules-division/general/radio-spectrum-allocation), an independent agency, the NTIA is jointly responsible for allocating the [radio spectrum](https://www.ntia.doc.gov/category/spectrum-management) used by telecommunications satellites operated by the federal government and by private industry. U.S. Department of Defense The Defense Department coordinates U.S. national security policy and overseas all branches of the U.S. armed forces. [Assistant Secretary of Defense for Homeland Defense and Global Security](https://policy.defense.gov/OUSDP-Offices/ASD-for-Homeland-Defense-Global-Security/) The ASD is responsible for formulating [national security strategy for outer space](https://policy.defense.gov/OUSDP-Offices/ASD-for-Homeland-Defense-Global-Security/Space-Policy/), among other matters. [U.S. Space Force](https://www.spaceforce.mil/) The newest branch of the U.S. armed forces was established on December 19, 2019, with the signing of the U.S. Space Forces Act, part of the [Defense Authorization Act of 2020](https://www.congress.gov/bill/116th-congress/senate-bill/1790).  It is organized as a military service branch within the Department of the Air Force and is directed by the Chief of Space Operations. U.S. Department of State  
The State Department is responsible for U.S. foreign policy and international relations. [Office of Emerging Security Challenges](https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-arms-control-verification-and-compliance/office-of-emerging-security-challenges/) This office works cooperatively with U.S. allies on issues of space security and missile defense. [Office of Space and Advanced Technology](https://www.state.gov/bureaus-offices/under-secretary-for-economic-growth-energy-and-the-environment/bureau-of-oceans-and-international-environmental-and-scientific-affairs/office-of-space-and-advanced-technology/) This office helps to formulates policy on a [wide range of topics](https://www.state.gov/key-topics-office-of-space-and-advanced-technology/), including space diplomacy, the commercial development of space resources, and the regulation of artificial satellites, satellite navigation systems, and satellite-based earth observation systems. U.S. Department of Transportation -- Federal Aviation Administration The FAA is a regulatory body within the Department of Transportation. [Office of Commercial Space Transportation](https://www.faa.gov/about/office_org/headquarters_offices/ast/) This FAA office is responsible for regulating the emerging commercial space transportation industry, ensuring its compliance with U.S. international space law obligations, as well as safeguarding public health and safety.  It also recommends changes to applicable federal statutes and regulations.

#### 2] Turn, we solve -- Partnerships between governments and private industry solves debris and only getting better --- major strides by 2024

**Pultarova 21**

[Tereza Pultarova, 05-26-2021, "Commercial space clean-up service could be ready in 2024," Space, ereza is a London-based science and technology journalist, aspiring fiction writer and amateur gymnast. Originally from Prague, the Czech Republic, she spent the first seven years of her career working as a reporter, script-writer and presenter for various TV programmes of the Czech Public Service Television. She later took a career break to pursue further education and added a Master's in Science from the International Space University, France, to her Bachelor's in Journalism and Master's in Cultural Anthropology from Prague's Charles University. She worked as a reporter at the Engineering and Technology magazine, freelanced for a range of publications including Live Science, Space.com, Professional Engineering, Via Satellite and Space News and served as a maternity cover science editor at the European Space Agency. [https://www.space.com/commercial-space-debris-removal-2024-astroscale]//DebateDrillsWW](https://www.space.com/commercial-space-debris-removal-2024-astroscale%5d//DebateDrillsWW)

"This **partnership with OneWeb** demonstrates their commitment to space sustainability and is the next step towards maturing our technologies **to develop** a full-service **debris removal** offering **by 2024**," John Auburn, managing director of Astroscale U.K. and group chief commercial officer [said in a statement](https://astroscale.com/astroscale-uk-signs-2-5-million-agreement-to-develop-space-debris-removal-technology-innovations-with-oneweb/). The new service **targets constellation operators** and is called ELSA-M. **The program would enable the removal of** multiple **retired satellites in** a **single mission**, thus **reducing cost** for the client, the company said in the statement. **The** orbital junk **collector would push each satellite into the atmosphere to burn up**, then return for the next defunct piece. "This funding **will help us evolve** key rendezvous and proximity operations technologies and capabilities beyond ELSA-d towards an end-of-life servicing offering for a range of constellation customers," Jason Forshaw, Astroscale's head of future business, Europe, said in the statement. "In parallel to this project, we're developing our next generation docking plate (DP), which is fitted to clients before launch, and is designed to enable a servicer to grapple the client. We are encouraging constellation customers to fit DPs to future-proof their satellites in case of need for removal due to failure, or at end of life, or to provide future in-orbit servicing." Astroscale's ELSA-d demonstration mission, currently in low Earth orbit, will carry out a series of rendezvous and close proximity debris capture and release manoeuvres this summer. The results of the test campaign will inform further work on the ELSA-M program, Astroscale said. The funding is part of the European Space Agency's (ESA) program called Sunrise, developing [flexible reprogrammable communication satellites.](https://www.gov.uk/government/news/uk-companies-join-forces-to-build-revolutionary-beam-hopping-satellite)

