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Garret S. Bowman

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SECURING THE PRECIPITOUS HEIGHTS: U.S. LAWFARE AS A MEANS TO CONFRONT CHINA AT SEA, IN SPACE, AND CYBERSPACE

Garret S. Bowman*

With regard to precipitous heights, if you are beforehand with your adversary, you should occupy the raised and sunny spots, and there wait for him to come up. If the enemy has occupied them before you, do not follow him, but retreat and try to entice him away.¹

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** The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the U.S. government or the Department of Defense.

*** As U.S. foreign policy shifts its strategic focus towards confronting “near peer adversaries,” the issue of China looms particularly large. For the past few decades, The U.S. and Chinese Communist Party have been moving towards an ideological confrontation on the future of the rules-based international order. The military side of this great-power competition has been focused on the East China Sea, with increasingly significant issues emerging in the domains of space and cyberspace. This article argues that lawfare, the strategic application of legal regimes and institutions, must be a fundamental part of U.S. strategy. The Chinese Communist Party has embraced a lawfare strategy but the United States must more aggressively exploit opportunities to exploit its institutional advantages. This Article concludes that arms control in outer space presents a unique opportunity to strengthen the U.S. lawfare advantage in other domains like cyberspace and at sea by bolstering the rules-based order. This outcome is fundamental to sustaining relative peace and prosperity over the next century.

¹ SUN TZU & SAMUEL B. GRIFFITH, THE ART OF WAR 125 (Oxford University Press 1964).

TABLE OF CONTENTS

I.	Introduction	83
II.	Background: The Arms Control Debate in Outer Space.....	88
	A. The Limits of Deterrence in Space	91
	B. The Limitations and Opportunities for Arms Control in Space	95
III.	Lawfare and the PRC's "Unrestricted Warfare" Strategy	98
	A. The PPWT as Lawfare in Space	100
	B. The Chinese Government's Conception of Political and Legal Warfare.....	103
	C. The Chinese Government's "Three Warfares" and its response to American Influence	104
	D. Lawfare is Central to Chinese Ambitions, it Cannot Rely on Economic Might Alone.....	108
IV.	Lawfare in Space as Part of a Broader American Strategy	112
	A. The Limits of Soft Law Alone.....	113
	B. Confronting the Chinese Government's Lawfare in Cyberspace	116
	C. Confronting the Chinese Government's Lawfare at Sea	118
	D. The Key Domain: Confronting the Chinese Government's Lawfare in Space.....	121
	1. The Advantage of Proposing a Kinetic AAT Test Ban	122
	2. A Kinetic ASAT Test Ban Through the Lens of Game Theory.....	124
V.	Conclusion	125

I. INTRODUCTION

Barring unforeseen events or domestic instability, the Chinese Communist Party's economic and military strength will continue to rise, along with its ambitions for East Asia. The U.S. is facing an incremental

decline in its regional power relative to the People's Republic of China ("PRC"). Economically, 1.4 billion Chinese citizens will soon collectively out produce 328 million Americans if current trends continue.² This economic power will translate to diplomatic, political, and military influence, particularly impacting those countries that share borders with China and neighbor the East China Sea. From a mid-term perspective, the U.S. hopes to deter a PRC invasion of Taiwan and maintain shipping lanes in the East China Sea.³ From a long-term perspective, the U.S. hopes to maintain its influence and prosperity vis-a-vis PRC as ensured by the rules-based international order ("R BIO").⁴

U.S. influence in the region is tied to the institutionalized cooperation and historical military alliances with Korea, Japan, and the Philippines.⁵ America's future influence involves strengthening and expanding its partnerships with increasingly powerful democracies like India.⁶

² See Evelyn Cheng & Yen Nee Lee, *New chart shows China could overtake the U.S. as the world's largest economy earlier than expected*, CNBC (Jan. 31, 2021, 10:04 PM), <https://www.cnbc.com/2021/02/01/new-chart-shows-china-gdp-could-overtake-us-sooner-as-covid-took-its-toll.html> (citing economists' forecast that China's GDP will overtake U.S. GDP by 2028).

³ See Dan Lamothe, *In Taiwan war game, few good options for U.S. to deter China*, WASH. POST (Oct. 26, 2021, 5:00 AM), <https://www.washingtonpost.com/national-security/2021/10/26/us-taiwan-china/> (explaining the need to build relations with Taiwan to deter Chinese action).

⁴ "R BIO" in this article refers to international relations organized around international cooperation through multilateral institutions, open markets, security cooperation, promotion of liberal democracy, and leadership by the United States and its allies. See *U.S. Relations With Taiwan*, U.S. DEP'T OF STATE (Aug. 31, 2018), <https://www.state.gov/u-s-relations-with-taiwan/> (outlining U.S. commitment to assist Taiwan in maintaining its defensive capability); see also Rezaul H. Laskar, *Modi speaks to US President Joe Biden, says committed to rules-based order*, HINDUSTAN TIMES (Feb. 09, 2021, 8:36 AM), <https://www.hindustantimes.com/india-news/modi-speaks-to-us-prez-biden-says-committed-to-rules-based-international-order-101612807900279.html> (quoting Prime Minister Modi's tweet "President @JoeBiden and I are committed to a rules-based international order. We look forward to consolidating our strategic partnership to further peace and security in the Indo-Pacific region and beyond" and the White House readout of the call detailing a focus on "defend[ing] democratic institutions and norms around the world."); see also Douglas H. Paal, *America's Future in a Dynamic Asia*, CARNEGIE ENDOWMENT FOR INT'L PEACE 14-18 (Jan. 31, 2019), <https://carnegieendowment.org/2019/01/31/america-s-future-in-dynamic-asia-pub-78222> (discussing competing U.S. strategies for China including containment, a new balance of power, integration into the existing international system, or the joint creation of a new international system).

⁵ See Paal, *supra* note 4, at 16 (noting that by virtue of its existing network of alliances and friendships, the United States enjoys an advantage over China in the Asia Pacific).

⁶ See *U.S. Security Cooperation With India*, U.S. DEP'T OF STATE (Jan. 20, 2021), <https://www.state.gov/u-s-security-cooperation-with-india/> (outlining increasing

The 2020s are a pivotal decade. In the currently contested sea domain and the rapidly expanding areas of cyberspace and outer space, the U.S. has a unique opportunity to win a decisive legal and political victory over the PRC. In each of these domains, the PRC has exposed itself as ill-suited to adopting the mantle of responsible superpower and world leader.⁷ The international reputation of China is at an all-time low while America's national security policy is re-focusing its efforts on thwarting the PRC and Russia's "revisionist" aims.⁸ In this new security landscape, America must be able to reclaim its title as leader of a robust international order by aggressively defending its values and bolstering its alliances.⁹ It can accomplish this in part by adopting an aggressive lawfare strategy in space, cyberspace, and in the South China Sea. Space, in particular, demands incorporation into a larger U.S. lawfare strategy.

By addressing the increasingly scrutinized issue of space weaponization through a targeted destructive anti-satellite ("ASAT") test-ban treaty, the U.S. can win a lawfare victory against the PRC that will impact other domains.¹⁰ Recent developments in rules governing space

security commitments with India); *see also* *U.S. - India Relations*, COUNCIL ON FOREIGN RELATIONS (Oct. 26, 2021, 12:57 PM), <https://www.cfr.org/timeline/us-india-relations> (providing background of the increasing ties between the U.S. and India, the world's largest democracy); *see also* Paal, *supra* note 4, at 23 ("India would welcome a more proactive policy and greater investment from the United States in the region. But at the same time, until New Delhi sees concrete evidence of a U.S. commitment, India will primarily pursue a bilateral approach to China, taking advantage of cooperation with Washington when benefits outweigh the risks to relations with Beijing.").

⁷ *See* SHIRLEY KAN, CONG. RSCH. SERV., RS22652, CHINA'S ANTI-SATELLITE WEAPON TEST 1 (2007) (discussing China's widely criticized Anti-Satellite test in 2007 and its aggressive posturing on territorial claims in the East China Sea have not been well received by the world community).

⁸ Laura Silver et al., *Unfavorable Views of China Reach Historic Highs in Many Countries*, PEW RSCH. CTR. (Oct. 6, 2020), <https://www.pewresearch.org/global/2020/10/06/unfavorable-views-of-china-reach-historic-highs-in-many-countries> ("Views of China have grown more negative in recent years across many advanced economies, and unfavorable opinion has soared over the past year."); *see also* *National Security Strategy of the United States of America*, WHITE HOUSE 1, 25 (Dec. 2017), <https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf> ("China and Russia want to shape a world antithetical to U.S. values and interests. China seeks to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favor.").

⁹ *See, e.g., id.* ("The United States will seek areas of cooperation with competitors from a position of strength, foremost by ensuring our military power is second to none and fully integrated with our allies and all of our instruments of power.").

¹⁰ *See generally* TIMOTHY A. WALTON, CHINA'S THREE WARFARES 4 (Delex Systems, Inc. 2012) ("Legal Warfare uses international and domestic law to claim the legal high ground or assert Chinese interests. It can be employed to hamstring an adversary's

security include a U.K.-drafted December 2020 U.N. resolution aimed at developing rules governing activities in space.¹¹ Whatever the likelihood of this developing into a proposal for a binding treaty governing space activities, the U.S. should not discount the advantages of addressing limited arms control while pursuing a broader lawfare strategy regarding China.

Lawfare, the idea that strategic advantage can be obtained through use of legal regimes and institutions,¹² must be a key element in U.S. strategy to confront PRC activities that threaten the RBIO that has benefited the international community for decades.¹³ The PRC does not and cannot offer a reasonable or responsible alternative to U.S. leadership in the maintenance and formation of international law. Although the Chinese government seeks to present its model of authoritarian sovereignty as an alternative to U.S. leadership, it has stumbled in claiming the mantle of responsible world leader.¹⁴ Its failure to join the Budapest Convention which seeks to regulate cyberspace,¹⁵ and its 2016 loss in a

operational freedom and shape the operational space. Legal warfare is also intended to build international support and manage possible political repercussions of China's military actions.”).

¹¹ G.A. Res. 75/36, ¶ 2 (Dec. 7, 2020); see Sandra Erwin, *U.S. to support international effort to set rules of behavior in space*, SPACE NEWS (Feb. 24, 2021), <https://space-news.com/u-s-to-support-international-effort-to-set-rules-of-behavior-in-space/>; see also Nicholas Smith Adamopoulos, *U.S. Advocates for Binding Rules on Behavior in Space*, ARMS CONTROL ASS'N (Apr. 2021), <https://www.armscontrol.org/act/2021-04/news/us-advocates-binding-rules-behavior-space> (detailing specific language to be included in a resolution regarding responsible behavior in space).

¹² Craig Martin, *What Are the Limits on Lawfare?*, OPINIO JURIS (May 5, 2019), <http://opiniojuris.org/2019/05/05/what-are-the-limits-on-lawfare/>.

¹³ See ELBRIDGE COLBY, FROM SANCTUARY TO BATTLEFIELD: A FRAMEWORK FOR A U.S. DEFENSE AND DETERRENCE STRATEGY FOR SPACE 24 (2016) (outlining the increasing threat to space assets and suggesting that the U.S. may seek to raise the international political costs to potential adversaries of striking at U.S. space assets).

¹⁴ China has publicly proposed a “Community of Common Destiny,” expressing Beijing’s long-term vision for making the international environment compatible with the Chinese government model and emergence as a global leader. These aspirations of leadership can be contrasted with international criticism aimed at the 2007 ASAT test, aggressive posturing in the East China Sea, and reluctance to adopt meaningful rules or cooperation in cyberspace. See Liza Tobin, *Xi’s Vision for Transforming Global Governance: A Strategic Challenge for Washington and its Allies*, 2 TEXAS NAT’L SEC. REV. 155, 155 (2018).

¹⁵ P.J. Blount, *Cyberspace and the Problem of New Spaces*, E-INT’L RELATIONS (Nov. 25, 2019), https://www.e-ir.info/2019/11/25/cyberspace-and-the-problem-of-new-spaces/#_ftnref12; see also *Parties/Observers to the Budapest Convention and Observer Organisations to the T-CY*, COUNCIL EUR., https://www.coe.int/en/web/cybercrime/parties-observers?wpisrc=nl_cybersecurity202 (last visited Nov. 19, 2021) (indicating that China is not a party to the Convention).

U.N. Convention on the Law of the Sea (“UNCLOS”) decision and failure to comply with that ruling,¹⁶ offer the U.S. a unique opportunity to expose the Chinese government’s hypocrisy and structural incompatibility with world leadership. More importantly, the U.S. should not squander its opportunity to reshape the narrative regarding the continued weaponization of space.

Since its widely condemned 2007 ASAT test, the PRC has sought to rebrand itself as interested in the collaborative and cooperative use of outer space.¹⁷ The PRC’s criticism of U.S. space weapon development and the PRC’s repeated sponsorship of the Treaty on the Prevention of the Placement of Weapons in Space (“PPWT”) seeks to control the narrative on the future of space development.¹⁸ The U.S. should not ignore these efforts. It has the opportunity to seize on Chinese missteps in cyberspace and in the East China Sea to rebut the PRC’s posturing in outer space.¹⁹ If the U.S. aggressively seeks a narrow hard-law arms-control treaty in space it will strengthen a legal regime in line with U.S. interests while increasing political pressure on the PRC in outer space and other domains.²⁰ The political and legal battlefield is the critical area for U.S. strategic focus.²¹ A sustained political and moral advantage is necessary to prevent a gradual drift in world leadership.²² In particular, the U.S.

¹⁶ Julian Ku, *The U.S. Should Hold Its Fire Over China’s Boycott of UNCLOS Arbitration*, LAWFARE (Nov. 26, 2015, 7:27 AM), <https://www.lawfareblog.com/us-should-hold-its-fire-over-chinas-boycott-unclos-arbitration>.

