

THE AIR FORCE LAW REVIEW



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COURT-MARTIAL NULLIFICATION: WHY MILITARY JUSTICE NEEDS
A “CONSCIENCE OF THE COMMANDER”

COLONEL JEREMY S. WEBER

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COURT-MARTIAL NULLIFICATION: WHY MILITARY JUSTICE NEEDS A “CONSCIENCE OF THE COMMANDER”

*COLONEL JEREMY S. WEBER**

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I. INTRODUCTION

These are interesting times for the U.S. military justice system. Long criticized for being too harsh on accused service members and failing to fundamentally protect due process for those in uniform,¹ the military justice system has faced severe criticism in recent years on the opposite front. Members of Congress, the media, and special interest groups have roundly criticized military justice for being too soft on crime—specifically sexual assault cases—by prosecuting too few cases and achieving too few convictions.² As a result, Congress enacted sweeping changes to the military justice system, most of them prosecution- and victim-friendly.³ Still, Congress and

¹ For examples of criticisms that the military justice system fails to protect the rights of accused service members, *see generally* ROBERT SHERRILL, *MILITARY JUSTICE IS TO JUSTICE AS MILITARY MUSIC IS TO MUSIC* (1970); Edward T. Pound, *Unequal Justice*, U.S. NEWS & WORLD REP., Dec. 16, 2002, at 19; Beth Hillman, *Chains of Command: The U.S. Court-Martial Constricts the Rights of Soldiers—And That Needs to Change*, LEGAL AFFAIRS, May/June 2002, at 50.

² For a concise overview of the pressure on the military justice system concerning its alleged failure to adequately prosecute sexual assault allegations, *see* Heidi L. Brady, *Justice is No Longer Blind: How the Effort to Eradicate Sexual Assault in the Military Unbalanced the Military Justice System*, 2016 U. ILL. L. REV. 193, 203-05 (2016). As one example of this pressure, the military reported in 2016 that it saw a significant drop in reports of sexual assault within the military. However, military leaders still faced criticism based on the data because an insufficient number of these allegations resulted in court-martial convictions. Sig Christenson & Bill Lambrecht, *Results Mixed in Military's Sex Assault Survey*, SAN ANTONIO EXPRESS NEWS, May 6, 2017, at A1.

³ Each of the last several National Defense Authorization Acts (NDAAAs) contained provisions mandating significant changes to the military justice system. *See* NDAA for Fiscal Year 2019, Pub. L. No. 115-232, 132 Stat. 1636 (2018) (establishing authorities of the Defense Advisory Committee on Investigation, Prosecution and Defense of Sexual Assault in the Armed Forces, calling for a report to expand Special Victims' Counsel services, and directing standardization of policies related to expedited transfer in cases of sexual assault or domestic violence); NDAA for Fiscal Year 2018, Pub. L. No. 115-91 §§ 532-33, 131 Stat. 1283 (2017) (giving the U.S. Court of Appeals for the Armed Forces jurisdiction over alleged victims' petitions to enforce their statutory rights, allowing changes in the previous year's act to apply to offenses alleged to have been committed before the effective date of the changes, making a new statute of limitations of child abuse allegations retroactive, and creating a new prohibition against the wrongful broadcast or distribution of intimate visual images); NDAA for Fiscal Year 2017, Pub. L. No. 114-328 §§ 5001 *et seq.*, 130 Stat. 2000 (2016) (enacting significant reforms to the military justice system, including changes to the composition of court-martial panels, an expanded role for military judges before referral of charges, and reorganization of the Uniform Code of Military Justice's punitive articles); NDAA for Fiscal Year 2016, Pub. L. No. 114-92, § 531, 129 Stat. 726, 814-15 (2015) (providing for a writ of mandamus to enforce victims' rights in a preliminary hearing or court-martial

other observers are unsatisfied and have focused their efforts on pressuring commanders into trying cases or attempting to remove commanders from the process altogether.⁴

In such an environment, commanders feel tremendous pressure to send sexual assault cases to trial. Commanders faced with allegations of sexual assault are presented with two choices: refer the case to a general court-martial or face higher-level scrutiny.⁵ If the latter path is chosen, it may prove costly to a commander's career, as higher-level commanders are reliant on Congressional approval of promotions, particularly at the general or flag officer level.⁶ Commanders face a temptation to send cases to trial

proceeding); NDAA for Fiscal Year 2015, Pub. L. No. 113-291, § 533, 128 Stat. 3292, 3366–67 (2014) (requiring the service secretaries to provide special victims' counsel to victims of alleged sex-related offenses in certain circumstances); *id.* at § 536, 128 Stat. 3368 (directing the President to amend Military Rule of Evidence 404(a) to provide that the general military character of the accused is not admissible for the purpose of showing the probability of innocence of the accused for certain offenses); NDAA for Fiscal Year 2014, Pub. L. No. 113-66, § 1701, 127 Stat. 672, 952-54 (2013) (incorporating all the rights of the Crime Victims' Rights Act into the Uniform Code of Military Justice [hereinafter UCMJ]); *id.* at § 1702, 127 Stat. 954-58 (limiting a pretrial UCMJ Article 32 investigation to a preliminary hearing, and limiting a convening authority's ability to alter findings and sentence at clemency).

⁴ See David A. Schlueter, *American Military Justice: Responding to the Siren Songs for Reform*, 73 A.F. L. REV. 193, 195-99 (2015) (summarizing proposals to limit or remove commanders' powers to prefer court-martial charges or convene courts-martial).

⁵ In 2012, the Secretary of Defense withheld "initial disposition authority" under Article 22 of the Uniform Code of Military Justice from all commanders who are not at least in the grade of O-6 and who do not hold a position as a special court-martial convening authority. *Memorandum from the Sec'y of Defense to the Secretaries of the Military Dep'ts, Chairman of the Joint Chiefs of Staff, Commanders of the Combatant Commands, and Inspector General of the Dep't of Defense* (Apr. 20, 2012), http://jpp.whs.mil/Public/docs/03_Topic-Areas/09-Withholding_Authority/20160408/01_SecDef_Memo_WithholdingAuthority_20120420.pdf. Additionally, the military services have varying policies as to whether higher-level review of this initial disposition decision is required. See, e.g., *Memorandum from the Under Sec'y of the Air Force to the Air Force Chief of Staff* (Jun. 17, 2013) (on file with author) (requiring review by the general court-martial convening authority of a decision not to refer charges in sexual offense cases). In addition, recent amendments to the Uniform Code of Military Justice specify that commanders may not refer charges of rape, sexual assault, and similar offenses to any level of court-martial other than the highest-level forum, a general court-martial. UCMJ arts. 18(c) and 56(b) (codified at 10 U.S.C. §§ 818(c) and 856(b) (2017)).

⁶ See 10 U.S.C. § 624(c) (2019) (requiring promotions except for junior officers to be made "by and with the advice and consent of the Senate). As a matter of practice, the Senate typically only individually confirms promotion nominations for general or flag officers.

and let the trier of fact determine the member's guilt or innocence rather than assume the risk of public or Congressional second-guessing.

In the military justice system, the trier of fact is often (but not always) a panel of "members" that resembles a jury in some ways but differs in other key respects.⁷ These members presumably provide a check on commanders' decisions to send cases to trial by rooting out cases with insufficient evidence and rendering a "not guilty" finding when the government has not proven its case beyond a reasonable doubt. In another sense, however, members are ill-equipped to serve as a safety valve on commanders' exercise of their prosecutorial discretion. Members are not well-armed to deal with the question of whether the accused *deserves* to be convicted, even if the government has proven its case beyond a reasonable doubt. Stated otherwise, members do not have an immediately apparent way of determining whether a conviction would be unjust in a given case.

The military justice system's unique features call for military judges to take a different approach than their civilian counterparts by affirmatively instructing court-martial panels about their authority to "nullify" a conviction even when the government has met its burden of proof. The political environment regarding sexual assault in the military heightens the need for such an instruction. The pressure on commanders to send sexual assault allegations to trial, combined with a slew of developments regarding sexual assault in the military justice system, all indicate that court-martial members should be informed about their nullification authority. In addition, a limited nullification instruction is the only way to assure victims that members do not lightly dismiss the seriousness of their allegations, while placing guidelines upon the practice. Members are the only actors in the military justice system with the power to effectively check commanders' decisions regarding courts-martial, and if they are not instructed on this power, there is no telling when, how, or if they will use it.

⁷ Until recently, at any general or special court-martial except a death penalty case, the accused had the choice whether to have findings and sentence determined by members or a military judge sitting alone. MANUAL FOR COURTS-MARTIAL, UNITED STATES [hereinafter MCM] (2016 ed.), Pt. II, Rule for Courts-Martial [hereinafter R.C.M.] 903. Recent amendments to the UCMJ create the option for the government to refer a case to a special court-martial before a judge alone, with caps on the punishments available. NDAA for Fiscal Year 2017, *supra* note 3, §§ 5161, 5163, *cf.* MCM (2019 ed.), pt. II, R.C.M. 903. For a comparison between military court-martial members and civilian juries, see Andrew S. Williams, *Safeguarding the Commander's Authority to Review the Findings of a Court-Martial*, 28 B.Y.U. J. PUB. L. 471, 485-502 (2014).

This article begins with an introduction to jury nullification, laying out the competing policy arguments for and against nullification, and comparing how civilian and military courts have treated the issue. It then examines some of the military justice system's longstanding unique attributes and explores how these characteristics call for a more liberal approach to recognizing nullification. The article then turns to the specific issue of sexual assault in the military and examines why the pressure created by this issue has amplified the need for a nullification instruction. Ultimately, this article proposes such an instruction in an effort to restore the balance between victims' rights, protections for accused service members, and the preservation of commanders' authority.

II. A BRIEF OVERVIEW OF NULLIFICATION

A. Definition and Background

Jury nullification (sometimes called jury independence or jury rights) can be defined as follows:

A jury's knowing and deliberate rejection of the evidence or refusal to apply the law either because the jury wants to send a message about some social issue that is larger than the case itself or because the result dictated by law is contrary to the jury's sense of justice, morality, or fairness.⁸

In other words, jury nullification occurs in criminal trials⁹ when the jury refuses to convict the defendant even though the prosecution has proven its case beyond a reasonable doubt. The jury might take such an action because it believes the underlying law to be unjust, because it sees the decision to charge this particular defendant with a crime as an abuse of prosecutorial

⁸ BLACK'S LAW DICTIONARY 936 (9th ed. 2009).

⁹ This article focuses on nullification in criminal trials. For a comparison regarding nullification by civil juries compared to criminal trials, *see generally* Lars Noah, *Civil Jury Nullification*, 86 IOWA L. REV. 1601 (2001). While nullification is most often analyzed in the criminal context, some have proposed jury nullification instructions that would apply in the civil context as well. *See, e.g.*, M. Kristine Creagan, *Jury Nullification: Assessing Recent Legislative Developments*, 43 CASE W. RES. L. REV. 1101, 1144-45 (1993). *See also* Aaron T. Oliver, *Jury Nullification: Should the Type of Case Matter?*, 6 KAN. J.L. & PUB. POL'Y, 49, 63-64 (1997) (exploring instances of nullification in civil cases, and concluding: "Jury nullification does occur in some civil cases. However, it does not appear to be a major problem.").

discretion, because it sees exigent circumstances behind the defendant's action, or because it is concerned about the harshness of the penalty or collateral consequences of convicting the defendant.¹⁰

The history and development of jury nullification have been thoroughly explored elsewhere and need not be laid out in great detail here.¹¹ Briefly, nullification played a deeply important role in the early American psyche. Colonial juries played a “vital and celebrated role in American resistance to British tyranny leading up to the revolution,” with juries frequently refusing to enforce British laws colonists perceived as unjust.¹² In the late 1700s, leaders such as John Adams, Alexander Hamilton, and prominent judges believed that “jurors had a duty to find a verdict according to their own conscience, though in opposition to the direction of the court...”¹³ In enacting the Sixth Amendment, the Framers of the Constitution “believed that jury nullification was essential to prevent government by judge or government by the rulers in power through the judiciary.”¹⁴ This position was shaped in large measure from attempted prosecutions for seditious libel against the Crown or its colonial proxies. In one oft-cited example, the New York printer John Peter Zenger found himself on trial in 1735 for seditious libel

¹⁰ See CLAY S. CONRAD, *JURY NULLIFICATION: THE EVOLUTION OF A DOCTRINE* 7 (2014):

The doctrine [of jury independence] states that jurors in criminal trials have the right to refuse to convict if they believe that a conviction would be in some way unjust. If jurors believe enforcing the law in a specific case would cause an injustice, it is their prerogative to acquit if they believe a law is unjust, or misapplied, or that it never was, or never should have been, intended to cover a case such as the one they are facing, it is their duty to see justice done.

See also Darryl K. Brown, *Jury Nullification Within the Rule of Law*, 81 MINN. L. REV. 1149, 1171-98 (1997) (setting forth four situations in which nullification occurs: a response to uncorrected rule violations by public officials; refusal to enforce a valid but unjust statute; in response to a just law unjustly applied; and as a method to uphold illegal or immoral community norms. Only the last of these uses of nullification, the author asserts, violates the rule of law.)

¹¹ See generally CONRAD, *supra* note 10, at 3-142 (thoroughly tracing the history of nullification from pre-Magna Carta times to its present day status in American jurisprudence).

¹² Andrew J. Parmenter, *Nullifying the Jury: “The Judicial Oligarchy” Declares War on Jury Nullification*, 46 WASHBURN L.J. 379, 382 (2007).

¹³ *United States v. Dougherty*, 473 F.2d 1113, 1132 (D.C. Cir. 1972).

¹⁴ Steven M. Fernandes, *Jury Nullification and Tort Reform in California: Eviscerating the Power of the Civil Jury by Keeping Citizens Ignorant of the Law*, 27 SW. U. L. REV. 99, 107 (1997).

when his newspaper criticized the state's governor.¹⁵ Because truth was not a recognized defense to the charge, and because it was clear that Zenger had published the statement, Zenger's defense counsel argued that the jury should decide for themselves whether truth *should* be a defense to seditious libel.¹⁶ He successfully pressed the jurors "to see with their own eyes, to hear with their own ears, and to make use of their own consciences and understandings," persuading the jury to acquit Zenger.¹⁷

Jury nullification is closely tied to the question of whether the jury's job is simply to determine the facts, or whether it may interpret the law as well. In early America, juries were regularly entrusted with deciding questions of law in addition to factual matters.¹⁸ Thus, juries could more easily engage in nullification by interpreting the law as broadly or narrowly as they saw fit based on the situation before them.¹⁹ However, it was not long before professional judges began to view the law's interpretation as their domain, building off the position in *Marbury v. Madison* that it is the judiciary's role to "say what the law is."²⁰ Courts thus slowly began to reel in juries' power to determine not only what the law "is," but what the law "should be" as

¹⁵ JEFFREY B. ABRAMSON, WE, THE JURY: THE JURY SYSTEM AND THE IDEAL OF DEMOCRACY 73-75 (1994); Lawrence W. Crispo et al., *Jury Nullification: Law Versus Anarchy*, 31 LOY. L.A. L. REV. 1, 7 (1997).

¹⁶ ABRAMSON, *supra* note 15, at 74.

¹⁷ Crispo et al., *supra* note 15, at 7 (quoting James Alexander, A BRIEF NARRATIVE OF THE CASE AND TRIAL OF JOHN PETER ZENGER 93 (2d ed. 1972)).

¹⁸ See, e.g., *Georgia v. Brailsford*, 3 U.S. 1, 4 (1794) (instructing the jury in a trial before the Supreme Court involving suit by a state to recover debts as follows):

It may not be amiss, here, Gentlemen, to remind you of the good old rule, that on questions of fact, it is the province of the jury, on questions of law, it is the province of the court to decide. But it must be observed that by the same law, which recognizes this reasonable distribution of jurisdiction, you have nevertheless a right to take upon yourselves to judge of both, and to determine the law as well as the fact in controversy. On this, and on every other occasion, however, we have no doubt, you will pay the respect, which is due to the opinion of the court: For, as on the one hand, it is presumed, that juries are the best judges of facts; it is, on the other hand, presumable, that the court are the best judges of law. But still both objects are lawfully, within your power of decision.

¹⁹ See CONRAD, *supra* note 10, at 45-63 (exploring early decisions holding that juries had the authority to decide questions of law, and the impact of this position upon jury nullification's development).

²⁰ 5 U.S. (1 Cranch) 137, 177 (1803).

well. By 1835, a Massachusetts federal court laid down a marker: juries may have the *power* to nullify, but they do not have “the moral right to decide the law according to their own notions, or pleasure.”²¹ Sixty years later, the U.S. Supreme Court followed suit, rejecting the proposition that juries have the “power arbitrarily to disregard the evidence and principles of law applicable to the case on trial.”²² By the end of the nineteenth century, most courts had struck down the practice of instructing juries that they were the judges of law as well as of fact.²³ Today, nullification is often viewed as a relic of history, a vestigial power that may have been appropriate for important moral questions such as Zenger’s seditious libel or fugitive slave cases, but that does not deserve the dignity of explicit recognition in modern courtrooms.²⁴

Jury nullification is as much a policy question as a legal one, with robust advocates on either side of the debate. Few issues generate as much controversy, with so few answers, as jury nullification.²⁵ Some advocate that jury nullification should be not only a right but a duty of jury members to act according to their consciences, a necessary safeguard against prosecutorial overreach.²⁶ Conversely, some argue just as passionately that jury nullification is abhorrent, a direct affront to the rule of law.²⁷ As one overview of the topic

²¹ *United States v. Battiste*, 4 F. Cas. 1042, 1043 (Mass. 1835).

²² *Sparf v. United States*, 156 U.S. 51, 63 (1895).

²³ CONRAD, *supra* note 10, at 99.

²⁴ *See, e.g., United States v. Dougherty*, 473 F.2d 1113, 1132-37 (D.C. Cir. 1972) (covering the history of nullification in American courts and arguments for its continued employment, but finding there is no right to a jury instruction on nullification, as an instruction would incorrectly imply judicial approval of the practice).

²⁵ *See* Teresa L. Conaway et al., *Jury Nullification: A Selective, Annotated Bibliography*, 39 VAL. U.L. REV. 393, 393 (2004):

The debate over jury nullification is multi-faceted. Indeed, many authors even disagree over the proper definition of jury nullification. Some approve of jury nullification in principle but do not believe juries should be informed of their ability to defy the law as explained to them by the judge. Others believe juries should be told outright of this ability. Still others decry the principle and seek ways to prevent jury nullification from ever happening. Others encourage its use, especially in certain types of cases....

²⁶ Aaron McKnight, *Jury Nullification as a Tool to Balance the Demands of Law and Justice*, 2013 B.Y.U. L. REV. 1103, 1120 (2013) (“The most common and basic argument in favor of jury nullification is that it serves as a protection for the accused against abuses by the government.”)

²⁷ *Id.* at 1122 (“The most common argument against jury nullification is that it undermines the rule of law.”)

noted: “Depending on one’s perspective, jury nullification is a courageous act of civil disobedience or the reprehensible act of an out-of-control jury. It ensures liberty or results in anarchy; it should be left unfettered or needs to be controlled.”²⁸ This tension feeds the question of whether the jury’s raw power to acquit based on the preference for general verdicts and the secrecy of deliberations should be “legitimized” by instructing juries that they have the *right* as opposed to the mere *ability* to nullify.²⁹ Advocates on both sides of the debate essentially coalesce around one main argument with various permutations.

Advocates of legitimizing jury nullification by instructing on the matter focus on the jury’s role in safeguarding against potential abuses or overreaching by the prosecutor. They argue that the Framers provided for the right to a jury trial for a reason; they “saw the judgment of their peers as [an] invaluable ally if the distant federal Congress should pass oppressive laws or if the federal prosecutors should seek to harass citizens by the ‘great instrument of arbitrary power’ that a criminal prosecution can become.”³⁰ Juries should be advised that they have the right to nullify, supporters assert, because juries represent the “conscience of the community,” an important check on the power of the government to try citizens.³¹ In certain cases (for example, acts of civil disobedience, prosecutions that appear to be motivated by improper concerns, or crimes involving extreme mitigating circumstances), the jury might properly provide a check on the government, consistent with checks and balances that exist elsewhere in American government.³² Along

²⁸ Conaway et al., *supra* note 25, at 393.

²⁹ R. Alex Morgan, *Jury Nullification Should Be Made a Routine Part of the Criminal Justice System, But It Won’t Be*, 29 ARIZ. ST. L.J. 1127, 1127 (1997) (“The issue is not nullification itself, but whether our judicial system should legitimize a jury’s power to nullify by having judges instruct juries that they are entitled to nullify the law.”)

³⁰ JOSHUA DRESSLER & GEORGE C. THOMAS III, CRIMINAL PROCEDURE: PRINCIPLES, POLICIES AND PERSPECTIVES 1061 (3d ed. 2006) (quoting in part NEIL H. COGAN, THE COMPLETE BILL OF RIGHTS 426 (1998)).

³¹ See *United States v. Dougherty*, 473 F.2d 1113, 1142 (D.C. Cir. 1972) (Bazelon, J. dissenting) (“Nullification is not a ‘defense’ recognized by law, but rather a mechanism that permits a jury, as community conscience, to disregard the strict requirements of law where it finds that those requirements cannot justly be applied in a particular case.”); *United States v. Spock*, 416 F.2d 165, 182-83 (1st Cir. 1969) (holding that the use of special findings in a jury verdict concerning Vietnam War protest activities constituted reversible error, as a jury represents the “conscience of the community” and therefore must be permitted to consider “more than logic” in its deliberations, especially considering questions of free speech).

³² McKnight, *supra* note 26, at 1126:

these lines, nullification advocates note that if law enforcement officials, judges, and attorneys all enjoy a certain amount of discretion in applying the law, so should juries.³³ In any event, proponents assert, nullification already exists, so why not acknowledge it and provide some guidance as to when and how it may be employed?³⁴

In his 2014 book on jury nullification, attorney Clay Conrad sums up the most important arguments in favor of an explicit role for nullification:

[W]e want juries to act as Alexander Hamilton’s “valuable safeguard to liberty,” and as the “conscience of the community.” The first job of a juror is to see that justice is done, or at least that injustice is prevented. We want juries to act as a safety valve, limiting the ability of the courts and legislatures to impose punishment on well-meaning or morally blameless defendants, and to protect their neighbors from overreaching or oppressive laws or law enforcement. Juries do this by rendering an independent verdict, acquitting a defendant who may be factually guilty when they believe that it would be unjust, unfair, or pointless to enter a conviction. In order for juries to do this, they must go beyond the “jury as fact-finder”

Through exercise of its nullification power, a jury can provide a check on legislatures to protect against unjust laws, a check on prosecutors that are unjustly applying the laws, and a check on judges who may be interpreting the law with too much rigidity. Jury nullification can also serve as a useful tool in balancing federalism, protecting states from the federal government’s encroachments into what have traditionally been the states’ determinations of criminal liability.... In this way, jury nullification would act as an additional check or limitation, preventing abuse of government power.

³³ *Id.* at 1122.

³⁴ Morgan, *supra* note 29, at 1139:

The strongest argument in favor of legitimizing jury nullification lies in the fact that juries can and do nullify already. Even critics of the doctrine acknowledge this truth. If our system functions in a way that allows nullification as a possible outcome of jury deliberations, it seems improper to conceal this knowledge from jurors in an attempt to secretly reduce their power. Furthermore, if one of the stated purposes of a trial is a search for the truth, who can justify misleading jurors as to the extent of their role in the proceedings?

paradigm and form an independent view of what it will take for justice to be done.³⁵

Opponents of a nullification instruction counter with a main theme of the “anarchy and chaos” that would result from juries making unilateral decisions apart from pure legal concerns.³⁶ The D.C. Circuit Court of Appeals succinctly laid out this position in a 1972 decision:

To encourage individuals to make their own determinations as to which laws they will obey and which they will permit themselves as a matter of conscience to disobey is to invite chaos. No legal system could long survive if it gave every individual the option of disregarding with impunity any law by which his personal standard judged morally untenable.³⁷

As with the argument for nullification, the central argument against it has several variations. One deals with the fear of inconsistency, or worse. Juries may decide to nullify or not based on their own biases or whims, creating inconsistent results.³⁸ If a jury decides to correct a perceived injustice to one defendant or one class of defendants but not another, this generates an undesirable amount of uncertainty in the process. More insidiously, it invites different treatment of defendants based on some discriminatory characteristic.³⁹ Opponents of a nullification instruction flip the “conscience of the community” argument around: juries can use nullification for evil as well as

³⁵ CONRAD, *supra* note 10, at 5.

³⁶ Morgan, *supra* note 29, at 1136 (“The most commonly used and perhaps the strongest argument against jury nullification is the fear of anarchy and chaos.”)

³⁷ United States v. Dougherty, 473 F.2d 1113, 1133-34 (D.C. Cir. 1972).

³⁸ McKnight, *supra* note 26, at 1122-23.

³⁹ Ilya Somin, *Rethinking Jury Nullification*, WASH. POST, Aug. 7, 2015, https://www.washingtonpost.com/news/volokh-conspiracy/wp/2015/08/07/rethinking-jury-nullification/?utm_term=.afdad0ac27fc:

When I first thought about jury nullification as a young law student, I was inclined to be against it. Yes, it could potentially be used to curb unjust laws. But it can also be a vehicle for jury prejudice and bias. Most notoriously, all-white juries in the Jim Crow-era South often acquitted blatantly guilty white defendants who had committed racially motivated crimes against blacks. Moreover, it seems unfair if Defendant A gets convicted while Defendant B is acquitted after committing exactly the same offense, merely because B was lucky enough to get a jury that disapproves of the underlying law.

good, as with Jim Crow-era juries that refused to convict white defendants for lynchings or other crimes against black victims.⁴⁰ Additionally, if juries are told they can acquit based on nullification, this may empower them to believe they can *convict* based on equitable principles rather than legal or evidentiary ones, resulting in the possibility of wrongful convictions.⁴¹ Another aspect of the anarchy argument asserts that nullification frustrates the will of the people expressed through the legislature and thereby undermines democracy; “it is up to the legislature and not juries to modify the law.”⁴² Finally, the anarchy argument echoes in the broader assertion that the criminal justice system, like government in general, reflects “a government of laws and not of men.”⁴³ As an unelected body not charged with representing the will of the people, the argument goes, juries would create an “anarchy of conscience, an unpredictable series of ad hoc judgments by isolated groups of twelve” rather than an orderly, reasoned society of laws made up by elected representatives.⁴⁴

This policy debate remains unresolved, leaving courts to decide whether and to what extent nullification should be recognized in criminal trials.

B. Civilian Courts’ Approach to Jury Nullification

The unresolved policy debate has caused jury nullification to float in a sort of legal purgatory in modern civilian criminal justice, neither encouraged nor outright discouraged. Courts have officially condemned jury nullification, yet they have allowed the practice to continue and at times have even been protective of it.⁴⁵ Most jurisdictions treat the issue with a mixed approach. They recognize that a jury has the raw power to acquit a defendant despite sufficient evidence of guilt based on the way the jury system is structured, but they oppose any instruction that would inform juries

⁴⁰ CONRAD, *supra* note 10, at 167-86.

⁴¹ McKnight, *supra* note 26, at 1123.

⁴² Crispo et. al., *supra* note 15, at 60-61.

⁴³ This quote is most often attributed to John Adams’ Massachusetts Constitution of 1780, art. XXX. See MASS. CT. SYS., *John Adams & the Massachusetts Constitution*, <http://www.mass.gov/courts/court-info/sjc/edu-res-center/jn-adams/mass-constitution-1-gen.html> (last visited Jul. 25, 2019).

⁴⁴ Jeffrey Abramson, *Two Ideals of Jury Deliberations*, 1998 U. CHI. LEGAL F. 125, 147 (1998) (quoted in McKnight, *supra* note 26, at 1122).