#### 3] Turn - Private space corporations are key to increasing safety in space technology.

**Kennedy 18** [Brian, “Many in US have confidence in what private space companies will accomplish”, Pew Research Center. 22 June 2018. https://www.pewresearch.org/fact-tank/2018/06/22/many-in-u-s-have-confidence-in-what-private-space-companies-will-accomplish/] //DebateDrills LC

Most **Americans express confidence that private space companies will make meaningful contributions in** developing **safe and reliable spacecraft or conducting research to expand knowledge of space**, according to [a recent Pew Research Center survey](https://www.pewresearch.org/internet/2018/06/06/majority-of-americans-believe-it-is-essential-that-the-u-s-remain-a-global-leader-in-space/).

**Private companies** such as SpaceX, Blue Origin and Virgin Galactic **are becoming increasingly important players in space exploration.** The National Aeronautics and Space Administration (**NASA) has**[**paid private companies $6.8 billion**](https://www.washingtonpost.com/news/business/wp/2018/06/15/feature/what-does-it-mean-to-be-a-nasa-astronaut-in-the-celebrity-space-age-of-elon-musk-and-richard-branson/?utm_term=.b1045d9e9863)**to develop launch systems that might send astronauts into space** as early as this year. These companies are also [setting their sights](https://www.popsci.com/who-wants-to-go-to-mars) on going to the moon or Mars in the future.

(81%) are confident that private space companies will make a profit from these ventures. Some 44% of **Americans have a great deal of confidence that private space companies will be profitable**, and an additional 36% have a fair amount of confidence.

But Americans are also cautiously optimistic that private companies will make contributions that benefit U.S. exploration efforts. **At least two-thirds of Americans have a great deal or a fair amount of confidence that private space companies will build safe and reliable rockets and spacecraft** (77%), **conduct** basic **research to increase knowledge and understanding** of space (70%) **or control costs for developing rockets and spacecraft** (65%).

**4] The probability for actual collision in space is extremely low – below 0.1% chance. It’ll stay this way as long as NASA’s actions in the squo are the same.**

**Salter 16** (Salter, Alexander William. SPACE DEBRIS: A LAW AND ECONOMICS ANALYSIS OF THE ORBITAL COMMONS. Stanford Law School, 2016, www-cdn.law.stanford.edu/wp-content/uploads/2017/11/19-2-2-salter-final\_0.pdf)//DebateDrills AY

The probability of a collision is currently low. Bradley and Wein estimate that the maximum probability in LEO of a collision over the lifetime of a spacecraft remains below one in one thousand, conditional on continued compliance with NASA’s deorbiting guidelines.3 However, the possibility of a future “snowballing” effect, whereby debris collides with other objects, further congesting orbit space, remains a significant concern.4 Levin and Carroll estimate the average immediate destruction of wealth created by a collision to be approximately $30 million, with an additional $200 million in damages to all currently existing space assets from the debris created by the initial collision.5 The expected value of destroyed wealth because of collisions, currently small because of the low probability of a collision, can quickly become significant if future collisions result in runaway debris growth. Given the possibility of high future costs, private and public actors should, for their own benefit, direct attention to the space debris problem now. Global satellite revenue in 2014 totaled $195.2 billion.6 That stream of economic activity is most threatened by significantly increased concentrations of space debris in orbit. Other activities within the “space economy” ($320 billion in revenue in 2013) that are potentially threatened include human spaceflight and nonorbital spacecraft.7 Private-sector space activities planned for the more distant future, including space tourism and asteroid mining, will also be affected if access to orbit is complicated by space debris.

## A2 Underview

#### 1] 1AR theory not DTD – time skew doesn’t matter, if the abuse is that legit that you should be able to just win on theory regardless 2] Yes RVIs – otherwise they waste our time on infinite friv theory and there’s no check

#### 2] Negating is harder – a] negating is harder – choosing the plan and 2AR collapse means the aff always controls the direction of the debate b] you get three speeches while we only get two c] getting to speak first and last means the judge remembers your speeches better