International Space Strategy

THE PARADOX OF ARTICLE IX AND NATIONAL SECURITY **SPACE ACTIVITIES**

Article IX of the Outer Space Treaty has stood as one of the more controversial provisions of the accord. In the almost 56 years since it was signed and entered into force, one of the legal duties and a legal right within Article IX that directly implicates national security space activities has elicited debate as to what it means and how it should be applied. Certainly, the expanse of national security space activities during the Cold War and to the present would have called for Article I to have seen significant state practice. Remarkably, there has been no apparent indication of such, unless the lack of clear state practice may be indicative of a more subtle state practice that interprets the obligations and rights of Article IX.

rticle IX is one of the more contentious provisions of the Outer Space Treaty as it relates to its application to outer space activities. The terms "due regard" and "harmful interference" found within Article IX elicit debate about their meaning and whether they require a legal definition. Beyond this rudimentary debate, however, the most provocative question relates to the role Article IX plays in national security space activities given the importance of these activities to spacefaring states during the Cold War and to the present day. Yet for the duration of the Outer Space Treaty's existence, the pertinent provisions of Article IX that would arguably apply to these activities have not been utilized.

This raises the question whether Article IX applies to national security activities, or has a conscious state practice created an exception to or modification of the Outer Space Treaty that excludes national security activities from its requirements? This article will examine the roots of Article IX, discuss its duties and rights, and examine how a deliberate state practice may have created a national security carve-out for Article IX.

Seeds of Article IX

The focus of discussion of Article IX is most often the elusive meaning of "due regard" and "harmful interference." But frequently overlooked is the fact that Article IX finds its roots in the scientific community and the preservation of the outer space environment for scientific research, specifically the Air Force Project West Ford.

Project West Ford attempted to create an artificial ionosphere by dispersing 75–110 lbs of copper dipoles in low-Earth orbit that would be 30 miles in diameter and would

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reflect high-frequency radio signals. The proposed disbursement raised concerns in the optical and radio astronomy community, which led to the appointment of a special committee to thoroughly evaluate the project before it was launched.² The committee deemed the concerns of the astronomical community unsubstantiated, but the government decided no further launches would be made until after the results of the first test had been evaluated, including comments from astronomers.³

The Kennedy administration followed up with a compromise policy on August 8, 1961 that would suspend further operations until the West Ford experiment was analyzed and evaluated. Operations would only resume contingent on the results of the evaluation and the employment of any required safeguards. A panel on Project West Ford convened and presented its results in a report on October 3, 1961. The report was made public the following day.⁴ The first launch occurred on October 21, 1961 with a payload of about 75 pounds of the needles. But the payload did not disperse as planned, leaving some of the dipoles in clumps.

In 1961, the International Council of Scientific Unions instructed the Committee on Space Research (COSPAR) to consider the issue of contamination of outer space and specifically to address Project West Ford. The committee established the Consultative Group of Potentially Harmful Effects of Space Experiments in May 1962. This group demanded the United States consult with it before the next launch.⁵

That, combined with diplomatic pressure from the Soviet Union in the United Nations, convinced the United States to suspend further experiments of this type until the results of the first deployment were fully analyzed and the results of the analysis could be shared with the scientific community. The United States also agreed to make prior consultations before performing similar experiments in the future and further consented to give advance warning of the launching of these types of experiments.

The second launch occurred on May 9, 1963. The dipoles deployed as planned and radio transmissions were made using the ring. On July 29, 1963, the United States furnished information about this launch to conform with Resolution 1721 B XVI, noting that an Atlas-Agena (1963 14A) carried about 50 pounds of copper dipoles that would have a similar orbital parameter as 1963 14A.6 Eight weeks after the launch, it was determined the experiment did not harm radio or optical astronomy observations. Still, even though Project West Ford ultimately had no adverse effects on science, this

^{1.} Delbert E. Terrill Jr., The Air Force Role in Developing International Space Law (Maxwell AFB, AL: Air University Press, 1999), 58.

^{2.} Terrill, International Space Law, 59.

^{3.} Terrill, 59-60.

^{4.} Report of the Panel of Project West Ford, October 3, 1961, John F. Kennedy Presidential Library and Museum, Folder Title: President's Science Advisory Committee (PSAC), 1961: May-December, Digital Folder JFKPOF-086a-003-p0072-0074, https://www.jfklibrary.org/3.