⁴⁵ See Kenneth Duvall, *The Contradictory Stance on Jury Nullification*, 88 N.D. L. REV. 409, 411 (2012) (“As it currently stands, nullification occupies a position in the twilight, officially condemned by the United States Supreme Court, yet allowed—even encouraged—to survive by various, unyielding protections of jury decision-making”).

of this right or that might encourage use of this power. This delicate status quo seems unlikely to be disturbed.⁴⁶ Nullification remains, in the words of one commentator, the “elephant in the room,” its specter looming over criminal trials but seldom discussed.⁴⁷

One area in which courts have achieved some clarity in this matter involves jury instructions about the power to nullify. Nearly every civilian court that has addressed nullification in recent decades has declined to instruct jury members on the possibility of nullification. In *Washington v. Watkins*, for example, the Fifth Circuit held that while juries have the power to nullify, courts “have almost uniformly held that a criminal defendant is not entitled to an instruction that points up the existence of that practical power to his jury.”⁴⁸ Likewise, the Sixth Circuit in *United States v. Krzyske* held that “no federal court has yet specifically permitted a jury nullification instruction and... few courts have even permitted arguments to the jury on the topic....”⁴⁹ On similar grounds, appellate courts have frequently approved of judges’ attempts to prevent defense counsel from encouraging nullification in their arguments. In *United States v. Trujillo*, for example, the Eleventh Circuit held that because a jury is bound to apply the law as interpreted and instructed by the judge, defense counsel may not argue jury nullification during closing argument.⁵⁰ A survey of state and federal cases reveal most courts take the same approach: jury nullification is not a proper subject for instruction or argument.⁵¹ At least one federal circuit has gone even further to extinguish nullification. In

⁴⁶ See, e.g., Duvall, *supra* note 45, at 410:

If the Supreme Court is sincere in condemning nullification, the Court would stamp out the practice by allowing jury control devices in criminal proceedings. Conversely, if the Court is determined to honestly sanction nullification, it would justify the currently incoherent ban on criminal jury controls. However, based on examinations of the Court’s current make-up and the entrenched positions on both sides, this Article contends the Court will not bring itself to either encroach on the jury or openly endorse nullification. Instead, the contradiction at the heart of this issue will continue to exist as a frozen conflict, awaiting a thaw that is unlikely to come.

⁴⁷ Kimberly Del Frate, *The Elephant in the Room: Attorney Accountability for Jury Nullification Arguments in Criminal Trials*, 52 CAL. W. L. REV. 163, 163 (2016).

⁴⁸ *Washington v. Watkins*, 655 F.2d 1346, 1374 n.54 (5th Cir. 1981).

⁴⁹ *United States v. Krzyske*, 836 F.2d 1013, 1021 (6th Cir. 1988).

⁵⁰ *United States v. Trujillo*, 714 F.2d 102, 106 (11th Cir. 1983).

⁵¹ See generally Teresa L. Conaway et. al., *Jury Nullification: A Selective, Annotated Bibliography*, 39 VAL. U.L. REV. 393 (2004).

United States v. Thomas, the Second Circuit reviewed criminal convictions that took place after the District Court dismissed a juror who effectively stated his intention to nullify the defendants' case on racial, cultural, or related grounds.⁵² The Second Circuit ultimately vacated the convictions because the juror's views might have been motivated by legitimate doubts as to the defendants' guilt, but the court expressly rejected the idea that the juror had the right to nullify the convictions:

We take this occasion to restate some basic principles regarding the character of our jury system. Nullification is, by definition, a violation of a juror's oath to apply the law as instructed by the court—in the words of the standard oath administered to jurors in the federal courts, to “render a true verdict *according to the law and the evidence*.” We categorically reject the idea that, in a society committed to the rule of law, jury nullification is desirable or that courts may permit it to occur when it is within their authority to prevent. Accordingly, we conclude that a juror who intends to nullify the applicable law is no less subject to dismissal than is a juror who disregards the court's instructions due to an event or relationship that renders him biased or otherwise unable to render a fair and impartial verdict.⁵³

Still, juries retain the ability to nullify, a fact courts readily acknowledge even if they frown on the exercise of that power. In *United States v. Moylan*, the Fourth Circuit rejected an appeal of a Vietnam-era conviction for destroying draft records where the appellant argued that the jury should have been instructed on its authority to nullify the conviction on moral grounds.⁵⁴ Even as it did so, however, the court recognized “the undisputed power” of the jury to nullify.⁵⁵ The court noted: “If the jury feels that the law under which the defendant is accused is unjust, or that exigent circumstances justified the actions of the accused, or for any reason which appeals to their logic or passion, the jury has the power to acquit, and the courts must abide by that decision.”⁵⁶ Other federal circuits have likewise recognized that juries

⁵² *United States v. Thomas*, 116 F.3d 606, 610-12 (2d Cir. 1997).

⁵³ *Id.* at 614 (citations omitted) (emphasis in original).

⁵⁴ 417 F.2d 1002, 1006 (4th Cir. 1969).

⁵⁵ *Id.*

⁵⁶ *Id.*

possess the power to nullify, even though they may not voice support for the practice.⁵⁷

Occasionally, courts go even further by recognizing that nullification serves a valuable purpose. The Fifth Circuit has held that nullification “is an important part of the jury trial system guaranteed by the Constitution.”⁵⁸ In another Vietnam-era prosecution—this time for conspiracy to violate the Selective Service Act—the First Circuit held that the use of special interrogatories to the jury was improper because they impeded on the jury’s power to deliver a general verdict.⁵⁹ The First Circuit did not use the word “nullification” per se, but it held that “the jury, as the conscience of the community, must be permitted to look at more than logic” and thus should not be led “step by step” toward reaching its verdict.⁶⁰ At the state level, most courts reject an explicit role for jury nullification; even in Indiana and Maryland, where state constitutions guarantee the jury the right to judge law as well as facts, courts hold that nullification is not a proper subject for instruction or argument.⁶¹ Still, a small minority of state courts have issued statements favoring the preservation of jury nullification in some form or fashion.⁶²

⁵⁷ See, e.g., *United States v. Avery*, 717 F.2d 1020, 1027 (6th Cir. 1983) (holding that jurors should be instructed to apply the law, but recognizing that they “may indeed have the power to ignore the law.”); *United States v. Simpson*, 460 F.2d 515, 519 (9th Cir. 1972) (rejecting the appellant’s contention that a nullification instruction should have been given, but recognizing that “as long as general verdicts are rendered in criminal cases, certain verdicts that may be reasonably thought to rest upon the juror’s rejection of the law will occur.”)

⁵⁸ *United States v. Leach*, 632 F.2d 1337, 1341 n.12 (5th Cir. 1980).

⁵⁹ *United States v. Spock*, 416 F.2d 165 (1st Cir. 1969).

⁶⁰ *Id.* at 182.

⁶¹ IND. CONST. art. I, § 19; *Holden v. State*, 788 N.E.2d 1253, 1255 (Ind. 2003); MD. DEC. OF R. art. 23; *In re Petition for Writ of Prohibition*, 539 A.2d 664, 682 (Ct. App. Md. 1988).

⁶² See, e.g., *Commonwealth v. Feaser*, 723 A.2d 197, 202-03 (Pa. 1999) (finding that the principle of double jeopardy serves, *inter alia*, the defendant’s interest in nullification, “which is absolute”); *State v. Bonacorsi*, 648 A.2d 469, 470-71 (N.H. 1994) (affirming “the undisputed power of the jury to acquit, even if its verdict is contrary to the law as given by the judge and contrary to the evidence”); *State v. Porter*, 639 So. 2d 1137, 1140 (La. 1994) (holding that a defendant charged with a crime that provides for a responsive verdict “has the statutory right to have the jury characterize his conduct as the lesser crime...even though the evidence clearly and overwhelmingly supported a conviction of the charged offense”); *Amado v. State*, 585 So. 2d 282, 283 (Fla. 1991) (recognizing that despite “overwhelming” evidence of guilt, a jury possess the “pardon power” to convict a defendant of a lesser offense).

The Supreme Court has not seen fit to upset the status quo. In 1895, the Court seemed to side with the lower courts in opposing an openly-acknowledged role for jury nullification. In *Sparf v. United States*, the Court reviewed the murder convictions of two sailors accused of killing an officer on the ship and throwing his body overboard.⁶³ During the trial, jurors asked the judge whether they could find one of the defendants guilty of manslaughter or attempted murder instead of murder, and asked the judge whether their verdict must be “guilty or not guilty.”⁶⁴ The trial judge instructed the members that if the evidence revealed the defendant was guilty of murder, the jury could not reduce the conviction to a lesser crime.⁶⁵ The Supreme Court agreed, rejecting the proposition that the jury could decide the law for itself and upholding the proposition that the jurors are required to follow the judge’s instructions on matters of law. The Court held: “Public and private safety alike would be in peril, if the principle be established that juries in criminal cases may, of right, disregard the law as expounded to them by the court and become a law unto themselves.”⁶⁶

While the language in *Sparf* seems broadly against nullification, the ruling was limited to a rather narrow issue of whether the judge’s particular answers to this jury’s questions were permissible, not whether juries could nullify as a practical matter or whether judges were prohibited from issuing nullification instructions. As one author noted: “Because of the procedural posture of the case, all the court decided—and all the court could decide—was that the refusal of the court to inform the jury that they could rightfully bring in an ameliorated verdict was not reversible error.”⁶⁷ *Sparf* did not settle the policy-based dispute behind jury nullification, nor did it try to end the practice of nullification. Despite lower courts’ activity regarding nullification, the Court has not revisited the issue.

Thus, jury nullification retains a role in American criminal jurisprudence, even if that role is largely an unstated one. From time to time, juries have risen up and employed nullification to frustrate the government’s efforts to enforce unjust laws such as Prohibition-era crimes or crimes under the Fugitive Slave Act.⁶⁸ In the end, neither side of the underlying policy

⁶³ *Sparf v. United States*, 156 U.S. 51, 52-53 (1895).

⁶⁴ *Id.* at 61 n.1.

⁶⁵ *Id.*

⁶⁶ *Id.* at 101.

⁶⁷ CONRAD, *supra* note 10, at 106.

⁶⁸ *See id.* at 79-88 (exploring potential acts of nullification leading to acquittals in

argument about nullification has completely carried the day with appellate courts. As one commentator has noted, “an unbiased observer likely grants that both sides have valid points, and following from this recognition, one can understand why the debate over nullification remains alive and well.”⁶⁹ Civilian courts do not instruct on nullification, but they often seem loath to completely condemn the practice as well. Jury members are left to fend for themselves. This uneasy standoff has carried over to the military justice system, that unique spinoff of criminal justice.

C. The Military’s Approach to Nullification

1. Appellate Cases

To the extent that military courts have addressed nullification, they have generally copied civilian courts’ approach. Military appellate courts have typically avoided the nullification issue and have encouraged military judges to do the same, even when court-martial panels have specifically asked about the issue. Defense counsel likewise are commonly encouraged to avoid any argument that smacks of nullification, though the law is less clear here. Generally speaking, court-martial panels are left to their own devices to figure out what—if any—latitude they have to render a not guilty verdict when the government has otherwise proven its case. From time to time, commentators have called for a more explicit recognition of nullification in courts-martial,⁷⁰ but those calls have been ignored, and the issue has been allowed to wallow. Before exploring what military courts have said regarding nullification, a few points of terminology are in order: “members” or a “panel” can be loosely thought of in terms of a jury; “trial counsel” means the prosecutor; the “accused” is the term for the defendant; and the pre-1995

Fugitive Slave Act prosecutions).

⁶⁹ Duvall, *supra* note 45, at 423.

⁷⁰ See MAJ Michael E. Korte, *He Did It, But So What? Why Permitting Nullification at Court-Martial Rightfully Allows Members to Use Their Consciences in Deliberations*, 223 MIL. L. REV. 100 (2015) (averring that military judges should allow defense counsel to advocate for member nullification, and that judges should instruct members that they may use their common sense and conscience in reaching a verdict); MAJ Bradley J. Huestis, *Jury Nullification: Calling for Candor from the Bench and Bar*, 173 MIL. L. REV. 68, 72 (2002) (calling for an “honest, candid approach” that allows counsel to argue for nullification and permits a nullification instruction); LCDR Robert E. Korroch and MAJ Michael J. Davidson, *Jury Nullification: A Call for Justice or an Invitation to Anarchy?*, 139 MIL. L. REV. 131 (1993) (asserting that military judges have the discretion to permit instructions and argument concerning nullification).

Court of Military Appeals (CMA) or the 1995 and onward Court of Appeals for the Armed Forces (CAAF) refers to the highest appellate court within the military justice system.⁷¹

The Uniform Code of Military Justice (UCMJ)⁷² says nothing about nullification. It does state that no authority convening a court-martial or a commanding officer may censure, reprimand, or admonish any member of the court for carrying out his or her duties, thereby granting court members some protection in the exercise of their duties.⁷³ The UCMJ also discusses instructions and voting procedures by court members, but it contains no discussion relevant to the nullification issue.⁷⁴ Likewise, the Rules for Courts-Martial covering instructions and deliberations on findings contain no guidance on the topic.⁷⁵ Thus, appellate courts are left to decide whether and to what extent nullification is recognized and permitted in court-martial practice.

Prior to 1997, military appellate courts addressed nullification only in dicta. For example, in 1983, the Court of Military Appeals considered whether the accused was harmed by not having the benefit of an instruction that the members “may, but are not required to, accept as conclusive any matter judicially noticed.”⁷⁶ Analyzing this particular issue, the court noted in passing:

Indeed, with respect to certain aspects of “domestic law,” instructing the court members that they may disregard the matter judicially noticed is virtually to invite them to engage in jury nullification. While civilian juries and court-martial members always have had the power to disregard instructions on matters of law given them by the judge, generally it has been held that they need not be advised as to this power, even upon request by a defendant.⁷⁷

⁷¹ See *infra* Section III for a description of some of these terms and how the actors in the military justice system differ from civilian courts.

⁷² *Uniform Code of Military Justice*, 10 U.S.C. §§ 801-946a (2019) [hereinafter UCMJ].

⁷³ UCMJ art. 37(a) (codified at 10 U.S.C. § 837(a) (2019)).

⁷⁴ UCMJ arts. 51-52 (codified at 10 U.S.C. §§ 851-52 (2019)).

⁷⁵ MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 920-921.

⁷⁶ *United States v. Mead*, 16 M.J. 270, 276-77 (C.M.A. 1983).

⁷⁷ *Id.* at 275 (emphasis added).

Thus, the court wholly relied on civilian practice as the basis for this dicta. Five years later, the court in *United States v. Smith* held that a military judge did not err in declining to allow defense counsel to *voir dire* members about their views on mandatory life sentences in a premeditated murder case.⁷⁸ The lower court had noted that defense counsel mentioned the possibility of court member nullification as a basis for his request for *voir dire* on this issue; that court rejected this justification.⁷⁹ The Court of Military Appeals concurred, holding that the nullification justification was “totally unacceptable.”⁸⁰ Shortly after *Smith*, the court held in *United States v. Schroeder* that there was no error in the accused’s mandatory minimum sentence and that the mandatory minimum requirement did not unlawfully detract from the discretion of the members.⁸¹ In so holding, the court noted that because the court members must vote on the sentence, they could engage in “jury nullification” by adjudging a sentence less than the mandatory minimum.⁸² However, the court noted, “such action . . . would be irresponsible as well as unlawful and certainly should not be encouraged.”⁸³

It was not until 1997 that the newly-renamed Court of Appeals for the Armed Forces dealt with nullification in more than dicta. Army Specialist Melvin Hardy faced a general court-martial on charges of forcible oral sodomy, rape, and attempted forcible anal sodomy.⁸⁴ During deliberations in this litigated case before members, the members posed the following question to the military judge: “If we find that both—that all elements of the [forcible oral sodomy] charge are present, that does not necessarily mean that we still have to find the defendant guilty of that charge, is that correct?”⁸⁵ The military judge responded that the members should consider all the instructions previously provided including those regarding issues of consent, and the previously-provided instruction that the members were to “impartially resolve the ultimate issue as to whether the accused is guilty or not guilty in accordance with the law, the evidence admitted in court, and your own conscience.”⁸⁶ Then, during a session outside the members’ pres-

⁷⁸ *United States v. Smith*, 27 M.J. 25, 28 (C.M.A. 1988)

⁷⁹ *United States v. Smith*, 24 M.J. 859, 861 (A.C.M.R. 1987).

⁸⁰ *Smith*, 27 M.J. at 29.

⁸¹ *United States v. Schroeder*, 27 M.J. 87, 90 (C.M.A. 1988).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *United States v. Hardy*, 46 M.J. 67, 67 (C.A.A.F. 1997).

⁸⁵ *Id.* at 68.

⁸⁶ *Id.*

ence, defense counsel argued that the members' question was a request for guidance on the issue of jury nullification and that the law allowed juries to nullify charges to "review the wisdom of the charges" and test "the discretion of the prosecutor."⁸⁷ Thus, defense counsel requested an instruction that "in the exercise of their peer discretion... they may find [the accused] not guilty, notwithstanding findings that there is evidence beyond a reasonable doubt to sustain each and every element of the offense, and [their] finding that there are no affirmative defenses."⁸⁸ The military judge declined to do so, and the members convicted the appellant of forcible oral sodomy, while acquitting him of the remaining charges.⁸⁹

CAAF held that the military judge did not err by refusing to give the requested nullification instruction. The court first noted that it had not previously ruled directly as to whether a court-martial panel should be instructed about nullification.⁹⁰ It then defined the question before it as a distinction between the *power* of a court-martial panel to disregard instructions, and an accused's *right* to a panel authorized to disregard the law.⁹¹ The court noted that the majority of federal circuits rejected nullification's recognition or encouragement.⁹² CAAF found important policy reasons behind this position: (1) The goals of permitting the jury to serve as the conscience of the community can be served by other rules such as the requirement for a general verdict, the prohibition against double jeopardy, and protections for a panel's deliberative process; (2) Jury nullification might not solely swing in a defendant's favor, and a jury encouraged to disregard the law might just as easily convict a defendant for non-evidentiary reasons as acquit; and (3) A nullification instruction might cause juries to acquit for reasons beyond deeply held moral or political views, extending to "a wide variety of misconduct that may have little to no connection to a deeply held moral view, such as violations of the civil rights laws, sexual harassment, vigilantism, and tax fraud."⁹³

CAAF then held that "[t]he same considerations that militate against endorsing jury nullification in civilian criminal trials apply in the military

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.* at 69-70.

⁹¹ *Id.* at 70.

⁹² *Id.* at 71-72.

⁹³ *Id.* at 72.

justice system.”⁹⁴ In fact, the court held, unique aspects of the military justice system supply additional reasons not to permit jury nullification instructions. First, CAAF stated, a court-martial panel is not a jury; it is not composed of randomly selected peers of the accused but rather military members personally selected by the convening authority according to statutorily defined criteria. That criteria does not include the ability to “pick and choose” which laws and rules military members must follow, and, the court held, following rules is particularly important in the military setting:

A jury nullification instruction would provide court members with an authoritative basis to determine that service members need not obey unpopular, but lawful, orders from either their civilian or military superiors. To permit such action would be antithetical both to the fundamental principle of civilian control of the armed forces in a democratic society and to the discipline that is essential to the successful conduct of military operations.⁹⁵

CAAF also stated that a nullification instruction is particularly inapt in the military justice system because of the importance of instructions in court-martial practice. A nullification instruction, the court held, “might breed a disrespect for the rule of law that could undermine protections for the rights of accused persons in the armed forces.”⁹⁶ In court-martial practice, CAAF stated, a primary protection of accused service members lies in “the instruction of court-martial panels in the rights of service members by military judges and the willing acceptance of court-martial panels of their responsibility to follow those instructions, regardless of their personal beliefs as to the wisdom of those protections.”⁹⁷

Based on this total rationale, CAAF held that “a court-martial panel does not have the right to nullify the lawful instructions of a military judge.”⁹⁸ Court-martial members might have the *power* of nullification, but such power represents a mere collateral consequence of the rules regarding general verdicts, the prohibition against a directed guilty verdict, double jeopardy

⁹⁴ *Id.*

⁹⁵ *Id.* at 74.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.* at 75.

protections, and protections for members' deliberative process.⁹⁹ Thus, the military judge did not err in declining to give a nullification instruction.¹⁰⁰

The *Hardy* court dealt with the narrow issue of whether a military judge is *required* to give a nullification instruction. The opinion did not address whether it would be error to provide such an instruction, or whether defense counsel may argue for the members to engage in nullification.¹⁰¹ Those questions were left for another day.¹⁰²

2. Instructions

Military judges give differing instructions to the members about their duties when the government has proven its case beyond a reasonable doubt. The model instruction in the *Military Judges' Benchbook*—the default reference for judges across the services—reads as follows: “if on the whole of the evidence you are satisfied beyond a reasonable doubt of the truth of each and every element, then you should find the accused guilty.”¹⁰³ However, at one point the Air Force's alteration of the *Benchbook* contained a key difference. This version reads: “If, based on your consideration of the evidence, you are firmly convinced that the accused is guilty of any offense charged, you must find him guilty.”¹⁰⁴ On its face, this “must” language seems to prohibit court members from engaging in nullification, while the standard “should” version at least leaves the possibility open.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Huestis, *supra* note 70, at 89.

¹⁰² For another summary of the *Hardy* decision, see Donna M. Wright and Lawrence M. Cuculic, *Annual Review of Developments in Instructions—1997*, ARMY LAW., July 1998, at 47-50.

¹⁰³ DEP'T OF THE ARMY PAMPHLET 27-9, *Military Judges' Benchbook* (Sept. 1, 2014), § 2-5-12 [hereinafter *Military Judges' Benchbook*].

¹⁰⁴ *United States v. McClour*, 2016 CCA LEXIS 82, slip op. at *16 (A.F. Ct. Crim. App. Feb. 11, 2016). The current Air Force version of the *Military Judges' Benchbook* contains the Army's “should find the accused guilty” language, rather than the “must find the accused guilty” language. *Military Judges' Benchbook* (Air Force version), § 2-5-12 (2018), available at <https://www.jagcnet.army.mil/Sites/trialjudiciary.nsf/homeContent.xsp?open&documentId=900756AC675854ED8525804400729CBB> (last accessed Jul. 12, 2019).

This “must find him guilty” instruction was challenged recently in *United States v. McClour*.¹⁰⁵ Senior Airman McClour was tried at a general court-martial on charges of rape and abusive sexual contact.¹⁰⁶ Prior to deliberations, the military judge instructed the members using the “must” language. Trial defense counsel did not object to this instruction.¹⁰⁷ The Air Force Court of Criminal Appeals had previously approved of this instruction, and CAAF’s forerunner had suggested its use as a “possibility.”¹⁰⁸ The members convicted Airman McClour of abusive sexual contact,¹⁰⁹ and he appealed, asserting the military judge’s use of the “must find him guilty” language erroneously violated Supreme Court precedent that prohibits a trial judge from “directing the jury to come forward with a [guilty verdict], regardless of how overwhelmingly the evidence may point in that direction.”¹¹⁰ In a short examination, the Air Force court rejected this argument, citing its previous decision and that of its superior court approving of the instruction at issue.¹¹¹

CAAF granted review on the issue of whether the military judge’s instructions constituted plain error. The defense’s brief to CAAF asserted that the “must” language in the instructions unlawfully deprived Airman McClour of his “legal right to a panel that is authorized to disregard the law.”¹¹² CAAF disagreed, finding no plain error in the judge’s instructions.¹¹³ In so holding, the court declined to entertain the defense’s nullification argument entirely, instead merely focusing on whether the instruction amounted to a directed verdict for the government.¹¹⁴ In fact, the court’s opinion did not even mention nullification or cite to its earlier decision in *Hardy*.

¹⁰⁵ 76 M.J. 23, 26 (C.A.A.F. 2017).

¹⁰⁶ *McClour*, 2016 CCALEXIS 82 at *1.

¹⁰⁷ *Id.* at *17.

¹⁰⁸ *United States v. Sanchez*, 50 M.J. 506, 511 (A.F. Ct. Crim. App. 1999); *United States v. Meeks*, 41 M.J. 150, 157 n.2 (C.M.A. 1994) (citing Federal Judicial Center, Pattern Criminal Jury Instruction 17-18 (1987)).

¹⁰⁹ *McClour*, 2016 CCALEXIS 82 at *1.

¹¹⁰ *Id.* at 16-17 (quoting *United States v. Martin Linen Supply Company*, 430 U.S. 564, 572-73 (1977)).

¹¹¹ *Id.* at 17.

¹¹² *Appellant’s Brief in Support of Petition Granted, United States v. McClour*, USCA Dkt. No. 16-0455/AF (Aug. 3, 2016), at 14-15, <http://www.armfor.uscourts.gov/newcaaf/calendar/201611.htm>.

¹¹³ *United States v. McClour*, 76 M.J. 23, 26 (C.A.A.F. 2017).

¹¹⁴ *Id.* at 25-26.

Thus, under *McClour* and *Hardy*, military judges remain free to not only decline to provide the members with guidance as to their nullification authority, but also to utilize an instruction that seemed to specifically forbid them from reviewing the government's exercise of prosecutorial discretion.¹¹⁵ CAAF and its subordinate service courts have adopted the civilian approach to nullification whole cloth. *Hardy* represents the only discussion of whether differences in the military justice system warrant a divergent approach from civilian courts, and that decision did not decide the issue of whether military judges may instruct on nullification. The *Hardy* opinion is also more than 20 years old and does not reflect whether changes in the military justice system—particularly those with regard to sexual assault allegations—warrant a new approach.

III. MILITARY VS. CIVILIAN CRIMINAL JUSTICE—KEY DIFFERENCES

Military justice has a fundamentally different purpose and structure from civilian criminal justice, and civilian courts' approach to nullification does not necessarily translate to the military justice setting. Fundamental aspects of the military justice system indicate that military judges should take a more permissive approach to nullification. First, commanders play a central role in the military justice system, enjoying broad discretion in how they exercise their authority. Second, the UCMJ criminalizes a wide range of conduct, raising the possibility that accused service members could be convicted for vaguely-defined or minor misconduct. Finally, service members are deprived of a right to a jury trial, depriving them of a key constitutional safeguard. This section explores these general features of the military justice system that call for a more expansive role for nullification; the following section then explores how the concern over sexual assault in the military has highlighted the need for explicit nullification authority in court-martial panels.

A. The Role of the Commander

Military justice resembles civilian criminal justice in many ways: a military judge in a judicial robe presides over most court-martial proceedings; a prosecutor and a defense counsel question witnesses and present argument; and a group of panel members performs a similar function to that of a jury.¹¹⁶

¹¹⁵ CAAF has not yet had the opportunity to decide whether its decision in *McClour* would be any different had an objection been made at trial.

¹¹⁶ See CHRIS BRAY, COURT-MARTIAL: HOW MILITARY JUSTICE HAS SHAPED AMERICA FROM THE REVOLUTION TO 9/11 AND BEYOND xiii (2016) (“If you attended a court-martial today, it

However, military justice differs fundamentally from civilian criminal justice in several respects. The most fundamental of these differences involves the centrality of the military commander.

The purpose of the military justice system is laid out in the preamble to the *Manual for Courts-Martial*: “to promote justice, to assist in maintaining good order and discipline in the armed forces, to promote efficiency and effectiveness in the military establishment, and thereby to strengthen the national security of the United States.”¹¹⁷ The “promote justice” part of the preamble is familiar, but the remainder of this statement is unique to military justice, and explains why military justice is a separate and profoundly different system.

Military justice is historically rooted in a harsh, commander-controlled approach to discipline. Prior to World War I, commanders were allowed broad authority to administer justice as they saw fit.¹¹⁸ As one study of the development of military justice concluded, “From the colonial period until well into the twentieth century, U.S. military commanders enjoyed a position of almost absolute power within the military justice system.”¹¹⁹ The commander handled a wide range of disciplinary matters, and could bend the process to suit his will. Thus, in 1920, the noted military justice scholar Colonel William Winthrop wrote that a court-martial was not a “court” in any real sense of the term but instead a mere instrument of the commander to carry out his will.¹²⁰ In the 1970s, the famously-titled book *Military Justice is to Justice as Military Music is to Music* harshly criticized military justice for the lingering role commanders played in the system. The author observed:

Historically, the man in uniform has been viewed as the property of his commanding officer, to be fed, clothed, rewarded

would look a lot like a trial in your local courthouse: There’s a judge, the two sides look like the prosecutor and the defendant with his defense lawyer, and the members of the court look like a jury”).

¹¹⁷ MCM (2019 ed.), *supra* note 7, pt. I, ¶ 3.

¹¹⁸ *United States v. Bauerbach*, 55 M.J. 501, 502 (Army Ct. Crim. App. 2001) (“Up until World War I, commanders and the public felt that the disciplining of troops was primarily commanders’ business, because a commander who could be trusted to take his troops into combat could also be trusted to treat them fairly in courts-martial.”)

¹¹⁹ Victor Hansen, *Changes in Modern Military Codes and the Role of the Military Commander: What Should the United States Learn from this Revolution?*, 16 TUL. J. INT’L & COMP. L 419, 426 (2008).

¹²⁰ WILLIAM WINTHROP, *MILITARY LAW AND PRECEDENTS*, 49-50 (2nd ed. 1920).

and punished as the commander believed appropriate for the preparation for war and the waging of it. The serviceman has had to bend his personal life to what even such a libertarian as Chief Justice Warren tolerantly viewed as the “military necessity” for absolute discipline, order and conformity. If the serviceman does not bend, his commander—with the approval of the federal government—can break him at will.¹²¹

Concerns over the commander’s role in military justice drove Congress after World War II to enact reforms in the modern the Uniform Code of Military Justice, which survives largely intact today.¹²² These reforms sought to strike a balance between good order and discipline on the one hand and justice on the other by providing for military judges, independent defense counsel, and an improved system of appellate review to provide some check on commanders’ influence over the military justice process.¹²³

Still, commander-imposed discipline remains a central component of military justice.¹²⁴ The commander’s role is “[d]istinctive to military justice”

¹²¹ SHERRILL, *supra* note 1, at 1.