¹⁷ See generally ALEXANDER BOWE, CHINA’S POSITION ON A CODE OF CONDUCT IN SPACE, U.S.-CHINA ECON. & SEC. REV. COMM’N, 2 (2017) (demonstrating China’s current views on outer space conduct); see also, Park Si-soo *China silent, South Korea ‘concerned’ over debris created by Russia’s anti-satellite missile test*, SPACENEWS, (Nov. 17, 2021), <https://spacenews.com/china-silent-south-korea-concerned-over-debris-created-by-russias-anti-satellite-missile-test/> (“Asked to comment on [Russia’s 2021 ASAT test] during a Nov. 16 press conference, China’s foreign ministry spokesperson Zhao Lijian said, “We noted relevant reports and that Russia has yet to respond. I think it is too early to make any comment.””).

¹⁸ See BOWE, *supra* note 17, at 2–3, 5.

¹⁹ *Id.* at 4–5.

²⁰ See Victoria Samson & Brian Weeden, *Enhancing Space Security: Time for Legally Binding Measures*, ARMS CONTROL ASS’N (Dec. 2020), <https://www.armscontrol.org/act/2020-12/features/enhancing-space-security-time-legally-binding-measures> (stating that the U.S. should pursue legally binding treaties to enhance national security interests. For example, the U.S. supporting a ban on debris-creating ASAT weapons tests “could send a powerful political signal”).

²¹ *Id.*

²² ANONYMOUS, THE LONGER TELEGRAM: TOWARD A NEW AMERICAN CHINA STRATEGY 10 (Frederick Kempe et al. eds., 2021) [hereinafter THE LONGER TELEGRAM] (“The United States’ China strategy must be anchored in both national values and national interests. This is what has long distinguished the nation from China in the eyes of the

should acknowledge the value of expanding the space legal regime, whether or not its efforts become international law.²³

This article seeks to reframe the debate in space over arms control vs. deterrence by positing that lawfare is the essential consideration for the U.S. adoption of targeted arms control. Arms control can be justified not only by its opportunity to regulate the arms race, but also by its ability to rally allies, confront bad actors like China, and reframe the debate about the future productive use of outer space.²⁴ Although benefits to the U.S. are obtainable whether or not China or Russia ultimately agree to any form of arms control, the content of any proposal must be plausible,²⁵ feasible,²⁶ and rendered in good faith.²⁷ In contrast to Chinese and Russian proposals on space weapons, the U.S. has little to gain by advocating for unrealistic or cynical applications of arms control.²⁸ U.S. willingness and ability to shape the narrative of a potential legal regime is an asset in itself and can be obtained by forcefully promoting a narrowly tailored arms control advocated for by certain scholars.²⁹ Policymakers should recognize lawfare's benefits as part of a larger strategic push to manage China's rise while protecting the U.S. led rules-based order. This means exploiting the PRC's legal and political hypocrisy in space, cyber

world. The defense of universal liberal values and the liberal international order, as well as the maintenance of US global power, must be the twin pillars of America's global call to arms.").

²³ Samson & Weeden, *supra* note 20.

²⁴ See, e.g., David A. Koplow, *The Fault Is Not in Our Stars: Avoiding an Arms Race in Outer Space*, 59 HARV. INT'L L. J. 331, 332–34, 345, 347, 379, 387 (2018) [hereinafter Koplow, *Avoiding an Arms Race in Outer Space*] (highlighting possible arms control initiatives to address the arms race in outer space including leveraging allies' space capabilities, holding bad actors accountable for adverse practices and noting the growing economic dependence on space); THE WHITE HOUSE, NATIONAL SPACE POLICY OF THE UNITED STATES OF AMERICA 7 (2010) ("The United States will pursue bilateral and multilateral transparency and confidence-building measures to encourage responsible actions in, and the peaceful use of, space. The United States will consider proposals and concepts for arms-control measures if they are equitable, effectively verifiable, and enhance the national security of the United States and its allies.").

²⁵ David A. Koplow, *Apes on a Treadmill in Space*, ARMS CONTROL ASS'N (Apr. 2021), <https://www.armscontrol.org/act/2021-04/features/apes-treadmill-space#end-note04>.

²⁶ John Lauder et al., *How to Avoid a Space Arms Race*, RAND BLOG (Oct. 26, 2020), <https://www.rand.org/blog/2020/10/how-to-avoid-a-space-arms-race.html>.

²⁷ Samson & Weeden, *supra* note 20.

²⁸ BOWE, *supra* note 17, at 4.

²⁹ See Jack M. Beard, *Soft Law's Failure on the Horizon: The International Code of Conduct for Outer Space Activities*, 38 U. PA. J. INT'L L. 335, 417 (2017) (arguing that an important first step in preventing space debris is an international agreement banning the testing of debris generating ASATs).

space, and the East China Sea.³⁰ Deterrence alone risks expediting an arms race already underway and creates instability in the absence of any agreed upon parameters.³¹

Part II provides background of the debate between mutually exclusive deterrence alone and comprehensive arms control in space and outlines how both are incompatible with U.S. national security. Part III outlines China's lawfare strategy, and Part IV argues that the U.S. should focus on arms control in space as part of a broader strategy in cyberspace and at sea to counter Chinese lawfare.

II. BACKGROUND: THE ARMS CONTROL DEBATE IN OUTER SPACE

In the realm of outer space weaponry, the strategic focus has been on achieving supremacy through technological and military deterrence.³² But a growing chorus of observers argue that some form of arms control is necessary to restrain and refocus the arms race in space.³³ The issue of space debris and its threat to all space-faring nations is a cause for concern and an opportunity for compromise.³⁴ Across U.S. administrations, the focus on a military buildup to achieve deterrence has prevailed.³⁵ Despite the U.S. head start on space technology, and the relative lack of conflict in space, an unconstrained arms race between the U.S., Russia, and the PRC is nearly universally seen as a net

³⁰ See generally Joan Johnson-Freese, *U.S.-China Relations: The Hypocrisy of Rules*, DIPLOMAT (Feb. 22, 2015), <https://thediplomat.com/2015/02/u-s-china-relations-the-hypocrisy-of-rules/> (demonstrating China's hypocrisy).

³¹ U.S. INST. OF PEACE, PEACEWORKS: ENHANCING U.S.-CHINA STRATEGIC STABILITY IN AN ERA OF STRATEGIC COMPETITION 49 (Patricia M. Kim, ed., 2021).

³² David A. Koplow, *Deterrence as the MacGuffin: The Case for Arms Control in Outer Space*, 10 J. NAT'L SEC. L. & POL'Y 293, 309 (2019), [hereinafter Koplow, *Deterrence as the MacGuffin*].

³³ See, e.g., Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 347 (stating that the last century of legal restraints on space arms control has contributed to improvements in chemical and biological weapon disciplines, while work in space itself has stopped); see, e.g., Cort S. Thompson, *Avoiding Pyrrhic Victories in Orbit: A Need for Kinetic Anti-Satellite Arms Control in the Twenty-First Century*, 85 J. AIR L. & COM. 105, 106, 129 (2020) (arguing that states should reenter reciprocal arms control agreements because countries are facing restraints on weapons research and development due to lack of legal constraints on the field); see also Beard, *supra* note 29, at 419 (determining that the time for legally binding restraints has arrived).

³⁴ See Thompson, *supra* note 33, at 114 (arguing that because sovereign states use space resources for their own benefit, the Tragedy of the Commons occurs, demonstrating a need for collective action).

³⁵ See, e.g., *id.* at 114 (discussing the use of the military to protect access to space).

loss to humanity and the individual countries participating in it.³⁶ An unconstrained arms race is expensive and risky; competitors must spend to continuously develop new weaponry while potentially destabilizing the national security balance between countries, risking conflict.³⁷ Nations with an advantage in deterrence seek to obtain more advanced and effective weaponry while those left behind are incentivized to take risks to prevent being overcome completely.³⁸ The prevalence of anti-satellite capable missiles and the risk of ever-multiplying space debris means that even a technologically out-classed state could make a devastating attack in space.³⁹ In contrast to the Cold War, where the U.S.S.R. was unable to sustain competition into the 1990s, there is no clear indication that the U.S. can use an arms race to outspend or outdevelop a rising China in the long run.⁴⁰ Because of the cost, risk, and uncertainty created by an escalating arms race in space, there has been significant discussion on the potential for space-focused arms control.⁴¹ Of course, arms control would not stop an arms race, but rather define the parameters of weapons buildup in a manner consistent with the interest of the parties to any proposed agreement.⁴²

Most proposals have focused on the necessity of a hard-law treaty to blunt the acceleration of a space arms race.⁴³ These proposals include narrowly tailored or limited propositions to rekindle a willingness to

³⁶ *Id.* at 113–14; but see John Yoo, *Rules for the Heavens: The Coming Revolution in Space and the Laws of War*, 2020 U. ILL. L. REV. 123, 124 (2020) (arguing that space weapons have benefits including: greater precision, fewer casualties and destruction, and more effective crisis bargaining between states).

³⁷ See generally Koplow, *Deterrence as the MacGuffin*, *supra* note 32 (stating that deterrence is expansive and expensive where each side must ensure it cannot fall behind in the perpetual contestation).

³⁸ *Id.* at 296.

³⁹ See generally *id.* at 297, 343 (detailing the types of anti-satellite weapons and the growth of space debris on state military capabilities).

⁴⁰ See James Dobbins et al., *Russia Is a Rouge, Not a Peer; China Is a Peer, Not a Rogue*, RAND CORP. 2, 5 (Oct. 2018), <https://www.rand.org/pubs/perspectives/PE310.html> (noting that China's GDP is second only to the U.S. and projected to have 2.2-fold growth in PPP by 2040).

⁴¹ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 295.

⁴² See ARTHUR A. STEIN, *WHY NATIONS COOPERATE: CIRCUMSTANCE AND CHOICE IN INTERNATIONAL RELATIONS* 130–32 (Cornell Univ. Press 1990) (asserting that when treaties do address weapons systems, they are likely to be partial agreements rather than comprehensive ones, understanding the need to channel arms races rather than do away with them).

⁴³ Blair Stephenson Kuplic, *The Weaponization of Outer Space: Preventing an Extraterrestrial Arms Race*, 39 N.C. J. INT'L L. 1123, 1134–35 (2013).

compromise between China, Russia, and the U.S.⁴⁴ Those countries are the most engaged in the productive use of outer space and most threatened by potential conflict and space debris.⁴⁵ Kinetic ASAT testing is seen as a likely area for compromise as it poses the most significant threat of space debris, and the major players have developed alternative means to ensure relative national security.⁴⁶

Previously, there was no indication that policymakers in the U.S. saw arms control as anything more than an unproductive measure that would constrain the U.S. advantage in space weaponry.⁴⁷ More recently, the U.S. has indicated support for “adopting a binding set of rules to make space safer and sustainable.”⁴⁸ If momentum can be sustained, this is a positive development for making space safer and for allowing the U.S. to reassert its leadership in the development of international law.⁴⁹ But U.S. foreign policy, generally governed by relatively stable consensus across different administrations, is vulnerable to shifts in rhetoric, emphasis, and strategy as it saw during the Trump administration.⁵⁰ This underscores the challenge that democracies like the U.S. face when confronting autocratic regimes which may have a longer strategic time frame.⁵¹ Some on the left see U.S. space militarization as inherently destabilizing, while some political commentators on the right critique any form of arms control as naïve utopianism at best and national security malpractice at worst.⁵² The political reality cannot be disregarded

⁴⁴ Koplow, *Avoiding an Arms race in Outer Space*, *supra* note 24, at 363 (discussing the impact of joint participation on global security); *see also* Beard, *supra* note 29, at 416 (asserting that solutions lie in legally binding prohibitions on specific types of the most harmful conduct, restrictions that are also likely to benefit from more feasible methods of verification).

⁴⁵ *See* Katharina Buchholz, *The Countries with the Most Satellites in Space*, STATISTA (July 14, 2020), <https://www.statista.com/chart/17107/countries-with-the-most-satellites-in-space/>.

⁴⁶ *See* Beard, *supra* note 29, at 419 (describing how China, Russia and the U.S. have demonstrated ASAT capabilities including directed energy weapons).

⁴⁷ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 295.

⁴⁸ *See* Erwin, *supra* note 11 (citing U.S. Space Command Maj. Gen. DeAnna Burt).

⁴⁹ *See* Erwin, *supra* note 11 (discussing how the non-binding nature of prior resolutions has hindered the effort to make space safer).

⁵⁰ Chinyere Obasi, *The Fault in Our Stars: Modern Threats to International Space Law*, HARV. POL. REV. (Nov. 10, 2020), <https://harvardpolitics.com/modern-threats-to-international-space-law/>.

⁵¹ *See, e.g.*, KRISTA LANGELAND ET AL., TAILORING DETERRENCE FOR CHINA IN SPACE 31 (RAND Corp., eds. 2021) (highlighting the challenges that the U.S. has faced in deterring China from interfering with space-based operations).

⁵² Charles Krauthammer, *The Irrelevance of START*, NAT'L REV. (Nov. 26, 2010, 5:00 AM), <https://www.nationalreview.com/2010/11/irrelevance-start-charles->

by legal and strategic planners. Populist movements on both the left and right may impact the trajectory of U.S. strategic policy in space.⁵³ As this article will argue, lawfare properly applied can both deter provocation by adversaries while strengthening the liberal international order. This allows policy makers to win near-term lawfare victories while building multilateral institutions and agreements in the long term.⁵⁴

A. The Limits of Deterrence in Space

Deterrence is fundamentally an effort to persuade another actor to adopt a course of action we prefer, or to refrain from taking actions we disfavor.⁵⁵ Although deterrence is a psychological phenomenon, an attempt to influence the decisions of rational competitors, it primarily involves the pursuit of military technology and hardware.⁵⁶ The ability to exert the psychological pressure for effective deterrence requires (1) sufficient military equipment and technology, (2) the ability to quickly determine the nature and origin of a threat, and (3) the ability to demonstrate determination or political will to exercise deterrent capabilities.⁵⁷

Prof. Koplow outlines two basic approaches to deterrence, (1) deterrence by threat of retaliation and (2) deterrence by denial.⁵⁸ Threat of retaliation includes symmetric, tit-for-tat retaliation, where a nation responds to an attack in kind, and asymmetric retaliation, or cross-domain retaliation, that strikes a different location or utilizes a different modality.⁵⁹ Both symmetric and asymmetric retaliation must meet the requirement that retaliation be proportional under international law.⁶⁰ There is no requirement that a defender responds identically to the acts of an aggressor. In the space context, a symmetric retaliation to a kinetic satellite strike would be a responsive strike on the attacker's satellite.⁶¹ An asymmetric retaliation may include an attack on ground-based

krauthammer/; Lauren Hauck, *The Rogue One: Trump's Space Force and the Threat of a New Cold War*, 42 U. HAW. L. REV. 119, 139 (2020).