^{5.} Terrill, International Space Law, 66.

^{6.} UN General Assembly, Resolution 1721 (XVI), International Co-Operation in the Peaceful Uses of Outer Space, A/4987 (December 20, 1961), https://www.unoosa.org/.

national security activity became the unintentional impetus for the duty to consult and the right to consultation in Article IX.7

Duty of Care and State Practice

Given the context of Project West Ford and the inadvertent creation of an international consultation requirement by a national security activity, it is critical to understand Article IX is fundamentally about preserving the outer space environment for scientific research. Consider Article I of the Outer Space Treaty: "There shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation."8

Article IX "is 'a provision which is designed to protect outer space and the celestial bodies from contamination and pollution and to protect the legitimate programs of States from undue interference." Article IX can be broken down into two legal duties and one legal right preceded by a preamble that builds upon Article I and expresses a duty of care.

In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.¹⁰

"Due regard" is not a defined term but instead a duty of care. It is implemented by two legal duties and one legal right in Article IX.11 But not all space activities are the same, which means what constitutes "due regard" for one activity may not be similar to what "due regard" is for another. This makes a legal definition of "due regard" impracticable given its meaning will depend on the nature of the space activity.

Furthermore, the duty of care will evolve as experience is gained in certain space activities and new activities come to light. Thus, due regard might be expressed as a legal test: "What would a reasonably prudent state actor performing the same or similar space activity do?" In terms of nongovernmental outer space activities, the question might be framed as, "What would a reasonably prudent nongovernmental actor

^{7.} Terrill, International Space Law, 61-62.

^{8.} Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty), U.S., U.K., U.S.S.R., January 27, 1967, art. i, 18 U.S.T. 2410, https://www.unoosa.org/.

^{9.} Paul G. Dembling and Daniel M. Arons, "The Evolution of the Outer Space Treaty," Journal of Air Law and Commerce 33 (1967): 440, https://digitalcommons.unl.edu/.

^{10.} Outer Space Treaty, art. ix.

^{11.} Dembling and Arons, "Outer Space Treaty," 441.

performing the same or similar space activity do? Bear in mind, the state would be responsible for nongovernmental space activities and any harm it might cause."12

These two standards are overly simplistic given politics figure into this analysis, and the political aspect of due regard is likely a subjective duty of care as opposed to an objective one. What one state considers reasonable may differ from state to state, especially in the context of great power competition. From this perspective, the two legal duties and one legal right of Article IX will be examined.

Duty to Prevent Harmful Contamination

The first legal duty of Article IX is a direct result of COSPAR's efforts to address contamination of outer space for scientific investigation and emphasizes the foundation in science. Article IX points back to Project West Ford:

States Parties to the Treaty shall pursue studies of outer space, including the moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose.¹³

This legal duty has one purpose: to protect outer space and extraterrestrial environments from contamination that would prevent or hinder scientific investigation and to ensure scientific investigation and other activities do not contaminate the Earth's biosphere. This legal duty is strictly designed with the goal of preserving the outer space environment, including celestial bodies, for scientific research and does not serve an ethical, moral, or environmental purpose.

States realize due regard by taking steps to prevent contamination of outer space, including celestial bodies, to preserve them for science and ensure that space activities do not contaminate the Earth's biosphere. This legal duty of due regard finds state practice in domestic planetary protection guidelines and protocols.

Duty to Consult

The second legal duty ties directly to the controversy created by Project West Ford, the complaints raised by the Soviet Union, and COSPAR's insistence on consultation after the first launch of dipoles by the United States. The legal duty implements due regard by imposing a legal duty upon a party planning a potentially harmful experiment to consult with other parties.14

If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and

^{12.} Outer Space Treaty, arts. vi, vii, viii.

^{13.} Outer Space Treaty, art. ix.

^{14.} Dembling and Arons, "Outer Space Treaty," 441.

other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment.15

Key in this legal duty are the phrases "reason to believe" and cause "potentially harmful interference," where due regard on the part of the state is to consult if it has any reason to believe that a space activity performed under its jurisdiction would hypothetically cause harmful interference with the space activities of another state(s).

The word "potentially" is often excluded when discussing harmful interference, although it is a critical part of due regard. "Potentially" creates a lower standard for triggering the duty to consult as opposed to a duty of care requiring only foreseeable "harmful interference," which would create a high bar to trigger the consultation requirement. Yet, Article IX specifically uses "potentially harmful interference," which lowers the threshold to any hypothetical contingency to trigger the duty to consult. Arguably, this would apply to a multiplicity of space activities that might not even remotely interfere with the space activities of other states.