¹²² For discussion of the reports of abuses in the court-martial system that led Congress to act, *see, e.g.*, ROBINSON O. EVERETT, *MILITARY JUSTICE IN THE ARMED FORCES OF THE UNITED STATES* 9-10 (1958); SHERRILL, *supra* note 1, at 75-78; BRAY, *supra* note 116, at 263-293 (2016); John W. Brooker, *Improving Uniform Code of Military Justice Reform*, 222 *MIL. L. REV.* 1, 10-11 (2014).

¹²³ *See* Graci Bozarth, *Strange Bedfellows: The Military, The University, and Sexual Assault*, 84 *UMKC L. REV.* 1003, 1011 (2016) (detailing post-World War II reforms such as the right to counsel and concluding that for reformers, “[a] chief concern regarded the influence of the commander on the military justice process, which translated into due process concerns for prosecuted service members”); Lt Col Jeremy S. Weber, *Sentence Appropriateness Relief in the Courts of Criminal Appeals*, 66 *A.F. L. REV.* 79, 88 (2010) (discussing reforms of court-martial appellate review and concluding that “Congress’s primary concern in establishing a better system for appellate review was to mitigate the virtually unfettered control commanders enjoyed over the court-martial process.”)

¹²⁴ *See generally* David A. Schlueter, *The Military Justice Conundrum: Justice or Discipline?*, 215 *MIL. L. REV.* 1 (2013) (asserting that generally the primary purpose of the military justice system is to enable commanders to enforce good order and discipline in their units); Maj Anthony J. Ghiotto, *Back to the Future with the Uniform Code of Military Justice: The Need to Recalibrate the Relationship Between the Military Justice System, Due Process, and Good Order and Discipline*, 90 *N.D. L. REV.* 475 (2014) (concluding that due process protections have impaired the system’s focus on maintaining good order and discipline, and that the system needs to be recalibrated to restore the discipline aspect).

with “no correlate in civilian criminal justice.”¹²⁵ Military commanders retain a dominant role in the military justice system, possessing powers unparalleled in civilian criminal justice. Following discovery of criminal misconduct, a lower-level commander “prefers” charges by serving them on the accused, and a more senior commander (called a convening authority) then “refers” the case to trial, thereby creating the court-martial.¹²⁶ Thus, commanders—not lawyers—decide who gets tried for what criminal offenses. Convening authorities also decide whether to accept or deny: an offer for a plea bargain (a “pre-trial agreement” in court-martial parlance); requests for probable cause searches; witness immunity requests; and agreements to employ expert witnesses.¹²⁷ After a case is tried, the convening authority receives matters from the convicted service member and the defense counsel, and may grant clemency to the service member in the findings or the sentence in certain situations.¹²⁸ When clemency may be granted, the convening authority has complete discretion in this decision, subject to certain recently imposed limits.¹²⁹

Thus, the UCMJ continues “to uphold the central role of the commanding officer as convening authority with the consolidation of executive and judicial functions.”¹³⁰ This principal, discretionary role of the commander continues to evoke controversy. Even though the UCMJ and the implementing *Manual for Courts-Martial* are regularly reviewed and updated with an eye toward improving the system,¹³¹ twenty-first century views persist that mili-

¹²⁵ EUGENE R. FIDELL ET. AL., *MILITARY JUSTICE CASES AND MATERIALS* 79 (2007).

¹²⁶ See MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 307(a) (describing who may prefer charges); UCMJ arts. 22-24 (codified at 10 U.S.C. §§ 822-824 (2019) (describing who may convene courts-martial)).

¹²⁷ MCM (2019 ed.), *supra* note 7, pt. II, Rules for Courts-Martial 315(d), 704(c), 703(d), 705 (2017).

¹²⁸ UCMJ art. 60(c) (codified at 10 U.S.C. § 860(c) (2017)); MCM, *supra* note 7 (2016 ed.), pt. II, R.C.M. 1107. Recent amendments to UCMJ Article 60(c) limited the authority of the convening authority to grant clemency in terms of findings or the sentence. NDAA for Fiscal Year 2014, *supra* note 3, § 1702.

¹²⁹ Compare MCM (2016 ed.), *supra* note 7, pt. II, R.C.M. 1107(b)(1) (“Any action to be taken on the findings and sentence is within the sole discretion of the convening authority”) with MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 1107(b)(1) (“The convening authority may suspend the execution of a court-martial sentence as authorized under R.C.M. 1109 or 1110.”).

¹³⁰ Jonathan Turley, *Tribunals and Tribulations: The Antithetical Elements of Military Governance in a Madisonian Democracy*, 70 GEO. WASH. L. REV. 649, 666 (2002).

¹³¹ See generally Brooker, *supra* note 122, at 15-42 (detailing processes through which the Department of Defense, Congress, and the public recommend and advocate for military justice reform).

tary justice is not true justice because it exists to carry out the commander's predetermined will rather than to seek justice. A 2001 report on the 50th anniversary of the UCMJ observed:

[T]he far-reaching role of commanding officers in the court-martial process remains the greatest barrier to operating a fair system of criminal justice within the armed forces. Fifty years into the legal regime implemented by the UCMJ, commanding officers still loom over courts-martial, able to intervene and affect the outcomes of trials in a variety of ways. The Commission recognizes that in order to maintain a disciplinary system as well as a justice system commanders must have a significant role in the prosecution of crime at courts-martial. But this role must not be permitted to undermine the standard of due process to which servicemembers are entitled.¹³²

Likewise, a notable 2002 *U.S. News & World Report* article harshly criticized the military justice system for failing to protect accused service members' rights, focusing particularly on the role of the commander.¹³³

As part of this commander-centric, discretionary model of justice, a commander enjoys wide latitude in determining how to dispose of a given criminal allegation. UCMJ articles are not characterized as "felony" or "misdemeanor" offenses, and commanders are issued no binding direction as to what allegations belong in what forum.¹³⁴ A commander has numerous options at his or her disposal, including three levels of court-martial, non-judicial punishment in which the commander decides guilt or innocence and imposes punishment, administrative actions such as letters of reprimand, and

¹³² *Report of the Commission on the 50th Anniversary of the Uniform Code of Military Justice* (May 2001), 6, http://www.loc.gov/rr/frd/Military_Law/pdf/Cox-Commission-Report-2001.pdf.

¹³³ Pound, *supra* note 1, at 19-30.

¹³⁴ Matthew S. Freedus and Eugene R. Fidell, *Conviction by Special Courts-Martial: A Felony Conviction?*, 15 Fed. Sent. R. 220, 221 (2003) ("One of the many unique features of military justice is that it does not distinguish between misdemeanor and felony convictions.") A recent amendment to the UCMJ does direct the Secretary of Defense to promulgate non-binding guidance regarding that commanders, convening authorities, and judge advocates should take into account when exercising their duties with respect to disposition of charges and specifications. UCMJ art. 33 (codified at 10 U.S.C. §833 (2019)).

administrative discharge from the service.¹³⁵ A staff judge advocate typically advises the commander on a proper level of response, but the decision belongs to the commander, not the lawyer.¹³⁶

Because the military justice system invests these decisions in individual commanders, the process is necessarily decentralized and leads to disparate results. One commander might believe that cocaine use warrants prosecution at a general court-martial. Another might believe it warrants prosecution at a lower-level court-martial or even non-judicial punishment.¹³⁷ Commanders receive “wide discretion to choose among a variety of options in disposing of a charge, including referring the charges to a general court-martial.”¹³⁸ Individual commanders are permitted to decide what is best based on their units, personnel, missions, resources, and state of good order and discipline. As the Court of Appeals for the Armed Forces has recognized: “The military justice system is highly decentralized. Military commanders stationed at diverse locations throughout the world have broad discretion to decide whether a case should be disposed of through administrative, nonjudicial, or court-martial channels.”¹³⁹

While commanders face few limits in the exercise of such discretion, they may not engage in “unlawful command influence,” including coercing or using unauthorized means to influence the actions of a commander with respect to his or her judicial acts.¹⁴⁰ Unlawful command influence is often described as the “mortal enemy of military justice” because of the hierarchical nature of military command and its potential to exert unfair pressure on commanders.¹⁴¹ The unlawful command influence doctrine has been held to apply not just to adjudicative matters (interference with witnesses, judges, members or counsel) but also “accusatory” aspects of the military justice process (such

¹³⁵ Schlueter, *American Military Justice*, *supra* note 4, at 207.

¹³⁶ *Id.*

¹³⁷ Hon. James E. Baker, *Is Military Justice Sentencing on the March? Should It Be? And If So, Where Should It Head? Court-Martial Sentencing Process, Practice, and Issues*, 27 FED. SENT. R. 72 (2014) (“Selection of a court-martial forum can also have as much to do with how prosecutorial discretion is exercised, as it does with the nature of the offense. For example, an offense like drug use might appropriately be referred to NJP or any of the three types of courts-martial, depending on the circumstances. However, offenses like murder will invariably be referred to a general court-martial.”).

¹³⁸ *United States v. Ashby*, 68 M.J. 108, 131 (C.A.A.F. 2009).

¹³⁹ *United States v. Lacy*, 50 M.J. 286, 287-88 (C.A.A.F. 1999).

¹⁴⁰ UCMJ art. 37(a) (codified at 10 U.S.C. § 837(a) (2019)).

¹⁴¹ *United States v. Thomas*, 22 M.J. 388, 393 (C.M.A. 1986).

as preferral and referral of charges).¹⁴² Thus, a superior commander may not direct his or her subordinate to send a case to trial or take any other specific disciplinary action, and a commander may not reprimand or censure a member of the court for a verdict imposed or a sentence adjudicated.¹⁴³ Beyond this boundary, however, commanders are largely free to impose discipline as they see fit, so long as they do not unlawfully discriminate against military members based on protected traits.¹⁴⁴

Courts-martial can garner high levels of public attention.¹⁴⁵ This attention has increased in the age of omnipresent media. In the words of one attorney and retired general officer, recent years have seen “a new, expanded interest by the media in the military, including military justice.... In fact, in the past decade, it is fair to say that the media has discovered military justice.”¹⁴⁶ This can place a strain on the military justice system, as senior commanders are well aware of the potential for their decisions in military justice matters to be criticized, and they know that a “wrong” decision—a decision that turns out to be politically unpopular—can effectively end a career. To quote a law professor and former judge advocate commenting on the controversial case of deserter Bowe Bergdahl:

Bergdahl’s case reveals how broken military justice is. It demonstrates a systemic flaw in how charges get to trial, in that military prosecutorial decision-making is hugely vulnerable to inappropriate influences. This defect stems from the fact that high-ranking commanders—not district attorneys like in our cities—decide how to dispose of allegations of misconduct in the military. Military commanders are supposed to make individualized decisions about whether to prosecute service-

¹⁴² United States v. Weasler, 43 M.J. 15, 17-18 (C.A.A.F. 1995).

¹⁴³ UCMJ art. 37(a) (codified at 10 U.S.C. §837(a) (2019)).

¹⁴⁴ See United States v. Argo, 54 M.J. 454, 463 (C.A.A.F. 1997) (“To support a claim of selective or vindictive prosecution, the accused has a ‘heavy burden’ of showing that ‘other similarly situated’ have not been charged, that ‘he has been singled out for prosecution,’ and that his ‘selection...for prosecution’ was ‘invidious or in bad faith, *i.e.*, based upon such impermissible considerations as race, religion, or the desire to prevent his exercise of constitutional rights.” (quoting in part United States v. Garwood, 20 M.J. 148, 154 (C.M.A. 1985)).

¹⁴⁵ See generally BRAY, *supra* note 116, and JOSEPH DI MONA, GREAT COURT-MARTIAL CASES (1972) (detailing particularly high-visibility courts-martial throughout American history).

¹⁴⁶ James Schwenk, “Military Justice and the Media: The Media Interview,” 12 USAFA J. L. STUD. 15 (2002/2003), http://www.au.af.mil/au/awc/awcgate/usafa/media_law.pdf.

members based on the facts at hand, free from unfair factors such as worry about their own careers. Reality is different.¹⁴⁷

As another law review author and former Army judge advocate stated: “While most commanders are patriotic, loyal, and primarily focused on doing what is right when they engage in the administration of justice, the reality is that commanders are human beings and all too often submit to the pressures generated by high profile political cases....”¹⁴⁸

B. The Long Arm of Military Law

To help effect such broad discretion in commanders, the UCMJ offers commanders an almost limitless array of criminal offenses under which service members may be charged. The UCMJ contains a broad collection of crimes ranging from traditional felony-level offenses (murder, rape and larceny) to offenses normally handled as misdemeanors in civilian jurisdictions (minor drug use, drunk and disorderly conduct, simple assault) to numerous military-specific offenses (absence offenses, dereliction of duty, and general offenses such as conduct prejudicial to good order and discipline).¹⁴⁹

Most notably, the UCMJ contains two so-called “general articles”¹⁵⁰ that punish a wide variety of actions. When it comes to officers or service academy cadets, UCMJ Article 133 criminalizes all “conduct unbecoming an officer and a gentleman.”¹⁵¹ Article 134, meanwhile, allows commanders to discipline any service member for “all disorders and neglects to the prejudice of good order and discipline in the armed forces” and “all conduct of a nature to bring discredit upon the armed forces.”¹⁵² The general articles thus

¹⁴⁷ Rachel E. VanLandingham, “Bowe Bergdahl Case Spotlights Military Justice System Driven by Politics and Retribution,” USA TODAY (Oct. 13, 2017), <https://www.usatoday.com/story/opinion/2017/10/13/bergdahl-case-spotlights-military-justice-system-driven-by-politics-rachel-vanlandingham-column/758972001/>.

¹⁴⁸ James W. Smith III, *A Few Good Scapegoats: The Abu Ghraib Courts-Martial and the Failure of the Military Justice System*, 27 WHITTIER L. REV. 671, 707 (2006).

¹⁴⁹ The full list of UCMJ offenses, with elements, definitions, model specifications, and maximum punishments, can be found in the MCM (2019 ed.), *supra* note 7, Part IV.

¹⁵⁰ See Edward J. Imwinkelried & Donald N. Zillman, *An Evolution in the First Amendment: Overbreadth Analysis and Free Speech Within the Military Community*, 54 TEX. L. REV. 42, 43 (1975) (“Articles 133 and 134 are the ‘general articles.’”)

¹⁵¹ UCMJ art. 133 (codified at 10 U.S.C. § 933 (2019)).

¹⁵² UCMJ art. 134 (codified at 10 U.S.C. § 934 (2019)). Article 134 also encompasses “crimes and offenses not capital.”

cover an “extraordinary” range of conduct,¹⁵³ and the broad scope of Article 134 in particular has long been recognized as the “most comprehensive and potentially most subject to abuse; hence its traditional British nickname, ‘the Devil’s Article.’”¹⁵⁴ The general articles give commanders remarkable authority to characterize conduct as criminal by determining that actions are unbecoming of an officer and a gentleman, are prejudicial to good order and discipline, or are of a nature to bring discredit upon the armed forces. As a former chief judge of the Court of Military Appeals noted, “[t]remendous flexibility—and perhaps some vagueness—is incorporated” by the general articles,¹⁵⁵ and they are so broad that their “true meaning might baffle the examination of the most skilled lawyer.”¹⁵⁶

The UCMJ is not limited to military-specific crimes, or even crimes that have any connection to military service. It was not always this way; in 1969, the Supreme Court limited court-martial jurisdiction to crimes that were “service connected,” reasoning that “[t]he catalog of cases put within reach of the military is indeed long,” and the Court needed to set some outer limit on the UCMJ’s reach.¹⁵⁷ Under the service-connected test, the government had to demonstrate an adequate proximity between the crime and military duty or necessity.¹⁵⁸ The Court later developed a lengthy list of factors to consider in determining whether a service member’s misconduct was service-connected.¹⁵⁹ After a period in which application of these factors

¹⁵³ HOMER E. MOYER, JR., *JUSTICE AND THE MILITARY* 1051 (1972).

¹⁵⁴ Michael Noone, *Justice, Military: Military Crimes*, in *THE OXFORD COMPANION TO AMERICAN MILITARY HISTORY* 356, 357 (John Whiteclay Chambers II ed., 1999); D.B. Nichols, *The Devil’s Article*, 22 *MIL. L. REV.* 111, 112 (1963). *But see* Col Jeremy S. Weber, *Whatever Happened to Military Good Order and Discipline?*, 66 *CLEV. ST. L. REV.* 122 (2017) (asserting that the military’s ability to prosecute cases under Article 134’s conduct prejudicial to good order and discipline clause has been hampered by fundamental confusion over what the term “good order and discipline” means).

¹⁵⁵ ROBINSON O. EVERETT, *MILITARY JUSTICE IN THE ARMED FORCES OF THE UNITED STATES* 63 (1958).

¹⁵⁶ Robinson O. Everett, *Article 134, Uniform Code of Military Justice—A Study in Vagueness*, 37 *N.C. L. REV.* 142, 142 (1958).

¹⁵⁷ *O’Callahan v. Parker*, 395 U.S. 258, 272-73 (1969).

¹⁵⁸ *Id.* at 273-74.

¹⁵⁹ *Relford v. Commandant*, 401 U.S. 355, 365 (1971), The factors the Court listed were:

1. The serviceman’s proper absence from the base.
2. The crime’s commission away from the base.
3. Its commission at a place not under military control.
4. Its commission within our territorial limits and not in an occupied zone of a foreign country.

proved unwieldy,¹⁶⁰ the Court abruptly reversed itself, holding that the only prerequisites for court-martial jurisdiction are that the accused was a member of the armed forces at the time he or she committed the charged misconduct.¹⁶¹ Unbound from the service connection requirement, “the expansion of courts-martial jurisdiction became complete and universal for military members.”¹⁶²

Military members can even face a court-martial for offenses that are not specifically listed in the UCMJ, but are violations of federal or state law and are assimilated under the “crimes and offenses not capital” provision of UCMJ Article 134.¹⁶³ The commander’s ability to impose discipline is also not legally limited by a state’s decision to maintain jurisdiction over an offense, as the Double Jeopardy Clause does not prohibit two prosecutions by different sovereigns (the federal and the state governments).¹⁶⁴ To the extent

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5. Its commission in peacetime and its being unrelated to authority stemming from the war power.
 6. The absence of any connection between the defendant’s military duties and the crime.
 7. The victim’s not being engaged in the performance of any duty relating to the military.
 8. The presence and availability of a civilian court in which the case can be prosecuted.
 9. The absence of any flouting of military authority.
 10. The absence of any threat to a military post.
 11. The absence of any violation of military property.

The Court also listed a twelfth factor that could be considered: The offense being among those traditionally prosecuted in civilian courts. *Id.* The Court later condensed these factors into three primary considerations: (1) the impact of the offense on military discipline and effectiveness; (2) whether the military interest in deterring the offense is distinct from and greater than that of civilian society; and (3) whether the military’s interest can adequately be vindicated in the civilian courts. *Schlesinger v. Councilman*, 420 U.S. 738, 758 (1975).

¹⁶⁰ See Schlueter, *American Military Justice*, *supra* note 4, at 217-19 (examining difficulties applying the factors); In *Solorio v. United States*, 483 U.S. 435, 448 (1987) (“the service connection approach, even as elucidated in *Relford*, has proved confusing and difficult for military courts to apply”).

¹⁶¹ *Solorio*, 483 U.S. at 451.

¹⁶² *Williams*, *supra* note 7, at 483.

¹⁶³ The Assimilative Crimes Act, 18 U.S.C. § 13 (2005), allows the military to assimilate certain violations of state law into federal jurisdiction and thus into UCMJ Article 134. MCM (2019 ed.), *supra* note 7, pt. IV, ¶ 60.c(4)(c)(ii).

¹⁶⁴ See generally Anthony J. Colangelo, *Double Jeopardy and Multiple Sovereigns*, 86 WASH. U. L. REV. 769 (2009) (broadly exploring the phenomenon of multiple sovereigns with jurisdiction over a matter and proposing that where multiple sovereigns legitimately may exercise jurisdiction, institutionalized comity mechanisms between the sovereigns

that service policies caution against dual prosecution in such situations, the services employ a general practice of seeking to maximize military jurisdiction over offenses committed by service members by requesting that civilians release jurisdiction to the military.¹⁶⁵

Recent trends all point in the direction of an increasing reach of military law. In some instances, a person does not even need to be “in” the military for court-martial jurisdiction to attach. Retirees from active duty who receive retirement pay remain subject to the UCMJ,¹⁶⁶ and the military has recently made aggressive use of this authority to prosecute retirees.¹⁶⁷ Reservists may be subject to court-martial jurisdiction even in some isolated situations when they are not on orders,¹⁶⁸ and Congress recently expanded the

can ensure both sovereigns’ interests are represented while protected against multiple prosecutions). While Double Jeopardy does not prohibit two prosecutions against service members in such a situation, military policy often discourages the practice. *See, e.g.,* Air Force Instruction 51-201, *Administration of Military Justice*, ¶ 4.18.1.1 (Jan. 18, 2019) [hereinafter AFI 51-201] (“A member who is pending trial or has been tried by a state or foreign court, regardless of whether the member was convicted or acquitted of the offense, should not ordinarily be tried by court-martial or subjected to nonjudicial punishment for the same act or omission, except upon the Secretary of the Air Force approval...”). The Supreme Court of the United States recently upheld the separate sovereigns doctrine in *Gamble v. United States*, 587 U.S., 139 S.Ct. 1960 (2019).

¹⁶⁵ AFI 51-201, *supra* note 164, ¶ 4.18 (“Convening Authorities and [Staff Judge Advocates] should foster relationships with local civilian authorities with a view toward maximizing Air Force jurisdiction.”)

¹⁶⁶ UCMJ art. 2(a)(4) (codified at 10 U.S.C. § 802(a)(4) (2019)).

¹⁶⁷ *See, e.g.,* *United States v. Dinger*, 76 M.J. 552 (N.M. Ct. Crim. App. 2017) (upholding the conviction of a retired Marine for offenses that occurred while the member was already retired). Recently, the Army also moved to court-martial a retired general for allegedly repeatedly raping a girl between 1983 and 1989, though a decision by CAAF regarding the applicability of the statute of limitations may block the Army’s efforts. Dan Lamothe, *Army Struggles With 30-Year-Old Rape Allegations Against Retired General*, WASH. POST, Dec. 19, 2017, https://www.washingtonpost.com/news/checkpoint/wp/2017/12/19/army-struggles-with-the-complexities-of-prosecuting-a-retired-general-accused-of-rape/?utm_term=.81d955401dbf. A popular military justice blog recently named the military’s exercise of jurisdiction over retirees—even extending to offenses committed in retirement—as its number one military justice story of 2017. Zachary Spilman, *Top Ten Military Justice Stories of 2017—#1: Exercising Court-Martial Jurisdiction Over Retired Members*, CAAFLOG, Jan. 1, 2018, <http://www.caaflog.com/2018/01/01/top-ten-military-justice-stories-of-2017-1-exercising-court-martial-jurisdiction-over-retired-members/#more-38113>.

¹⁶⁸ *See* *United States v. Phillips*, 58 M.J. 217 (C.A.A.F. 2003) (holding that, under the facts of that case, the Air Force had jurisdiction to court-martial a reserve officer for misconduct that occurred during her travel day to perform military duties).

reach over Reservists between periods of military service.¹⁶⁹ Court-martial jurisdiction can even attach to civilians who have never served in the military; since 2006, the UCMJ has authorized military trials for civilians “serving with or accompanying an armed force in the field” during times of war or contingency operations.¹⁷⁰

The arm of military law is long indeed. Nearly any act of misconduct committed by a service member worldwide, 24/7, can be subject to a court-martial. Commanders can bring military members—or sometimes others—to court-martial for any offense committed while they serve in the military, whether on base or off, on duty or off, or whether impacting the military or not.

C. The Lack of a Right to a Jury Trial

While a panel of court-martial members might hear evidence and render verdicts much like a jury, the panel is not a jury.¹⁷¹ Although the Sixth Amendment guarantees the right to an impartial jury in “all criminal prosecutions,”¹⁷² this right has not applied to military courts-martial from the nation’s outset.¹⁷³ For example, when the Supreme Court imposed the service-connection test, it did so because it found that in courts-martial, “not all of the specified procedural protections deemed essential in Art. III trials need apply,” including the Sixth Amendment right to a jury trial.¹⁷⁴ The Court then engaged in an extended discussion of the differences in courts-martial in this respect:

[T]here is a great difference between trial by jury and trial by selected members of the armed forces. It is true that military personnel because of their training and experience may be especially competent to try soldiers for infractions of military

¹⁶⁹ NDAA for Fiscal Year 2017, *supra* note 3, § 5102 (2016) (amending the UCMJ to provide jurisdiction over reservists during travel to and from periods of inactive-duty training, and between consecutive periods of inactive-duty training). Those changes are now part of UCMJ art. 2(a)(3) (codified at 10 U.S.C. § 802(a)(3) (2019)).

¹⁷⁰ UCMJ art. 2(a)(10) (codified at 10 U.S.C. § 802(a)(10) (2006)).

¹⁷¹ *See generally* Williams, *supra* note 7, at 485-502 (exploring differences between a civilian jury and a court-martial panel).

¹⁷² U.S. CONST. amend. VI (1789).

¹⁷³ Williams, *supra* note 7, at 476-77.

¹⁷⁴ O’Callahan v. Parker, 395 U.S. 258, 262 (1969).

rules. Such training is no doubt particularly important where an offense charged against a soldier is purely military, such as disobedience of an order, leaving post, etc. But whether right or wrong, the premise underlying the constitutional method for determining guilt or innocence in federal courts is that laymen are better than specialists to perform this task. This idea is inherent in the institution of trial by jury.

A court-martial is tried, not by a jury of the defendant's peers which must decide unanimously, but by a panel of officers empowered to act by a two-thirds vote.... [T]he suggestion of the possibility of influence on the actions of the court-martial by the officer who convenes it...and who usually has direct command authority over its members is a pervasive one in military law, despite strenuous efforts to eliminate the danger.¹⁷⁵

Juries and court-martial panels differ primarily in their size and degree of unanimity required. For federal civilian prosecutions, a jury must consist of twelve people.¹⁷⁶ Federal juries are also required to be unanimous in their verdicts.¹⁷⁷ State juries are not necessarily subject to the same requirements as the federal system. For example, state juries need not necessarily be unanimous to pass constitutional muster,¹⁷⁸ even though state law in all but two states requires a unanimous verdict to convict on a felony charge.¹⁷⁹ State

¹⁷⁵ *Id.* at 263-65.

¹⁷⁶ *Thompson v. Utah*, 170 U.S. 343, 351 (1898) (overturning the conviction in District Court, as “it was his constitutional right to demand that his liberty should not be taken from him except by the joint action of the court and the unanimous verdict of a jury of twelve persons.”) *See also* FED. R. CRIM. P. 23(b)(1) (“A jury consists of 12 persons unless this rule provides otherwise” [such as when agreed upon by the parties or when a juror is excused during the proceedings].)

¹⁷⁷ *See, e.g., United States v. Scalzitti*, 578 F.2d 507, 512 (3d Cir. 1978) (discussing the requirement of unanimity in the federal jury system, its role as “an indispensable element of a federal jury trial,” and its “deep roots in federal jurisprudence.”) *See also* FED. R. CRIM. P. 31(a) (“The jury must return its verdict to a judge in open court. The verdict must be unanimous.”)

¹⁷⁸ *Apodaca v. Oregon*, 406 U.S. 404 (1972); *Johnson v. Louisiana*, 406 U.S. 356 (1972).

¹⁷⁹ OREGON REV. STAT. § 136.450 (Except in murder or aggravated murder cases, “the verdict of a trial jury in a criminal action shall be by concurrence of at least 10 of 12 jurors”); LOUISIANA CODE CRIM. P. § 782A (For non-capital cases: “Cases in which punishment is necessarily confinement at hard labor shall be tried by a jury composed of twelve jurors, ten of whom must concur to render a verdict. Cases in which the punishment may be confinement at hard labor shall be tried by a jury composed of six

juries also may be smaller than twelve people—as small as six—“particularly if the requirement of unanimity is retained.”¹⁸⁰ The Supreme Court established the lower limits of permissible jury size in *Ballew v. Georgia*, holding that the five-person jury provided by Georgia law was unconstitutional because such a small jury is inherently unreliable.¹⁸¹ Likewise, in *Burch v. Louisiana*, the Court overturned a conviction when a six-person jury voted five to one to convict, thus effectively shrinking the size of the jury required to convict below six.¹⁸² The Sixth Amendment’s size and unanimity requirements are a crucial safeguard against wrongful convictions, as larger, unanimous juries arguably engage in more debate, represent a greater variety of viewpoints, and force minority views to be more fully heard.¹⁸³

The military justice system contains no such safeguards. Except in death penalty cases, a service member may be convicted by a two-thirds majority of court-martial “members.”¹⁸⁴ Moreover, courts-martial may consist of far fewer members than civilian juries, with a minimum of five members required even for felony-type offenses and just three for misdemeanor-type offenses.¹⁸⁵ The problems created by small, non-unanimous panels have not gone unnoticed by practitioners. A judge advocate writing in a recent law review article noted that the small size of court-martial panels makes them “too small for effective deliberations,” and “the panel’s most pernicious feature is that the members do not have to unanimously agree on the findings.”¹⁸⁶ An earlier commentary by two military justice practitioners asserted although the Sixth Amendment’s jury requirement does not apply to courts-martial, the size and lack of unanimity in court-martial panels violates the Due Process

jurors, all of whom must concur to render a verdict.”)