⁵³ See James Clay Moltz, *Space and Strategy: A Conceptual versus Policy Analysis*, ASTROPOLITICS: INT'L J. OF SPACE POL. & POL'Y 113, 130–31 (2010) (explaining the use of an overriding goal that is widely accepted).

⁵⁴ FORREST E. MORGAN, DETERRENCE AND FIRST-STRIKE STABILITY IN SPACE: A PRELIMINARY ASSESSMENT 51 (RAND Corp. 2010).

⁵⁵ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 295.

⁵⁶ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 307–08.

⁵⁷ *Id.* at 310.

⁵⁸ *Id.*

⁵⁹ *Id.* at 312.

⁶⁰ *Id.* at 313.

⁶¹ *Id.* at 312.

satellite control systems or even attacking naval or land-based assets.⁶²

Deterrence by denial seeks to persuade a potential attacker that they have a limited chance of success in launching an attack or an aggressive action.⁶³ This includes intercepting the attack, i.e. destroying an incoming force or weapon completely or by partial attrition so that it minimizes the impact of the attack.⁶⁴ It may also include deterrence by self-protection, through fortifying or otherwise reducing the vulnerability of a threatened military force or asset.⁶⁵ While this framework is commonly applied to nuclear deterrence or navel freedom of navigation exercises, it faces unique challenges when applied to the rapidly evolving military activities located in and focused on outer space.

The U.S. is dependent on outer space and has reaped the benefits of outer space more than any other nation.⁶⁶ The U.S. has nearly three times the number of satellites of Russia and China combined.⁶⁷ American satellites control the way its military fights, how its economy runs, and has transformed the lives of its citizens.⁶⁸ While this is true for both China and Russia, the U.S. is particularly reliant on satellites and space technology.⁶⁹ American adversaries understand this reliance and vulnerability and actively work to exploit and threaten this exposure.⁷⁰

Adding to this dependence and vulnerability are issues with attributing the origins of a particular attack. To effectively practice deterrence by denial, the victim of an attack would have to quickly attribute who

⁶² Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 313–14.

⁶³ *Id.* at 314.

⁶⁴ See COLBY, *supra* note 13, at 26 (describing how the current policy by the United States of denying an attack by North Korea or Iran is a method that is emulated by U.S. space policy).

⁶⁵ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 316.

⁶⁶ See COLBY, *supra* note 13, at 4 (“The United States is profoundly reliant on the ability to use space for its security [...] [I]t has the upper hand because it can understand better what is taking place in the midst of conflict, what its own forces are doing, and what those of an enemy are doing amidst the “fog of war.” The United States can therefore employ force around the globe [...] more effectively.”).

⁶⁷ William J. Broad, *How Space Became the Next ‘Great Power’ Contest Between the U.S. and China*, N.Y. TIMES (May 6, 2021), <https://www.nytimes.com/2021/01/24/us/politics/trump-biden-pentagon-space-missiles-satellite.html> (“The United States leads in satellite tallies, mainly because of its space-age legacies and its many entrepreneurs, including those now aiding the military . . . 1,425 for the United States, 382 for China and 172 for Russia.”).

⁶⁸ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 297–98.

⁶⁹ *Id.* at 299.

⁷⁰ Broad, *supra* note 67 (“‘They saw how the U.S. projected power,’ said Todd Harrison, a space analyst at the Center for Strategic and International Studies, a Washington think tank. ‘And they saw that it was largely undefended.’”).

the aggressor is. In space, this is more difficult than during terrestrial conflict.

Senior leaders in Washington would likely require absolute proof of who the attacking country is when our satellites are destroyed before they would allow any counterstrikes. Since attacking ASAT systems do not have big red stars painted on their sides and are likely constructed of Western parts, quick attribution is quite problematic. It may essentially cause self-deterrence and paralysis of national leadership decisions. Currently, if a satellite stops working, determining the cause takes weeks and months and is ultimately only a guess since these space systems cannot generally be directly imaged. US adversaries do not seem to practice self-deterrence. As a result, the space war may well be over before the United States even knows it began.⁷¹

Thus, U.S. satellites pose an attractive target to potential adversaries and may create challenges in determining the author of an attack. All this is to say that deterrence by retaliation faces unique risks and challenges when compared with the more familiar Cold War paradigm.

Further, when considering the impact of space debris on any kinetic attack, cascading symmetric relation in space means that in striking foreign satellites, the U.S. risks making orbits unusable for the foreseeable future.⁷² Even disabling satellites by dazzling or cyber-attacks creates a risk of collision and debris.⁷³ The “Kessler syndrome” describes the idea that any debris creation will be exacerbated at a near exponential rate.⁷⁴ But if the U.S. relies on asymmetric deterrence, i.e. striking or threatening to strike terrestrial targets, it risks unpredictable escalation as proportionality is harder to access cross domains.⁷⁵ An isolated satellite strike could devolve into full-scale mutual retaliation on terrestrial targets. Regardless, the problem of attribution remains.

As for deterrence by denial, satellites are vulnerable targets with no practical way to harden from attack. Maneuvers cost fuel, and

⁷¹ Paul Szymanski, *Techniques for Great Power Space War*, 13 STRATEGIC STUDIES Q. 78, 94–95 (2019).

⁷² Ramin Skibba, *The Ripple Effects of a Space Skirmish*, ATLANTIC (July 12, 2020), <https://www.theatlantic.com/technology/archive/2020/07/space-warfare-unregulated/614059/>.

⁷³ *See id.* (explaining how dazzling satellites and other space jamming techniques can lead to debris in space, thereby increasing the risk of collision).

⁷⁴ Louis de Gouyon Matignon, *The Kessler Syndrome*, SPACE LEGAL ISSUES (Mar. 27, 2019), <https://www.spacelegalissues.com/space-law-the-kessler-syndrome/>.

⁷⁵ COLBY, *supra* note 13, at 11.

armoring is prohibitively heavy to launch into orbit.⁷⁶ Some have proposed increasing the number and location of satellites while reducing costs to build redundancy in the satellite infrastructure.⁷⁷ Regardless of the technical feasibility of these efforts, building deterrence by denial is expensive.⁷⁸ If China makes a serious effort to develop technology to exploit these vulnerabilities, the cost will continue to increase as technology evolves. China's economic growth and large population might mean that the U.S. is at a disadvantage when it comes to a spending race to ensure effective deterrence. Recognizing the significant costs and concerns with a deterrence-only strategy, commentators have proposed arms control to focus or mitigate an unrestrained arms race.⁷⁹ Anti-satellite technology is already widespread among space-faring nations, but an agreement limiting or prohibiting testing or use that creates debris makes sense.⁸⁰ A focus on restricting behavior, such as the use of debris-causing ASAT weapons, is a good candidate for inclusion.⁸¹

B. The Limitations and Opportunities for Arms Control in Space

Arms race proposals are most practical when they recognize that states will only agree to arms control tangential to their core security interests. As Prof. Koplow has observed, "countries have legally obligated themselves only to refrain from the particular weapons behaviors that they did not want to – or did not have the capacity to – undertake anyway."⁸² Among the more reasonable proposals, Prof. Koplow, and

⁷⁶ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 316–17 (explaining how to strategize satellites in space in anticipation of future satellite attacks from foreign countries).

⁷⁷ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 317.

⁷⁸ *Id.* at 319–20.

⁷⁹ See generally Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 332–37 (discussing the costs and concerns of arms control and mitigating an arms race).

⁸⁰ Beard, *supra* note 29, at 343–44.

⁸¹ See Erwin, *supra* note 11 (quoting Maj. Gen. DeAnna Burt who stated, "The Chinese and the Russians have already put weapons in space [...] [W]e're way past having a conversation about regulating [anti-satellite weapons] per se, which is why we focus on norms of behavior [...] I don't think you can put that genie back in the bottle.").

⁸² David A. Koplow, *An Inference about Interference: A Surprising Application of Existing International Law to Inhibit Anti-Satellite Weapons*, 35 U. PA. J. INT'L L. 737, 768 (2014); see also MORTON WILLIAM ROYSE, AERIAL BOMBARDMENT AND THE INTERNATIONAL REGULATION OF WARFARE 132 (1928) ("[A] weapon will be restricted in inverse proportion, more or less, to its effectiveness; that the more efficient a weapon or method of warfare the less likelihood there is of its being restricted in action by the rules of war.").

others, have advocated for a ban on kinetic ASAT testing.⁸³ Kinetic tests like the Chinese test in 2007, the Indian test in 2019, and the Russian test in 2021, present a significant risk of space debris which threaten the productive use of space orbits well in the future.⁸⁴ Because the U.S., Russia, and China have already demonstrated their kinetic ASAT abilities and have adopted alternative ASAT technologies,⁸⁵ it's considered the most immediately-beneficial form of arms control available. The hope is that this initial strategy of non-destruction will serve as the starting point to more comprehensive arms control compromises between the U.S., Russia, and China.⁸⁶ Even if a regime of arms control did develop, some commentators have cast doubt on their effectiveness if conflict were to be initiated.⁸⁷

In line with the well-reasoned academic support for this type of treaty, U.S. policy makers recently indicated participation and support for a December 2020 proposal by the U.K. to implement a set of rules of behavior in space.⁸⁸ The U.K. proposal adopting a behavior-based approach allowing U.N. members to identify threats and challenges does not, on its face, seem geared towards a binding treaty.⁸⁹ Despite this, initial remarks from U.S. Space Command suggest that the U.S. seeks to pursue a binding agreement. "We're going to prepare what we believe will be proposal language that will go to the UN and hopefully result in a binding resolution," U.S. Space Command's Maj. Gen. DeAnna Burt said.⁹⁰

⁸³ Koplow, *Avoiding an Arms Race in Outer Space*, *supra* note 24, at 363–65 (advocating for restrictions upon the testing in space of specified types of ASAT systems).

⁸⁴ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 301, 303, 306.

⁸⁵ Nivedita Raju, EU NON-PROLIFERATION AND DISARMAMENT CONSORTIUM, NO. 74, A PROPOSAL FOR A BAN ON DESTRUCTIVE ANTI-SATELLITE TESTING: A ROLE FOR THE EUROPEAN UNION? 1, 3 (2021).

⁸⁶ Koplow, *Avoiding an Arms Race in Outer Space*, *supra* note 24, at 368–69.

⁸⁷ Szymanski, *supra* note 71, at 91–92 ("Most space treaties will be violated in the first few hours of the coming space war. International treaties have usually been violated in most previous major terrestrial conflicts and, due to the remoteness of space, treaties concerning the military use of space are easier to ignore—especially when the world populace may not even be aware of this ongoing space conflict and treaty violation truth will be hard to come by.").

⁸⁸ Erwin, *supra* note 11.

⁸⁹ G.A. Res. 75/36, at 3 (Dec. 16, 2020) (The General Assembly "[e]ncourages Member States to study existing and potential threats and security risks to space systems, including those arising from actions, activities or systems in outer space or on Earth, characterize actions and activities that could be considered responsible, irresponsible or threatening and their potential impact on international security, and share their ideas on the further development and implementation of norms, rules and principles of responsible behaviors and on the reduction of the risks of misunderstanding and miscalculations with respect to outer space.").

⁹⁰ Erwin, *supra* note 11.

Although Maj. Gen. Burt believes that “[t]here’s a lot of good work happening on the international stage,”⁹¹ any binding language is unlikely to gain support from China and Russia, both of which voted against the initial U.N. resolution.⁹²

This would mark the first time in recent history that the U.S. has made any significant push for any type of formally binding arms control. The Obama administration did articulate support for the “EU standards of space conduct,” but ultimately withdrew support for the proposals in 2012.⁹³ This change in policy was likely caused in part by Congressional concerns over “arms control by the back door” that might limit future space defense developments in unintended ways.⁹⁴ Despite the technically non-binding character of the code, implementing regulations by the executive branch would constrain military activities to the extent required by the terms of the Code.⁹⁵ Addressing these concerns, Congress included language in the 2013 National Defense Authorization Act that required executive submission of a certification that “such agreement has no legally-binding effect or *basis* for limiting the activities of the United States in outer space.”⁹⁶ It is not clear whether this language is enforceable against the President’s authority to conduct foreign relations but this dispute illustrates the challenge that democracies have in implementing a strategic shift in defense policy.

It is yet to be seen whether U.S. support for the newly introduced U.K.-sponsored U.N. resolution through the Committee on the Peaceful Uses of Outer Space⁹⁷ will build momentum towards a binding

⁹¹ *Id.*

⁹² Almudena Azcárate Ortega, *Placement of Weapons in Outer Space: The Dichotomy Between Word and Deed*, LAWFARE (Jan. 28, 2021, 8:01 AM), <https://www.lawfareblog.com/placement-weapons-outer-space-dichotomy-between-word-and-deed>.

⁹³ Michael Listner, *US rebuffs current draft of EU Code of Conduct: is there something waiting in the wings?*, SPACE REV. (Jan. 16, 2012), <https://www.thespacereview.com/article/2006/1>; *see also* Michael Listner, *U.S. Should Take a Cold, Hard Look at Space Code of Conduct*, SPACENEWS (Apr. 7, 2014), <https://spaceneews.com/40128us-should-take-a-cold-hard-look-at-space-code-of-conduct/#:~:text=The%20United%20States%20should%20take,national%20security%20and%20political%20analysis> (“The EU code was rejected by the United States for several reasons, including national security concerns, but even though the code of conduct has been substantially overhauled it still does not offer the United States tangible benefits and potentially places greater burdens and restrictions on the United States.”).

⁹⁴ Beard, *supra* note 29, at 402.

⁹⁵ *Id.* at 402–03.

⁹⁶ *Id.* at 404.