The line of inquiry when considering the duty to consult can be phrased as follows. "Is there any imaginable scenario where the planned space activity could interfere with or obstruct space activities to the detriment of another State?" The answer to this inquiry is "yes" because there is not going to be 100 percent certainty that a state's space activity will not interfere with another state's space activity.

Consider the usage of potentially and its synonyms in domestic settings. In the context of US environmental regulations, "potentially" triggers an environmental assessment in terms of what constitutes a "major federal action" under regulations promulgated under the National Environmental Protection Act, where even a remote possibility of federal involvement will trigger the act. Title 40 CFR § 1508.18 states, "major Federal action includes actions with effects that may be major and which are potentially (emphasis added) subject to Federal control and responsibility." ¹⁶ Conversely, "potentially" would not be sufficient to meet the threshold of a motion to stay, pending a court's review of an appeal in US federal courts.¹⁷

The modifier "potentially," coupled with "harmful interference" creates a hair trigger for the duty to consult, making it arbitrary and unrealistic in practice. Consequently, the term "potentially," and particularly "potentially harmful interference," is subject to interpretation depending on what is considered due regard for a specific space activity. The geopolitical factor is also significant in this evaluation, since competing state interests and great power competition are likely evaluated as factors a state must consider before tripping the duty to consult. This ultimately makes the

^{15.} Outer Space Treaty, art. ix.

^{16.} National Archives Code of Federal Regulations, Title 40 CFR § 1508.18, "Major Federal Action," https://www.ecfr.gov/.

^{17.} Nken v. Holder, 556 U.S. 418, 434-35 (2009).

decision to trip the duty to consult a policy decision and not just a legal question for states.

The method of reporting for the consultation requirement is not spelled out in Article IX; however, it appears to be left to the states to communicate between themselves and not through the secretary-general. This is evident from Outer Space Treaty negotiations, where the Japanese delegation proposed parties required to report under the consultation requirement would do so directly to the secretary-general. The Soviet Union's delegation objected to this proposal noting the required information would be transmitted more quickly if the secretary-general was bypassed and communicated directly to the party potentially affected by the experiment or activity. The secretary-general was bypassed and communicated directly to the party potentially affected by the experiment or activity.

The duty to consult has no perceptible state practice, although certain activities like kinetic antisatellite tests and other national security space activities arguably should have been preceded by the Article IX obligation.²⁰ Interestingly, China claimed it alerted the United States, Japan, and others of the impending ASAT test it performed on January 11, 2007.²¹ Yet, even if this proved to be true, China did not formally invoke the duty to consult. Nonetheless, the lack of state practice for the duty to consult may be evidence of a state practice of a different sort.

Right to Consultation

The legal right to request a consultation in Article IX aligns with the duty to consult. The right is created in Article IX.

A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.²²

The legal right to request a consultation theoretically provides a state with a mechanism to prod another state to invoke the duty to consult. This means the right to request a consultation, like the duty to consult, must occur before a state performs the space activity in question. The right to consultation is attached to the low threshold of "potentially harmful interference" and provides a state with a low threshold to compel the duty to consult.

^{18.} Dembling and Arons, "Outer Space and Treaty," 441.

^{19.} Dembling and Arons.

^{20.} Michael G. Mineiro, "FY-1C and USA-193 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty," *Journal of Space Law 34* (2009).

^{21. &}quot;China Confirms Anti-Satellite Missile Test," *Guardian*, January 23, 2007, https://www.theguardian.com/.

^{22.} Outer Space Treaty, art. ix.

Japan purportedly invoked the right to request a consultation following China's January 11, 2007 antisatellite test. Japan may have been attempting to invoke the right to consultation following the January 11, 2007 antisatellite test performed by China when it requested confirmation of the test.²³ If Japan's request for confirmation was intended as an Article IX request for consultation, it would not be considered state practice of invoking the right because it was made after the test and not prior to it.

The twist in this event is Western intelligence organizations likely had foreknowledge China was planning an ASAT test, although it is unclear how much detail they knew in advance. Yet despite the low threshold to trigger the right to consultation, no such request was made.