¹⁸⁰ *Williams v. Florida*, 399 U.S. 78, 100 (1970) (citations omitted).

¹⁸¹ *Ballew v. Georgia*, 435 U.S. 223, 232-36 (1978)

¹⁸² *Burch v. Louisiana*

¹⁸³ *Williams*, *supra* note 7, at 492-97.

¹⁸⁴ Article 52(a)(2), UCMJ, 10 U.S.C. § 852(a)(2) (requiring concurrence of two-thirds of members present to convict a service member for any offense other than one for which the death penalty is made mandatory by law). A recent amendment increases this requirement to three-fourths. National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, 130 Stat. 2000, § 5235 (2016).

¹⁸⁵ Article 16, UCMJ, 10 U.S.C. § 816 (2017). Recent amendments to the UCMJ increase the size of court-martial panels to eight members for general courts-martial and four members for special courts-martial; those changes went into effect as this article was being prepared for publication. National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, 130 Stat. 2000, § 5235 (2016).

¹⁸⁶ *Williams*, *supra* note 7, at 494.

Clause, arguing that the same findings that led the Supreme Court to adopt its size and unanimity requirements apply with equal force to courts-martial.¹⁸⁷

In a 1986 decision involving a collateral attack on a court-martial conviction, the Tenth Circuit seemed sympathetic to concerns about the size and lack of unanimity in court-martial panels. The court recognized that “a considerable resemblance” between modern court-martial panels and civilian juries “lends some credence to petitioner’s argument that the same number and unanimity requirements which govern conviction in a civilian criminal trial should also apply to convictions by a court-martial panel.”¹⁸⁸ That court also found that the military justice system’s smaller panels and lack of a unanimity requirement presented “close and troubling questions” under a Fifth Amendment analysis.¹⁸⁹ Ultimately, though, the Tenth Circuit held that military members are not entitled to a jury trial with its accompanying size and unanimity requirements.¹⁹⁰

Military appellate courts have been unreceptive to constitutional challenges to the UCMJ’s structure of smaller, non-unanimous panels. While CAAF has not explicitly held that Supreme Court precedent for panel size and unanimity do not apply to courts-martial,¹⁹¹ its predecessor has summarily rejected a complaint that “Appellant was denied a fundamentally fair criminal trial as guaranteed by the Fifth and Sixth Amendments where the findings of guilty were announced by less than a unanimous verdict of eight members.”¹⁹² The intermediate-level courts of the individual services have also rejected contentions that military members have a right to a unanimous verdict.¹⁹³

¹⁸⁷ Richard J. Anderson and Keith E. Hunsucker, *Is the Military Nonunanimous Finding of Guilty Still an Issue*, ARMY LAW., Oct. 1986, 57, 58-59. *But see* Sanford v. United States, 586, F.3d 28 (D.C. Cir. 2009) (rejecting the argument that the Due Process Clause requires compliance with Sixth Amendment size and unanimity propositions at courts-martial).

¹⁸⁸ Mendrano v. Smith, 797 F.2d 1538, 1539-41 (10th Cir. 1986).

¹⁸⁹ *Id.* at 1547.

¹⁹⁰ *Id.* at 1541, 1547.

¹⁹¹ EUGENE R. FIDELL ET AL., MILITARY JUSTICE CASES AND MATERIALS 726 (2007) (“Surprisingly, the Court of Appeals for the Armed Forces has never discussed the applicability of the *Ballew/Burch* line of cases to courts-martial.”)

¹⁹² United States v. Brammel, 32 M.J. 3 (C.M.A. 1990) (summary disposition).

¹⁹³ *See, e.g.*, United States v. Guilford, 8 M.J. 598, 601-02 (A.C.M.R. 1979) (The decisions in *Ballew* and *Burch*, although urged upon us by the appellant, do not apply to his case. *Ballew* does not apply because the court-martial to which appellant’s case was tried consisted of more than six members (*viz.*, seven). *Burch* does not govern because

The lack of a jury trial right in courts-martial is also reflected in who composes the panel. A court-martial is not a standing court; it is created only when the convening authority refers the case to trial.¹⁹⁴ When the convening authority refers a matter to trial, he or she creates the court by selecting the members who will hear the case, if the accused chooses to be tried by members. Court-martial members are not selected at random from a list of registered voters. Instead, the convening authority individually selects them by name, usually from a roster of military members within his or her command.¹⁹⁵ Selection to a court-martial means that the convening authority has personally identified that member as the “best qualified” under the UCMJ’s criteria, which include “age, education, training, experience, length of service, and judicial temperament.”¹⁹⁶ Any court-martial member must also outrank the accused in a given case.¹⁹⁷ Court-martial panels, thus, do not represent the “jury of one’s peers” drawn from a cross-section of the community to protect the defendant from the power of the state, an ideal that embodies the notion of a jury trial.¹⁹⁸

The military justice’s approach to the trier of fact is not without its advantages. By requiring the convening authority to select the best-qualified

the Court expressly eschewed any intimation of its views as to the constitutionality of nonunanimous verdicts rendered by juries of more than six members.... By clear implication of the Fifth and Sixth Amendments, the right to a trial by jury as contemplated in the Sixth Amendment does not apply to military trials of members of the armed forces in active service). *See also* United States v. Corl, 6 M.J. 914 (N.M.C.M.R. 1979); United States v. Palma, ACM 38638, slip op. (A.F. Ct. Crim. App. Oct. 19, 2015); United States v. Spear, ACM 38537, slip op. (A.F. Ct. Crim. App. July 30, 2015); United States v. Novy, ACM 38554, slip op. (A.F. Ct. Crim. App. July 14, 2015) (all rejecting the assertion that *Ballew* and *Burch* require larger, unanimous court-martial panels).

¹⁹⁴ United States v. Denedo, 556 U.S. 904, 925 (2009) (“[A] court-martial is not a standing court. On a case-by-case basis, “[i]t is called into existence for a special purpose and to perform a particular duty. When the object of its creation has been accomplished it is dissolved.”) (citations omitted).

¹⁹⁵ Under the Rules for Courts-Martial, the convening authority may detail court-martial members under the convening authority’s command, or may select members from a different command when those members are made available to him or her. MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 503(a)(3).

¹⁹⁶ UCMJ art. 25(e)(2) (codified at 10 U.S.C. § 825(e)(2) (2019)).

¹⁹⁷ UCMJ art. 25(e)(1) (codified at 10 U.S.C. § 825(e)(1) (2019)). The members also, of course, differ among others in rank. Military judges typically issue instructions that members are not to allow differences in rank to affect their deliberations.

¹⁹⁸ *See* Williams v. Florida, 399 U.S. 78, 87 (1970) (finding “a long tradition attaching great importance to the concept of relying on a body of one’s peers to determine guilt or innocence as a safeguard against arbitrary law enforcement).

members, court-martial panels are generally well educated and they are motivated to perform their duties well.¹⁹⁹ As a former general officer in the Army Judge Advocate General's Corps stated, "I believe our system provides us with better educated and more conscientious panels, on average, than any other system would."²⁰⁰ This coincides with the view of many practitioners who believe that, despite the smaller panel sizes and lack of a unanimity requirement, court-martial panels provide a fairer forum for accused service members than civilian juries do for criminal defendants.²⁰¹ The Supreme Court has even recognized that court-martial panel members exhibit a "high degree of honesty and sense of justice which nearly all of them undoubtedly have,"²⁰² while a CAAF judge categorized court-martial members as "blue ribbon panels."²⁰³

¹⁹⁹ See Christopher W. Behan, *Don't Tug on Superman's Cape: In Defense of Convening Authority Selection and Appointment of Court-Martial Panel Members*, 176 MIL. L. REV. 190, 303-04 (2003):

One would expect that an informed citizen, aware of all the facts, would look favorably upon the rights offered by the military justice panel system to the accused. Selection of panel members is, like many other decisions a commander makes, simply another exercise of operational responsibilities. It provides a benefit to the commander because, by selecting his best-qualified subordinates, he ensures the quality of justice meted out to his soldiers is high, and it demonstrates his commitment and vision that justice is important to him. The system is fair and flexible, and it offers the military accused choices that are unavailable to civilian criminal defendants. The panels are well-educated, honest, and faithful to their oaths.

²⁰⁰ John S. Cooke, *The Twenty-Sixth Annual Kenneth J. Hodson Lecture: Manual for Courts-Martial 20XX*, 156 MIL. L. REV. 1, 25 (1998).

²⁰¹ See, e.g., Robert F. Holland, *Improving Criminal Jury Verdicts: Learning from the Court-Martial*, 97 J. CRIM. L. & CRIMINOLOGY 101, 105 (offering the view of a former military judge that "the military jury trial, while no more perfect than any other human institution, is a fundamentally fair and sound process for determining criminal culpability."); Behan, *supra* note 199, at 304 ("The UCMJ has proven its worth as a fair system of justice that grants due process to individuals, while preserving the flexibility, efficiency, and ease of administration necessary in a military setting. No one seriously questions its actual fairness.") The famous trial lawyer F. Lee Bailey is noted to have said that if he were innocent, he would rather be tried before a court-martial than any civilian criminal court. F. LEE BAILEY, FOR THE DEFENSE 38 (1976).

²⁰² United States ex rel. Toth v. Quarles, 350 U.S. 11, 17 (1955).

²⁰³ United States v. Wiesen, 56 M.J. 172, 180 (C.A.A.F. 2001) (Crawford, C.J., dissenting).

Still, the fact remains that a court-martial panel is not a jury, and the method in which members are selected carries two significant drawbacks for accused service members. First, because they are selected according to specific criteria and because they must outrank the accused, court-martial panels are necessarily not a cross-section of the community and may not provide the same level of diversity as a randomly-drawn collection of jurors. Diversity is generally believed to promote better discussion and deliberation, and provide a more authoritative verdict by reflecting the values of the community from which the jury is drawn.²⁰⁴ Especially considering Article 25's "judicial temperament" criterion, convening authorities may tend—unwittingly or otherwise—to select members who think alike, increasing the danger of "groupthink" in deliberations.²⁰⁵ This leads into the second primary downside of the military justice system's method of selecting panel members: it opens the possibility that—intentionally or not—the convening authority may "stack the court." The convening authority (or subordinates preparing a list of names for his or her consideration) are prohibited from attempting to "stack" the court by selecting members who are inclined toward a harsher view of justice.²⁰⁶ However, it is not always easy to pierce the deliberative process and enter the convening authority's mind, and the convening authority's motives may be subtle or nuanced.²⁰⁷ In any event, the situation may not

²⁰⁴ See Williams, *supra* note 7, at 489:

The idea behind the cross-section goal is that people see and evaluate things differently, and one function of the jury is to bring the divergent perceptions that exist in the community to the trial process. Diversity promotes vigorous and fruitful discussion. Not only do persons from different backgrounds bring unique insights to the deliberations, but their mere presence brings out the best in other jurors. If the jury is to speak authoritatively, it must reflect the community at large and its values. Researchers found that diverse juries deliberate longer, discuss a wider range of information, and make more accurate statements about the case.

²⁰⁵ For an overview of the "groupthink" phenomenon, see generally Cass R. Sunstein, *Group Judgments: Statistical Means, Deliberation, and Information Markets*, 80 N.Y.U. L. REV. 962 (2005).

²⁰⁶ *United States v. Dowty*, 60 M.J. 163, 171 (C.A.A.F. 2004); *United States v. Hilow*, 32 M.J. 439, 440 (C.M.A. 1991).

²⁰⁷ See Guy P. Glazier, *He Called for His Pipe, and He Called for His Bowl, and He Called for His Members Three—Selection of Military Juries by the Sovereign: Impediment to Military Justice*, 147 MIL. L. REV. 1, 4 (1998):

[The court-martial selection process] is unfair, both in reality and in appearance. The process naturally breeds unlawful command influence and its mien. At best, military jury selection incorporates

create the appearance of fairness. The role of the commander in selecting court-martial members has long been one of the most-criticized aspects of the military justice system.²⁰⁸ The method of selecting panel members has led the Supreme Court to conclude that court-martial panels “have not been and probably never can be constituted in such a way that they can have the same qualifications that the Constitution has deemed essential to fair trials of civilians in federal courts.”²⁰⁹ Likewise, a Court of Military Appeals judge called the method of selecting panel members “the most vulnerable aspect of the court-martial system; the easiest for critics to attack,”²¹⁰ while the court itself has held that “the perceived fairness of the military justice system would be enhanced immeasurably by congressional reexamination of the presently utilized jury selection process.”²¹¹

Court-martial members also differ from juries in the significantly greater role they play in trials. Members enjoy “equal authority” with the government and the defense to question witnesses or even call their own witnesses or request the production of evidence.²¹² Members may even seek additional evidence even after beginning their deliberations.²¹³ In the author’s experience, most panels are quite active in asking questions and requesting additional evidence, and often uncover facts not revealed by the parties’ presentation of the evidence.

the varied individual biases of numerous convening authorities and their subordinates. At worst, it involves their affirmative misconduct. “Court-stacking” is consistently achieved, suspected, or both. Further the convening authority exerts improper dominion and control over the independence of military jurors.

²⁰⁸ See generally *id.*; James A. Young III, *Revisiting the Court Member Selection Process*, 163 MIL. L. REV. 91 (2000); Stephen A. Lamb, *The Court-Martial Panel Selection Process: A Critical Analysis*, 137 MIL. L. REV. 103 (1992); G. Edward Rudloff, *Stacked Juries: A Problem of Military Injustice*, 11 SANTA CLARA L. REV. 362 (1971).

²⁰⁹ United States ex. rel. Toth v. Quarles, 350 U.S. 11, 17 (1955).

²¹⁰ United States v. Smith, 27 M.J. 242, 252 (C.M.A. 1988) (Cox, J., concurring).

²¹¹ United States v. McCarthy, 2 M.J. 26, n.3 (C.M.A. 1976).

²¹² UCMJ art. 46(a) (codified at 10 U.S.C. § 846(a) (2019)). See also MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 801(c), Discussion:

The members may request and the military judge may require that a witness be recalled, or that a new witness be summoned, or other evidence produced. The members or military judge may direct trial counsel to make an inquiry along certain lines to discover and produce additional evidence.... In taking such action, the court-martial must not depart from an impartial role.

²¹³ MCM (2019 ed.), *supra* note 7, pt. III, Mil. R. Ev. 614.

More significantly, court members play an extraordinarily important role in sentencing. If the accused requests a trial before members on findings, the members also sentence the accused.²¹⁴ Moreover, the military justice system largely eschews mandatory minimum sentences, meaning the members may select any sentence from no punishment to the maximum authorized punishment in its sole discretion.²¹⁵ In fact, members are specifically instructed to consider all forms of punishment, ranging from no punishment to the maximum punishment.²¹⁶ Members have a much wider range of sentencing options to choose from as compared to civilian courts, with options such as hard labor without confinement, forfeiture of pay, restriction to designated geographic limits, reduction in rank, and a punitive discharge to choose from in addition to more conventional options such as a fine or confinement.²¹⁷ Members are given no sentencing guidelines, a range of reasonableness, or comparison cases to help them determine where a given case falls within an extraordinary range of possible punishments.²¹⁸ Thus the military “uses a system that allows the sentencing authority almost complete discretion,” the polar opposite of the approach taken by the federal system and the vast majority of states.²¹⁹

While the military justice system has been reformed over time to provide more protections for service members, the fact remains that differences in the military justice system’s purpose and scope, the role of the

²¹⁴ MCM (2019 ed.), *supra* note 7, pt. II, Rule for Courts-Martial 502(a)(2). Recent amendments to the UCMJ amend this practice to provide for sentencing by a judge instead of members in some additional circumstances. National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, 130 Stat. 2000, § 5236 (2016), codified at 10 U.S.C. § 816 (2019).

²¹⁵ *See generally* MCM (2019 ed.), *supra* note 7, pt. II, Rule for Courts-Martial 1003 (setting forth permissible punishments in a court-martial). *See also* Megan N. Schmid, *This Court-Martial Hereby (Arbitrarily) Sentences You: Problems With Court Member Sentencing in the Military and Proposed Solutions*, 67 A.F. L. REV. 245 (2011) (noting the arbitrary nature of sentencing by court members and proposing solutions including abolishing court member sentencing); Schlueter, *The Military Justice Conundrum*, *supra* note 124, at 62 (explaining that apart from the maximum permissible punishments spelled out in the *Manual for Courts-Martial*, “[t]he sentencing authority’s discretion is otherwise unfettered; there are no ‘sentencing guidelines’ and (except in very serious cases) no mandatory minimum sentences”).

²¹⁶ *Military Judges’ Benchbook*, *supra* note 103, at §§ 2-5-1, 2-5-22.

²¹⁷ MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 1003.

²¹⁸ *Military Judges’ Benchbook*, *supra* note 103, at § 2-5-22.

²¹⁹ Steven M. Immel, *Development, Adoption, and Implementation of Military Sentencing Guidelines*, 165 MIL. L. REV. 159, 161-62 (2000).

commander, and composition, selection and role for the trier of fact all make courts-martial members a decidedly different forum than a civilian jury trial.²²⁰ These differences call for a fresh look at whether civilian precedent regarding nullification should apply with equal force in the military justice system.

D. Why Differences in the Military Justice System Argue for a Nullification Instruction

These features of the military justice system weigh in favor of military judges acknowledging nullification's existence by instructing upon it in certain cases. While undoubtedly commanders largely exercise their authority carefully and responsibly, the very notion of power concentrated in one individual without checks and balances is antithetical to the American system. Even in the military, where unity of command is considered essential to an effective fighting force,²²¹ the principle is not absolute. Every commander is subject to limits.²²² The UCMJ's entire structure is centered around bal-

²²⁰ In a recent decision, the Supreme Court provided evidence that the military justice may not be as distinct as it has traditionally been assumed to be. In *Ortiz v. United States*, the Court held that it has the jurisdiction to review decisions from the military justice system, because the military justice system is essentially "judicial" rather than "disciplinary" in character, and because it provides "virtually the same" procedural protections to service members as civilian courts do to defendants. *United States v. Ortiz*, 585 U.S. ___, 138 S.Ct. 2165, 2174 (2018) (quoting DAVID SCHLUETER, *MILITARY CRIMINAL JUSTICE: PRACTICE AND PROCEDURE* § 1-7, at 50 (9th ed. 2015)). To the extent that the decision indicates courts-martial and civilian criminal proceedings are not fundamentally different, the *Ortiz* decision could be read to undercut the argument that differences in the military justice system call for a different nullification instruction rule than civilian courts employ. However, the *Ortiz* decision may also support the argument in this article, as it may be read to indicate that there is no reason why service members should not enjoy the Sixth Amendment right to a jury trial, and in the absence of that right, a nullification instruction is an appropriate substitute.

²²¹ See, e.g., Lt Col Stephen Keane and Maj Kenneth A. Artz, *An Integrated Approach to Civil-Military/Interagency Counterterrorism Capacity Building*, 71 A.F. L. REV. 1, 12 (2014) (explaining the importance of unity of command, "a doctrine of military operations that ensures responsibility is located in one place."); MAJ Jerrod Fussnecker, *The Effects of International Human Rights Law on the Legal Interoperability of Multinational Military Operations*, 2014 ARMY LAW. 7 (2014) (describing the role unity of command plays in the success of military operations, and the challenges to achieving unity of command in multinational operations);

²²² JOINT PUBL'N 1, *DOCTRINE FOR THE ARMED FORCES OF THE UNITED STATES* (Mar. 25, 2013, incorporating changes through July 12, 2017), at V-1, states:

Command is central to all military action, and unity of command is central to unity of effort. Inherent in command is the authority that a military commander lawfully exercises over subordinates

ancing the need for commander control with modern notions of American justice, including providing checks on commanders' authority.²²³ A limited nullification instruction in certain cases represents a small but essential step toward better achieving this balance. The need for balance is especially strong considering the broad reach of the UCMJ and its outlined offenses. Every set of criminal statutes includes offenses that should not warrant prosecution in all circumstances, but this is particularly true of the UCMJ. The UCMJ includes many punitive articles that should ordinarily warrant low-level administrative action instead of a court-martial, such as failure to go (being late to work), being derelict in one's duties (failing to perform duties in an acceptable manner), and adultery.²²⁴ In a system in which every commander is largely free to make his or her own decisions about what matters belong in what forum, nullification could perform a critical leveling function to prevent outlier cases of commanders sending minor offenses to court-martial.

Of course, civilian prosecutors also exercise discretion in deciding what cases to bring to trial, and the argument that prosecutorial discretion should be checked by a nullification instruction has not prevailed in civilian courts. However, commanders' prosecutorial discretion is different from that

including authority to assign missions and accountability for their successful completion. Although commanders may delegate authority to accomplish missions, they may not absolve themselves of the responsibility for the attainment of these missions. *Authority is never absolute; the extent of authority is specified by the establishing authority, directives, and law.*

(Emphasis added).

²²³ Schlueter, *The Military Justice Conundrum*, *supra* note 124, at 4 (“In enacting the UCMJ, Congress struggled to balance the need for the commander to maintain discipline within the ranks against the belief that the military justice system could be made fairer, to protect the rights of service members against the arbitrary actions of commanders.”)

²²⁴ UCMJ arts. 86, 92, 134 (codified at 10 U.S.C. §§ 886, 892, 934 (2019)). The *Manual for Courts-Martial* does specify that nonjudicial punishment should be used for “minor offenses.” Factors to consider in determining whether an offense is “minor” include “the nature of the offense and the circumstances surrounding its commission; the offender’s age, rank, duty assignment, record and experience; and the maximum sentence impossible for the offense if tried by general court-martial.” MCM (2019 ed.), *supra* note 7, pt. V, ¶ 1(e). Minor offenses generally mean those for which “the maximum sentence impossible would not include a dishonorable discharge or confinement for longer than 1 year if tried by general court-martial.” *Id.* However, this guidance only serves as a limitation on use of nonjudicial punishment as a forum, and does not restrict commanders from sending minor offenses to court-martial. Additionally, it is not binding upon commanders. *Id.* at pt. I, ¶ 4, Discussion.

of commanders in several respects.²²⁵ Civilian prosecutors are subject to ethical rules that govern their decisions and at least theoretically, constrain them from acting too aggressively.²²⁶ At least in the federal system, charging decisions are generally reviewed by supervisory attorneys to ensure prosecutorial discretion is being wisely exercised.²²⁷ Commanders, meanwhile, are merely guided by the Rules for Courts-Martial's guidance that they should dispose of cases "at the lowest appropriate level of disposition," guidance which is both vague and that does not give rise to a remedy.²²⁸ Also, a prosecutor is bound by a federal grand jury's decision not to indict, unlike a preliminary hearing officer's recommendation in the military justice system.²²⁹ In fact, federal grand juries are permitted to refuse to indict based on concerns about governmental overreaching, thus reducing the importance of a nullification instruction at the trial stage.²³⁰ Most state prosecutors are also elected, and

²²⁵ See generally Rachel E. VanLandingham, *Discipline, Justice, and Command in the U.S. Military: Maximizing Strengths and Minimizing Weaknesses in a Special Society*, 50 NEW ENG. L. REV. 21 (2015) for an overview of differences in governing rules regarding civilian prosecutors and military commanders when exercising prosecutorial discretion.

²²⁶ See *American Bar Ass'n Model Rules of Prof'l Conduct*, Rule 3.8 (2017) (outlining, *inter alia*, the prohibiting against prosecuting an offense for which probable cause does not exist) and Discussion ("A prosecutor has the responsibility of a minister of justice and not simply that of an advocate"); *ABA Standards for Criminal Justice Prosecution Function and Defense Function* § 3-1.1 (3d ed. 1993) (spelling out in detail factors to consider in deciding whether to prosecute); *Dep't of Justice, U.S. Att'ys' Manual* (2017), § 9-27.000 (same).

²²⁷ See Troy K. Stabenow, *Throwing the Baby Out with the Bathwater: Congressional Efforts to Empower Victims Threaten the Integrity of the Military Justice System*, 27 FED. SENT. R. 156, 166 (2015) (citing Memorandum from Attorney General Holder to United States Attorneys and Assistant Attorney General for the Criminal Division, Aug. 12, 2013).

²²⁸ MCM (2019 ed.), *supra* note 7, pt. II, Rule for Courts-Martial 306(b). The MCM has recently added disposition factors for deciding how to handle a given offense, though those factors are non-binding and are specifically stated to be "cast in general terms, with a view to providing guidance rather than mandating results." MCM (2019 ed.), *supra* note 7, App. 2.1, Section 1.1(b).

²²⁹ See, e.g., *United States v. Navarro-Vargas*, 408 F.3d 1184, 1201 (9th Cir. 2005), *cert. denied*, 546 U.S. 1036 (2005) ("The grand jury's decision to indict or not is unreviewable in any forum; its decision is final"); *Gaither v. United States*, 413 F.2d 1061, 1066 (D.C. Cir. 1969) ("The grand jury's decision not to indict at all, or not to charge the facts alleged by the prosecutorial officials, is not subject to review by any other body.")

²³⁰ See, e.g., *Vasquez v. Hillery*, 474 U.S. 254, 263 (1986) ("The grand jury does not determine only that probable cause exists to believe that a defendant committed a crime, or that it does not.... Moreover, [the] grand jury is not bound to indict in every case where a conviction can be obtained.") (quoting in part *United States v. Ciambrone*, 601 F.2d 616, 629 (2d Cir. 1979) (Friendly, J., dissenting)); *United States v. Marcucci*, 299

must be aware that attempts to apply the law too harshly in controversial cases could come at a political cost; commanders may not be immune from public or political pressure, but they generally enjoy a high degree of deference in their decisions not only from the courts, but from the public.²³¹

Court members are the only realistic entity that could override a convening authority's decision to court-martial a service member. While theoretically a superior commander could also overrule a decision by a subordinate commander, in practice higher-level commanders rarely intervene to overrule decisions by their subordinates.²³² If the commander wants to send a case to the most serious forum, a general court-martial, he or she must offer the accused the chance to appear at a pretrial hearing which concludes with

F.3d 1156, 1164 (9th Cir. 2002), *cert. denied* 538 U.S. 934 (2003) (recognizing that the grand jury may “reject an indictment that, although supported by probable cause, is based on governmental passion, prejudice, or injustice.”)

²³¹ See, e.g., Rosa Brooks, *Civil-Military Paradoxes*, in *WARRIORS AND CITIZENS: AMERICAN VIEWS OF OUR MILITARY* 134 (Jim Mattis & Kori Schake eds., 2016) (studying civil-military relations and concluding):

We do perceive a troubling level of deference to the military on the side of the civilians.... While some deference to expertise and experience is appropriate, it is unhealthy for civilian policymakers to feel like they cannot question military officers and potentially even more unhealthy for the public to put more trust in the political judgments of its military officers than its elected officials. Moreover, because of the levels of public trust in the military, both parties have an incentive to use military officers as policy salesmen, further undermining the norm of an apolitical military. The United States benefits from a large pool of civilian and academic expertise on defense and security issues, and it is highly problematic for civil-military relations if the public identifies uniformed personnel as uniquely qualified and trustworthy to make policy judgments in those areas.

See also Schlueter, *supra* note 124, at 16 (exploring courts' tendency to defer to the judgment of military officials in matters affecting military justice); James Joyner, *Greater Deference to Generals Has Undermined Civilian Control of the Military*, N.Y. TIMES, Dec. 6, 2016, <https://www.nytimes.com/roomfordebate/2016/12/06/is-it-wrong-to-have-a-general-like-james-mattis-run-the-pentagon/greater-deference-to-generals-has-undermined-civilian-control-of-the-military> (“Not only is the public... ‘enormously deferential to the military’ but ‘elected leaders seek greater legitimacy by wrapping themselves in public confidence for the military.’”)