⁹⁷ Erwin, *supra* note 11.

agreement or will merely continue the muddled progress on soft-law norms in space. Any broad proposals that address U.S. defense flexibility may face hurdles in application. Regardless, the effectiveness of soft law in constraining the development and utilization of military technology is questionable.⁹⁸ The imprecision of standards and the incentive to cheat on constraints makes the broad norms or standards articulated by the code less effective. As Prof. Beard notes, during the Cold War, the U.S. and Russia gravitated towards specific and granular arms control agreements to confront the issue of cheating in the Prisoner's Dilemma model that comprises arms control agreements.⁹⁹

Thus, if broad arms control is unattainable, the soft law model is ineffective, and even narrow or targeted treaties lack political will, what is the solution to the possibility of an unconstrained arms race? The answer is that targeted arms control needs to be part of a larger lawfare strategy. If lawfare is embraced as a counter to China's ambitions, arms control in space is a central piece to that strategy. The biggest reason for the U.S. to embrace a lawfare strategy, is to capitalize on Beijing's recent stumbles in its push to win victories over the U.S. in this arena.

III. LAWFARE AND THE PRC'S "UNRESTRICTED WARFARE" STRATEGY

Thus, U.S. satellites pose an attractive target to potential adversaries and may create challenges in determining the author of an attack. All this is to say that deterrence by retaliation faces unique risks and challenges when compared with the more familiar Cold War paradigm.

The contemporary concept of the term "lawfare" was first popularized just after the U.S.-led military campaign in Kosovo.¹⁰⁰ Major General Dunlap introduced the idea that adversaries aim to exploit Western

⁹⁸ Beard, *supra* note 29, at 367 ("While soft law may lay the foundation for the development of hard law regimes in other fields, in the context of arms control it may instead merely generate new sources of uncertainty and conflict. When indeterminate language is used to establish key rules in arms control agreements, no credible commitments are signaled by states. Concurrently, offensive defections may be hard to identify, little assurance is signaled to prevent states from engaging in defensive defections, and some states may become "defensive quasi-defectors" as they unilaterally interpret (in a self-serving manner) ambiguous key rules.").

⁹⁹ *Id.* at 418.

¹⁰⁰ *About Lawfare: A Brief History of the Term and the Site*, LAWFARE, <https://www.lawfareblog.com/about-lawfare-brief-history-term-and-site> (last visited Nov. 23, 2021).

legal values to handcuff and to defeat the U.S.¹⁰¹ The term is best defined as “the strategy of using – or misusing – law as a substitute for traditional military means to achieve an operational objective.”¹⁰² In the context of strategic international law, and space law in particular, the term refers to law’s use as an offensive weapon aimed at controlling opponents and seizing political initiative.¹⁰³ The U.S. has largely dominated international rulemaking in space.¹⁰⁴ Bilateral negotiations with the U.S.S.R. yielded space treaties that serve as the foundation of the space legal regime and the U.S. has continued to shape the interpretation and application of law in space.¹⁰⁵ In particular, the meaning of “peaceful purposes” in the Outer Space Treaty is largely seen to include the lawful deployment of weapons in accordance with the U.N. Charter.¹⁰⁶ As China emerged as a space power, it purposefully incorporated lawfare aimed at the U.S. to further its strategic goals.¹⁰⁷ These efforts have included a push for recognition of vertical sovereignty, arguing for control of space beyond internationally accepted norms.¹⁰⁸ When these arguments failed to gain traction, China supported Russian efforts to adopt a draft Treaty on Prevention of the Placement of Weapons in Outer Space (“PPWT”), proposed in 2008 and 2014.¹⁰⁹

A. The PPWT as Lawfare in Space

In the space context, PPWT is at the forefront of China’s efforts to

¹⁰¹ *Lawfare amid warfare*, WASH. TIMES (Aug. 3, 2007), <https://www.washingtontimes.com/news/2007/aug/03/lawfare-amid-warfare/> (referencing Maj. Gen. Dunlap’s 2001 essay first introducing the term “Lawfare”).

¹⁰² Charles J. Dunlap, Jr., *Lawfare Today: A Perspective*, YALE J. INT’L AFFAIRS 146, 146 (2008).

¹⁰³ Dean Cheng, *Winning Without Fighting: Chinese Legal Warfare*, Asia Report (Heritage Found.), May 18, 2012, at 1.

¹⁰⁴ See Milton “Skip” Smith, *The Space Law Review: USA*, L. REVIEWS (Dec. 17, 2020), <https://thelawreviews.co.uk/title/the-space-law-review/usa>.

¹⁰⁵ See OFF. TECH. ASSESSMENT, OTA-TM-STI-27, U.S. - SOVIET COOPERATION IN SPACE: A TECHNICAL MEMORANDUM 9 (1985); HANDBOOK OF SPACE LAW 3–4 (Frons von der Dunk & Fabio Tronchetti eds., 2015).

¹⁰⁶ HANDBOOK OF SPACE LAW, *supra* note 105, at 314.

¹⁰⁷ Mitchell Ford, *War on the Final Frontier: Can Twentieth-Century Space Law Combat Twenty-First-Century Warfare?*, 39 HOUS. J. INT’L L. 237, 258–59 (2017) (describing three types of warfare in Chinese writings (1) public opinion warfare, (2) psychological warfare, and (3) legal warfare).

¹⁰⁸ Bret Austin White, *Reordering the Law for a China World Order: China’s Legal Warfare Strategy in Outer Space and Cyberspace*, 11 J. NAT’L SEC. L. & POL’Y 435, 458 (2021).

¹⁰⁹ Beard, *supra* note 29, at 416.

curtail the U.S.' technological advantage in space.¹¹⁰ While the U.S. has repeatedly blocked adoption of the treaty and publicly criticized its terms as ill-defined and impossible to verify,¹¹¹ the PPWT has been useful to its sponsors, Russia and China, who have revised and redrafted proposals of the treaty and presented it to the international community.¹¹² Rather than a workable solution to an arms race, the PPWT is heavily biased towards Chinese and Russian interests to the detriment of the U.S. and its allies.

China has pursued a robust and comprehensive array of counter-space weapons, including ground-launched ASAT missiles, ground-based directed energy weapons, ground-based satellite jammers, computer network operations, and co-orbital ASAT systems. The PPWT is ideal for preserving these capabilities: it would allow China to continue developing and deploying ground-based counterspace assets, testing ground-based weapons against its own spacecraft even if such tests created debris, and testing ground-based weapons against foreign spacecraft so long as these tests did not inflict physical damage. The PPWT would also favor China and Russia by prohibiting space-based "weapons" under broad terms that could include satellites that support missile defense systems on the ground—which these countries have long opposed—while allowing the terrestrial-based weapons that pose the greatest threat to space systems.¹¹³

The U.S., as the leading power in space and space-based weaponry, would have its ambitions curtailed, while the terrestrial-based weapons to combat the U.S. advantage would go unregulated under the PPWT. Further, the PPWT only bans weapons specially designed as weapons,¹¹⁴

¹¹⁰ See Bowe, *supra* note 17, at 1 (describing how the PPWT is aimed at restricting orbiting space weapons, but not terrestrial ASAT weapons which are central to Chinese security posturing in space).

¹¹¹ Ford, *supra* note 107, at 254–55.

¹¹² See Daniel R. Coats, Dir. of Nat'l Intel., Statement for the Record: Worldwide Threat Assessment of the U.S. Intelligence Community, (May 11, 2017) ("Russia and China remain committed to developing capabilities to challenge perceived adversaries in space, especially the United States, while publicly and diplomatically promoting nonweaponization of space and "no first placement" of weapons in space."); see also Rebecca Arcesati, *China's space program is about more than soft power*, MERICS (Feb. 21, 2019), <https://merics.org/en/analysis/chinas-space-program-about-more-soft-power> ("China has been eager to present itself as a peaceful and trustworthy space power opposed to arms races in outer space and committed to multilateralism. Such a narrative appeals to developing countries lacking autonomous space capabilities. It also seems to persuade the European Space Agency.").

¹¹³ Bowe, *supra* note 17, at 3 (quoting the Russian minister's response to the U.S. Defense Space Strategy).

¹¹⁴ Louis de Gouyon Matignon, *Treaty on the Prevention of the Placement of Weapons in Outer Space*, SPACE LEGAL NEWS (May 8, 2019),

but any object or satellite that has navigation and communication can be used as a weapon – slam it into another satellite and create debris. The Chinese government is aware of U.S. opposition but has made no significant move to modify the treaty's contours in a way acceptable to U.S. interests.¹¹⁵ The value of the treaty to its sponsors is not necessarily curtailing an arms race, but rather an opportunity to paint the U.S. as uninterested in taking reasonable steps to protect the global commons of space from a damaging arms race.¹¹⁶ The goal of presenting the U.S. pursuit of national security as destabilizing rather than stabilizing has some support in legal academia and is in line with the goals of so-called “revisionist powers.”¹¹⁷

The U.S. has largely been content to point out the flaws in the PPWT, concluding that the PPWT does not offer a sincere or serious avenue for reaching agreement.¹¹⁸ But the EU does not explicitly share America's cynicism about China's proposal or its potential for cooperation.¹¹⁹ Russia, another so-called revisionist power, is an eager co-sponsor of the treaty.¹²⁰ Thus, two of the three advanced space faring nations, the PRC and Russia, have repeatedly pushed a one-sided treaty while publicly declaring their interest in responsible cooperation in space.¹²¹ There is some indication this strategy is working on a political level.

<https://www.spacelegalissues.com/treaty-on-the-prevention-of-the-placement-of-weapons-in-outer-space-the-threat-or-use-of-force-against-outer-space-objects/>.

¹¹⁵ Coats, *supra* note 112, at 8.

¹¹⁶ *Outer Space: Militarization, weaponization, and prevention of an arms race*, REACHING CRITICAL WILL, <https://www.reachingcriticalwill.org/resources/factsheets/critical-issues/5448-outer-space> (last visited Nov. 26, 2021).

¹¹⁷ *C.f.* Hauck, *supra* note 52, at 120 (arguing that the creation of a Space Force amounts to U.S. “imperialism” in space); U.S. DEP'T OF DEF., SUMMARY OF THE 2018 NATIONAL DEFENSE STRATEGY (2018) (“It is increasingly clear that China and Russia want to shape a world consistent with their authoritarian model—gaining veto authority over other nations’ economic, diplomatic, and security decisions.”).

¹¹⁸ Jeff Foust, *U.S. Dismisses Space Weapons Treaty Proposal as “Fundamentally Flawed”*, SPACENEWS (Sept. 11, 2014), <https://spacenews.com/41842us-dismisses-space-weapons-treaty-proposal-as-fundamentally-flawed/> (outlining U.S. concerns with the PPWT, including the lack of a verification mechanism and no restrictions on the development and stockpiling of anti-satellite (“ASAT”) weapons on the ground).

¹¹⁹ Arcesati, *supra* note 112 (“The ESA has long been keen to work with China, particularly on scientific missions for which pooling resources is key to success. Last year, the European space industry expressed wariness of the Trump administration’s vision of US dominance in space.”).

¹²⁰ ANGELA STENT, RUSSIA AND CHINA: AXIS OF REVISIONIST? 1 (Brookings 2020), <https://www.brookings.edu/research/russia-and-china-axis-of-revisionists/>.

¹²¹ Michael Listner & Rajeswari P. Rajagopalan, *The 2014 PPWT: a new draft but with the same and different problems*, SPACE REV. (Aug. 11, 2014), <https://www.thespacereview.com/article/2575/1>.

The European Space Agency (“ESA”) has embraced the PRC as a partner in space and worked to strengthen ties to Chinese space projects.¹²² But the PRC’s economic leverage is weakened by its systematic violations of human rights. Three months after China and the EU signed a trade deal, reciprocal sanctions between the EU and China based on human rights concerns in Xinjiang threaten the future of Europe’s economic partnership with China.¹²³ As economic decoupling accelerates between the U.S. and China, the EU is faced with a tension between its values and its economic interests. Europe’s multi-track approach of cooperating economically with China while drawing a contrast on values issues like human rights may be untenable. China for its part, seems unwilling to tolerate criticism while preserving close economic ties.¹²⁴

The PPWT is just one example of China’s attempt to complement its economic power with a push for legal legitimacy. China and Russia are pursuing the same strategy in cyberspace where Russia and China have leveraged the U.N. General Assembly to form a U.N. cyber discussion body intended to supplant the Budapest convention on cybercrime with a new treaty consistent with their strategic interests (discussed further below).¹²⁵ The PRC and Russia’s unity in repeatedly proposing the PPWT demonstrated that they believe it has successfully increased their political power. While the PPWT has not been offered since 2014, this is likely because China no longer needed it as a wedge between the U.S. and its allies during the Trump administration, which was rhetorically deemphasizing multilateral cooperation.¹²⁶ Indeed, the lawfare element

¹²² *ESA and Chinese astronauts train together*, EUR. SPACE AGENCY (Aug. 24, 2018), https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Astronauts/ESA_and_Chinese_astronauts_train_together.

¹²³ Stuart Lau, *China’s new bogeyman: Europe*, POLITICO (Mar. 29, 2021, 8:21 PM), <https://www.politico.eu/article/chinas-new-bogeyman-europe/>; see also Adam Tooze, *The Fragility of Europe’s China Strategy*, INTERNATIONALE POLITIK Q. (Mar. 30, 2021), <https://ip-quarterly.com/en/fragility-europes-china-strategy> (explaining the roadblocks to China’s continued advancement).

¹²⁴ See Vincent K. L. Chang & Frank N. Pieke, *Europe’s engagement with China: shifting Chinese views of the EU and the EU-China relationship*, 16 ASIA EUR. J. 317, 321 (2018).

¹²⁵ David Ignatius, *How Russian and China are attempting to rewrite cyberworld order*, WASH. POST (Mar. 30, 2021, 7:07 PM), https://www.washingtonpost.com/opinions/global-opinions/how-russia-and-china-are-attempting-to-rewrite-cyberworld-order/2021/03/30/16030226-9190-11eb-a74e-1f4cf89fd948_story.html.