Another more recent event that bears scrutiny is when China mounted a lawfare operation against the United States in the UN. China appears to have done an end-run around the right to consultation when it filed a complaint with the UN Secretary General citing Article V of the Outer Space Treaty on December 6, 2021.²⁴ The complaint alleged on two occasions Starlink satellites nearly collided with China's space station and called these alleged conjunctions "a danger to the life and health of astronauts." ²⁵ It appears China attempted to conflate the language of Article V with "potentially harmful interference" found in Article IX in an attempt to stir an international incident without creating a state practice for the right to consultation.

Accordingly, the right to consultation creates a conundrum similar to the duty to consult in that there is a lack of state practice to support it. The question is whether the lack of state practice for the right to consultation, like the lack of state practice for the duty to consult may be evidence of state practice of a different sort.

National Security Activities, Norms, and Pandora's Box

The duty to consult and the right to consultation in Article IX is a direct result over concerns for national security activities provoked by the the scientific community and the geopolitical fervor over Project West Ford. Yet neither has been invoked. Dozens if not hundreds of national security space activities were performed by the United States and the Soviet Union, including destructive ASAT tests, in the period between Project West Ford and the enactment of the Outer Space Treaty during the Cold War. Since 1967, other states have become significant players in outer space and have performed national security space activities, including the China and India. Still, not once has the duty to consult or the right to consultation been invoked.

Given the low threshold to trigger the consultation requirement and the right of other states to force the issue, it would seem these two features of Article IX would have seen at least some, if not significant, state practice. The answer to this paradox

^{23. &}quot;Japan Voices Concern over China's Missile Test," Reuters, January 19, 2007, https://www.reuters.com/.

^{24.} Information Furnished in Conformity with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, A/ AC.105/1262 (December 3, 2021), https://www.unoosa.org/.

^{25.} Outer Space Treaty, art.v, para. 3.

may lie in deliberate policy decisions and state practice by both the United States and Soviet Union in the environment of Cold War politics and great power competition, which has led to a silent state practice related to and interpreting both the duty to consult and the right to consultation.

Keeping the Lid Shut

National security activities by their very nature are shrouded in secrecy. Invoking the Article IX duty to consult would shine unwanted light on the true nature of the activity in question or at least give geopolitical adversaries and competitors enough clues to discern vital details. A state like the United States invoking the duty to consult or the right to consultation would arguably create a state practice and by extension could create a legally binding norm for both the requirement and the right that could have unintended consequences.

For example, a rival state could use the right to request a consultation as a lawfare tool to compel the duty to consult and pry into and disrupt an adversary's national security activities, bolster its own soft power, and create a diplomatic nightmare for a geopolitical rival. Conversely, invoking the right to consultation could work against the state employing it by exposing intelligence sources and means, which could also affect a state's national security. This may have been a factor in why the United States may not have disclosed it had prior warning of China's 2007 ASAT test.²⁶

Accordingly, triggering the duty to consult or invoking the right to consult may not be in the interest of states as it would open a Pandora's Box and might prove to be a two-edge sword to the detriment of national security activities for all involved. All-inall, the lack of state practice with respect to the duty to consult and the right to consultation in Article IX is likely the result of deliberate policy decisions that remain classified as opposed to a strict legal analysis. Thus, the lack of state practice for Article IX can be construed as state practice that might form a customary norm that excludes national security activities from the duty to consult and by extension the right to consultation.

A Norm Excepting National Security Activities?

The duty to consult and the right to consultation do not have direct state practice supporting them, which has left these precepts in limbo. As mentioned above, this may be a calculated move to avoid turmoil resulting from the exposure of national security activities as well as other state-sponsored space activities. Indeed, the very lack of state practice of invoking this legal duty and legal right for national security space activities may well be deliberate state practice initiated by the United States and the Soviet Union during the Cold War to create a customary norm that excludes national security activities from the duty to consult and the right to consultation.

^{26. &}quot;SC-19 ASAT," Global Security (website), n.d., accessed December 7, 2022, https://www.globalsecu rity.org/.