²³² MCM (2019 ed.), *supra* note 7, pt. II, Rule for Courts-Martial 306(a), Discussion (“Each commander in the chain of command has independent, yet overlapping discretion to dispose of offenses within the limits of that officer’s authority. Normally,...the initial disposition decision is made by the official at the lowest echelon with the power to make it.”)

a recommendation from the preliminary hearing officer.²³³ However, the preliminary hearing officer's recommendations are limited,²³⁴ and the convening authority is free to disregard them.²³⁵ Likewise, in general courts-martial, the convening authority's staff judge advocate provides written advice before referral, but unless the staff judge advocate makes specific legal findings (for example, the charges are not warranted by the evidence or there is no jurisdiction over the accused), the convening authority is not bound by the staff judge advocate's recommendation.²³⁶ Lower-level courts martial do not even contain this requirement for written advice from the staff judge advocate; the commander is largely free to send the case to trial if he or she wishes.²³⁷

Military appellate courts have broad authority to safeguard the rights of accused service members, but their ability to review the convening authority's decision to send a case to trial based on the severity of the allegations is, at best, extremely limited. To help balance the power of commanders in the military justice system, the service-level courts of criminal appeals enjoy broad authority to set aside a conviction on not only legal grounds, but also factual sufficiency grounds.²³⁸ They also maintain the authority to judge

²³³ UCMJ art. 32 (codified at 10 U.S.C. § 832 (2019)).

²³⁴ Relatively recent amendments to the UCMJ restricted the role of the previously-called "Article 32 investigation" to a "preliminary hearing," and limited the preliminary hearing officer's recommendations to the following: (1) whether there is probable cause to believe an offense has been committed and the accused committed the offense; (2) whether the convening authority has court-martial jurisdiction over the offense and the accused; (3) consideration of the form of charges; and (4) the disposition that should be made of the case. NDAA for Fiscal Year 2014, *supra* note 3, § 1702.

²³⁵ MCM (2019 ed.), *supra* note 7, Rule for Courts-Martial 405(a), Discussion ("Determinations and recommendations of the preliminary hearing officer are advisory.").

²³⁶ UCMJ art. 34 (codified at 10 U.S.C. § 834 (2019)) (stating that a convening authority may not refer charges and specifications to a general court-martial unless the staff judge advocate advises that: each specification alleges an offense under the UCMJ; there is probable cause to believe that the accused committed the offense charged; and a court-martial would have jurisdiction over the accused and the offense).

²³⁷ UCMJ art. 34(b) (codified at 10 U.S.C. § 834(b) (2019)); *see also* James B. Roan and Cynthia Buxton, *The American Military Justice System in the New Millennium*, 52 A.F. L. REV. 185, 197-202 (generally covering commanders' options and processes for disposing of allegations of disciplinary infractions).

²³⁸ UCMJ art. 66(d) (codified at 10 U.S.C. § 866(d) (2019)). Courts exercise this power rarely. Matt C. Pinsker, *Ending the Military's Courts of Criminal Appeals De Novo Review of Findings of Fact*, 47 SUFFOLK U. L. REV. 471, 472 (2014) ("Claims of factual sufficiency are frequently and easily made by appellate defense counsel, but are very time consuming for appellate prosecutors to respond to. Despite this huge investment of resources in conducting a de novo review of claims of factual sufficiency, the courts of

the appropriateness of the accused's sentence, an authority described as an "awesome, plenary, *de novo* power of review" that grants it the authority to "substitute its judgment' for that of the military judge," or for that of the court members.²³⁹ In fact, they have been described as "something like the proverbial 800-pound gorilla when it comes to their ability to protect an accused."²⁴⁰ However, even the courts of criminal appeals have limits to their authority, and one such limit concerns their ability to nullify a factually and legally sufficient conviction.

In *United States v. Nerad*, CAAF ruled that the Air Force Court of Criminal Appeals exceeded its broad authority when it set aside a service member's conviction for possessing child pornography of his 17-year-old girlfriend.²⁴¹ The Air Force court had taken this action because, even though it held the conviction was legally and factually sufficient, it believed "the appellant's possession of the photos under these circumstances is not the sort of conduct which warrants criminal prosecution for possessing child pornography and that this conviction unreasonably exaggerates the criminality of his conduct."²⁴² The government appealed, asserting that the Air Force court's action amounted to judicial nullification.²⁴³ While rejecting the government's argument that courts of criminal appeals have *no* authority to disapprove a legally and factually sufficient conviction, CAAF nonetheless held that "nothing suggests that Congress intended to provide the [courts of criminal appeals] with unfettered discretion to do so for any reason, for no reason, or on equitable grounds, which is a function of command prerogative."²⁴⁴ Thus,

criminal appeals almost never find factual insufficiency.") The article studied 579 cases reviewed by the Army Court of Criminal Appeals in 2012. Of these, the court found factual sufficiency in only fifteen cases, and of those fifteen, it reduced the sentence in only three as a result. *Id.* at 505-06.

²³⁹ *United States v. Cole*, 31 M.J. 270, 272 (C.M.A. 1990). As with factual sufficiency, appellate courts rarely exercise this power. Weber, *Sentence Appropriateness in the Courts of Criminal Appeals*, *supra* note 123 (studying more than 4,000 appellate decisions over a five-year period and finding that courts of criminal appeals granted any form of sentence appropriateness relief in less than 7 percent of these decisions).

²⁴⁰ *United States v. Parker*, 36 M.J. 269, 271 (C.M.A. 1993).

²⁴¹ *United States v. Nerad*, 69 M.J. 139, 148 (C.A.A.F. 2010).

²⁴² *United States v. Nerad*, 67 M.J. 748, 749 (A.F. Ct. Crim. App. 2009). The author notes for purposes of disclosure that he was government counsel of record in this case throughout its appellate processing.

²⁴³ *Nerad*, 69 M.J. at 140.

²⁴⁴ *Id.* at 145. As noted above, Congress has since limited convening authorities' ability to grant clemency in certain cases. *See supra* notes 127-129 and accompanying text.

CAAF reversed the Air Force court, holding that service courts' power "must be exercised in the context of legal—not equitable—standards, subject to appellate review."²⁴⁵

Nerad does not specifically prohibit the courts of criminal appeals from "nullifying" a factually and legally sufficient conviction. Conceivably, a service court might develop a legal standard for determining when nullification is appropriate and apply that standard to set aside a conviction in the interests of justice.²⁴⁶ However, one might reasonably ask what space CAAF's *Nerad* opinion leaves for the courts of criminal appeals to navigate—if an appellate court may not overturn a conviction on equitable grounds, when *can* an appellate court overturn a legally and factually sufficient conviction? In the wake of *Nerad*, the courts of criminal appeals have occasionally indicated they have considered setting aside a conviction correct in fact and law, but they have largely declined to do so.²⁴⁷ This decision sends a fairly

²⁴⁵ *Id.* at 140 (citing *United States v. Quiroz*, 55 M.J. 334, 339 (C.A.A.F. 2001)). Senior Airman Nerad petitioned the U.S. Supreme Court to review CAAF's decision, but the Supreme Court denied the petition for writ of certiorari. *Nerad v. United States*, 562 U.S. 1065 (2010). On remand to the Air Force court to clarify its rationale for its earlier decision, the court reversed itself, noting that its earlier action was "a de facto exercise of clemency and more closely aligned with equitable standards than any legal basis." *United States v. Nerad*, 2011 CCA LEXIS 346, *8 (A.F. Ct. Crim. App. Mar. 9, 2011).

²⁴⁶ For example, appellate courts could develop a test to review convening authorities' use of their prosecutorial discretion based on the legal standard of reasonableness, similar to the test that has been developed for reviewing claims of unreasonable multiplication of charges. CAAF has permitted service courts of criminal appeals to grant relief for claims of unreasonable multiplication of charges even when the charges are not legally multiplicitous, utilizing the following factors: (1) Did the [appellant] object at trial that there was an unreasonable multiplication of charges and/or specifications; (2) Is each charge and specification aimed at distinctly separate criminal acts; (3) Does the number of charges and specifications misrepresent or exaggerate the appellant's criminality; (4) Does the number of charges and specifications [unreasonably] increase the appellant's punitive exposure; and (5) Is there any evidence of prosecutorial overreaching or abuse in the drafting of the charges? *United States v. Quiroz*, 55 M.J. 334, 338-39 (C.A.A.F. 2001) (citations and internal quotation marks omitted). CAAF in *Nerad* cited the unreasonable multiplication of charges standard and suggested that the courts of criminal appeals might be able to craft some similar standard to "explain why the finding is unreasonable, based on a legal standard." *Nerad*, 69 M.J. at 147.

²⁴⁷ *See, e.g.*, *United States v. Ward*, 2015 CCA LEXIS 49, slip op. at *13 n.6 (A.F. Ct. Crim. App. Feb. 11, 2015) ("In addition, we considered our authority under Article 66(c), UCMJ, . . . to disapprove a legally and factually sufficient conviction that we find should nonetheless not be approved. We decline to grant relief. . . ."); *United States v. Cook*, 2014 CCA LEXIS 931, slip op. at *14 n.3 (A.F. Ct. Crim. App. Jan. 13, 2014) ("Recognizing that our broad authority under Article 66(C), UCMJ, . . . allows us to approve only those

strong signal that if court-martial members do not engage in nullification, appellate courts will not be able to fill the gap.

If anyone is in a position to provide at least a modicum of a check on commanders' prosecutorial discretion, it is the members. As things stand, they receive no direction as to whether and how they may acquit in the face of the evidence. Upon assembly of the court-martial, the military judge administers the following oath to the court members:

Do you (swear) (affirm) that you answer truthfully the questions concerning whether you should serve as a member of this court-martial; that you will faithfully and impartially try, according to the evidence, *your conscience*, and the laws applicable and the laws applicable to trial by courts-martial, the case of the accused now before this court; and that you will not disclose or discover the vote or opinion of any particular member of the court (upon a challenge or) upon the findings or sentence unless required to do so in due course of law(, so help you God)?²⁴⁸

At first glance, the oath's direction to try the case according to "your conscience" may appear to represent permission to consider nullification. However, the remainder of the instructions give members no indication that nullification is an option. First, immediately after administering the oath, the military judge instructs the members that they "are required to follow my directions on the law."²⁴⁹ The military judge also instructs the members, "You must determine whether the accused is guilty or not guilty based solely upon the evidence presented here in court and upon the instructions I will give you."²⁵⁰ Again at the end of the trial, the military judge instructs the members that the judge's duty is to instruct on the law while the members' duty is "to determine the facts, apply the law to the facts, and determine the guilt or

findings of guilt that we find 'should be approved,' we decline to exercise that authority in this case.") (citations omitted for both quotations). However, in *United States v. Bond*, 69 M.J. 701 (C.G. Ct. Crim. App. 2010), which was decided before CAAF's opinion in *Nerad*, the Coast Guard court set aside a service member's convictions for assault and battery, drunk and disorderly conduct, and indecent language, holding that such findings were minor and should not be approved when the appellant was found not guilty of attempted indecent assault. The Judge Advocate General of the Coast Guard did not certify this case for CAAF's review.

²⁴⁸ MCM (2019 ed.), *supra* note 7, pt. II, Rule for Courts-Martial 807(b)(2), Discussion (emphasis added).

²⁴⁹ *Benchbook*, *supra* note 103, at § 2-5.

²⁵⁰ *Id.*

innocence of the accused.”²⁵¹ Existing instructions do not put court-martial members on notice that nullification is even an option, let alone provide any guidance as to when and how it should be employed.

Court-martial members particularly need a nullification instruction otherwise they will be much less likely than civilian juries to review the justness of the prosecution decision. Civilian courts generally shy away from nullification instructions in part because of the belief that jurors will appropriately exercise the authority without being told about it.²⁵² However, civilian jurors are different from court-martial members not only in their personality characteristics, but in how they are selected. Civilian jurors come in to a trial with nothing on the line. They see no hidden meaning in their random selection for jury duty, and there is no reason for them to believe that their career performance depends on their performance in the criminal trial. While jurors may have an innate respect for the judge as an authority figure, no one involved in the process determines the juror’s work assignments, career progression, or promotion opportunities. Except in the small percentage of cases that particularly capture the public’s attention, no one is judging jurors’ performance, and even then, jurors’ identities may be protected from the media and the public.²⁵³ A court-martial panel, on the other hand, consists

²⁵¹ *Id.* at § 2-5-9.

²⁵² *See, e.g.,* United States v. Dougherty, 473 F.2d 1113, 1135 (D.C. Cir. 1972):

The way the jury operates may be radically altered if there is alteration in the way it is told to operate. The jury knows well enough that its prerogative is not limited to the choices articulated in the formal instructions of the court. The jury gets its understanding as to the arrangements in the legal system from more than one voice. There is the formal communication from the judge. There is the informal communication from the total culture—literature (novel, drama, film, and television); current comment (newspapers, magazines and television); conversation; and, of course, history and tradition. The totality of input generally convey adequately enough the idea of prerogative, of freedom in an occasional case to depart from what the judge says. Even indicators that would on their face seem too weak to notice—like the fact that the judge tells the jury it must acquit (in case of reasonable doubt) but never tells the jury in so many words that it must convict—are a meaningful part of the jury’s total input. Law is a system, and it is also a language, with secondary meanings that may be unrecorded yet are part of its life.

²⁵³ *See generally* David S. Willis, *Juror Privacy: The Compromise Between Judicial Discretion and the First Amendment*, 37 SUFFOLK U. L. REV. 1195 (2004) and David Weinstein, *Protecting a Juror’s Right to Privacy: Constitutional Constraints and Policy Options*, 70 TEMP. L. REV. 1, 27-33 (1997) (each summarizing state and federal rules

of either all officers or a mix of officers and enlisted personnel senior to the accused.²⁵⁴ Those members have presumably advanced to their positions in part because they have demonstrated good judgment. Nonetheless, they have also advanced because they recognize the importance of following orders and because they have made a career of meeting their superiors' expectations. Following orders, of course, is a core principle of military culture, operations, and law. The tendency of the military to reward conformity and discourage innovation is well-documented.²⁵⁵ In combat, following orders is a non-negotiable condition of mission success.²⁵⁶ Failure to follow orders is an offense under the UCMJ, whether committed in peacetime or in combat.²⁵⁷ Members trained to follow orders cannot reasonably be expected to seriously consider nullification when the military judge has not instructed them of this power, and has in fact indicated the opposite.

Without a nullification instruction, the very fact that a senior commander has referred the case to trial sends a clear message: the court members are free to decide guilt or innocence according to the evidence, but the convening authority has already decided that this case warrants a court-martial. That same convening authority personally picked the members to sit in judgment on this case, and will review the results of the members' decision, even if he or she does not know how each member voted.²⁵⁸ The scrutiny on each individual court member increases with the court-martial's smaller panels compared to civilian trials. Undoubtedly, few convening

regarding disclosure of jurors' identities).

²⁵⁴ UCMJ art. 25 (codified at 10 U.S.C. § 825 (2019)).

²⁵⁵ See, e.g., Tim Kane, *Why Our Best Officers Are Leaving*, THE ATLANTIC, Jan./Feb. 2011, <https://www.theatlantic.com/magazine/archive/2011/01/why-our-best-officers-are-leaving/308346/> (summarizing the results of other scholarly articles on the topic as well as a survey of West Point graduates, and concluding that "the Pentagon doesn't always reward its innovators. Usually, rebels in uniform suffer at the expense of their ideas.")

²⁵⁶ See, e.g., A.P.V. ROGERS, LAW ON THE BATTLEFIELD (2d ed. 2004), 208-09:

During military operations decisions, actions and instructions often have to be instantaneous and do not allow time for discussion or attention by committees. It is vital to the cohesion and control of a military force in dangerous and intolerable circumstances that commanders should be able to give orders and require their subordinates to carry them out.

²⁵⁷ UCMJ art. 92 (codified at 10 U.S.C. § 892 (2019)).

²⁵⁸ Following trial, the convening authority has the opportunity to act on the sentence, and some situations may take action with regard to the findings. MCM (2019 ed.), *supra* note 7, pt. II, Rules for Courts-Martial 1109-1110.

authorities actually overtly second-guess the decisions by court members. Most convening authorities likely have the same desire to see justice done as court-martial members do, and respect the members' decisions. However, by merely referring the matter to a court-martial, the convening authority has sent a clear signal about the seriousness of the matter that court-martial members are not apt to reject, at least not without an explicit instruction informing them that this is an option. Military members are ingrained with the "above my pay grade" mindset.²⁵⁹ It would only be natural in such situations that court-martial members, specially picked for a case the convening authority has referred to trial and without the benefit of anonymity, would be loath to second-guess a decision by the convening authority that if the accused's guilt is proven, the matter is worthy of a court-martial conviction. An explicit instruction notifying the members that they have the ability to use their own consciences to determine whether the accused should be convicted even if the prosecution has proven the elements of the crime(s) may be the only way court-martial members might consider nullification. This is all the more true considering that some judges have utilized an instruction that the members "must" convict the accused if his or her guilt is proven, rather than the more conventional "should" instruction.²⁶⁰

The military justice system entrusts members to make decisions unparalleled by civilian criminal juries. Withholding information from the members about their ability to acquit in the face of the evidence treats members in a paternalistic way at odds with the role members are otherwise expected to fulfill.

²⁵⁹ See PERRY M. SMITH & DANIEL M. GERSTEIN, ASSIGNMENT: PENTAGON: HOW TO EXCEL IN A BUREAUCRACY 51 (2007) (describing the phrase as an "often-used excuse" meaning that "the issue is so important someone at a higher level must make the decision.")

²⁶⁰ Granted, members may already exercise a sort of nullification, at least on a limited scale. With complete discretion in sentencing, members can sentence an accused to light punishment (or even no punishment) because they do not feel the case belonged in a court-martial. The former Court of Military Appeals Senior Judge Robinson O. Everett once gave an interview in which he was asked about abolishing sentencing by members. He responded that members are less predictable than judges, but: "...I'm inclined to leave it as it is. I think probably the more unusual sentences by courts-martial are those that are too light, almost [a] type of jury nullification." Interview by Walter M. Hudson, *Two Senior Judges Look Back and Look Ahead: An Interview with Senior Judge Robinson O. Everett and Senior Judge Walter T. Cox*, 165 MIL. L. REV. 42, 89 (2000). To the extent that this sort of "nullification" occurs, it represents an imperfect compromise; the accused still stands convicted of the offense with all the attendant consequences that a federal conviction carries.

At the same time, the ways in which court-martial panels fall short of full Sixth Amendment protections also highlight the need for a nullification instruction. In a jury, one juror may take a principled stand and hang the jury, frustrating the government's efforts to effectuate what the juror believes is an injustice for at least the time being. Larger juries, drawn from a pool of the defendant's peers, are more likely to produce one such voice for the defendant. Service members, on the other hand, are doubly disadvantaged: they are less likely to find such an advocate in a smaller pool, and any advocate they do find is not enough to prevent a two-thirds majority for voting to convict. A nullification instruction would not place juries and court-martial panels on even footing, but it would represent a small step toward bringing the two systems closer into alignment.

Additionally, the fact that court-martial panels are not required to be unanimous obviates concerns about nullification's more malignant side: the concern that juries might acquit based on improper motives such as racism.²⁶¹ In the civilian sector, one juror's prejudices could block a conviction of, for example, a white police officer accused of shooting an unarmed black victim. However, in the military justice system, such prejudices would need to be much more widespread to result in unwarranted acts of nullification. More than one-third of the court members would need to hold such views to alter the panel's verdict. The military has its challenges when it comes to prejudices (particular with regard to gender and sexual orientation),²⁶² but it brings people of relatively diverse backgrounds together, unlike civilian juries drawn from one specific geographic area.²⁶³ Certainly, nullification based on improper motives is still possible in the military justice system, but it seems less likely to occur in the military justice system given panels' voting requirements and makeup.

Finally, in such a decentralized system in which both commanders and panel members are free to make their own decisions with no binding guidance as to the "going rate" for a given offense, inconsistencies are bound

²⁶¹ See *supra* notes 38-40 and accompanying text.

²⁶² See generally INTEGRATING THE US MILITARY: RACE, GENDER, AND SEXUAL ORIENTATION (Douglas W. Bristol, Jr. and Heather Marie Stu eds., 2017) (generally exploring the challenges and successes of integration involving race, gender, and sexual orientation in the military).

²⁶³ See generally INCLUSION IN THE AMERICAN MILITARY: A FORCE FOR DIVERSITY (David E. Rohall et al. eds., 2017) (covering the military's efforts to promote diversity and inclusion, including ways they have been ahead of civilians in doing so).

to result.²⁶⁴ The often-criticized tendency of commanders to punish junior enlisted personnel more harshly than senior officers—the so-called “different spansks for different ranks”—is one example of variations the military justice system’s decentralized and discretionary nature can produce.²⁶⁵ To the extent that one of the criticisms of nullification is that different juries can utilize it differently, that concern is already present in the military justice system. A body of court-martial members through the deliberative process might actually level out some commanders’ more extreme decisions to send cases to trial, thereby creating a more uniform system rather than a more unpredictable one. Explicitly granting such authority to a panel of experienced military personnel to deal with the problem of outlier cases is not without precedent; a main reason the military courts of criminal appeals enjoy their broad sentence appropriateness authority is to combat this problem.²⁶⁶

While one might argue that having the members serving as a check on the prosecutorial authority of the commander is antithetical to the notion of commander control, the Supreme Court recently indicated that the notion of commander control of the military justice system is not as powerful as it used to be. As this article was being edited, the Supreme Court issued its decision in *Ortiz v. United States*.²⁶⁷ The ultimate holding of the Court is not relevant to this discussion, but the Court’s analysis of the foundational jurisdictional issue certainly is. In rejecting a challenge that the Court lacks jurisdiction to hear an appeal from the military justice system because military courts are not “courts” under Article III of the Constitution, the Court signaled its view that military courts-martial are not as unique as they are sometimes imagined to be. The majority held that military courts-martial are “constitutionally rooted” and “inherently judicial,” providing “no reason” to make a distinction between courts-martial and an ordinary federal court.²⁶⁸ Commentators have interpreted the decision as a blow to the notion that

²⁶⁴ See Baker, *supra* note 137, at 26 (explaining the decentralized nature of military justice and concluding that the system generally (and commanders’ clemency authority specifically) “can and does result in inconsistent applications, notwithstanding seemingly similar circumstances.”)

²⁶⁵ *Id.*

²⁶⁶ See Weber, *Sentence Appropriateness Relief in the Courts of Criminal Appeals*, *supra* note 123, at 128 (noting that “the service courts’ sentence severity and sentence comparison decisions are intended to have some leveling effect on the military justice system as a whole,” and that “[s]entence severity decisions are supposed to include considerations of uniformity and evenhandedness....”)

²⁶⁷ *Ortiz v. United States*, 585 U.S. ___, 138 S.Ct. 2165 (2018).

²⁶⁸ *Id.* at 2174, 2180.

courts-martial are fundamentally different from civilian courts.²⁶⁹ If the *Ortiz* decision really means that courts-martial are not fundamentally different from civilian courts, it might indicate that a different nullification rule for courts-martial is not appropriate. However, it would also mean that the notion of commander control of the military justice system is not as powerful as once thought, and thus panel members should be able to serve as a check on commanders' discretion.²⁷⁰

Several structural aspects of the military justice system indicate that military judges should take a more aggressive approach toward recognizing nullification.²⁷¹ This need for a nullification instruction has come to a head in recent years, as the issue of sexual assault has placed a spotlight on commanders' military justice decisions.

IV. NULLIFICATION AND THE MILITARY'S SEXUAL ASSAULT PROBLEM

The inherent differences of the military justice system all create compelling reasons for military judges to utilize a nullification instruction. This article is not the first to call on military judges to issue such an instruction.²⁷² Yet, despite an open invitation in *McClour*, CAAF has not taken the opportunity to revisit its open-ended decision in *Hardy* from 20 years ago. Military judges likewise have not seen fit to push for a more open role for nullification.

However, circumstances have changed. The recent atmosphere regarding sexual assault in the military has exacerbated existing tensions

²⁶⁹ See, e.g., Linda Strite Murname, *Did Military Courts Just Lose Their Right to Be Different? Five Takeaways from Ortiz v. United States*, <https://www.judges.org/did-military-courts-just-lose-their-right-to-be-different-five-takeaways-from-ortiz-v-united-states/> (last accessed Jan. 5, 2019); Dan Mauer, *Are Military Courts Really Just Like Civilian Criminal Courts?*, <https://www.lawfareblog.com/are-military-courts-really-just-civilian-criminal-courts> (last accessed Jan. 5, 2019).

²⁷⁰ See Mauer, *supra* note 269 (arguing that the *Ortiz* decision may “inadvertently undermine the conventional arguments from within the military defending a muscular, quasi-judicial role for commanding officers.”)

²⁷¹ Additionally, the general practice in court-martial practice is to include all known offenses at the same court-martial. MCM (2019 ed.), *supra* note 7, pt. II, R.C.M. 307(c)(4). Thus, an accused could stand accused at the same trial of more serious offenses and lesser offenses that, standing alone, might not warrant a court-martial conviction but were included on the charge sheet. A nullification instruction also could prevent situations where an accused is acquitted of more serious offenses but convicted of minor offenses that, standing alone, do not warrant a federal conviction.

²⁷² See, e.g., the various articles cited at *supra* note 70.

and has made the need for a nullification instruction more urgent than ever. Congressional, media, public, and advocacy group criticism over the military's perceived inability to respond to, prevent and prosecute sexual assault in the ranks has placed enormous pressure on commanders to react more vigorously to allegations. This, in turn, has threatened to upset the system's delicate balance between discipline and justice. One result of this situation is that commanders are pressured to prefer and refer cases to trial. Evidence is mounting that commanders are sending cases to trial that they normally would not due to this pressure. A significant risk exists that commanders are not only sending cases with weak evidence to trial, but also cases that do not involve misconduct severe enough to warrant a conviction. Only a nullification instruction can provide an adequate safety valve against such pressure.

A. The Sexual Assault Problem and the Pressure on Commanders

For several years, the military has been under attack on the issue of sexual assault. Much of that criticism has been aimed at the prevalence of sexual assault by or against service members,²⁷³ or the military's response to allegations of sexual assault,²⁷⁴ but attention has also focused on the military's perceived unwillingness to take sexual assault cases to trial and achieve

²⁷³ See generally Lisa M. Schenck, *Informing the Debate About Sexual Assault in the Military Services: Is the Department of Defense Its Own Worst Enemy?*, 11 OHIO ST. J. CRIM. L. 579 (2014) (providing a deeper look at criticisms over the prevalence of sexual assault in the military and the military's flawed method of reporting the number of sexual assault allegations, including the widely-reported figure of 26,000 military-on-military sexual assault allegations in Fiscal Year 2012 that drove calls for changed policies).

²⁷⁴ See, e.g., *A Failure on Military Sexual Assaults*, N.Y. TIMES, June 13, 2013 (quoting Sen. Carl Levin, chairman of the Senate Armed Services Committee: "We have a problem with the underreporting of sexual assaults. We have a problem with the inadequate investigation of sexual assaults. We have a problem with the lack of support for victims of sexual assaults. We have a problem with retaliation, ostracism and peer pressure against such victims. And we have a problem with a culture that has taken inadequate steps to correct this situation."); Mark Thompson, *Military Sexual Assault Victims Discharged After Filing Complaints*, TIME, May 18, 2016, <http://time.com/4340321/sexual-assault-military-discharge-women/> (alleging widespread retaliation against military members by discharging them for filing sexual assault complaints). A Department of Defense survey indicates that roughly a quarter of active duty service members reported retaliation following a report of sexual assault. *Dep't of Defense Annual Report on Sexual Assault in the Military: Fiscal Year 2016*, May 1, 2017, at 32-33, http://sapr.mil/public/docs/reports/FY16_Annual/FY16_SAPRO_Annual_Report.pdf (hereinafter *DoD 2016 Annual Report*). Recent amendments to the UCMJ make retaliation against witnesses, victims, or others who report crimes a criminal offense. NDAA for Fiscal Year 2017, *supra* note 3, § 1050.

convictions.²⁷⁵ As commanders have discretion in handling sexual assault reports, they deal with the political consequences surrounding this issue; and they assume the risk when they decide not to send sexual assault cases to trial. This creates an incentive to send sexual assault allegations to trial, regardless of the quality of the evidence or the seriousness of the allegation. A recent Congressionally-mandated review of the military justice system captured the view of many military justice practitioners interviewed: “[I]n an effort to respond to public criticism and right past wrongs, commanders now feel pressure to resolve greater numbers of sexual assault allegations at courts-martial, regardless of the relative merits of the case or the likelihood of conviction.”²⁷⁶ Or, in the words of a former assistant secretary of defense assessing two high-visibility cases brought to trial despite weak evidence, “the very clear conclusion that must be drawn from these cases is that a commander who is assessing a prosecution is burdened inevitably by self-interest.”²⁷⁷ To quote still another source (an Army judge advocate), commanders have heard “the message...that severe professional consequences will result if commanders take what they think Congress believes to be the incorrect action in sexual assault cases.”²⁷⁸ A recent report of the Subcommittee of the Judicial Proceedings Panel, an organization created under the Federal Advisory Committee Act to conduct an independent assessment of the military justice system, provides significant supporting evidence for this concern. The report identified a number of concerns regarding commanders’ decisions to refer sexual assault cases to trial, including: “Because convening authorities currently lack meaningful written guidelines to help them decide whether a case warrants referral to court-martial, such as the likelihood of securing a conviction at trial, they may be referring sexual assault charges to trial on the basis of weak evidence”; and “Counsel perceive that convening authorities feel public pressure to refer sexual assault cases to trial.”²⁷⁹

²⁷⁵ See generally Brady, *supra* note 2 (asserting that pressure to eradicate sexual assault and increase prosecution of sexual assault allegations has created a dangerous imbalance that fails to protect service members’ due process rights).