¹²⁶ See generally Lillian Posner & Evan Sankey, *The U.S. and Russia are Parting Ways in Space and That’s Risky*, NAT’L INTEREST (May 7, 2021), <https://nationalinterest.org/feature/us-and-russia-are-parting-ways-space-and-thats-risky-184506> (describing China’s general bypassing of the PPWT, and the winding down of the Treaty’s effectiveness and import).

of the PRC's political warfare is central to their attempt to increase power relative to the U.S. The PPWT is a clear example of law used as bludgeon, something U.S. policy makers should not ignore.

B. The Chinese Government's Conception of Political and Legal Warfare

The PRC's ambitions require the dismantling or sidelining of the U.S.-led order created after World War II. Lawfare plays a key role in this attempt to "diminish the credibility of US power and influence sufficiently to cause those states currently inclined to "balance" against China to instead join the bandwagon with China."¹²⁷ U.S.-led security alliances and democratic norms are seen as incompatible with the Chinese government's ambition during the next century.¹²⁸ This strategy does not necessarily include military confrontation but rather, what Chinese writings refer to as the "three warfares": public opinion warfare, psychological warfare, and legal warfare.¹²⁹ The three concepts are seen as interrelated and mutually reinforcing.¹³⁰ In discussing this concept, Dean Cheng defines the Chinese conception of legal warfare.

Legal warfare is one of the key instruments of psychological and public opinion/media warfare. It raises doubts among adversary and neutral military and civilian authorities, as well as the broader population, about the legality of adversary actions, thereby diminishing political will and support—and potentially retarding military activity. It also provides material for public opinion/media warfare. Legal warfare does not occur on its own; rather, it is part of the larger military or public opinion/media warfare campaign.¹³¹

Key to utilizing legal warfare is a historical conception of the rule of law that is distinct from the Western tradition. The idea that the law exists independent of the ruler and the governed and binds them equally is not rooted in the PRC's historical experience. Rather, law is seen from an instrumental perspective, as a tool with which authority may be used to

¹²⁷ THE LONGER TELEGRAM, *supra* note 22, at 8 (arguing that China intends to use its "growing influence within international institutions to delegitimize and overturn initiatives, standards, and norms perceived as hostile to China's interests . . . while advancing a new, hierarchical, authoritarian conception of international order.").

¹²⁸ Tobin, *supra* note 14, at 156 ("Xi, however, has gone much further than his predecessors to promote his vision for transforming global governance. For Xi, China's growing comprehensive national power means that Beijing has greater ability — and faces a greater urgency — to achieve its long-held aspirations.").

¹²⁹ Cheng, *supra* note 103.

¹³⁰ *Id.*

¹³¹ Cheng, *supra* note 103.

control the governed.¹³² This historical conception is combined with the Chinese Government's acknowledgment that despite rapid growth, China is not yet ready to effectively confront U.S. military dominance.¹³³

C. The Chinese Government's "Three Warfares" and its response to American Influence

In the late 1990s, two Chinese military officers published a book on "Unrestricted Warfare," arguing that PRC strategists should investigate alternative forms to traditional warfare.¹³⁴ They suggest that due to China's relative technological and military disadvantage, it was necessary to pursue alternative ways to wage warfare.¹³⁵ These alternatives included international diplomacy, economic pressure, legal warfare and public opinion.¹³⁶ Though written two decades ago, the article outlined the PRC's view on world politics and how international law has shaped the rules-based order led by the U.S. in the aftermath of WWII.¹³⁷

Fundamentally, the PRC's understanding of the international legal system is that it was built to serve U.S. interests to the detriment of China.¹³⁸ To address this concern, the authors introduce the concept of "unrestricted warfare," the idea that utilizing any available method of coercion is necessary to reshape the international system to one more conducive to the PRC's aims.¹³⁹ In discussing this strategy, the authors point out what they see as the American emphasis on weaponry and technology as a means of power and deterrence.¹⁴⁰

Americans have a strong inborn [...] tendency to turn their pursuit of the highest technology and its perfection into a luxury, even including

¹³² *Id.*

¹³³ See Ambassador Chas W. Freeman, Jr., USFS (Ret.), China's Challenge to American Hegemony, Remarks to the Global Strategy Forum (Jan. 20, 2010) (describing China's lack of "rule of law," the U.S. as a hegemonic military power, and China's reluctance to challenge the U.S. despite its "economic success").

¹³⁴ QIAO LIANG & WANG XIANGSUI, UNRESTRICTED WARFARE 2, 7, 221 (Foreign Broad. Info. Serv. trans., 1999).

¹³⁵ Andrés B. Muñoz Mosquera & Nikoleta Chalanouli, *China, an Active Practitioner Of Legal Warfare*, LAWFIRE (Feb. 2, 2020), <https://sites.duke.edu/law-fire/2020/02/02/guest-post-andres-munoz-mosqueras-and-nikoleta-chalanoulis-essay-china-an-active-practitioner-of-legal-warfare/>.

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ See, e.g., Tobin, *supra* note 14, at 157 (explaining how for Beijing, democracy in international relations means "shifting global influence away from Washington and U.S. allies and toward China and other countries that accede to its concepts.").

¹³⁹ Mosquera & Chalanouli, *supra* note 135.

¹⁴⁰ *Id.*

weapons and machinery [...] This inclination makes them rigidly infatuated with and therefore have blind faith in technology and weapons, always thinking that the road to getting the upper hand with war can be found with technology and weapons. This inclination also makes them anxious at any given time that their own leading position in the realm of weaponry is wavering, and they continually alleviate these concerns by manufacturing more, newer, and more complex weapons [...] They believe that as long as the Edisons of today do not sink into sleep, the gate to victory will always be open to Americans. Self-confidence such as this has made them forget one simple fact - it is not so much that war follows the fixed race course of rivalry of technology and weaponry as it is a game field with continually changing direction and many irregular factors.¹⁴¹

The authors have thus diagnosed the American inclination towards strategic deterrence facilitated by a reliance on technological superiority. Prof. Koplow has echoed this critique of American policy makers, suggesting that deterrence in the U.S. is a “MacGuffin,” or a motivating goal that is divorced from its practical utility.¹⁴² The Chinese authors suggest that the PRC should not compete directly with U.S. technological and military advantages.¹⁴³ The authors urge the PRC to find alternatives by which to mitigate the U.S.’ military and technical advantages.¹⁴⁴ This includes redefining the rules by which strategic power is exercised and maintained.¹⁴⁵ In confronting America’s rules-based world order, the authors recommend that China embrace an approach of “unrestricted warfare.”

[W]arfare is in the process of transcending the domains of soldiers, military units, and military affairs, and is increasingly becoming a matter

¹⁴¹ LIANG & XIANGSUI, *supra* note 134, at 95, 114–15 (stating “observing, considering, and resolving problems from the point of view of technology is typical American thinking. Its advantages and disadvantages are both very apparent, just like the characters of Americans.”).

¹⁴² Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 294.

¹⁴³ See generally LIANG & XIANGSUI, *supra* note 134, at 2 (arguing that “strong” countries should not use the same approach as “weak” countries in military advancement and suggesting the U.S. is a “strong” country).

¹⁴⁴ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 294.

¹⁴⁵ See LIANG & XIANGSUI, *supra* note 134, at 196 (stating that “rules must be respected. To evade or break the rules requires prudence. The issue is that what we are thinking about is precisely how to evade or break such rules. We do not believe that all wars must gradually progress in level-by-level sequence, accumulating until a fateful moment of destiny is reached. We believe that moment is something which can be created. Finding a way by which we can continuously create that moment and not wait for the accumulation, and then fixing that method as a kind of strategy, that is the thing which we should do.”).

for politicians, scientists, and even bankers [...] Although the boundaries between soldiers and non-soldiers have now been broken down, and the chasm between warfare and non-warfare nearly filled up, globalization has made all the tough problems interconnected and interlocking, and we must find a key for that. The key should be able to open all the locks, if these locks are on the front door of war. And this key must be suited to all the levels and dimensions, from war policy, strategy, and operational techniques to tactics; and it must also fit the hands of individuals, from politicians and generals to the common soldiers. We can think of no other more appropriate key than "unrestricted warfare."¹⁴⁶

Subsequent authors have endorsed this view of the PRC's conception of its place in the international order, namely a rising power confronting an international legal system designed to protect the interests of the United States.¹⁴⁷ Commentators have also posited that U.S. reliance on technology for the national security realm is both a strength and a weakness.¹⁴⁸ Being unable to compete directly with the U.S. in terms of military or technological might,¹⁴⁹ China has embraced alternative means to advance state power. This alternative means includes arguments on vertical sovereignty in space and the PPWT, a new push to shape cyber law through a new cybercrime treaty, and attempts to build legal cover for the PRC's territorial aims in the South China Sea.¹⁵⁰

U.S. policy makers must thus understand China's place in the rules-based international order ("RBIO") the way PRC strategists understand China's place. The PRC's hostility to the RBIO is based on the perception it constrains China's ambitions regarding space, Taiwan, the South China Sea, cyber space, and Chinese domestic policy.¹⁵¹ The PRC's

¹⁴⁶ *Id.* at 221–22.

¹⁴⁷ See, e.g., U.S. Dep't of Def., *Military and Security Development Involving the Peoples' Republic of China (2020)* (discussing China's foreign policy to readdress its place in the "international order").

¹⁴⁸ Steven L. Bryant, Jr., *The Dangers of an Over-Reliance on Technology* (June 14, 2011) (Master's thesis, National Defense University, Joint Forces Staff College) (available at <https://www.hsdl.org/?view&did=722986>).

¹⁴⁹ Bates Gill & Michael E. O'Hanlon, *China's Hollow Military*, BROOKINGS (June 1, 1999), <https://www.brookings.edu/articles/chinas-hollow-military/>.

¹⁵⁰ See Jonathan G. Odom, *Debunking a New Chinese Talking Point Against U.S. Policy in the South China Sea*, LAWFARE (Dec. 16, 2020), <https://www.lawfare-blog.com/debunking-new-chinese-talking-point-against-us-policy-south-china-sea> (characterizing the PRC's attempt to claim territory in the South China Sea as "sovereignty issues" and U.S. policy opposing its aims as illegitimate); see also Ignatius, *supra* note 125 (discussing China and Russia's UNGA sanctioned push to draft a new treaty on cybercrime and creation of a UN cyber discussion body).

¹⁵¹ See, e.g., U.S. Dep't of Def., *supra* note 147 (discussing China's view that the rules-based system hinders its strategic ambitions and is contrary to its sovereignty).

current leadership under Xi Jinping can disregard human rights and rule of law under the RBIO because they see it as an American system designed to promote American interests.¹⁵² In response to U.S. Secretary of State Andrew Blinken's call to strengthen the rules-based international order, China's top diplomat Yang Jiechi stated:

What China and the international community follow or uphold is the United Nations-centered international system and the international order underpinned by international law, not what is advocated by a small number of countries of the so-called "rules-based" international order. And the United States has its style – United States-style democracy – and China has the Chinese-style democracy.¹⁵³

China is thus defining the RBIO as a subjective statement of values as opposed to a universal set of rules applying to all nation states.

Whether the U.S. pursues a policy of containment, attempts to integrate China into the current international system, or works to establish a new cooperative balance of power, it must acknowledge the PRC's interest in undermining the U.S.-led status quo.¹⁵⁴ From a containment perspective, if China views the RBIO as constraining its rise in power relative to the U.S., the U.S. must understand the RBIO as a system that protects its relative power.¹⁵⁵ Thus, foreign policy realists should acknowledge the importance of the RBIO to U.S. interests. If the U.S. is to effectively address PRC lawfare, the rules governing space provides a unique opportunity.

D. Lawfare is Central to Chinese Ambitions, it Cannot Rely on Economic Might Alone

It could be argued that China is building its growing influence on economic power and that lawfare ambitions are secondary. Indeed, the

¹⁵² See Ignatius, *supra* note 125 (stating that "China's top diplomat had an interesting rejoinder to Secretary of State Antony Blinken's call in Anchorage this month to "strengthen the rules-based international order." Such an order already exists, answered Politburo member Yang Jiechi. It's called the United Nations.").

¹⁵³ Antony J. Blinken, U.S. Sec'y of State, Remarks: Secretary Antony J. Blinken, National Security Advisor Jake Sullivan, Director Yang And State Councilor Wang At the Top of Their Meeting (Mar. 18, 2021).

¹⁵⁴ Cf. Paal, *supra* note 4 (mentioning that "[a] policy that combines engagement with China with attention to nurturing a balance of power around Beijing as a hedge will best serve U.S. interests. In that spirit, the United States will need to find a pragmatic basis for bilateral relations with China that protects what is working and helps adjust what is not.").

¹⁵⁵ Odom, *supra* note 150.

Belt and Road initiative seems primarily aimed at infrastructure development in exchange for access to markets and resource rights.¹⁵⁶ China's international political clout may stem more from economic influence than a compelling vision for world governance.¹⁵⁷ But as China is discovering, its influence and economic power may be undermined by its political liabilities.¹⁵⁸ There is a threshold to China's ambition that economic incentives cannot overcome. Recent developments in Korea and the EU are illustrative.¹⁵⁹

In December 2020, the EU and the PRC signed a historic trade deal while the U.S. was managing its pandemic response and navigating an unresolved electoral dispute.¹⁶⁰ But after a few months passed, these increased economic ties between the PRC and the EU are on much shakier ground. For one, European leaders, who hoped they could bifurcate expanding economic cooperation and support for human rights, soon became embroiled in mutual economic sanctions over Chinese human rights abuses in Xinjiang province.¹⁶¹ A swift backlash against European goods occurred after various EU officials criticized Beijing's treatment of Uyghurs.¹⁶² As a result, this dispute may result in a closer relationship between the U.S. and Europe, with China somewhat excluded. All showing that political and cultural disagreements upending otherwise profitable Chinese economic arrangements is not limited to Western Countries.

¹⁵⁶ Andrew Chatzky & James McBride, *China's Massive Belt and Road Initiative*, COUNCIL ON FOREIGN RELATIONS, (Jan. 28, 2020, 7:00AM), <https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative>.

¹⁵⁷ *Id.* (explaining the common differences between China and other actors in their world outlooks).

¹⁵⁸ See Lau, *supra* note 123.