If such a state practice does exist, it has been adhered to silently and raises the question whether it meets the requirements of customary international law. "Customary international law has long been recognized as one of three primary sources of international law. Article 38(1) of the Statute of the International Court of Justice states that international law derives from international conventions, international custom, and general principles of law."²⁷

Customary international law . . . consists of two components. First, there must be a general and consistent practice of states. This does not mean that the practice must be universally followed; rather it should reflect wide acceptance among the states particularly involved in the relevant activity. . . . Second, there must be a sense of legal obligation, or *opinio juris sive necessitatis*. In other words, a practice that is generally followed but which states feel legally free to disregard does not contribute to customary law; rather, there must be a sense of legal obligation. States must follow the practice because they believe it is required by international law, not merely because that they think it is a good idea, or politically useful, or otherwise desirable. 28

"Not all states are equal from that perspective. State practice *and opinio juris* of states which occupy a special and outstanding position in the field at issue are of more value than those of other states." In other words, the state practice in question and the sense of legal obligation are weighed against the value the state asserting the practice has in the particular field, which in this case is outer space activities and national security space activities. The greater the value a state has in outer space activities and national security space activities, the more probable the state practice and the *opinio juris* will evolve into customary international law.

The existence of the state practice in question and whether it meets the three prongs of the test for customary international law are discussed below.

1. Is there is a general and consistent practice among states that perform national security space activities that excludes these activities from the legal duty to consult and the right to consultation in Article IX?

Answer: Probably. During the Cold War, the United States and the Soviet Union performed numerous national security space activities, including direct-ascent and co-orbital antisatellite tests. The Soviet tested its Istrebitel Sputnikov ("killer satellite") on numerous occasions and deployed it as a break-out capability. The United States tested the ASM-135 air-launched ASAT that destroyed the Solwind P78-1 on

^{27.} Ronald Alcala, "Opinio Juris and the Essential Role of States," Articles of War, Lieber Institute, February 11, 2022, https://lieber.westpoint.edu/.

^{28.} United States v. Bellaizac-Hurtado, 700 F.3d 1245, 1252 (11th Cir. 2012).

^{29.} Frans G. von der Dunk, "THE DELIMITATION OF OUTER SPACE REVISITED: The Role of National Space Laws in the Delimitation Issue," *Proceedings of the Forty-First Colloquium on the Law of Outer Space* (1998), 254, https://digitalcommons.unl.edu/.

September 13, 1985.³⁰ These tests arguably would have risen to level of Project West Ford and triggered the low threshold of the duty to consult in Article IX or given a state opportunity to invoke the right to request consultation.

Other examples include China's 2007 ASAT test, the United States' deorbit operation of USA-193 in 2008 during Operation Burnt Frost, and India's 2019 ASAT test in Mission Shakti. Significantly, none of these states invoked the duty to consult before these events nor did any states invoke the right to consultation. Operation Burnt Frost stands out as it was made public well in advance of the first and only attempt, yet no state invoked the right.³¹

This suggests the state practice of not invoking the Article IX duty to consult nor invoking the right to consultation for national security space activities appears to be a consistent state practice that has wide acceptance among states performing outer space and national security space activities and meets the first requirement of customary international law.

2. Do states that follow this practice do so out of a sense of legal obligation? Answer: Maybe. This is where the analysis gets tricky because even though a state practice appears to exist, states that appear to exercise this practice are silent about its existence, which makes its status as customary international law ambiguous. In other words, the lack of pronouncement of the existence of the state practice makes it difficult to determine whether states believe they are legally obligated to follow this state practice and otherwise feel they are required by international law to do so. "Undoubtedly, state silence regarding customary law can create ambiguity, and that ambiguity can, in turn, invite speculation about the law."32

Yet, states likely have an interest in not acknowledging this state practice to allow the penumbra of customary law to grow stealthily and uninterrupted from geopolitical challenge. But the strategy of silence only works until it is openly challenged. Consider this hypothetical.

State A is preparing a national security activity that would likely trigger the duty to consult but does not do so because it believes international law excludes these activities from Article IX. State B becomes aware of the planned activity either through public statements or a breach of security and challenges state A through the right of consultation.

State A has two choices: (1) submit to state B's challenge and comply with the duty to consult, in which case, the opinio juris sive necessitatis is quashed or at the very least compromised; or (2) challenge state B's use of the right of consultation and assert the

^{30.} Ronald Reagan, The U.S. Anti-Satellite (ASAT) Program: A Key Element in the National Strategy of Deterrence, Collection Green, Max: Files 1985-1988, Folder Title: Anti-Satellite Program, Box: 03 (Simi Valley, CA: Ronald Reagan Presidential Library, 1987), https://www.reaganlibrary.gov/.