²⁷⁶ Subcomm. of the Judicial Proceedings Panel, *Report on Barriers to the Fair Administration of Military Justice in Sexual Assault Cases*, May 2017, at 2, http://jpp.whs.mil/Public/docs/08-Panel_Reports/JPP_SubcommReport_Barriers_Final_20170512.pdf (hereinafter Judicial Proceedings Panel Report).

²⁷⁷ Helene Cooper, *Two Cases, One Conclusion on Military Justice*, N.Y. TIMES, Mar. 22, 2014, at A3 (quoting former Assistant Secretary of Defense Paul F. McHale).

²⁷⁸ Elizabeth Murphy, *The Military Justice Divide: Why Only Crimes and Lawyers Belong in the Court-Martial Process*, 220 MIL. L. REV. 129, 130 (2014).

²⁷⁹ Judicial Proceedings Panel Report, *supra* note 276, Executive Summary.

One former commander particularly exemplifies this pressure and the effects it can have on decisions to send sexual allegations to trial. In 2013, Lieutenant General Craig Franklin exercised the clemency authority granted to him under the UCMJ to disapprove the guilty finding against a Lieutenant Colonel who had been convicted of sexual assault.²⁸⁰ Congressional members skewered General Franklin for “mak[ing] a mockery of the entire legal system,”²⁸¹ and “offend[ing] anyone’s sense of justice and fair play,”²⁸² while asking the Secretary of the Air Force and the Air Force Chief of Staff to consider firing General Franklin.²⁸³ Congressional efforts to remove or limit commanders’ clemency authority ensued from General Franklin’s decision.²⁸⁴

Later that year, General Franklin concurred with the recommendations of a preliminary hearing investigating officer and multiple staff judge advocates, and declined to refer to trial the sexual assault case of *United States v. Wright*, which had some difficult evidentiary challenges.²⁸⁵ While this decision was in line with the lawyers’ recommendations, the decision rested on General Franklin’s shoulders. According to an affidavit filed by General Franklin’s staff judge advocate, the Judge Advocate General of the Air Force relayed to the staff judge advocate that the failure to refer the case to trial would place the Air Force in a difficult position with Congress and that absent a “smoking gun,” alleged victims are to be believed and their cases are to be referred to trial, among other matters.²⁸⁶ Then, the Acting Secretary of

²⁸⁰ Craig Whitlock, *General’s Decision in Sex Case is Scrutinized*, WASH. POST, May 7, 2013, at A1; *United States v. Wright*, 75 M.J. 501, 502-03 (A.F. Ct. Crim. App. 2015); *United States v. Boyce*, 76 M.J. 242, 244-46 (C.A.A.F. 2017). The author expresses no opinion as to the wisdom or lack thereof in General Franklin’s action, but his action was a lawful exercise of authority granted to him by Congress.

²⁸¹ Craig Whitlock, *Pilot’s Clemency in Sexual-Assault Case Elicits Furor*, WASH. POST, Mar. 10, 2013, at A4.

²⁸² Craig Whitlock, *General Defends Overruling Verdict*, WASH. POST, Apr. 11, 2013, at A3.

²⁸³ Whitlock, *Pilot’s Clemency in Sexual-Assault Case*, *supra* note 281, at A4.

²⁸⁴ *Id.*

²⁸⁵ *Wright*, 75 M.J. at 502. The author notes for purposes of disclosure that he was one of the authors of this opinion. The Article 32 investigating officer (a judge advocate) recommended that the charges not be referred to trial due to “inconsistencies in [the alleged victim’s] various accounts of the events, and his view that the case contained evidentiary deficiencies (including the fact that a friend of [the accused] who was present during the encounter stated that the sexual acts appeared consensual).” *Id.* The special court-martial convening authority, however, recommended referring the charges to trial. *Id.*

²⁸⁶ *Id.* at 503. According to the affidavit, discussion also centered on whether Lt Gen Franklin violated an Air Force regulation by dismissing the charges without meeting with the alleged victim. *Id.* The Judge Advocate General later refuted the account by General

the Air Force took the unusual step of attaching the accused service member to the Air Force District of Washington for the purpose of prosecuting the alleged sexual assault.²⁸⁷ The new convening authority referred the matter to trial.²⁸⁸ Following extensive litigation over discovery related to the defense's claims of unlawful command influence,²⁸⁹ Airman Wright ultimately stood trial, where a panel of members acquitted him.²⁹⁰ Meanwhile, the victims' advocacy group Protect Our Defenders called General Franklin's failure to send the case to trial an example of his "flawed judgment," and Senator Kirsten Gillibrand, the leading critic of military commanders' decisions in military justice matters, called for General Franklin to be "relieved of his post now."²⁹¹ General Franklin was forced to retire at a lower rank after the

Franklin's Staff Judge Advocate, asserting that the Staff Judge Advocate "spun" the phone conversation, and merely questioned whether proper procedures were followed in gathering the alleged victim's input. Nancy Montgomery, *Sexual Assault Case Not Dismissed Despite Ruling of Unlawful Command Influence*, STARS AND STRIPES, Aug. 12, 2015, <https://www.stripes.com/news/sexual-assault-case-not-dismissed-despite-ruling-of-unlawful-command-influence-1.362563>.

²⁸⁷ *Wright*, 75 M.J. at 503.

²⁸⁸ *Id.*

²⁸⁹ Defense counsel requested production of communications between certain high-level Air Force officials about this case to help establish its unlawful command influence allegation. The military judge ordered the government to produce a large volume of materials for *in camera* review, and when the government asserted privilege over these materials, the military judge abated the proceedings. *Id.* at 504-08. The government appealed the abatement order, and the Air Force Court of Criminal Appeals granted the appeal in part, finding that the military judge failed to take sufficient steps to define what materials were appropriate for *in camera* review before ordering abatement. *Id.* at 512.

²⁹⁰ Jeff Schogol, *Airman Acquitted of Sexual Assault Charge*, AIR FORCE TIMES, Oct. 29, 2015, <https://www.airforcetimes.com/news/your-air-force/2015/10/29/airman-acquitted-of-sexual-assault-charge/>. The account of the acquittal summarizes the evidence as follows:

The sergeant [the alleged victim] testified that while she and Wright were watching a movie, he pulled her on top of him and proceeded to rape her. She testified that she couldn't escape because she was frozen with fear.

But a friend of Wright's—in another room at the sergeant's apartment reading "Fifty Shades of Grey," according to accounts of his testimony—said he'd heard what sounded to him like consensual sex. He said the sergeant told him that Wright had raped her, but Wright told him he would never rape anyone.

Id.

²⁹¹ Kristin Davis, *General Draws Rebuke for Closing Sex Assault Case*, AIR FORCE TIMES, Dec. 30, 2013, at A15.

Secretary of the Air Force lost confidence in his ability to command due to his decision in the *Wright* case combined with his earlier clemency action.²⁹²

General Franklin's actions in a case soon after *Wright*, *United States v. Boyce*,²⁹³ provide yet another example of the pressure on convening authorities to send sexual assault allegations to trial. Following his decision not to refer the *Wright* case to trial, on the same day the Air Force Chief of Staff notified him that the Secretary of the Air Force had lost confidence in him, and that General Franklin had a choice of either retiring at a lower grade or being removed from his position, General Franklin was presented with another sexual assault case for a referral decision.²⁹⁴ General Franklin referred the case to a general court-martial and then announced he would step down from his position and retire.²⁹⁵ CAAF found that Air Force officials' actions toward General Franklin constituted an appearance of unlawful command influence in the referred case, a fact that General Franklin himself essentially conceded.²⁹⁶ CAAF also signaled the possibility of a "chilling effect that the conduct of the Secretary of the Air Force and/or the Chief of Staff of the Air Force generally may have had on other convening authorities and in other criminal cases that are not before us."²⁹⁷ A dissenting opinion by Judge Ryan was even harsher toward Air Force officials' actions, asserting that "there was monkey business aplenty here with respect to [General] Franklin."²⁹⁸

General Franklin is not the only senior Air Force officer to run afoul of Congress for reaching the "wrong" decision in a sexual assault case. In 2012, Lieutenant General Susan Helms disapproved a panel's guilty finding on a sexual assault charge for an officer, instead issuing him nonjudicial punishment for an indecent act.²⁹⁹ General Helms, the first U.S. military

²⁹² Kristin Davis, *General Who Overturned Aviano Sex Assault Conviction to Retire*, AIR FORCE TIMES, Jan. 20, 2014, at A22.

²⁹³ *United States v. Boyce*, 76 M.J. 242 (C.A.A.F. 2017).

²⁹⁴ *Id.* at 245.

²⁹⁵ *Id.* at 245-46.

²⁹⁶ *Id.* at 252-53. In an affidavit introduced at trial, General Franklin acknowledged that it "would be foolish to say there is no appearance of [unlawful command influence]." *Id.* at 246, 251, 253. As a result, CAAF reversed the findings and the sentence without prejudice and returned the case for a possible rehearing. *Id.* at 244, 253.

²⁹⁷ *Id.* at 253.

²⁹⁸ *Id.* at 256 (Ryan, J., dissenting). Judge Ryan dissented because she found that the appearance of unlawful command influence caused no substantial prejudice to the accused's rights.

²⁹⁹ Craig Whitlock, *General's Decision in Sex Case is Scrutinized*, WASH. POST, May 7,

woman to travel in space as a crew member on the space shuttle, saw her nomination to a higher-level position blocked by a member of the Armed Services Committee over her action.³⁰⁰ Following a protracted process, the Air Force ultimately withdrew the nomination,³⁰¹ and General Helms subsequently retired.³⁰² Combined, the consequences to Generals Franklin and Helms “send the message to senior leaders that severe professional consequences will result if commanders take what they think Congress believes to be the incorrect action in sexual assault cases.”³⁰³ As General Helms noted in retirement:

Politics have become law because Congress is using law to fix a social problem. All cases are different; there cannot be one answer that solves a general problem. Congress wants the “right” outcome of every trial. There are very distinct phases of the sexual assault problem. Awareness, education, and accountability have created phenomenal change, but the military is not getting credit for it. Sexual assault has become a politically useful tool to attack the UCMJ process without understanding it and analyzing how structural changes will impact the victim and accused. Congress influencing the justice system is short-sighted and too damaging to the accused because influencing the process negatively influences his rights.³⁰⁴

The Air Force is not alone in providing examples of pressure on convening authorities in sexual assault cases. Following a sexual assault conviction in the difficult case of *United States v. Barry*,³⁰⁵ the intermediate

2013, at A1.

³⁰⁰ *Id.*

³⁰¹ Chris Carroll, *Helms Nomination for Space Command Withdrawn*, STARS AND STRIPES, Nov. 8, 2013, <https://www.stripes.com/news/helms-nomination-for-space-command-withdrawn-1.251789>.

³⁰² David Alexander, *Female U.S. General Who Overturned Sex-Assault Ruling to Retire*, REUTERS, Nov. 8, 2013, <https://www.reuters.com/article/us-usa-defense-sexualassault/female-u-s-general-who-overturned-sex-assault-ruling-to-retire-idUSBRE9A800A20131109>.

³⁰³ Murphy, *supra* note 278, at 130.

³⁰⁴ *Id.* at 164 (quoting from personal interview with retired Lieutenant General Helms).

³⁰⁵ *United States v. Barry*, 2016 CCA LEXIS 634, slip op. (N-M. Ct. Crim. App. Oct. 31, 2016). The court summarized the facts of the case as follows:

In early December 2012, the appellant and AV were introduced by mutual friends and began a dating relationship that soon became sexual. On the mid-morning of 13 January 2013, after spending the night together in the appellant’s hotel room aboard Naval Amphibious Base Coronado, they engaged in a consensual sexual encounter that

service-level appellate court found the conviction factually sufficient and affirmed.³⁰⁶ Following this, the *Washington Times* reported that the now-retired convening authority in the case only approved the conviction because of pressure brought to bear upon him by senior Navy officials.³⁰⁷ The report quoted the convening authority that he “came to believe that there was insufficient evidence to convict and wanted to overturn the verdict. His staff judge advocate advisers tried to talk him out of it. Failing, they then brought in the Navy’s powerhouse admirals to talk him out of it.”³⁰⁸ One of these admirals, the Deputy Judge Advocate General of the Navy (who later became the service’s top military lawyer), reportedly told the convening authority about the political pressure the Navy faced on sexual assault and the efforts in Congress to strip convening authorities of their power.³⁰⁹ The convening authority later wrote in an affidavit: “Absent the pressures described above, I would have

involved the appellant blindfolding AV and tying her by the wrists and ankles while she was face-down on the bed. He then, with AV’s consent, digitally penetrated her anus. Next, however, without seeking her consent, the appellant penetrated her anus with his penis. AV immediately responded by telling him no several times and pleading with him to stop. When it became apparent to AV that the appellant was not going to stop, she then asked him to “[p]lease, go slow.” He complied. After approximately two minutes of penetrating AV, the appellant climbed off her and took a shower, leaving AV still tied to the bed. AV testified the anal sex was “tremendously” painful and “felt like something sharp was inside and I was tearing.” When the appellant finished his shower, he wiped AV’s buttocks with a towel and untied her. After AV took her own shower, she realized she was bleeding rectally. The following day, after telling a cousin about the Sunday morning events, AV “mentally had accepted it was rape[.]” Within days she sent the appellant a Facebook message accusing him of sexual assault; within a month she reported the sexual assault to the Naval Criminal Investigative Service (NCIS).

Id. at *2-3. The court’s opinion also cited evidence that AV sat in the appellant’s lap and hugged and kissed him after the incident, that they went out together afterward, that she asked him if he intended to visit the following weekend, and that she described the bondage to a friend afterward without mentioning the assault. *Id.* at *6.

³⁰⁶ *Id.* at *9.

³⁰⁷ Rowan Scarborough, *Pentagon Brass Improperly Interfered in Navy SEAL’s Sexual-Assault Case, Retired Admiral Claims*, WASH. TIMES, May 12, 2017, <https://www.washingtontimes.com/news/2017/may/12/patrick-lorge-retired-admiral-charges-pentagon-bra/>.

³⁰⁸ *Id.*

³⁰⁹ *Id.*

disapproved the findings in this case.”³¹⁰ Faced with this evidence, CAAF granted review on the issue of whether unlawful command influence existed in the case, and ordered a post-trial fact-finding hearing into the matter.³¹¹ After receiving the hearing’s findings, CAAF held that the Deputy Judge Advocate General committed unlawful command influence, and overturned the conviction.³¹² The court held that the record “clearly demonstrates that, but for external pressures including, but not limited to, [the Deputy Judge Advocate General’s] improper advice,” the convening authority “would have taken different action in Appellant’s case.”³¹³ Such an “improper manipulation of the criminal justice process,” the court held, “will not be countenanced by this Court.”³¹⁴

Likewise, the Coast Guard recently ran afoul of CAAF for allowing the political pressure regarding sexual assault to influence commanders’ actions in a court-martial. In *United States v. Riesbeck*, CAAF held that four different convening authorities involved in picking a panel that featured seven women out of ten members (including at least four trained as victim advocates to aid sexual assault victims) constituted “court stacking,” a form of unlawful command influence.³¹⁵ CAAF based its decision in part on the findings of a judge conducting a post-trial hearing on the issue, who concluded that, “Given the intense external pressures [regarding sexual assault cases], and lack of any other explanation, the most likely reason for the selections... is conscious or unconscious decisions... that it was very important to have a large number of women on the court.”³¹⁶ CAAF agreed:

The salient facts paint a clear picture of court stacking based on gender in an atmosphere of external pressure to achieve specific results in sexual assault cases. Against that backdrop, purposefully selecting a panel that is seventy percent female, most of whom are victim advocates, from a roster of officers that was only twenty percent female and a pool of enlisted

³¹⁰ *Id.*

³¹¹ *United States v. Barry*, 2017 CCA LEXIS 1108 (C.A.A.F. Nov. 29, 2017).

³¹² *United States v. Barry*, 78 M.J. 70 (C.A.A.F. 2018).

³¹³ *Id.* at 78.

³¹⁴ *Id.*

³¹⁵ *United States v. Riesbeck*, 77 M.J. 154 (C.A.A.F. 2018).

³¹⁶ *Id.* at 158.

that was only thirteen percent female, smacks of a panel that was “hand-picked” by or for the Government.³¹⁷

Concluding that the error in the government’s actions “is both so obvious and so egregious that it adversely affected not only Appellant’s right to a fair trial by an impartial panel, but also the essential fairness and integrity of the military justice system,”³¹⁸ CAAF took the extraordinary step of dismissing the case with prejudice, precluding the government from trying the appellant again.³¹⁹

Some of the push to send sexual assault cases to trial can be traced to 2013, when President Barack Obama specifically outlined his expectations regarding the handling of sexual assault allegations. In response to a Pentagon report of an increase in sexual assault allegations, the President stated that military members who commit sexual assault should be “prosecuted, stripped of their positions, court-martialed, fired, dishonorably discharged.”³²⁰ The President also said: “We’re going to communicate this again to folks up and down the chain in areas of authority, and I expect consequences.”³²¹ The President’s public comments were, in the words of a former Judge Advocate General of the Army, “more specific than I’ve ever heard a commander in chief get. When the commander in chief says they will be dishonorably discharged, that’s a pretty specific message.”³²² While the Secretary of Defense did issue a “clarifying” statement, the President himself never retracted his statement.³²³ A handful of trial judges ruled that the President’s remarks constituted unlawful command influence,³²⁴ but largely the issue was handled

³¹⁷ *Id.* at 166.

³¹⁸ *Id.* at 167.

³¹⁹ *Id.*

³²⁰ President Barack Obama, *Remarks by President Obama and President Park of South Korea at a Joint Press Conference* (May 7, 2013), <https://obamawhitehouse.archives.gov/the-press-office/2013/05/07/remarks-president-obama-and-president-park-south-korea-joint-press-confe>.

³²¹ *Id.*

³²² Jennifer Steinhauer, *Remark by Obama Complicates Sexual Assault Trials*, N.Y. TIMES, July 13, 2013, <http://www.nytimes.com/2013/07/14/us/obama-remark-is-complicating-military-trials.html>.

³²³ Elspeth Reeve, *Why Hagel Had to Tell the Military to Ignore Obama on Sexual Assault*, THE ATLANTIC, Aug. 15, 2013, <https://www.theatlantic.com/politics/archive/2013/08/chuck-hagel-instructs-military-ignore-obama-sexual-assault/312146/>.

³²⁴ Erik Slavin, *Judge: Obama Comments ‘Unlawful Command Influence’*, STARS AND STRIPES, June 17, 2013, <http://www.stripes.com/judge-obama-sex-assault-comments-unlawful-commandinfluence-1.225974>; Steinhauer, *supra* note 322.

through *voir dire* and did not significantly hamper efforts to prosecute sexual assault cases.³²⁵

In such an environment, it should not be surprising to learn that commanders have learned the lessons of Generals Franklin and Helms (regardless of whether their underlying decisions were right or wrong) and are sending more sexual assault cases to trial. Information uncovered in a 2014 Congressional study of military justice found that commanders routinely sent sexual assault cases to trial even when civilian prosecutors declined to prosecute those cases.³²⁶ The raw numbers of sexual assault courts-martial tends to support the conclusion that commanders are aggressively taking sexual assault allegations to trial. In fiscal year 2016, commanders preferred charges in 791 cases involving allegations of sexual assault and actually proceeded to trial in 389 cases involving sexual assault.³²⁷ Compare these numbers to fiscal year 2012, when commanders preferred charges in 594 cases involving sexual assault and 302 cases of sexual assault proceeded to trial.³²⁸ Thus, in just four years' time, preferrals and referrals in sexual assault cases rose by roughly 30 percent. This increase is all the more significant when considered in light of the overall trend toward fewer courts-martial in the military. Between the same period, from fiscal years 2012 to 2016, the overall number of courts-martial tried across the military fell by more than 34 percent.³²⁹ Stated again, the number of sexual assault cases referred is up by nearly 30 percent over

³²⁵ See, e.g., *United States v. Thompson*, 2017 CCA LEXIS 398, slip op. at *19-27 (N-M. Ct. Crim. App. June 13, 2017); *United States v. Rodriguez*, 2016 CCA LEXIS 416, slip op. at *6-10 (A.F. Ct. Crim. App. July 13, 2016); *United States v. Brown*, 2015 CCA LEXIS 81, slip op. at *10-13 (A.F. Ct. Crim. App. Mar. 3, 2015).

³²⁶ *Report of the Response Systems to Adult Sexual Assault Crimes Panel* 129 (June 2014), http://responsesystemspanel.whs.mil/Public/docs/Reports/00_Final/RSP_Report_Final_20140627.pdf.

³²⁷ *DoD 2016 Annual Report*, *supra* note 274, Appendix B at 24.

³²⁸ Department of Defense Sexual Assault Prevention and Response Office, *Department of Defense Annual Report on Sexual Assault in the Military* (Apr. 15, 2013), 67-73, http://sapr.mil/public/docs/reports/FY12_DoD_SAPRO_Annual_Report_on_Sexual_Assault-VOLUME_ONE.pdf.

³²⁹ These numbers are derived from annual reports the services provide to CAAF. U.S. Court of Appeals for the Armed Forces, ANNUAL REPORTS, http://www.armfor.uscourts.gov/newcaaf/ann_reports.html. In fiscal year 2012, the services combined tried 3,857 courts-martial. In fiscal year 2016, this number fell to 2,528. The author notes that a disproportionate amount of this decrease came in summary courts-martial (the lowest level of courts-martial) from the Army and the Marine Corps. However, even factoring out summary courts-martial, the total number of other courts-martial tried by the services fell by more than 23 percent during this period.

just a four-year period while the total number of courts-martial during this time is down by more than 34 percent. Sexual assault is fast becoming a central focus of the military justice system.

Sometimes the pressure to send sexual assault cases to trial manifests itself in cases with problematic evidence being sent to trial, such as the *Wright* and *Boyd* cases. Presumably, court-martial panels are capable of sorting through such cases and acquitting accused service members when the government has not proven its case beyond a reasonable doubt. The fact that acquittal rates in contested sexual assault courts-martial hover around 60 percent serves as an indication both of the pressure on commanders to refer weak evidentiary cases to trial and the ability of court-martial panels to acquit in appropriate cases.³³⁰ A more complex problem—and one that only a nullification instruction can address—presents itself when commanders yield to pressure and send cases to trial that have sufficient evidence but do not warrant a court-martial conviction. An Army judge advocate who interviewed two Army brigade commanders found that such a practice is not uncommon:

[O]ne stated that if a sexual assault or sexual harassment case comes across his desk, even if he thinks it is not a good case, he feels he should send it forward, err on the side of the victim, and hope that justice is served in the end. He stated that there is “indirect [unlawful command influence] from the top right now.” The second brigade commander contended that the hard part is when he is told by someone that there is no case, but everyone looks to him to make the decision, and he will be scrutinized for not seeming to take the matter seriously enough if he does not opt for a court-martial. He stated that there is a lot of indirect pressure, and his concern is that a statistic will show that he did not send enough cases forward, that his name will be out there as “someone who doesn’t get it.”³³¹

³³⁰ In fiscal year 2016, the Department of Defense reported that in the 389 sexual assault cases that proceeded to trial, 33 percent resulted in complete acquittals, while in the remainder, the accused was convicted of at least one offense. *DoD 2016 Annual Report*, *supra* note 274, Appendix B at 24. However, this does not account for cases in which the accused was acquitted of all sexual assault charges but convicted of other charges. Of all sexual offense cases that proceeded to trial in fiscal year 2016, the accused was actually convicted of a sexual offense in about 37 percent of such cases. *Id.* at 26.

³³¹ Murphy, *supra* note 278, at 149.

In such an environment, a nullification instruction is particularly important.³³² Several factors related to the current sexual assault environment drive this point home.

B. Other Changed Conditions

Standing alone, the pressure on commanders to send sexual assault cases to trial amplifies the need for a nullification instruction. However, several aspects of the current environment surrounding sexual assault cases particularly point in this direction.

1. Broad Array of Offenses

On its face, the assertion that there may be allegations of sexual assault that do not warrant trial by court-martial may seem dubious. After all, sexual assault is, in the apt description of one commentator, “a particularly pernicious form of harm with long-lasting effects, and a harm plagued by a particular nonresponse problem.”³³³ Make no mistake: as a general matter, sexual assault is one of the most heinous crimes a person can commit against another, and it warrants an appropriately serious response.

However, any crime involves degrees of harm, and “sexual assault” in particular is a broadly-defined term. In fact, much of the pressure on the military regarding the issue stems from broad, amorphous definitions of the term.³³⁴ As with the UCMJ generally, military law prohibits a wide variety of sexual-based acts, and commanders exercise discretion in deciding

³³² A recent decision from the Air Force Court of Criminal Appeals indicates that pressure regarding sexual assault may also affect the judicial process. In *United States v. Vargas*, No. 38991, slip op. (A.F. Ct. Crim. Ap. Mar. 15, 2018), the court reversed a sexual assault conviction, finding that the military judge abused his discretion by failing to recuse himself from presiding over the trial. The court found that the military judge was a potential witness because he was involved in the removal of a prior military judge in the case. That removal was the subject of a defense unlawful command influence motion. The evidence developed on that motion, according to the Air Force court, indicated “dissatisfaction” with the prior military judge, discussion about how to prevent the prior military judge from hearing sexual assault cases, and ultimately the prior military judge’s removal from sexual assault cases (though not other types of cases) after that military judge acquitted a member of sexual assault and adjudged a sentence for remaining specifications that included minimal confinement and no punitive discharge. *Id.* at *5-6.

³³³ Mary Graw Leary, *Affirmatively Replacing Rape Culture with Consent Culture*, 49 TEX. TECH. L. REV. 1, 31 (2016).

³³⁴ See generally Schenck, *supra* note 273.

what offenses belong in a court-martial and what offenses can be handled through lesser action. In its current version, Article 120 of the UCMJ covers not only rape but sexual assault, aggravated sexual contact, and abusive sexual contact.³³⁵ “Sexual assault” occurs when a military member engages in penetration or oral sexual contact of another in two situations. First, sexual assault occurs if the sexual act is committed by threatening or placing the other person in fear; making a fraudulent representation that the sexual act serves a professional purpose; or inducing a belief by any artifice, pretense, or concealment that the person is a another person. Second, sexual assault occurs if the sexual act is committed: without that other person’s consent; while the other person is asleep, unconscious, or otherwise unaware that the sexual act is occurring; or when the other person is incapable of consenting due to impairment or a mental or physical disability.³³⁶ This penetration can be either with: (a) the penis; or (b) another body part or an object if done to abuse, humiliate, harass, or degrade a person or to arouse or gratify the sexual desire of a person.³³⁷ “Aggravated sexual contact” includes non-penetrative contact such as touching another’s vulva, penis, scrotum, anus, groin, breast, inner thigh, or buttocks, if done with an intent to abuse, humiliate, harass, or degrade any person or to arouse or gratify the sexual desire of any person, if the sexual contact was done under circumstances that would otherwise constitute rape.³³⁸ “Abusive sexual contact” essentially involves the same types of sexual contact as with aggravated sexual contact, but under circumstances that parallel sexual assault instead of rape.³³⁹ Other related sections cover offenses such as depositing obscene matters in the mail, rape and sexual assault of a child, indecent viewing/recording/broadcasting, forcible pandering, and indecent exposure.³⁴⁰

Article 120 thus represents Congress’s response to calls for a “comprehensive criminal sexual misconduct article.”³⁴¹ Under the abusive sexual contact provision, for example, any touching of another could give rise to criminal prosecution if done to arouse or gratify sexual desires and without the other person’s consent. As one law review notes, “The Article 120

³³⁵ UCMJ art. 120 (codified at 10 U.S.C. § 920 (2019)).

³³⁶ UCMJ art. 120(b) (codified at 10 U.S.C. § 920(b) (2019)).

³³⁷ UCMJ art. 120(g)(1) (codified at 10 U.S.C. § 920(g)(1) (2019)).

³³⁸ UCMJ arts. 120(c) and (g)(2) (codified at 10 U.S.C. §§ 920(c) and (g)(2) (2019)).

³³⁹ UCMJ art. 120(d) (codified at 10 U.S.C. § 920(d) (2019)).