¹⁵⁹ *Id.*; Tobias Harris & Haneul Lee, *A New Chapter in U.S.-South Korea Relations: Seoul Embraces a Broader Role in Asia*, CTR. AM. PROGRESS (June 25, 2021, 9:00 AM), <https://www.americanprogress.org/issues/security/news/2021/06/25/500953/new-chapter-u-s-south-korea-relations-seoul-embraces-broader-role-asia/>.

¹⁶⁰ Rob Schmitz, *Europe and China Approve Landmark Investment Treaty, Snubbing U.S.*, NPR (Dec. 30, 2020, 12:47 PM), <https://www.npr.org/2020/12/30/951400927/europe-and-china-approve-landmark-investment-treaty-snubbing-u-s>.

¹⁶¹ Guiseppe Succimarra, *EU Sanctions China For Human Rights Abuses In Xinjiang*, HUM. RTS. PULSE (Apr. 15, 2021), <https://www.humanrightspulse.com/master-contentblog/eu-sanctions-china-for-human-rights-abuses-in-xinjiang>.

¹⁶² Adela Suliman, *Nike, H&M, Burberry face backlash and boycotts in China over stance on Uyghur treatment*, NBC NEWS (Mar. 25, 2021, 10:11 AM), <https://www.nbcnews.com/news/world/nike-h-m-face-backlash-china-over-xinjiang-cotton-concerns-n1262019>.

South Korea, long a U.S. ally, recently began moving towards a more ambiguous foreign policy concerning the growing rivalry between the U.S. and the PRC.¹⁶³ Korea is a vibrant democracy defined by hardship in the first half of the 20th century and astonishing economic development in the second.¹⁶⁴ It has always been aware of its vulnerable status in a “tough neighborhood,” caught between Chinese, Japanese, and American behemoths.¹⁶⁵ But its attempts to navigate an independent course between Beijing and the U.S. is challenged by popular resentment against perceived Chinese political and cultural overreach.¹⁶⁶ Koreans expressed outrage over suggestions that kimchi, a beloved national dish, and the hanbok, a traditional Korean clothing, originated in China.¹⁶⁷ The PRC’s financial backing of the Korean entertainment industry forced a rewrite of a popular drama based on depictions conflating Korean and Chinese cultural history.¹⁶⁸ Korean popular resentment over Chinese cultural imperialism was previously reinforced by \$7.5 billion of economic sanctions imposed by Beijing in 2016 over Seoul’s hosting of the American Terminal High Altitude Area defense system.¹⁶⁹ While President Moon’s administration maintained a focus on strategic ambiguity between Beijing and Washington, the political and cultural realities in Korea may make a future close relationship with China untenable.

These cases are offered to demonstrate that China’s world-wide

¹⁶³ See Dongwoo Kim, *The Politics of South Korea’s ‘China Threat’*, DIPLOMAT (Apr. 5, 2021), <https://thediplomat.com/2021/04/the-politics-of-south-koreas-china-threat/> (“There is a mismatch between this strong anti-China sentiment in the public and South Korea’s current foreign policy. This, combined with external environments that make the policy of ‘strategic ambiguity’ vis-à-vis China and the United States increasingly difficult and the hyper-partisan, polarized political landscape, could altogether transform China policy into a key wedge issue in South Korea’s politics in the coming years.”).

¹⁶⁴ Charles K. Armstrong, *Korean History and Political Geography*, ASIA SOC’Y, <https://asiasociety.org/education/korean-history-and-political-geography#> (last visited Nov. 26, 2021).

¹⁶⁵ Robert Kelly, *Forging Autonomy in a Tough Neighborhood: Korea’s Foreign Policy Struggle*, ASIAN SEC. BLOG (Sept. 14, 2009), <https://asiansecurityblog.wordpress.com/2009/09/14/forging-autonomy-in-a-tough-neighborhood-korea-s-foreign-policy-struggle-1/>.

¹⁶⁶ See, e.g., Greeshma Nayak, *South Korean Drama ‘Joseon Exorcist’ Sparks Controversy Over Portrayal of Chinese Culture*, REPUBLICWORLD.COM (Mar. 25, 2021), <https://www.republicworld.com/entertainment-news/web-series/south-korean-drama-joseon-exorcist-sparks-controversy-over-portrayal-of-chinese-culture.html> (detailing controversy over popular Chinese-funded Korean drama featuring Chinese culture on a Korean television show).

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ Kim, *supra* note 163.

influence cannot rest on economic incentives alone. China's strategic vulnerability lies in the fact that its sovereignty-focused nationalism does not provide a compelling narrative for prospective partner nations.¹⁷⁰ While nations including EU countries and S. Korea may be able to ignore this in the short run, in the long run, Beijing cannot secure long term alliances without promoting externally compatible values. U.S. values including economic and political liberalism supported by the rule of law remains one of its most attractive characteristics when engaging with the world community. These values endure and remain compelling regardless of economic and military influence. The RBIO acts as a vehicle for these values and undergirds market access and economic cooperation.¹⁷¹

Chinese lawfare provides a veneer of legitimacy that amounts to a papering over of its foundational weakness as a world leader. If America fails to assert its role as a global leader in forming and enforcing international law and norms, China will exploit the vacuum with proposed but ultimately untenable legal regimes like the PPWT while ignoring adverse rulings like the Philippines Law of the Sea Decision.¹⁷² America's response must include targeted, well defined, and verifiable binding treaties, starting with a ban on destructive ASAT tests. But it must be more than just an American sponsored reverse PPWT, aimed at curtailing opponents while protecting advantage. It can be narrow enough to allow continued development of deterrence technology while restricting new debris-causing tests by emerging space powers. China and Russia share this interest in the continued productive use of space. But even if ultimately rejected by China and Russia, U.S. support for globally beneficial rules distinguish its vision of a future governed by law rather than

¹⁷⁰ Daniel Deudney & G. John Ikenberry, *Liberal World: The Resilient Order*, FOREIGN AFF. 18 (July/Aug. 2018), https://scholar.princeton.edu/sites/default/files/gji3/files/05_deudney_ikenberry.pdf ("Overall, liberalism remains perennially and universally appealing because it rests on a commitment to the dignity and freedom of individuals. It enshrines the idea of tolerance, which will be needed in spades as the world becomes increasingly interactive and diverse. Although the ideology emerged in the West, its values have become universal, and its champions have extended to encompass Mahatma Gandhi, Mikhail Gorbachev, and Nelson Mandela.").

¹⁷¹ Deudney & Ikenberry, *supra* note 170, at 16.

¹⁷² Anders Corr, *Enforce Law Of The Sea Ruling: Stand With The Philippines Now, Or Later Face China Alone*, FORBES (July 13, 2016, 6:19 AM), <https://www.forbes.com/sites/anderscorr/2016/07/13/enforce-law-of-the-sea-ruling-stand-with-the-philippines-now-or-later-face-china-alone/?sh=52a701b7da56> (explaining that the U.S. and its allies are the only countries with the power to enforce the Philippines Law of the Sea ruling, as China chooses to defy it).

one dominated only by economic and military influence. This is particularly true in the realm of military activities where voluntary restraints are of limited utility between potential rivals.

IV. LAWFARE IN SPACE AS A PART OF A BROADER AMERICAN STRATEGY

The U.S.' recent endorsement of a plan to develop "binding norms" is a first attempt to meaningfully confront the PRC's attempts to reframe the narrative in space.¹⁷³ Until recently, it had either pursued deterrence while ignoring Chinese lawfare or half-heartedly endorsed the EU's soft law approach for a Code of Space Conduct.¹⁷⁴ Its participation in the 2019 U.N. Committee on the Peaceful Uses of Outer Space guidelines of sustainability was a positive step forward.¹⁷⁵ But a focus on soft law or military deterrence alone misses the opportunity to seize a lawfare advantage over China and restrengthen the rules-based order.

The Artemis Accords, setting forth principles for cooperation aimed at civil exploration, are a positive development for the space legal regime.¹⁷⁶ But neither Russia nor China has signed on to the accords but have their intent to cooperate together on a parallel space discovery project.¹⁷⁷ Regardless, NASA is restricted from cooperation with China based on a 2011 statute aimed at preventing American technology from being exploited by the Chinese government.¹⁷⁸ The portions of the Artemis Accords aimed at restricting space debris are helpful in establishing

¹⁷³ Erwin, *supra* note 11.

¹⁷⁴ See Marcus Weisgerber, *U.S. Wants Changes to EU Space Code of Conduct*, SPACENEWS (Jan. 12, 2012, 6:23 PM), <https://spacenews.com/18667us-wants-changes-to-eu-space-code-of-conduct/> (explaining that the U.S. will no longer endorse the EU's Code of Space Conduct).

¹⁷⁵ See generally Peter Martinez, *The UN COPUOS Guidelines for the Long-Term Sustainability of Outer Space Activities*, SECURE WORLD FOUND. (Nov. 2019), https://swfound.org/media/206891/swf_un_copuos_lts_guidelines_fact_sheet_november-2019-1.pdf (highlighting that the U.S.'s endorsement and participation of these plans is a recent, and promising development).

¹⁷⁶ See generally *The Artemis Accords, Principles for Cooperation in the Civil Exploration and Use of the Moon, Comets, and Asteroids for Peaceful Purposes* (Oct. 13, 2020) (generally supporting the idea of international cooperative space exploration under the principles set forth by the Artemis Accords).

¹⁷⁷ Morgan McFall-Johnsen, *China and Russia haven't signed on to NASA's new plan to unify how humanity explores space*, BUS. INSIDER (Oct. 13, 2020, 12:52 PM), <https://www.businessinsider.com/nasa-artemis-accords-deep-space-exploration-moon-mars-asteroids-comets-2020-10>; Steven Lee Meyers, *China and Russia Agree to Explore the Moon Together*, N.Y. TIMES (Oct. 5, 2021), <https://www.nytimes.com/2021/03/10/world/asia/china-russia-moon.html>.

¹⁷⁸ Department of Defense and Full-Year Continuing Appropriations Act of 2011, Pub. L. No. 112-10, § 1340, 125 Stat. 38, 123 (amended in 2020).

U.S. leadership by example, but they do not directly engage Chinese or Russian space activities.¹⁷⁹ Further, as Prof. Beard noted in his critique of the International Code of Conduct for Space activities, soft law efforts to create arms control norms suffer from imprecise terms and, thus, makes determining whether a state party has violated the norms difficult to discern.¹⁸⁰ The Artemis Accords lack a meaningful way of holding China or Russia accountable for irresponsible behavior.

The PRC's unrestricted warfare approach is that because it is untethered to any universal or compelling vision of a structured world order and is vulnerable to hypocrisy, contradiction, and self-sabotage.¹⁸¹ If the PRC's international strategy is motivated by no principle other than maximizing its government's power, then the U.S. is compelled to exploit this strategy where it is vulnerable.¹⁸² Chinese actions in cyberspace and in the sea are additional examples where an assertive U.S. approach to regain the moral international narrative will have achievable results.¹⁸³ America should aggressively confront the Chinese narrative over the weapons in outer space as part of a larger push to confront China's irresponsible actions on the international stage.

A. The Limits of Soft Law Alone

A U.K.-sponsored December 2020 General Assembly resolution and the U.S.' initial reaction to it are perhaps the most recent significant developments in space security law. While Maj. General Burt was quoted as saying the U.S. would support a binding UN resolution,¹⁸⁴ it is not clear yet what this means. If this means a targeted treaty with specific terms and a verification regime, it may very well accomplish the lawfare goals advocated in this paper. If, however, it becomes a project

¹⁷⁹ McFall-Johnsen, *supra* note 177.

¹⁸⁰ Beard, *supra* note 29, at 423.

¹⁸¹ *Id.* at 358–60.

¹⁸² THE LONGER TELEGRAM, *supra* note 22, at 66 (“U.S. strategy must never forget the innately realist nature of the Chinese strategy that it is seeking to defeat. Chinese leaders respect strength and are contemptuous of weakness. They respect consistency and are contemptuous of vacillation. China does not believe in strategic vacuums.”).

¹⁸³ See Ariel Levite & Lyu Jinghua, *Chinese-American Relations in Cyberspace: Towards Collaboration or Confrontation?*, CARNEGIE ENDOWMENT INT’L PEACE (Jan. 24, 2019), <https://carnegieendowment.org/2019/01/24/chinese-american-relations-in-cyberspace-toward-collaboration-or-confrontation-pub-78213> (explaining how a cyberattack between China and the U.S. could quickly escalate, and the democratic ideologies of the U.S. would morally prevail).

¹⁸⁴ Erwin, *supra* note 11 (noting that The U.S. is working with the U.K., Canada, France, Germany, Australia, and New Zealand).

aimed at a political commitment with the hope that state practice will solidify into customary international law, it comes with associated pitfalls. The danger is that this new project will suffer the same defects as the EU's Code of Conduct that fizzled after losing U.S. endorsement during the Obama Administration.¹⁸⁵ Prof. Beard highlighted the inapplicability of political commitments to security issues when critiquing the recent emphasis on so-called "soft law."¹⁸⁶ It remains to be seen whether the new U.K./U.S. project will avoid these pitfalls.

Prof. Beard points out the inherent disadvantage the U.S. suffers when applying non-binding political commitments in the shadow of autocratic regimes like Russia and China.¹⁸⁷ Non-binding commitments carry more force for democracies that face consequences for straying from political obligations.¹⁸⁸ Soft law agreements like the Code or political commitments that might emerge from the U.K.'s U.N. project depend entirely on self-enforcement and social verification from member states.¹⁸⁹ Authoritarian states are not subject to the same scrutiny without domestic private interest groups to freely evaluate military programs in light of international commitments.¹⁹⁰ If arms control necessarily incentivizes self-interested defection, the weight of corrective political pressure rests more lightly on autocratic regimes.¹⁹¹ This is particularly true with the focus on lawfare. China has greater control over its domestic political narrative than the U.S. when seeking to shape the dialogue around the commitment to and development of new rules governing space. Thus, the PRC has a greater opportunity to press the boundaries of vaguely defined commitments or weak verification regimes.¹⁹²

But the U.S. has another option, advocating for legally binding prohibition on specific types of the most harmful conduct. This agreement should be narrowly tailored and include precise terms and feasible

¹⁸⁵ Beard, *supra* note 29, at 391-94.