^{31.} Laura Grego, The Anti-Satellite Capability of The Phased Adaptive Approach Missile Defense System, Public Interest Report (Washington, DC: Federation of American Scientists, 2011), https://pubs.fas.org/.

^{32.} Alcala, "Opinio Juris."

state practice of excluding national security space activities from the Article IX duty to consult invalidates state B's challenge.

If state A chooses the former, legitimacy for the state practice being customary international law is destroyed or at least crippled. If state A chooses the latter, then it will reveal the state practice to the international community but also give state A the opportunity to strengthen the practice as customary international law and gain support among other states that may or may not have quietly accepted a similar state practice.

This hypothetical illustrates the risk associated with state silence, but that does not mean it is unwise for a state to openly acknowledge a state practice it regards as a customary international law. Regardless, the existence of and the opinio juris sive necessitatis of this suspected state practice as customary international law may have been validated, and the existence of the state practice itself may have been acknowledged by a recent event.

On November 15, 2021, the Russian Federation launched a direct-ascent, antisatellite weapon from its A-235 PL-19 Nudol system and destroyed a defunct SIGINT intelligence satellite, Cosmos 1408 (COSPAR ID: 1982-092A). The Russian Federation initially denied the intentional destruction of its satellite but freely admitted to the incident 24 hours later and justified the destruction of Cosmos 1408 while downplaying international condemnation of the resulting orbital space debris. The Russian Federation weathered the resulting criticism from the international community and boasted about the capability and capacity it demonstrated.³³

Retired Major General Vladimir Dvorkin, who is the former head of the 4th Central Research Institute (TsNII) of the Russian Defense Ministry, may have supported the existence of a state practice that Article IX is not applicable to national security activities during an interview with a Russian state media news outlet.

He said Russia sends warnings to the US when it test-fires ICBMs. According to him, this does not apply to the testing of missiles of the anti-missile defense system (ABM).... 'Russia has not violated international agreements by testing anti-satellite weapons. . . . There is no direct violation of any international agreements. And we should not warn anyone when we test our systems—anti-missile or anti-satellite. We are not obliged to warn anyone about this, there is nothing like that.'34

Dvorkin may have revealed the state practice toward Article IX and national security space activities and validated the opinio juris sive necessitatis, which would satisfy the two prongs of customary international law. His statements should be considered

^{33.} Tracy Cozzens, "Russia Issues Threat to GPS Satellites," GPS World, November 29, 2021, https:// www.gpsworld.com/.

^{34. &}quot;The Former Head of the Research Institute of the Ministry of Defense Did Not See Violations of the Law in the Test of an Anti-Satellite Missile," Interfax (Moscow), November 6, 2021, https://www. -interfax-ru.translate.goog/.

cautiously as he is supposed to be retired, and it is uncertain whether he was speaking or has ever spoken for the government of the Russian Federation.

If Dvorkin's statements accurately represent the official position of the Russian government, then it can be inferred that not only does a state practice toward Article IX and national security space activities exist, but it also meets the test of customary international law, especially since the Russian Federation (and the Soviet Union) occupies a special and outstanding position in the field of outer space activities, including national security space activities. This gives weight to the state practice and opinio juris in question and argues in favor of meeting the prerequisites of customary international law.35

What happens if there is a challenge to the state practice? Suppose in the prior hypothetical where state B asserts the right to consultation, state A responds and asserts the right to consultation does not apply to national security space activities. State B replies that no such rule of international law exists. Who would prevail presuming state B is a state party to the Outer Space Treaty but has limited experience and value in performing outer space activities, much less national security space activities, and state A has decades of experience in outer space activities and national space security space activities? Would state B's assertion have sufficient weight to dislodge state A's position and force state A to comply with the consultation requirement?

It could be argued state B's petition of the right to consultation would provide the necessary state practice to override state A's opinio juris sive necessitatis. But the state practice and opinio juris of state A, which occupies a special and outstanding position in the field of outer space activities, including national security space activities, has more value than that of state B. Therefore, state A's special and outstanding position would give greater weight to its claim of customary international law and allow it to rebuff the challenge.

Conversely, if several states having value similar to state B were to support state B's position, it could pose a threat to state A's opinio juris sive necessitatis regardless of its outstanding position. But other states that may silently support state A's position and have lesser or similar value in outer space activities, including national security space activities, could break their silence and openly support state A's claim and not only override the attempt by state B and its supporters but also bolster the state practice regarding the duty to consult and the right to consultation as it applies to national security space activities thereby increasing its legitimacy as binding international law.