³⁴⁰ UCMJ arts. 120a-c, (codified at 10 U.S.C. §§ 920a-c (2019)).

³⁴¹ *Report of the Commission on the 50th Anniversary of the Uniform Code of Military Justice*, *supra* note 132, at 11.

definition of ‘sexual contact; effectively criminalizes the entire spectrum of human bodily contact if matched with the requisite mental state (e.g., ‘intent to arouse’).”³⁴²

Any sexual offense is wrong and should be responded to, but the wise exercise of prosecutorial discretion is particularly important in cases involving sexual offenses, which often involve personal circumstances about the accused and the alleged victim and varying degrees of wrong and harm. However, at least when it comes to certain sex offenses, Congress has explicitly discouraged commanders from exercising prosecutorial discretion, expressing its sense “that any charge regarding [rape, sexual assault, forcible sodomy, or attempts to commit these offenses] should be disposed of by court-martial.”³⁴³ Under recent amendments to the UCMJ, only a general court-martial has jurisdiction over allegations of rape, sexual assault, or rape or sexual assault of a child, or attempts of any of these offenses.³⁴⁴ While perhaps it is indisputable that these particularly atrocious offenses warrant a general court-martial, and Congress’s determination in this matter is beyond court members’ province to second guess, the possibility exists that this “expectation” of Congress may be read by commanders to extend to other, less serious offenses under the broad lay umbrella of “sexual assault.” A recent law review article summarizes the complementary problems of the UCMJ’s broad coverage of sexual offenses combined with the expectation that all reports of “sexual assault” should be prosecuted in a court-martial:

These policies generate several problems by including everything from forcible intercourse to a nonconsensual touch on the arm through clothing within the spectrum of “sexual assault.” Justice can take a different form for offenses of different severity—nonconsensual intercourse should, and likely would, be dealt with more harshly than a “slap on the ass.” To the lay public, “sexual assault” is largely synonymous with the crime of rape. Victims and society expect a certain disposition level for a crime labeled “sexual assault”; this expectation is reinforced when statistics count a report as sexual assault, or a victim is *told* she was sexually assaulted even when the

³⁴² Robert E. Murchough, *Barracks, Dormitories, and Capitol Hill: Finding Justice in the Divergent Politics of Military and College Sexual Assault*, 223 MIL. L. REV. 233, 273 (2015).

³⁴³ NDAA for Fiscal Year 2014, *supra* note 3, §§ 1752(a)(1) and (b).

³⁴⁴ UCMJ art. 18(c), (codified at 10 U.S.C. § 818(c) (2019)).

events alleged, though true, do not meet the defined elements of that crime.³⁴⁵

Sexual-based offenses exist along a continuum of harm.³⁴⁶ If every action that technically could be charged under the UCMJ is taken to a court-martial, then this diminishes the effect of having different levels of discipline. One need not stretch the imagination too far to think of scenarios where a “sexual assault” might not reasonably warrant a court-martial when lesser, more expeditious forums are available; for example, if the conduct occurred during or leading up to an otherwise long and happy relationship, if the charged offense took place in conjunction with other consensual sexual activity, if the subject responded to requests to stop albeit not right away, or if a third party reported the offense but the victim did not consider the matter serious enough to report and did not want the subject to be prosecuted.³⁴⁷ With full recognition that sexual offenses have no place in the military and every sexual offense causes some degree of harm, reasonable people can argue that not every sexual-type act that could conceivably be proven under the UCMJ’s broad provisions necessarily warrants a court-martial conviction.³⁴⁸ This is particularly true given the consequences of such a conviction.

2. Mandatory Minimums/Collateral Consequences

A conviction under UCMJ Article 120 carries with it significant consequences, particularly of late. Unlike most UCMJ offenses that carry no mandatory minimum punishment, under recent UCMJ amendments a conviction for rape or sexual assault, rape or sexual assault of a child, or an attempt or conspiracy to commit one of these offenses carries a mandatory minimum punishment of a dismissal or dishonorable discharge.³⁴⁹ A dismissal

³⁴⁵ Murdough, *supra* note 342, at 274.

³⁴⁶ See generally U.S. Gov’t Accountability Office Rep’t to the Comm. on Armed Services, *Sexual Violence: Actions Needed to Improve DoD’s Efforts to Address the Continuum of Unwanted Sexual Behaviors* (Dec. 2017), <https://www.gao.gov/assets/690/689086.pdf>.

³⁴⁷ For general discussion of the tendency of commanders to refer cases on the lesser end of the sexual assault spectrum, see Schlueter, *American Military Justice*, *supra* note 4; Murphy, *supra* note 278; Greg Rustico, *Overcoming Overcorrection: Towards Holistic Military Sexual Assault Reform*, 102 VA. L. REV. 2027 (2016).

³⁴⁸ See Murdough, *supra* note 342, at 274 (“Justice can take a different form for offenses of different severity—nonconsensual intercourse should, and likely would, be dealt with more harshly than a slap on the ass.”)

³⁴⁹ UCMJ art. 56(b) (codified at 10 U.S.C. § 856(b) (2019)).

or a dishonorable discharge carries with it a stigma that is “commonly recognized by our society” and places “limitations on employment opportunities and will deny the accused other advantages which are enjoyed by one whose discharge characterization indicates that [he or she] has served honorably.”³⁵⁰ Such a discharge “will affect an accused’s future with regard to [his or her] legal rights, economic opportunities, and social acceptability,” and deprives the accused of any retirement benefits he or she is otherwise eligible for.³⁵¹ For Article 120 offenses that do not carry a mandatory dismissal or dishonorable discharge, if a court-martial does not sentence the accused to a punitive discharge at trial, the accused will not necessarily be permitted to continue serving in the military. As a matter of policy, the services are generally required to pursue administrative discharge against the member unless they seek a high-level waiver.³⁵²

Additionally, offenses that carry a mandatory dismissal or dishonorable discharge may also only be tried at a general court-martial.³⁵³ In other words, the convening authority may decline to send the case to trial, but once the decision has been made to do so, he or she may not refer the case to a lower-level special or summary court-martial. Civilian employers and government agencies generally treat a general court-martial conviction as a felony-level conviction.³⁵⁴ A service member convicted under nearly any

³⁵⁰ *Benchbook*, *supra* note 103, at § 2-6-10.

³⁵¹ *Id.*

³⁵² See Army Regulation 635-200, *Active Duty Enlisted Administrative Separations*, ¶ 14-12(3) (Dec. 19, 2016) (providing a basis for discharge for any soldier convicted of a “sexually violent offense at a court-martial but who was not sentenced to a punitive discharge); Navy MILPERSMAN 1910-142, *Separation by Reason of Misconduct—Commission of a Serious Offense*, para. 3d (May 12, 2017) (requiring mandatory administrative separation processing for any act of rape, sexual assault, stalking, forcible sodomy, child sexual abuse, possession or distribution of child pornography, incestuous relationships, or any attempt thereof); Navy MILPERSMAN 1910-144, *Separation by reason of Misconduct—Civilian Conviction*, para. 3b (Sep. 20, 2011) (requiring mandatory administrative separation processing for lewd and lascivious acts, forcible sodomy, any child sexual abuse, possession of child pornography, incestuous relationships, or “any form of sexual misconduct” charged as a violation of the UCMJ); Air Force Instruction 36-3208, *Administrative Separation of Airmen*, para. 5.55 (Jun. 13, 2019) (requiring initiation of administrative discharge or a retention request for Airmen found to have committed sexual assault of a child or “sexual assault,” encompassing a broad category of UCMJ offenses including rape, sexual assault, aggravated sexual contact, abusive sexual contact, forcible sodomy, or attempts to commit these offenses).

³⁵³ UCMJ art. 18(c) (codified at 10 U.S.C. § 818(c) (2019)).

³⁵⁴ See generally Freedus and Fidell, *supra* note 134 (drawing a distinction between general court-martial convictions, which are treated as a felony for federal or state

Article 120, UCMJ provision also will be reported to the service member's state for a decision as to whether the member must register as a sex offender in the jurisdiction in which he or she will reside, work, or attend school upon leaving confinement.³⁵⁵

The consequences of an Article 120 conviction are increasingly severe and cause a long-lasting impact on a convicted service member. In many cases, this is perfectly appropriate and just, but not everything that could be labeled under the broad heading of "sexual assault" necessarily warrants this outcome. A reasonable argument could be advanced that a slap of the buttocks, however inappropriate, does not warrant a felony conviction, sex offender registration, and a mandatory separation with a negative characterization, divesting the accused of benefits otherwise earned. Mandatory minimum sentences are generally considered one of the stronger arguments in favor of nullification, and while civilian courts generally reject requests to inform juries about mandatory minimum sentences in the findings portion of a trial, at least one federal court has held that such information is permissible on nullification grounds, at least in "cases where criminal law and community norms greatly diverge."³⁵⁶

3. The Contraction of the Article 32 Hearing

For much of military justice's recent history, the pretrial investigation required under UCMJ Article 32 before referral to a general court-martial was touted as a key safeguard of the military justice system. The pretrial investigation has served since at least World War I as a key procedural safeguard that "has helped prevent prosecutorial abuses by commanders."³⁵⁷

sentencing purposes, and special courts-martial, which should not be).

³⁵⁵ DoD Instruction 1325.07, *Administration of Military Correctional Facilities and Clemency and Parole Authority*, Mar. 11, 2013 incorporating Change 3, Apr. 10, 2018, at Appendix 4 to Enclosure 2.

³⁵⁶ *United States v. Datcher*, 830 F. Supp. 411, 417 (Midd. D. Tenn. 1993). Another District Court later held that a trial judge erred by not instructing the jury on the statutory minimum sentence for possessing child pornography. *United States v. Polizzi*, 549 F. Supp. 2d 308 (E.D.N.Y. 2008). The Second Circuit later vacated that decision, but did leave open the possibility that judges could so instruct juries. *United States v. Polouizzi*, 564 F.3d 142 (2d Cir. 2009). For a review of the *Datcher* decision and an argument in favor of informing juries about mandatory minimum sentences during findings, see Kristen K. Sauer, *Informed Conviction: Instructing the Jury About Mandatory Sentencing Consequences*, 95 COLUM. L. REV. 1232 (1995).

³⁵⁷ Stabenow, *supra* note 227, at 166.

Under the post-World War II UCMJ, Article 32 required a “thorough and impartial investigation of all the matters set forth” in a charge or specification, including “a recommendation as to the disposition which should be made of the case in the interest of justice and discipline.”³⁵⁸ From a perspective of transparency and fairness, the Article 32 investigation enjoyed many advantages over civilian grand juries, including the right of defense counsel and the accused to be present, present evidence, and cross-examine witnesses, and the investigation’s openness to the public.³⁵⁹ It also served as a “truth-seeking” forum, “a screening device designed to protect against referral of baseless charges, provide convening authorities with necessary factual and legal predicates for either referral or other disposition of charges, and give the defense—indeed both sides—discovery of evidence for use at trial, should charges be referred.”³⁶⁰

In 2014, however, “Congress threw all of this out the window, and more than 200 years of truth-seeking continuity in the military’s pretrial process, in favor of another standard.”³⁶¹ Amendments to the UCMJ changed the “preliminary investigation” into a “preliminary hearing,” reduced the reviewing officer’s role from inquiring into the “truth of the matter” set forth in the charges to probable cause determination, and provided crime victims the opportunity to not be required to testify.³⁶² Passed in an effort to shield complainants from perceived unfair treatment in preliminary investigations, the amendments effectively gutted a mechanism long used to compensate for many of the areas in which the military justice system lacks the safeguards of civilian criminal justice.³⁶³ The changes also make it less likely that preliminary hearings will effectively aid commanders in screening cases for which evidence exists to support the charges, but do not reasonably belong in a court-martial. Because the complainant is not compelled to testify (and, as a practical matter, will seldom choose to do so), the preliminary hearing officer will often not have the benefit of gauging the impact of the offense

³⁵⁸ UCMJ art. 32(a) (codified at 10 U.S.C. § 832(a) (1950)).

³⁵⁹ MCM, pt. II, R.C.M. 405 (2012).

³⁶⁰ Thomas G. Becker, *Alas, Poor Truth, We Knew You: Reflections on the Transformation of Article 32, UCMJ: “Investigations” into Pretrial “Hearings,”* 42 THE REPORTER 41, 42-43 (2015).

³⁶¹ *Id.* at 43.

³⁶² *Id.* at 43-44 (summarizing changes found in UCMJ art. 32, as amended by § 1702 of the 2014 National Defense Authorization Act, *supra* note 3).

³⁶³ See Stabenow, *supra* note 227, at 172 (asserting that the act amending UCMJ Article 32 “effectively eliminates the single military mechanism that has, for almost a century, compensated for a host of safeguards provided only in the civilian courts.”).

on the complainant or developing details about the case not contained in witness statements.

Preliminary hearing officers, with access to basically the same information the commander had, are unlikely to provide helpful information or perspective to the convening authority in screening for cases that are not sufficiently serious to warrant a court-martial. The recent Judicial Proceedings Panel report concurred, finding “[t]he revised Article 32 process provides less information to convening authorities and no longer serves as a discovery mechanism for the defense.”³⁶⁴ The Article 32 investigation that once served as “a more substantive check on [prosecutorial] discretion than can be found in the civilian system”³⁶⁵ has been greatly scaled back. Something—or someone—needs to fill the void.

4. The Demise of the Terminal Element

While not unique to the sexual assault issue, recent developments with Article 134 of the UCMJ also indicate a nullification instruction is more necessary than ever. In 2007, President George W. Bush removed offenses such as indecent assault, indecent acts or liberties with a child, and indecent exposure from UCMJ Article 134.³⁶⁶ This coincided with an expanded version of UCMJ Article 120 to cover a broader range of sexual offenses than the prior version, which simply covered rape and carnal knowledge.³⁶⁷ Nine years later, Congress again contracted offenses under Article 134, moving them into other “enumerated” Articles of the UCMJ.³⁶⁸ Congress removed thirty-four offenses (primarily military-specific offenses such as misconduct by a sentinel or lookout or impersonating an officer) that were previously contained under Article 134 and created new enumerated offenses under the UCMJ for these acts. However, none of these most recent changes involved sexual-based offenses. By removing these offenses from Article 134, Congress removed the requirement to prove that such conduct is either prejudicial

³⁶⁴ Judicial Proceedings Panel Report, *supra* note 276, Executive Summary.

³⁶⁵ Note, *Prosecutorial Power and the Legitimacy of the Military Justice System*, 123 HARV. L. REV. 937, 949 (2010).

³⁶⁶ Exec. Order No. 13447, 72 Fed. Reg. 56179 (Oct. 2, 2007).

³⁶⁷ UCMJ art. 120 (codified at 10 U.S.C. § 920 (2006)). The 2007 version of UCMJ Art. 120 was amended again in 2012, after military appellate courts found it unconstitutional because it shifted the burden of proving consent to the accused. *See generally* Brooker, *supra* note 122, at 39-42 (outlining the reasons for and problems with the 2007 revisions to UCMJ Article 120).

³⁶⁸ NDAA for Fiscal Year 2017, *supra* note 3, § 5187.

to good order and discipline or service-discrediting, reasoning that such offenses are “well-recognized concept[s] in criminal law” and thus do “not need to rely upon the ‘terminal element’ of Article 134...as the basis for [their] criminality.”³⁶⁹ The only offenses left under Article 134 are those for which “there is a military-specific reason for utilizing the terminal element under Article 134.”³⁷⁰

Despite these steps, Congress has not been the most significant actor in limiting the government’s requirement to prove that an act was either prejudicial to good order and discipline or service-discrediting. In recent years, CAAF has dramatically limited the requirement to prove the terminal element under military law. Until the early 21st century, it was well settled that any “enumerated” offense automatically carried an element of prejudice to good order and discipline or was of a service-discrediting nature.³⁷¹ The highest military court repeated in a series of cases that every offense listed in the UCMJ was “per se” prejudicial to good order and discipline.³⁷² Thus, in *United States v. Foster*, the court held that an Article 134 offense could be a lesser-included offense to a charge of forcible sodomy even though Article 134 carries the terminal element, an element not included in the greater forcible sodomy offense.³⁷³ The court reasoned that enumerated articles “are rooted in the principle that such conduct *per se* is either prejudicial to good order and discipline or brings discredit to the armed forces; these elements are implicit in the enumerated articles. Although the Government is not required to prove these elements in an enumerated-article prosecution, they are certainly present.”³⁷⁴ However, CAAF dramatically reversed its course in

³⁶⁹ *Military Justice Act of 2016: Section-by-Section Analysis*, http://jpp.whs.mil/Public/docs/03_Topic-Areas/01-General_Information/13_MJRG_MilitaryJusticeAct_2016_SecAnalysis.pdf (last visited July 30, 2019).

³⁷⁰ UCMJ art. 134 (codified at 10 U.S.C. § 934 (2017)); see also *United States v. Gaskins*, 72 M.J. 225 (C.A.A.F. 2013).

³⁷¹ *United States v. Miller*, 67 M.J. 385, 388-89 (C.A.A.F. 2009).

³⁷² *Id.*

³⁷³ *United States v. Foster*, 40 M.J. 140, 143 (C.M.A. 1994).

³⁷⁴ *Id.* The court also cited an earlier case in stating that “it is merely a matter of historical accident that some offenses came to be assigned separate articles without that element, while others continue to be charged with the element under the general article.” *Id.* (quoting *United States v. Doss*, 15 M.J. 409, 415 (C.M.A. 1983) (Cook., J., concurring in the judgment)). For other cases standing for the proposition that all UCMJ articles carried a terminal element, see *United States v. Fuller*, 54 M.J. 107, 112 (C.A.A.F. 2000) (“[E] very enumerated offense under the UCMJ is *per se* prejudicial to good order and discipline or service-discrediting.”); *United States v. Sapp*, 53 M.J. 90, 92 n.2 (C.A.A.F. 2000) (“[T] he elements of prejudice to good order and discipline and discredit to the armed forces

a series of cases beginning in 2009.³⁷⁵ Most specifically, in 2010 and 2011, CAAF overruled its earlier precedent regarding the role of the terminal element in enumerated offenses, now expressly holding that UCMJ offenses, other than Article 134 offenses, do not require proof that the conduct was either prejudicial to good order and discipline or service-discrediting.³⁷⁶

This matters to the nullification debate. Article 134's terminal elements are inherently subjective,³⁷⁷ providing court-martial panels with enormous latitude to decline to convict if they believe the government has not met this idiosyncratic standard. Even though under pre-2009 case law, the government was not required to allege and prove the terminal element, it was acknowledged to be part of every UCMJ offense, providing defense counsel a potential nullification-like argument for acquittal. Counsel could have argued that a particular instance of sexual contact was not prejudicial to good order and discipline or service-discrediting, thus avoiding admonition from the military judge for arguing for nullification. Members who were not inclined to convict based on the severity of the offense could have had a similar "easy out" by agreeing that the conduct did not satisfy the terminal element, thus avoiding any need to engage in outright nullification. CAAF's recent decisions now close off that route.

5. Nullification is Already Happening

Up to this point, some readers may question whether this article has a hidden purpose to downplay the seriousness of sexual assault by making it seem as if it is not a "real crime" worthy of criminal prosecution. No such purpose is intended. The author has spent more than two decades in the military justice system, and has taken aggressive action to vigorously

are implicit in every enumerated offense...."); *United States v. Britton*, 47 M.J. 195, 198 (C.A.A.F. 1997) ("[A]n offense under Article 134 can be a lesser-included offense of an offense under an enumerated Article, notwithstanding the requirement under Article 134 to prove that the conduct was prejudicial or service-discrediting.").

³⁷⁵ See Weber, *Whatever Happened to Military Good Order and Discipline?*, *supra* note 156, at 147-50 (exploring recent cases that limited the role of the terminal element in military law).

³⁷⁶ *United States v. Jones*, 68 M.J. 465, 473 (C.A.A.F. 2010); *United States v. Miller*, 67 M.J. 385, 388 (C.A.A.F. 2009).

³⁷⁷ See generally Weber, *Whatever Happened to Military Good Order and Discipline?*, *supra* note 156 (asserting that, in particular, the "conduct prejudicial to good order and discipline" clause has lost a clear sense of meaning, resulting in commanders' decreased ability to punish conduct under UCMJ Article 134).

prosecute sexual assault cases.³⁷⁸ Sexual assault, like other forms of crime, is intolerable in the military and must be responded to with appropriate measures. The most persuasive argument in favor of an explicit role for court-martial nullification is not that large numbers of service members who have committed sexual assault should go free. Rather, the best argument is that panels may already be exercising nullification, and an instruction is the best hope to provide some constraints on nullification's practice.

In civilian criminal justice systems, the existence of jury nullification is a poorly-kept secret. While the system of general verdicts and secretive deliberations precludes any firm conclusions about how often nullification occurs, significant evidence of the nullification practice exists. A famous 1996 study on the topic found that nullification takes place more often than previously thought, occurring not just to express dissatisfaction with a given law or to prevent a conflict with the jury's moral convictions, but for a broad variety of reasons that were sometimes difficult to categorize.³⁷⁹ A more recent study in 1998 focused on juror attitudes about the process as an indicator of nullification's prevalence; the study found that "[c]oncerns about legal fairness are... a measurable factor in many jury verdicts."³⁸⁰ These studies match the anecdotal observations of practitioners who see nullification as a relatively common occurrence, despite the judicial unwillingness to acknowledge it.³⁸¹

³⁷⁸ For example, the author was the staff judge advocate of the office that prosecuted the officer sexual assault general court-martial that resulted in a conviction at trial but which Lieutenant General Helms disapproved in clemency. *Supra* notes 299-302 and accompanying text. Civilian law enforcement initially investigated the complaint that led to the investigation and court-martial of the officer, but ceded jurisdiction to the Air Force soon after taking the complaint. The author also served as lead appellate government counsel in the *Nerad* decision that drastically limited the ability of court of criminal appeals to set aside legally and factually sufficient convictions—in that case, a child pornography conviction. *See supra* notes 241-247 and accompanying text.

³⁷⁹ *See* David N. Dorfman and Chris K. Iijima, *Fictions, Fault, and Forgiveness: Jury Nullification in a New Context*, 28 U. MICH. J.L. REFORM 861, 882-90 (1995) (summarizing the findings set forth in HARRY KALVEN, JR. AND HANS ZEISEL, *THE AMERICAN JURY* (1966)).

³⁸⁰ Paula L. Hannaford-Agor and Valerie P. Hans, *The Jury in Practice? Nullification at Work? A Glimpse From the National Center for State Courts Study of Hung Juries*, 78 CHI.-KENT L. REV. 1249, 1277 (2003).

³⁸¹ *See, e.g.*, Caisa Elizabeth Royer, *The Disobedient Jury: Why Lawmakers Should Codify Jury Nullification*, 102 CORNELL L. REV. 1401, 1413 (2017 (“Despite almost universal judicial disapproval of jury nullification, jurors continue to nullify”)); Morgan, *supra* note 34, at 1139 (“The strongest argument in favor of legitimizing jury nullification lies in the fact that juries can and do nullify already. Even critics of the doctrine acknowledge this truth”); Kim Murphy, *Some Juries Giving Pot a Pass*, CHI. TRIBUNE,

No study has examined the prevalence of nullification in military courts-martial. The practice may be less common in courts-martial than civilian criminal trials, given the concerns raised above about the willingness among military members to trust a commander's judgment, the method of selecting court-martial members, and the lack of required unanimity in panel verdicts. Nonetheless, one should not doubt that nullification occurs, particularly in sexual assault cases. The military has long struggled with its attitudes toward sexual assault, which are shaped by a combination of factors including gender demographics, the role of violence in the military, and perspectives on sex.³⁸² Despite enormous education efforts, views persist that make obtaining convictions difficult; for example, court-martial members may believe the crime is not sufficiently serious to warrant a court-martial conviction, or that the victim only came forward to obtain the benefits of being labeled a sexual assault victim or "survivor."³⁸³ Alternatively, members may simply be unwilling to convict one of their own, wanting to exercise mercy were they in a similar situation or perhaps believing that the member's military service outweighs any harm caused by the crime. The continued criticism by Congressional representatives, the media, and advocacy groups that the military "doesn't get it" on this issue has spawned some degree of backlash, a view that is bound to carry over to the deliberation room. For example, a Navy prosecutor described the routine question court-martial members convey: "Is this a rape case or is this a [N]avy rape case?"³⁸⁴ A significant number of military members who report sexual assault also report that they experience some form of retaliation for reporting.³⁸⁵ If an alleged victim's unit retaliates

Dec. 29, 2010, C11 (noting an increasing tendency of juries to refuse to convict in marijuana convictions); Joan Biskupic, *In Jury Rooms, a Form of Civil Protest Grows*, WASH. POST, Feb. 8, 1999, A1 (noting that "a striking body of evidence suggests" jury nullification becoming more common).

³⁸² See generally Madeling Morris, *By Force of Arms: Rape, War, and Military Culture*, 45 DUKE L.J. 651 (1996).

³⁸³ For an overview of programs developed to assist victims of sexual assault, including the right to request an expedited transfer, protections against reprisal, additional review of any disciplinary or discharge action contemplated against the victim, and the special victims' counsel program, see Dep't of Defense Instruction 6495.02, *Sexual Assault Prevention and Response Program Procedures*, May 24, 2017. See also Victim Assistance Information, Dep't of Defense Sexual Assault Prevention and Response Office, <http://www.sapr.mil/index.php/victim-assistance> (last visited Feb. 3, 2018).

³⁸⁴ Marisa Taylor and Chris Adams, *Military Stance Muddies War on Rape: Critics Questioning Push to Prosecute Weak Cases Unlikely to Earn Convictions*, CHI. TRIBUNE, Dec. 26, 2011, at C24.

³⁸⁵ Gabrielle Lucero, *Military Sexual Assault: Reporting and Rape Culture*, 6 STAN. J. PUB. POL'Y 1, 6 (2015) (estimating that 62 percent of alleged victims experience

against him or her, this may be some evidence that court members may not be inclined to consider allegations of sexual assault sufficiently serious to warrant a court-martial conviction, thus predisposing them to nullification. While it is impossible to know for certain, it seems probable that court-martial members already engage in nullification, contributing to the high acquittal rate in sexual assault courts-martial. What is also unknown is whether members engage in nullification too much, not enough, or too inconsistently, which is precisely the reason an instruction is advisable.

A nullification instruction could help curb instances of nullification based on biases, fears, or generalized misconceptions about sexual assault. Such an instruction could highlight permissible and impermissible factors to consider in the nullification decision, stress the limited role nullification should play in deliberations, and highlight the gravity of a decision to nullify. Ultimately, a nullification instruction could bring the issue out into the open and force the court-martial panel to confront its own motivations and its own limited perspective when deciding whether to exercise the “nuclear option” of nullification. A proposed instruction to achieve these ends is outlined below.

V. PROPOSED APPROACH

A. When an Instruction is Appropriate

This article advocates that a nullification instruction represents a necessary step toward correcting an imbalance that has occurred as a result of the military’s recent war against sexual assault. However, this step should be a small one, a cautious recognition that the military justice system is different and may demand a different approach toward nullification in the interest of fundamental fairness. If this small step proves insufficient, the issue can be revisited.

As a starting point, as the Air Force seems to have recognized, military judges should cease using the “must convict” variant of standard findings instructions that was highlighted in the *McClour* case.³⁸⁶ By merely switching from “must” to “should,” the members would be cued in to their ability

retaliation); *DoD 2016 Annual Report*, *supra* note 274, at 33 (estimating the number at 32 percent). Recent amendments to the UCMJ establish a criminal offense for retaliating against a person who reports a criminal offense. NDAA for Fiscal Year 2017, *supra* note 3, § 5450.

³⁸⁶ See *supra* notes 104-114 and accompanying text.

to nullify without resorting to an outright instruction. This cue becomes more apparent because an instruction that the members “should convict” if the government meets its burden stands in opposition to the “must acquit” language in instructions. In other words, by instructing the members that they “must acquit” if the government fails to prove its case but that they merely “should convict” if the government does establish guilt, the members are sent a powerful message about their ability to nullify.³⁸⁷ This step alone would significantly balance the scales and avoid confusion about members’ power to nullify.

Beyond this, a nullification instruction should not be issued as a matter of routine. Rather, it should be limited to a minority of cases when defense counsel asks for a nullification instruction and where the facts indicate nullification *may* be appropriate. Military judges should consider the following proposed factors in deciding whether a nullification instruction is appropriate. No single factor should be considered dispositive:

- (1) Does the case involve at least one charge and specification alleging “sexual assault” (broadly defined) or another matter for which the military currently faces particular political or public pressure?
- (2) Is there any evidence of at least generalized pressure on the convening authority to prefer and refer the matter to trial, even if such pressure falls short of unlawful command influence?³⁸⁸

³⁸⁷ See Korte, *supra* note 70, at 142:

The significance of the differing standards cannot be understated. The rules for courts-martial protect the accused by mandating a “not guilty” verdict when more than one-third of the panel members have reasonable doubts as to guilt. The same rules, as delineated in the standard *Benchbook* instructions, do not expressly require a “guilty” verdict when the members have no reasonable doubt as to guilt. Thus, panel members who find that the government has met the elements beyond reasonable doubt have latitude to find the accused “not guilty” because the members merely *should* find the accused guilty. This deliberate language allows for nullification in the limited cases where the panel members find that the accused committed the offense, but they do not wish to convict.