¹⁸⁶ *Id.* at 374.

¹⁸⁷ *Id.* at 338, 359, 393 (explaining a number of general disadvantages to the U.S. under soft law space agreements with respect to Russia and China).

¹⁸⁸ *Id.* at 399.

¹⁸⁹ *Id.* at 375.

¹⁹⁰ *Id.* at 374-77.

¹⁹¹ Beard, *supra* note 29, at 360-61, 374 (explaining that arms control incentivizes defection and that authoritarian states' political committees carry less weight than democratic ones).

¹⁹² *Id.* at 376 (detailing that authoritarian regimes have advantages over democratic regimes in securing soft arms control arrangements).

methods of verification.¹⁹³ In the arena of space debris prevention, a ban on the testing of destructive debris-generating ASATs avoids the pitfalls associated with less defined and more sweeping proposals.¹⁹⁴ An agreement signed by Russia and the PRC would reduce debris-causing tests and establish a treaty as a framework for future arms control, but merely proposing an agreement that China refused to sign would give the U.S. a secondary lawfare advantage. The U.S. should not propose a cynical or bad faith proposal like the PPWT which would undermine the principles of a rules-based order.¹⁹⁵ A treaty proposal will yield immediate short-term political benefits to the U.S. and long term global benefits if ultimately agreed to by China and Russia. In particular, this proposal should be aimed at the most damaging ASAT weapons technology, debris-causing interceptor vehicles, or hit to kill kinetic energy weapons.

A successful prohibition on tests of kinetic energy, hit-to-kill, debris generating ASATs would curtail the spread of weapons technology that is increasingly becoming widespread.¹⁹⁶ A focus on the most threatening current technology avoids the definition and verification problems of a comprehensive arms control agreement. The format of the proposed agreement should be incorporated into a legally binding international convention that includes the space-faring states along with precise definitions, credible commitments, and clear compliance obligations. Congressional buy-in is necessary to ensure legitimacy and to underscore U.S. leadership in developing international space law. Whether the recent U.K.-led project can create a proposal with similar benefits remains to be seen. Regardless, any proposal should be narrowly tailored, specific, verifiable, and plausible.¹⁹⁷ Any lawfare benefit

¹⁹³ *Id.* at 362–63, 416; *see also* Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 345 (“Arms control measures must be prudent, balanced, verifiable, and enforced. Treaties cannot single-handedly and instantaneously abolish all ASAT weapons and counterspace capabilities; diplomacy cannot be simply a reaction to what we might think of as “deterrence fatigue.””).

¹⁹⁴ Beard, *supra* note 29, at 363–65 (“Determinacy in such agreements appears to have its own ‘compliance in pull,’ while the absence of determinacy in other agreements makes it unlikely that state will have conjunctions about non-compliance.”).

¹⁹⁵ *Id.* at 390.

¹⁹⁶ *Id.* at 419–20 (“A new wave of destructive ASAT weapon tests is not unimaginable, since countries other than China, Russia, and the United States, including India, Israel, and Japan; remain interested in developing hit-to-kill ASAT technology.”).

¹⁹⁷ Koplow, *Deterrence as the MacGuffin*, *supra* note 32, at 345–46 (“None of the goals of arms control will be easy to attain, especially in the uniquely challenging circumstances of space. But achieving effective arms control in the nuclear realm is not

hinges on these factors whether the proposal is aimed at ASAT testing or definitions of hostile behaviors in space.

B. Confronting the Chinese Government's Lawfare in Cyberspace

Cyberspace is a unique domain where international cooperation is particularly compelling.¹⁹⁸ The intangibility of cyberspace and growing reliance across the world means individual sovereign countries are unable to govern or establish controls by acting unilaterally. Despite the increasing power and relevance of cyberspace, there is a paucity of international treaties or conventions addressing conduct in cyberspace. In fact, the only significant multilateral treaty governing the internet is the Budapest Convention.¹⁹⁹

The Budapest Convention, otherwise known as the Convention on Cybercrime, is the only legally binding international treaty that lays out common standards on cybercrime investigations.²⁰⁰ The goal is to boost cooperation among criminal justice systems around the globe in these cases.²⁰¹ Neither China nor Russia are current members of the Budapest Convention that was established in 2001.²⁰² More recently, Russia, with the support of China, successfully pushed a U.N. cybercrime resolution which may lead to establishment of a second treaty which would act as a counter to the established Budapest Convention.²⁰³ The new

easy, either, and the effort has sometimes succeeded there. The point is that we need to start trying.”).

¹⁹⁸ See Larry D. Welch, *Cyberspace – The Fifth Operational Domain*, DEF. TECH. INFO. CTR. (Nov. 1, 2004), <https://www.ida.org/-/media/feature/publications/2/20/2011-cyberspace---the-fifth-operational-domain/2011-cyberspace---the-fifth-operational-domain.ashx> (discussing the idea of treating cyberspace as its own domain); see Elena Chernenko et al., *Increasing International Cooperation in Cybersecurity and Adapting Cyber Norms*, COUNCIL ON FOREIGN RELATIONS (Feb. 23, 2018), <https://www.cfr.org/report/increasing-international-cooperation-cybersecurity-and-adapting-cyber-norms> (discussing the “urgent need for cooperation among states to mitigate threats [of] cybercrime”).

¹⁹⁹ Joyce Hakmeh & Allison Peters, *A New UN Cybercrime Treaty? The Way Forward for Supporters of an Open, Free, and Secure Internet*, COUNCIL ON FOREIGN RELATIONS (Jan. 13, 2020, 11:35 AM), <https://www.cfr.org/blog/new-un-cybercrime-treaty-way-forward-supporters-open-free-and-secure-internet>.

²⁰⁰ Allison Peters, *Russia and China Are Trying to Set the U.N.'s Rules on Cybercrime*, FOREIGN POL'Y (Sept. 16, 2019, 4:29 PM), <https://foreignpolicy.com/2019/09/16/russia-and-china-are-trying-to-set-the-u-n-s-rules-on-cyber-crime/>.

²⁰¹ *Id.*

²⁰² *Parties/Observers to the Budapest Convention*, *supra* note 15.

²⁰³ Deborah Brown, *Cybercrime is Dangerous, But a New UN Treaty Could Be Worse for Rights*, HUM. RTS. WATCH (Aug. 13, 2021, 12:55 PM),

resolution and anticipated treaty are regarded in the West as providing cover for its authoritarian sponsors to crack down on online dissidents.²⁰⁴ The resolution, and Russia's subsequent draft convention based on the resolution, provide an extremely vague definition for what constitutes the use of information and communication technologies for criminal purposes.²⁰⁵ More importantly, a rival treaty to the Budapest Convention risks diluting the consensus surrounding the established treaty. There is speculation that China leveraged its economic power to convince smaller countries to adopt the resolution which was passed in 2020.²⁰⁶

Regardless of the specific implications of an authoritarian-backed cyber initiative, Russia and China are committed to establishing alternatives to U.S. supported treaties aimed at bolstering the liberal consensus on an international stage. The U.S. should be prepared to win cooperation with states who may otherwise be prepared to support a convention that threatens an open, free, and secure internet consistent with liberal values. Of course, this effort to increase support for the Budapest Convention does not happen in isolation. By adopting a coherent strategy to reestablish rules in space, the U.S. can defend against Russian and Chinese challenges a consistent legal framework in cyber space. The PPWT and cyber proposals within the U.N. framework are part of a larger Chinese and Russian strategy to challenge a universal legal regime. The last PPWT proposal in 2014 and the 2020 Russian/Chinese push on cyberspace rules should be viewed as the continuation of a lawfare strategy aimed at undermining the current RBIO. U.S. policy must continue to support international rule making and cooperation or risk losing control of the international legal narrative.²⁰⁷

<https://www.hrw.org/news/2021/08/13/cybercrime-dangerous-new-un-treaty-could-be-worse-rights>.

²⁰⁴ Hakmeh & Peters, *supra* note 199.

²⁰⁵ *Id.*; see also Press Release, The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, Draft United Nations Convention on Cooperation in Combating Information Crimes (Feb. 20, 2018) (providing the text of the convention for references to the vague usage of the indicated language).

²⁰⁶ Samuel Stolton, *UN backing of controversial cybercrime treaty raises suspicions*, EURACTIV (Jan. 30, 2020), <https://www.euractiv.com/section/digital/news/un-backing-of-controversial-cybercrime-treaty-raises-suspicions/>.

²⁰⁷ See David Whineray, *The United States' Current and Future Relationships With the United Nations*, CARNEGIE ENDOWMENT INT'L PEACE (Mar. 6, 2020), <https://carnegeendowment.org/2020/03/06/united-states-current-and-future-relationship-with-united-nations-pub-81238> ("The Trump Administration has broken away from this previous Beltway consensus. Since 2017, US foreign policy has become more transactional, mercantile, nationalist, and unpredictable, with a greater emphasis on

C. Confronting the Chinese Government's Lawfare at Sea

The PRC has heavily utilized lawfare tactics concerning its territorial ambitions at sea.²⁰⁸ China continues to assert control over a historical “nine-dash line” that includes 90% of the South China Sea.²⁰⁹ China's claims overlap with the Exclusive Economic Zones (“EEZ”) of Vietnam, the Philippines, Malaysia, and Indonesia.²¹⁰ Despite China's claimed interest in following international law, it has ignored the rights of EEZ and other territorial rights recognized by the U.N. Convention on the Law of the Sea (“UNCLOS”) of which China is a party.²¹¹ While the U.S. has publicly opposed China's aggressive stance, it has avoided a direct confrontation over China's assertiveness.²¹² China's strategy to assert broad territorial claims enforced by a massive coast guard presence continues to create tension in the region. China has maintained this strategy despite a ground-breaking ruling by the Permanent Court of Arbitration in 2016.²¹³ This ruling, an unequivocal repudiation of China's maritime

sovereignty and a reduced focus on alliances. The Trump Administration, unlike its predecessors, has often seen the RBIO as constraining, rather than advancing, US national interests.”).

²⁰⁸ Walton, *supra* note 10, at 9 (“Over the past decade, military confrontations between the U.S. and China have exhibited significant international law components, with China justifying its position in the context of or lack of international law [...] In the future, Chinese Legal Warfare could provide advantages in areas such as treaties regulating or abolishing the emplacement of weapons in space, or the fielding of anti-satellite systems. Overall, Chinese interpretation of the U.N. Convention on the Law of the Sea emphasizes that it strengthens stated sovereignty and denies unauthorized access to foreign militaries.”).

²⁰⁹ Xavier Francis, *Indonesia Rejects Chinese Claims To The South China Sea; Says 'Nine-Dash Line' Puts Its Interests At Risk*, EURASIAN TIMES (June 5, 2020), <https://eurasianimes.com/indonesia-rejects-chinese-claims-to-the-south-china-sea-says-nine-dash-line-puts-its-interests-at-risk/>.

²¹⁰ *Id.*

²¹¹ Jon Marek, *US-China International Law Disputes in the South China Sea*, AIR U. (July 9, 2021), <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/2685294/us-china-international-law-disputes-in-the-south-china-sea/>.

²¹² Richard Javad Heydarian, *New Biden era of confrontation in the South China Sea*, ASIA TIMES (Jan. 29, 2021), <https://asiatimes.com/2021/01/new-biden-era-of-confrontation-in-the-south-china-sea/> (“Secretary Blinken also underscored that the United States rejects China's maritime claims in the South China Sea to the extent they exceed the maritime zones that China is permitted to claim under international law as reflected in the 1982 Law of the Sea Convention.”).

²¹³ Robert D. Williams, *Tribunal Issues Landmark Ruling in South China Sea Arbitration*, LAWFARE (July 12, 2016, 11:28 AM), <https://www.lawfareblog.com/tribunal-issues-landmark-ruling-south-china-sea-arbitration>; Jane Perlez, *Tribunal Rejects Beijing's Claims in South Sea China*, N.Y. TIMES (July 12, 2016, 1:13 PM),

ambitions, presents the U.S. and its allies with an opportunity to press China on the legal illegitimacy of its claims.²¹⁴ Along with space, and cyber, the PRC actions in the East China Sea provide the U.S. with a third prong for drawing a contrast between its support for a globally beneficial legal consensus and the PRC's transactional power grabs.

UNCLOS is an international agreement that establishes maritime zones that delineates the economic and territorial the rights of sovereign states.²¹⁵ Many of the UNCLOS provisions are generally accepted as Customary International Law, binding on both signatories and states who have not officially ratified the agreement.²¹⁶ UNCLOS established the International Tribunal for the Law of the Sea (ITLOS), with a mandate to "adjudicate disputes arising out of the interpretation and application of the Convention."²¹⁷

In 2013, the Philippines initiated arbitration challenging many of the PRC's claims in the South China Sea.²¹⁸ Surprisingly, the tribunal clearly and unanimously ruled against China's claims.²¹⁹ The PRC did not recognize the tribunals' authority and did not participate in the arbitration.²²⁰ Among the key holdings, the tribunal determined that the PRC's claims to an expansive "nine-dash line" were invalid and that the country's rights and obligations in the South China Sea were

<https://www.nytimes.com/2016/07/13/world/asia/south-china-sea-hague-ruling-philippines.html>.

²¹⁴ *Id.*

²¹⁵ Press Release, Permanent Court of Arbitration, *The South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China)*, 1 (July 12, 2016) ("... the Convention comprehensively allocates rights to maritime areas and that protections for pre-existing rights to resources were considered, but not adopted in the Convention.").

²¹⁶ Roncevert Ganan Almond, *U.S. Ratification of the Law of the Sea Convention*, DIPLOMAT (May 24, 2017), <https://thediplomat.com/2017/05/u-s-ratification-of-the-law-of-the-sea-convention/> (describing how UNCLOS remains one of forty-five U.S. treaties still awaiting Senate ratification but still has an influence on U.S. conduct).

²¹⁷ U.N. Convention on the Law of the Sea art. 186, Dec. 10, 1982, 1833 U.N.T.S. 397; *International Courts and Tribunals*, U.N. & RULE L., <https://www.un.org/ruleoflaw/thematic-areas/international-law-courts-tribunals/international-courts-and-tribunals/> (last visited Nov. 26, 2021).