Consequently, it appears not only does a state practice that excludes national security space activities from the Article IX duty to consult and the right of consultation exist, but it is also supported by opinio juris sive necessitatis of state actors who have outstanding positions in outer space activities and national security space activities to make it binding as customary international law. The important takeaway is this customary rule of international law does not abrogate nor exploit a gap in Article IX; instead, it defines the parameters of due regard and delimitates when the duty to consult

^{35.} von der Dunk, "Delimitation Issue," 254.

and the right to consultation do not need to be invoked and effectively exempts national security space activities from Article IX.

Presuming the state practice at issue is customary international law complementing the Outer Space Treaty and defining the parameters of Article IX in particular, the question is whether the practice of excluding national security space activities from the duty to consult and the right to consultation is a norm of customary international law.

Treaties may constitute evidence of customary international law but "will only constitute sufficient proof of a norm of customary international law if an overwhelming majority of States have ratified the treaty, and those states uniformly and consistently act in accordance with its principles. . . . Of course, States need not be universally successful in implementing the principle in order for a rule of international law to arise . . . but the principle must be more than merely professed or aspirational.³⁶

Most provisions and principals of the Outer Space Treaty can be considered norms as it has been ratified by over a 100 states, and arguably most provisions have state practice from a multiplicity of states with varying degrees of outer space capabilities and achievements. But the only part of Article IX and due regard that has shown any overt state practice is the legal duty related to the protection of the outer space environment and the Earth's biosphere. "A customary international law norm will not form if specially affected States have not consented to its development through state practice consistent with the proposed norm."37

In this case, it is not the silence of the states that assert the state practice toward the duty to consult and the right of consultation that prevents the formation of a norm but the silence and failure of states to invoke the right to consultation that permitted the creation of the norm. In other words, silence by states asserting the customary norm for the state practice directed at the duty to consult and the right to consultation has created ambiguity that has allowed customary international law and a norm to grow in the shadows. Moreover, the silence by states that would have opposed the existence of such a norm by failing to timely invoke the right to consultation has permitted the penumbras of customary international law room to grow and with it the formation of a norm.

Conclusion

The existence of a state practice and a norm excluding national security space activities from the Article IX duty to consult and the right to consultation is notional for the time being. It is unlikely states will either confirm or deny the existence of such a

^{36.} Bellaizac-Hurtado, 700 F.3d at 1255 citing Flores v. Southern Peru Copper Corp., 414 F.3d 233, 256 (2d Cir. 2003); and Bellaizac-Hurtado, 700 F.3d at 1255 citing Flores v. Southern Peru Copper Corp., 414 F.3d 233, 248 (2d Cir. 2003).

^{37.} Bellaizac-Hurtado. at 1255 citing North Sea Continental Shelf Cases (Fed. Republic of Ger. v. Den.; Fed. Republic of Ger. v. Neth.), 1969 I.C.J. 3, 43 (Feb. 20).

state practice unless challenged directly by a state invoking the right to consult. That seems unlikely to happen anytime soon. Nongovernmental organizations and academia will continue to hold out Article IX in terms of national security space activities such as ASAT tests, and the terms due regard and harmful interference will continue to be bandied about relating to nongovernmental activities.

But states themselves, while brandishing due regard and harmful interference as political terms, do not appear eager to give these terms authority. Certainly there have been missed opportunities to give legitimacy to Article IX. The Starlink nongeostationary satellite orbit system and other such large-scale systems, for example, have generated concerns among both optical and radio astronomers similar to the concerns raised by Project West Ford.³⁸ Yet, no state has invoked the right to consult against the United States on this matter.

Perhaps this lack of action on the part of states is due to the recognition the duty to consult and by extension the right to consultation is flawed given the low threshold of "potentially harmful interference" and have decided it is better to leave the lid of Pandora's Box shut. Whatever the reason, the state practice for the exemption of national security space activities from the duty to consult and the right to consultation will likely continue in silence. These two manifestations of due regard may not find legitimacy in practice and remain merely an aspirational part of the Outer Space Treaty. They will certainly continue to be a talking point and generate controversy but will likely find little pragmatic use in the scope of not just national security space activities but outer space activities in general. Æ

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^{38.} Jeff Foust, "Starlink vs. the Astronomers," Space News, February 4, 2020, https://spacenews.com/.