²¹⁸ Perlez, *supra* note 213.

²¹⁹ *Id.*

²²⁰ Fu Ying, *Why China Says No to the Arbitration on the South China Sea*, FOREIGN POL'Y (July 10, 2016), <https://foreignpolicy.com/2016/07/10/why-china-says-no-to-the-arbitration-on-the-south-china-sea/> ("Beijing's position is clear: no acceptance, no participation, no recognition, and no implementation." China's position was that the matter before the tribunal implicated issues of sovereignty, which do not fall under the auspices of the UNCLOS treaty.).

comprehensively governed by UNCLOS.²²¹ Additionally, the tribunal ruled that neither the Spratly Islands nor the Scarborough Shoal are entitled to an EEZ.²²² This means that the resources in the southern part of the South China Sea and encompassed by China's nine-dash-line, belong to the coastal states: Indonesia, the Philippines, Malaysia, Brunei, and Vietnam. Despite this ruling, the PRC has continued to pressure those coastal states for "joint development," in effect ignoring the tribunal's decision.²²³ Both Vietnam and the Philippines have been financially impacted by their inability to exploit natural gas resources in the face of the PRC's continued pressure.²²⁴ The U.S. has an opportunity where a majority of affected East Asian states are opposed to and distrustful of PRC ambitions. Indeed, the U.S. has continued so-called freedom of navigation exercises near the Spratly islands.²²⁵ This symbolic military assertiveness to bolster the legal framework of UNCLOS at sea and the Budapest Convention over cyberspace should be applied to space, which lacks U.S.-sponsored rules governing militarization.

D. The Key Domain: Confronting the Chinese Government's Lawfare in Space

America's military technical advantage over China is pronounced in space. Due to its relative newness as an exploitable domain, space has seen rapid changes in technology.²²⁶ The decades-long head start that the U.S. has had over the PRC's space ambitions provides an incentive for China to use political and lawfare means to close the gap. As stated earlier, the PPWT seeks to win political points by constraining the U.S.

²²¹ Republic of the Phil. v. China, PCA Case Repository 2013-19 ¶¶ 261-62 (Perm. Ct. Arb. July 12, 2016).

²²² Bill Hayton, *Two Years On, South China Sea Ruling Remains a Battleground for the Rules-Based Order*, CHATHAM HOUSE (July 11, 2018), <https://www.chatham-house.org/2018/07/two-years-south-china-sea-ruling-remains-battleground-rules-based-order>.

²²³ *Id.*

²²⁴ *Id.*; see also Ted Regencia, *Alarm raised over Chinese ship intrusion in Philippine waters*, AL JAZEERA (Feb. 2, 2021), <https://www.aljazeera.com/news/2021/2/2/china-survey-ship-enters-philippine-waters-without-permission> (documenting continued tension related to Chinese incursions into the Philippine's EEZ).

²²⁵ Brad Lendon, *US steps up challenges to Chinese-claimed islands in South China Sea*, CNN (Feb. 17, 2021, 2:46 AM), <https://www.cnn.com/2021/02/17/asia/us-navy-south-china-sea-freedom-of-navigation-intl-hnk/index.html>.

²²⁶ Guglielmo S. Aglietti, *Current Challenges and Opportunities for Space Technologies*, FRONTIERS SPACE TECHNOLOGIES (June 16, 2020), <https://www.frontiersin.org/articles/10.3389/frspt.2020.00001/full>.

while China develops its own military counter-weapons to U.S. superiority. But the technological advancement that the U.S. enjoys in space also means that the U.S. military is uniquely reliant on space. While space revolutionized how the U.S. waged war against non-state actors and less developed adversaries, it also presents the most attractive target for the PRC in a future conflict. A conflict without satellites would change the way the military operates. “What happens is you go back to World War II. You go back to industrial age warfare.”²²⁷ A space-neutralized conflict would serve as an equalizer in a future conflict between the U.S. and the PRC. Therefore, the U.S. reliance on space has additional risks even in limited conflicts.

The issue of space debris means that even if a limited conflict occurred in space, it would risk polluting space for the foreseeable future. Any kinetic or destructive skirmish in orbit could have cascading effects. The impact of a cascading chain reaction of collisions known as “The Kessler Syndrome,” means that debris can potentially render entire swaths of orbit off limits.²²⁸ While this would be disastrous for humanity, it would have an outsized impact on the U.S. in particular.²²⁹ The mutual aversion to exponential space debris is likely a reason that a binding agreement could be reached, much in the same way the U.S.S.R. and U.S. banned space based WMDs in the 1967 Outer Space Treaty.²³⁰

The United States has a reputational advantage over China on the issue of space stewardship. The 2007 Chinese ASAT test was widely condemned and exposed China’s disregard for the impact of its unilateral pursuit of national security that ignores the interest of third-party states.²³¹ Despite these setbacks, China, with the enthusiastic

²²⁷ David Martin, *The Battle Above: U.S. and China are locked in a high stakes contest over satellites that are critical to national security and everyday life*, 60 MINUTES (Apr. 26, 2015), <https://www.cbsnews.com/news/rare-look-at-space-command-satellite-defense-60-minutes/> (quoting General John Hyten).

²²⁸ *Micrometeoroids and Orbital Debris*, NASA (June 14, 2016), https://www.nasa.gov/centers/wstf/site_tour/remote_hypervelocity_test_laboratory/micrometeoroid_and_orbital_debris.html.

²²⁹ Koplow, *Avoiding an Arms Race in Outer Space*, *supra* note 24, at 347 (quoting “If a shooting war were to start in, or move to, space, the United States would have far more to lose, and even if the U.S. ASAT capabilities were greater than those of its rivals, the United States would run out of targets to shoot at fairly quickly, long before its potential adversaries had exhausted their ASAT magazines.”).

²³⁰ Daryl Kimball, *The Outer Space Treaty at a Glance*, ARMS CONTROL ASS’N (Oct. 2020), <https://www.armscontrol.org/factsheets/outerspace> (discussing the U.S. and U.S.S.R. push for the Outer Space Treaty).

²³¹ Anthony J. Mastalir, *The US Response to China’s ASAT Test: An International Security Space Alliance for the Future* (Aug. 2009) (Drew Paper No. 8) (on file with Air University).

cooperation of Russia, has attempted to present itself as a defender of peaceful space operations in opposition to the U.S. rush to exploit and further militarize outer space.²³² The U.S. has the opportunity to respond to this narrative in a way that strengthens its position as world leader and in line with its own national-security interests. Proposing a ban on debris-causing tests is directly in line with those interests.

1. The Advantage of Proposing a Kinetic ASAT Test Ban

In the realm of international law and policy, words matter. Russian Federation and PRC claim that the U.S. is “weaponizing space” and the introduction and reintroduction of the PPWT in 2008 and 2014 are made because they are part of a coherent and coordinated strategy to maximize power relative to the U.S.²³³ Indeed, the U.S. positioning as a sole objector on U.N. General Assembly Resolutions regarding the Prevention of an Arms Race in Space illustrates how other nations have defined the narrative on responsible use of space.²³⁴ Rather than focusing exclusively on technology to guarantee its national security interests in space, the U.S. should affirmatively advance proposals for the rules regulating the weaponization of space. These proposals need not offer a comprehensive or ambitious solution to the weaponization of space, but rather provide an American response to the cynically expedited PRC and Russian Federation proposals embodied by the PPWT. Indeed, certain scholars have argued that a kinetic satellite test ban is feasible, and in-line with U.S. national security interests.²³⁵ A prohibition on kinetic ASAT tests would confront

²³² See Pavel Podvig & Hui Zhang, *Chapter 2: Chinese Perspectives on Space Weapons*, AM. ACAD. ARTS & SCIENCES, <https://www.amacad.org/publication/russian-and-chinese-responses-us-military-plans-space/section/4> (expressing the shared concern over U.S. ambitions) (last visited Nov. 26, 2021).

²³³ Frank A. Rose, *The U.S. Defense Space Strategy works on paper, but will it be implemented?*, BROOKINGS (July 6, 2020) <https://www.brookings.edu/blog/order-from-chaos/2020/07/06/the-u-s-defense-space-strategy-works-on-paper-but-will-it-be-implemented/> (“Russia and China have been moderately successful in advancing their diplomatic agenda in this area with initiatives like the No First Place of Weapons in Outer Space resolution at the UNGA, and the introduction of their draft Prevention of Place of Weapons in Outer Space Treaty in the CD.”).

²³⁴ G.A. Res. 43/70, at 71 (Dec. 7, 1988).

²³⁵ Beard, *supra* note 29, at 417–18 (“[T]here should be a focus on [...] systems employing kinetic energy which represent the greatest current threat of weapons-related debris generation in space[. This] is within the competence of states to clearly define, regulate and verify under an appropriate international legal regime.”); Thompson, *supra* note 33, at 158; see also Koplrow, *Avoiding an Arms Race in Outer*

a significant threat to the international community, underline U.S. political goals by illustrating responsible governorship of space, and advance U.S. national security vice a vis its rivals. More importantly, it would place the U.S. at the forefront of a lawfare push to constrain China's ambitions to the extent they are inconsistent with the RBIO. China cannot be constrained by force in the long run, rather, as one strategist argues:

The overriding political objective should be to cause China's elite leadership to collectively conclude that it is in [China's] best interests to continue to operate within the existing US-led liberal international order rather than build a rival order, and that it is in the [Chinese Communist Party's] best interests, if it wishes to remain in power at home, not to attempt to expand China's borders or export its political model beyond China's shores.²³⁶

This strategic objective necessarily entails a lawfare strategy consistent with the U.S. conception of the rule of law.²³⁷ The current emphasis on military deterrence will be insufficient in the long run against an opponent that is content to manipulate its population to share its nationalist goals and run out the clock as its relative economic power and influence expands.²³⁸

2. The Kinetic ASAT Test Ban Through the Lens of Game Theory

The prisoner's dilemma is frequently cited in international relations where each state has an incentive to selfishly pursue their own interest but in doing so, it forfeits the benefits of cooperation.²³⁹ Critically, the dilemma is not just between two players but is conducted in the presence of allies, adversaries, and the entire international community. The U.S. may be faced with a dilemma between itself and

Space, *supra* note 24, at 363–65 (proposing a “limited test ban,” to interdict the most dangerous debris-creating developmental tests of new space weapons).

²³⁶ THE LONGER TELEGRAM, *supra* note 22, at 9.

²³⁷ *Id.* at 10.

²³⁸ *How nationalism is shaping China's young*, ECONOMIST (Jan. 23, 2021), <https://www.economist.com/special-report/2021/01/21/how-nationalism-is-shaping-chinas-young> (“Soon after Mr Xi's rise to power, officials were summoned to secret briefings about a party circular called “Document Number Nine”. The directive banned schools from teaching seven Western concepts, such as constitutional democracy, universal values, civil society and a free press. This had a big impact on universities as centres of student activism and political debate.”).

²³⁹ See *Prisoner's Dilemma Applied to International Treaty Interpretation*, WAGING PEACE TODAY (Aug. 10, 2012, 1:00 PM), https://wagingpeacetoday.blogspot.com/2012/08/prisoners-dilemma-applied-to_10.html.

China while simultaneously facing other dilemmas, current and future, with other actors on the world stage. Its decisions in resolving the current prisoner's dilemma will have an impact on its future dealings with friends and adversaries.

In the arena of space weapons, the U.S. has perceived pursuing technological and military advantage as having a greater national security benefit than seeking arms control. China shares the same calculus but is aware of the U.S. aversion to any form of arms control treaty. The PPWT is not necessarily reflective of the Chinese Communist Party's interest in cooperative arms control, but rather that it sees an opportunity to damage America's international standing while continually presenting the PPWT as a good faith and responsible alternative to the unrestrained weaponization of space.²⁴⁰ This is consistent with a strategy to use alternative means to seek relative power and influence vis-a-vis the U.S. The U.S. maintains a technical and military advantage in space and retains a great deal of goodwill and political clout.²⁴¹ But it has suffered unnecessary harm from the legal and political battle the PRC and the Russian Federation waged concerning arms control in space.

In the matrix of a prisoner's dilemma, there is an advantage to proposing cooperation whether or not cooperation is ever achieved. Likewise, there is a harm in appearing to reject an offer of cooperation even if that offer is made in bad faith. The U.S. has the opportunity to propose limited arms control that, if accepted, will yield the benefit of focusing the arms control race away from destructive debris-causing uses. If not accepted, it will achieve a moral and legal victory in the international community.

IV. CONCLUSION

A space lawfare strategy acknowledges the realities of an emerging global powershift while not provoking a Chinese security dilemma with escalating effects.²⁴² It leverages the American advantage in

²⁴⁰ See generally Raphael J. Piliero, *Seeking Common Ground: US-China Arms Control in Outer Space*, U.S.-CHINA PERCEPTION MONITOR (Sept. 15, 2020), <https://uscnpm.org/2020/09/15/seeking-common-ground-us-china-arms-control/> (describing how U.S. objectives in space arms control and their rejection of PPWT undermine their international reliability and standing).

²⁴¹ See Stephen M. McCall, CONG. RSCH. SERV., IFI0337, CHALLENGES TO THE UNITED STATES IN SPACE (2020).

²⁴² Cf. Lyle J. Goldstein, *The Indo-Pacific Strategy Is a Recipe for Disaster*, LAWFARE (Feb. 18, 2021, 8:56 AM), <https://www.lawfareblog.com/indo-pacific-strategy->

shared values in East Asia and across the world. Viewing developing space security law through a lawfare lens requires neither the faith of a grand arms control bargain nor the cynical realism of a weapons buildup. If narrowly tailored, it can restrict the riskiest behaviors in space, starting with orbital debris, while allowing U.S. advancements in new security technology. If successful, it will contribute to international space security while advancing American standing and influence across domains. If unsuccessful, it will at least allow the U.S. to present itself as the global leader it already is, the steward of rules-based order that provides the world with its best chance at continued peace, security, and prosperity.

recipe-disaster (critiquing a 2018 declassified U.S. strategy that risked creating a security dilemma with China, escalating tensions).