³⁸⁸ In the sexual assault context, courts have often faced unlawful command influence motions based on the overall environment regarding sexual assault, but have generally declined to find unlawful command influence short of evidence of particular pressure

- (3) In the experience of the military judge, does the case involve at least one charge and specification that, standing alone, would not normally warrant trial by court-martial?³⁸⁹
- (4) Has defense counsel articulated some particularized need for a nullification instruction in the context of this individual case (for example, does the case involve an allegedly harsh mandatory minimum sentence or collateral consequences)?
- (5) Does the nature of the case, either in the military judge's experience or based on evidence in the record, raise the concern that military members may bring their individual biases or preconceptions into the deliberation room?

directed toward the individual commander involved in the case. *See, e.g.*, *United States v. Thompson*, 2017 CCA LEXIS 398, slip op. at *17-27 (N-M Ct. Crim. App. Jun. 13, 2017) (finding no unlawful command influence from comments by the President, the Commandant of the Marine Corps, the Secretary of the Navy, and the Superintendent of the Naval Academy, combined with pretrial publicity surrounding the appellant's case); *United States v. Gabriel*, 2015 CCA LEXIS 15, slip op. at *14-17 (A.F. Ct. Crim. App. Jan. 22, 2015) (finding no abuse of discretion in military judge's finding of no unlawful command influence where the defense generally asserted a "toxic" atmosphere existed with regard to alleged sexual assault in the military, and this atmosphere pervaded the entire military justice process); *United States v. Wylie*, 2012 CCA LEXIS 456, slip op. at *7-8 (N-M Ct. Crim. App. Nov. 30, 2012) (finding no unlawful command influence where the Commander of the Pacific Fleet sent a message to all subordinate commanders that stressed the need for leadership in responding to sexual assaults, and mentioned briefly the appellant's court-martial that was pending action by the convening authority).

³⁸⁹ The use of such "throwaway" charges raises an especially compelling case for nullification. For example, occasionally a commander will refer charges of sexual assault and adultery against an accused arising from the same incident. The accused may successfully defend against the sexual assault allegation by raising a consent defense, but be convicted for the adulterous, consensual sexual act. *Cf. Murphy, supra* note 278, at 173 (disclosing that from 2011 to 2013, the Army obtained 127 convictions for adultery, including cases in which the service member is convicted of additional offenses). If the service member is acquitted of a greater offense such as sexual assault but convicted of a lesser, related offense such as adultery, the convening authority retains the ability to grant clemency by disapproving the finding of guilt on the lesser charge. However, the convening authority is not required to do so. UCMJ art. 60(c)(3) (codified at 10 U.S.C. § 860(c)(3) (2017)).

- (6) Have the members requested guidance as to their ability to find an accused not guilty even when the government has proven its case beyond a reasonable doubt?

This decision whether to issue a nullification instruction should generally be made at the close of findings, when the parties discuss findings instructions. Military judges should decline earlier attempts to raise the issue of nullification to the members; for example, *voir dire* questions aimed at raising the equities of convicting the accused based on the charges should generally be avoided. Only if the military judge decides to issue a nullification instruction should defense counsel be permitted to specifically argue or otherwise raise the matter.³⁹⁰

B. The Instruction

With few model nullification instructions in existence in civilian jurisdictions, and none proposed for the military justice system, this article develops a proposed instruction for military judges to issue in appropriate cases. As discussed, it aims to provide members with general information about their duties, their role in the military justice system, and the limited role nullification should play in military courts-martial. The proposed instruction presumes military judges have used the “should” language rather than the “must” variant at issue in *McClour*. The proposed instruction reads as follows:

As I previously instructed you, if on the whole of the evidence you are satisfied beyond a reasonable doubt of the truth of each and every element, then you should find the accused guilty. However, even if you find that the government has proved all of the elements of the charged offense(s) beyond a reasonable doubt, you have the power to find that based upon the facts of this case, a guilty verdict will yield a fundamentally unjust result, and thus you may find the accused not guilty. You are not required to do so, and as a general matter, if the government has proven its case beyond a reasonable doubt, you should find the accused guilty. Your decision to acquit the accused despite the government meeting its burden of proof—if in

³⁹⁰ Skilled defense counsel have often found ways to subtly raise the issue even in jurisdictions where express recognition of nullification is prohibited. See generally CONRAD, *supra* note 10, at 267-95 (exploring tactics for raising the issue by generally appealing to jurors’ “conscience” or “judgment” and the seriousness of the decision before them without expressly mentioning nullification).

fact you wish to make such a decision—should not be taken lightly. One of the criteria by which you were selected for duty on this court-martial is your judicial temperament. If you decide to acquit the accused even believing the government has proved its case beyond a reasonable doubt, your decision should be based upon your experience, your conscience, and your sense of justice for all parties involved, recognizing that it is Congress’s prerogative to criminalize certain activity and prescribe the appropriate forum for some allegations, and the convening authority is ultimately entrusted with maintaining good order and discipline in a military organization. Any decision you make in this regard must be made without passion or prejudice, but with all seriousness to do justice in this particular case. Your authority to find the accused not guilty even if you find the government has proven its case beyond a reasonable doubt may only work to the benefit of the accused, never to the accused’s detriment; as I previously instructed you, you may not convict the accused unless you find the government has established beyond a reasonable doubt that the accused committed the charged offense(s).

VI. CONCLUSION

“Trust in the jury is, after all, one of the cornerstones of our entire criminal jurisprudence, and if that trust is without foundation, we must re-examine a great deal more than just the nullification doctrine.”

– United States Court of Appeals for the District of Columbia Circuit Judge David L. Bazelon³⁹¹

Despite continuing efforts to reform the military justice system to look more like the civilian criminal justice model, the court-martial remains “a strange creature” that “delivers a separate kind of justice.”³⁹² Unless and until Congress further modifies military justice, courts-martial will continue to employ different factors applying different laws. A different entity from a jury—court-martial panel members—is called upon to adjudicate the findings

³⁹¹ United States v. Dougherty, 473 F.2d 1113, 1142 (D.C. Cir. 1972) (Bazelon, J., dissenting).

³⁹² BRAY, *supra* note 116, at xii.

and sentence. At their core, courts-martial “are still very much instruments of command authority, and their ultimate purpose is to protect the military effectiveness of the armed forces.”³⁹³

In this situation, there is no reason why courts-martial need be bound by the same reluctance to instruct on nullification that civilian courts display. Rather, there is every reason why they should take a more permissive approach. The commander still sits in a position of unparalleled power in courts-martial, and if court members do not recognize their power to check the commander, no one will. Court-martial panel members can be trusted to exercise this power responsibly, as their natural tendency to defer to authority, their selection under UCMJ criteria, the lack of required unanimity, and members’ general sense of duty will ensure they will not nullify cases frequently or inappropriately. Indeed, the military justice system already trusts court-martial members to perform functions far beyond those given to civilian jurors. A limited nullification instruction would also help balance the fact that service members do not enjoy the Sixth Amendment right to a jury trial, with that right’s unanimity and size requirements.

The need for a nullification instruction is all the more apparent now. The perceived crisis of sexual assault in the military has placed enormous pressure on commanders to send cases to trial, regardless of whether the member’s conduct warrants a federal conviction and the accompanying sentence and collateral consequences. Following revisions to Article 32, UCMJ, preliminary hearings no longer serve as an adequate safeguard to prevent unwarranted cases from going to trial. Mandatory minimums and sex offender registration have increased the stakes of a sexual assault conviction considerably, no matter how relatively minor the offense. Someone needs to at least have the option—even if rarely exercised—to refuse to convict a service member if an injustice would result. Court-martial panel members are the only ones positioned to do so.

The time has come to provide some balance, particularly when it comes to allegations of sexual assault in the military. Advocates for military justice reform have decried the unfettered discretion of commanders when it comes to handling sexual assault allegations. A limited nullification instruction represents a cautious and reasonable step toward checking commanders’ authority in this area. As no one else can fill the role, a panel of experienced, vetted military members should be entrusted to serve as the “conscience of the commander.”

³⁹³ *Id.* at xiv.

STATE RESPONSIBILITY FOR NON-STATE ACTORS IN
TIMES OF WAR: ARTICLE VI OF THE OUTER SPACE
TREATY AND THE LAW OF NEUTRALITY

*LIEUTENANT COLONEL JIMMY GUTZMAN**

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I. INTRODUCTION

Article VI of the Outer Space Treaty provides that States are responsible for all actions of their non-State actors.¹ This article argues that there should be a higher threshold than the plain text of Article VI of the Outer Space Treaty would indicate for States to be declared belligerents if their non-State actors provide space-based services to a State at war.

In space, all non-State actions are attributed to the State that licenses and oversees them.² Modern corporate structures, mergers, and buyouts can create situations where multiple States could be considered responsible for a single non-State space endeavor.

Under general international law, the conduct of a private person or corporation typically must have some connection to the State if the conduct is to be attributed to that State.³ Under the law of neutrality, States maintain certain rights when two other States (belligerents) are at war so long as the neutral State does not take State action in favor of either of the belligerent States. Combining these two premises, a neutral State is not usually at risk of losing its neutral status and being declared a belligerent if a corporation or person of that state provides some service to a belligerent state, so long as that person or corporation is not acting on behalf of the neutral State.⁴

In international space law, however, all private actions are attributed to the State. Article VI of the Outer Space Treaty provides that States are responsible “whether such activities are carried on by governmental agencies or by non-governmental entities.”⁵ A private corporation that provides space-based services to a belligerent State does not just risk its own assets and personnel; it also risks having its sponsoring state declared a belligerent.

¹ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Jan. 27, 1967, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty or OST].

² *Id.*

³ INT’L LAW COMM’N, DRAFT ARTICLES ON RESPONSIBILITY OF STATES FOR INTERNATIONALLY WRONGFUL ACTS, WITH COMMENTARIES, 38 (2001), http://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf [hereinafter Draft Articles on State Responsibility or DASR] (stating, “the general rule is that the only conduct attributed to the State at the international level is that of its organs of government, or of others who have acted under the direction, instigation or control of those organs, i.e. as agents of the State.”).

⁴ *Id.*

⁵ Outer Space Treaty, *supra* note 1.

This State responsibility requirement worked well for the first forty-plus years of non-State activities in space. More recently, however, non-State actors in space are increasingly both more common and more complex. For example, in 2012, Intelsat, LLC, a U.S. company wholly owned by Intelsat Global, SA, a Luxembourg company, launched Intelsat-22, a geosynchronous telecommunications satellite, into orbit. The Australian Defense Forces contracted to put an ultra-high frequency (UHF) communications payload on this satellite for the purpose of military communications.⁶ The overall satellite was licensed and registered by the United States, but the payload was licensed by Australia.⁷ Intelsat-22 was launched from Baikonur Cosmodrome, Kazakhstan, by International Launch Services (ILS), a U.S. corporation majority-owned by the Khrunichev State Research and Space Production Center of Moscow, Russia.⁸ Which State or States would be internationally responsible for the UHF payload if Australia were to go to war?

Another recent example occurred in 2017 when MacDonald, Detwiler, and Associates (MDA), a Canadian company that owns and operates its own remote sensing satellite, purchased DigitalGlobe,⁹ a U.S. company that

⁶ Jeff Foust, *An opening door for hosted payloads*, SPACE NEWS (Oct. 30, 2012), <http://spacenews.com/an-opening-door-for-hosted-payloads/>; *Hosted Payloads*, INTELSAT GEN. CORP., <http://www.intelsatgeneral.com/hosted-payloads/>.

⁷ U.S. Fed. Comm'n's Comm'n [hereinafter FCC], Intelsat-22 Grant of Application for Satellite Space Systems Authorization with Attachment to Grant, IBFS File No. SAT-LOA-20110929-00193 (2012) Attachment at 1, http://licensing.fcc.gov/cgi-bin/ws.exe/prod/ib/forms/reports/related_filing.htm?f_key=-233699&f_number=SATLOA2011092900193; Comm. on the Peaceful Uses of Outer Space [hereinafter UNCOPUOS], Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space ann. III, Aug. 1, 2012, U.N. Doc ST/SG/SER.E/650, <http://www.unoosa.org/documents/pdf/ser650E.pdf>.

⁸ *Intelsat 22*, U.S. NAT'L AERONAUTICS & SPACE ADMIN. [hereinafter NASA], <https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=2012-011A> (last visited May 22, 2019); Int'l Launch Servs. [hereinafter ILS], *Intelsat's Global Broadband Maritime and Aeronautical Infrastructure Continues to Advance with ILS Proton Launch Success of Intelsat 22*, (Mar. 26, 2012), <https://www.ilslaunch.com/intelsats-global-broadband-maritime-and-aeronautical-infrastructure-continues-to-advance-with-ils-proton-launch-success-of-intelsat-22/>.

⁹ DigitalGlobe, *MDA to Acquire DigitalGlobe, Creating Industry Leader in End-to-End Space Systems, Earth Imagery and Geospatial Solutions* (Feb. 24, 2017), <http://investor.digitalglobe.com/phoenix.zhtml?c=70788&p=RssLanding&cat=news&id=2249168>. I note that since the original submission of this paper, MDA's acquisition of DigitalGlobe, its transition to MAXAR, and MAXAR's incorporation in the U.S. greatly alter the licensing implications. I kept the DigitalGlobe references and analysis as it still presents an illustrative case for law of neutrality implications. See DigitalGlobe, *About DigitalGlobe*,

owns and operates a constellation of five remote sensing satellites. MDA indicated that it would set up a U.S. subsidiary to own and operate the five recently acquired satellites. Which State or States would be internationally responsible for the five-satellite constellation if the company provides military intelligence to a belligerent?

The first section of this article provides an overview of general international law and international space law in relation to States' responsibility for non-State actors to explain how attribution is different in space than in general international law. The second section explores the law of neutrality and how certain actions, like providing telecommunications to a belligerent, could violate the law of neutrality. The third section looks at the history of non-State actors in space and their recent rapid expansion, with a focus on the fluidity of space corporations and international conglomerates. The fourth section explores the present-day interaction between States and non-State actors, including how States license and utilize non-State actors' capabilities. The fifth and final section brings together the previous four. It presents an analysis of which State or States should be held responsible and what could or should happen to a State's neutrality when one of its non-state actors provides space services to a belligerent. This article accomplishes this through case studies of Intelsat and DigitalGlobe.

Though the types of space applications and the number of State and non-State actors have expanded exponentially in recent years, this article focuses primarily on U.S. endeavors, laws, and regulations related to telecommunications and remote sensing. This is not because other States do not have robust space programs overseeing non-State actors, but rather because both of the recent satellite transactions that have major law of neutrality implications (the Intelsat hosted payload and the sale of DigitalGlobe) are satellites licensed by the United States.

II. STATE RESPONSIBILITY FOR NON-STATE ACTORS UNDER GENERAL INTERNATIONAL LAW AND INTERNATIONAL SPACE LAW

This section outlines the differences between general international law and international space law to explain the intricacies of responsibility, liability, and jurisdiction in space law and to show how the existing treaties and norms of space law appear to allow for more than one State to be responsible for a single non-State actor's action. This section lays the groundwork for the

<https://www.digitalglobe.com/company/about-us> (last visited August 2, 2019).

later analysis of which law takes precedence if there were a conflict between general international law and space law. It addresses three issues important for this article: (1) Whether at least one State is internationally responsible for all non-State actors' actions in outer space; (2) Whether more than one State could be responsible for the actions of a non-State actor in outer space; and (3) Whether space law trumps general international law if there were a conflict of laws between general international law and international space law regarding an outer space endeavor.

A. State Responsibility Under General International Law

In international law, a State is responsible for its internationally wrongful acts.¹⁰ For an act to be internationally wrongful, a State must have failed to comply with its international responsibility. That is, if a state has violated, by either an act or omission, some type of obligation, be it a treaty¹¹ or agreement or some other aspect of international law, the State is responsible.¹² The violating State is responsible to other States who are party to the treaty, agreement, or other aspect of international law the first State violated.¹³ Most

¹⁰ DASR, *supra* note 3, art. 1 (“Responsibility of a State for its internationally wrongful acts; Every internationally wrongful act of a State entails the international responsibility of that State”); *Phosphates in Morocco*, Judgment, 1938 P.C.I.J. (ser. A/B) No. 74, at 22 (“We should look for the violation of international law—a definitive act which would, by itself, directly involve international responsibility.”); *Corfu Channel (U.K. v. Alb.)*, 1949 I.C.J. 4 (Apr. 9) (referencing a “State’s obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States”).

¹¹ *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania, Second Phase*, Advisory Opinion, 1950 I.C.J. Rep. at 228 “it is clear that refusal to fulfil a treaty obligation involves international responsibility.”

¹² As stated by the arbitral tribunal in the Case concerning the difference between New Zealand and France concerning the interpretation or application of two agreements, concluded on 9 July 1986 between the two States and which related to the problems arising from the *Rainbow Warrior* Affair, 251, http://legal.un.org/riaa/cases/vol_XX/215-284.pdf [hereinafter, *Rainbow Warrior* Case]:

[T]he general principles of International Law concerning State responsibility are equally applicable in the case of breach of treaty obligation, since in the international law field there is no distinction between contractual and tortious responsibility, so that any violation by a State of any obligation, of whatever origin, gives rise to State responsibility....

See also JAMES CRAWFORD, IX BROWNIE’S PRINCIPLES OF PUBLIC INTERNATIONAL LAW 541 (8th ed. 2012), <http://opil.oup.com/view/10.1093/he/9780199699698.001.0001/he-9780199699698-chapter-25>.

¹³ CRAWFORD, *supra* note 12, at 540.

important for this discussion, for a State to be responsible, the internationally wrongful action must be attributable to the State.¹⁴

Under general international law, a State is internationally responsible when it, through one of its agencies or officials, takes some action.¹⁵ This type of responsibility is called direct responsibility.¹⁶ States are typically not responsible for actions of their non-State actors under general international law unless the non-State actor was acting on behalf of the State.¹⁷ Therefore, the conduct of purely private persons or private corporations is not generally attributable to the State. There must be some nexus between the internationally wrongful act and the State to which the act is attributed, and private individuals or corporations acting on their own behalf cannot commit internationally wrongful acts on behalf of their State.¹⁸

There are two major exceptions to a State's not being held responsible for its non-State actor's actions in general international law: when a State has indirect responsibility, and when a State makes provisions to accept responsibility for its non-State actors. Indirect State responsibility refers to a State's obligation "to protect foreign States and their nationals against violations of their rights committed by persons within its effective jurisdiction."¹⁹ A State could therefore be held responsible for an action by one of its citizens even if the action were not imputable to the State. The second exception is when States specifically make special provisions accepting responsibility. One manner in which States can do so is by signing and ratifying a treaty that automatically assigns responsibility to the State of its non-State actor.²⁰

¹⁴ DASR, *supra* note 3; Phosphates in Morocco, *supra* note 10, at 28 ("This act being attributable to the State and described as contrary to the treaty right of another State, international responsibility would be established immediately as between the two States."); HANS KELSEN, *PRINCIPLES OF INTERNATIONAL LAW* 196-197 (R.W. Tucker, ed., 2d ed. 1967).

¹⁵ CRAWFORD, *supra* note 12, at 542-543; DASR, *supra* note 3, at 38; MANFRED LACHS, *THE LAW OF OUTER SPACE: AN EXPERIENCE IN CONTEMPORARY LAW-MAKING* 115 (Tanja Masson-Zwaan & Stephan Hobe, eds., Martinus Nijhoff 2010).

¹⁶ Bin Cheng, *Article VI of the 1967 Space Treaty Revisited – "International Responsibility", "National Activities", and "The Appropriate State,"* 26 J. SPACE L. 7, 11 (1998).

¹⁷ DASR, *supra* note 3.

¹⁸ *Id.*

¹⁹ Bin Cheng, *supra* note 16, at 11.

²⁰ *Id.* at 10; DASR, *supra* note 3, art. 11 ("Conduct which is not attributable to a State under the preceding articles shall nevertheless be considered an act of that State under

B. State Responsibility Under International Space Law

International space law is one branch of international law where non-government actions are attributed to States because States have voluntarily undertaken additional responsibilities for their non-State actors.

1. State Responsibility for Non-State Actors in the Outer Space Treaty

In the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), the seminal treaty on outer space law with 109 States party to the treaty and 23 additional signatories,²¹ States accept international responsibility for non-State actors under Article VI:

States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the moon and other celestial bodies, by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization.²²

Some of these terms require further clarification and have been the subject of much scholarship.²³ “Responsibility,” in the context of the first

international law if and to the extent that the State acknowledges and adopts the conduct in question as its own.”).

²¹ UNCOPUOS, Status of International Agreements relating to activities in outer space as at 1 January 2019, U.N. Doc. A/AC.105/C.2/2019/CRP.3 (2019), http://www.unoosa.org/documents/pdf/spacelaw/treatystatus/AC105_C2_2019_CRP03E.pdf.

²² Outer Space Treaty, *supra* note 1, art. VI.

²³ Bin Cheng, *supra* note 16; BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW 237 (1997); Duncan Blake, *The Law Applicable to Military Strategic Use of Outer Space*, in NEW TECHNOLOGIES AND THE LAW OF ARMED CONFLICT 115, 121 (2014), <http://link.springer>.

sentence of Article VI, is twofold. First, responsibility means that a State is held internationally accountable and must answer for all “national activities” (a term also left open to interpretation)²⁴ that occur in outer space.²⁵ Those national activities could be governmental or non-governmental (by a non-State actor) activities²⁶ and, if non-governmental, could implicate multiple States such as the State of registry or “the State of the nationality of the persons involved.”²⁷ Second, the State is also responsible to ensure that governmental and non-governmental space activities comply with the Outer Space Treaty.²⁸

The second sentence of Article VI adds another requirement: authorization and continued supervision of non-State actors in outer space by the “appropriate” State party to the treaty. The term “appropriate State party” is also subject to interpretation.²⁹ The fact that “State” is singular and “the” precedes “appropriate” would seem to indicate that the parties to the treaty intended only one State be responsible for a non-State entity.³⁰ However, the

com/chapter/10.1007/978-90-6704-933-7_8; R.K. Woetzel, *Responsibility for activities in outer space with special reference to article IV of the Outer Space Treaty of 1967*, in 25TH COLLOQUIUM ON THE LAW OF OUTER SPACE, PARIS, FRANCE 159 (1983); Martin Menter, *Legal Responsibility for Outer Space Activities*, 26 PROC. L. OUTER SPACE 121, 121–123 (1983); Aldo Armando Cocca, *From Full Compensation to Total Responsibility*, 26 PROC. L. OUTER SPACE 157 (1983); Motoko Uchitomi, *State Responsibility/Liability for National Space Activities*, 44 PROC. L. OUTER SPACE 51 (2001); Michel Bourély, *Rules of International Law Governing the Commercialisation of Space Activities*, 29 PROC. L. OUTER SPACE 157 (1986); Ram S. Jakhu & Steven Freeland, *Relationship between the United Nations Space Treaties and the Vienna Convention on the Law of Treaties*, 55 PROC. INT’L INST. SPACE L. 375 (2012).

²⁴ Blake, *supra* note 23, at 121; LACHS, *supra* note 15, at 114, states, “The acceptance of this principle (Art VI of OST) removes all doubts concerning imputability.”

²⁵ Bin Cheng, *supra* note 16, at 14; FRANCIS LYALL & PAUL B. LARSEN, *SPACE LAW: A TREATISE* 66-69 (2016); Krystyna Wiewiorowska, *Some Problems of State Responsibility in Outer Space Law*, 7 J. SPACE L. 23, 30 (1979); Jakhu & Freeland, *supra* note 23, at 11.

²⁶ Bin Cheng, *supra* note 16, at 9; John T. Stewart, Jr., *U.S. Private Enterprise Enters the Space Arena—The Beginning*, 26 PROC. L. OUTER SPACE 149 (1983); Patricia M. Sterns & Leslie I. Tennen, *Obligations of States in the Corpus Juris Spatialis: Fathoming Unchartered Waters*, 26 PROC. L. OUTER SPACE 169, 172 (1983).

²⁷ Bin Cheng, *supra* note 16, at 20-22.

²⁸ Outer Space Treaty, *supra* note 1, art. VI; Paul B. Larsen, *Liability Limitation under National Law and the Liability Convention*, 53 PROC. INT’L INST. SPACE L. 416, 418 (2010).

²⁹ Karl-Heinz Bockstiegel, *The Term “Appropriate State” in International Space Law*, 37 PROC. L. OUTER SPACE 77 (1994).

³⁰ Bin Cheng, *supra* note 16, at 27; Paul B. Larsen, *Draft Space Protocol and Jurisdiction over Commercial Space Assets*, 54 PROC. INT’L INST. SPACE L. 485, 491 (2011).

single responsible State idea is complicated by the last sentence in Article VI of the Outer Space Treaty, by the Liability Convention and the Registration Convention (discussed below), and the view of authors that the term “appropriate state” could encompass more than one State.³¹

The final sentence of Article VI references international organizations.³² This sentence notes that when international organizations are involved in outer space activities, both the organization and the States who are party to the treaty and who participate in the organization bear responsibility for compliance with the treaty. Though this final sentence is narrower than the first sentence by only specifically outlining international responsibility for compliance with the Outer Space Treaty and not for the broader general international responsibility for all space actions, the sentence makes it clear that more than one State can be responsible for a single outer space entity.³³

The overall goal of Article VI appears to be to ensure that at least one State is internationally responsible and answerable for all actions and activities that occur in outer space.³⁴

Two other articles in the Outer Space Treaty reference responsibility: Articles VII and VIII. Article VII states that “Each State Party to the Treaty that launches or procures the launching of an object into outer space...and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty...”³⁵ or to its persons. Here the Outer Space Treaty references liability instead of

³¹ Uchitomi, *supra* note 23, at 54 (noting that “the negotiating history and many authors support the idea that there can be more than one ‘appropriate state’ although it is expressed as singular”); Ram Jakhu, *Application and Implementation of the 1967 Outer Space Treaty*, 40TH COLLOQUIUM ON THE LAW OF OUTER SPACE 442, 444 (1997), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2801430; Bourély, *supra* note 23, at 159; STEPHAN HOBE ET AL., COLOGNE COMMENTARY ON SPACE LAW: IN THREE VOLUMES 110 (2009) [hereinafter COLOGNE COMMENTARY] (describing how in a case of co-operation between two States’ entities, “a national activity (of the governmental agency or non-governmental entity) in co-operation with another national activity (of another governmental agency or non-governmental entity)... two or more States might be internationally responsible”); Bin Cheng, *supra* note 16, at 29.

³² Outer Space Treaty, *supra* note 1, art. VI.

³³ Wiewiorowska, *supra* note 25, at 37.

³⁴ COLOGNE COMMENTARY, *supra* note 31, at 113; Bin Cheng, *supra* note 16, at 23; LYALL & LARSEN, *supra* note 25, at 66.

³⁵ Outer Space Treaty, *supra* note 1, art. VII.

overall international responsibility³⁶ and introduces the idea of a launching State. Instead of focusing on being held internationally accountable for all actions, this article notes that a launching State will be required to make whole any State party (or citizen thereof) who has damages as a result of an outer space activity.³⁷

The text of Article VII appears to allow for more than one State to be held liable for a single outer space endeavor. By holding liable both “a state that launches, or procures the launch” and a “State Party from whose territory or facility an object is launched,” the signatories allow for those to be at least two, and possibly four or more, separate State Parties.³⁸ Article VII is later amplified in the Liability Convention, which will be discussed in more detail below.

On the other hand, Article VIII of the Outer Space Treaty makes clear that any space object can only be registered to one State. Primarily concerned with jurisdiction, the article states that a “State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body.”³⁹ Throughout the article, the singular “State Party” appears to allow for only one State to register and retain jurisdiction over an outer space object. This article is later clarified by the Registration Convention, which will also be discussed below.

Having discussed the Outer Space Treaty’s provisions on international responsibility in outer space, we now turn to the Liability Convention and the Registration Convention.

2. State Responsibility for Non-State Actors in the Liability Convention

Article II of the Convention on International Liability for Damage Caused by Space Objects (Liability Convention) notes that the “launching state shall be absolutely liable for damage caused by its space object on the

³⁶ Bin Cheng, *supra* note 16, at 10.

³⁷ Michael E. Davis, *Australia’s Space Treaty Obligations*, 41 PROC. L. OUTER SPACE 236, 240 (1998).

³⁸ Matxalen Sánchez Aranzamendi, *Who Is the Launching State: Looking for the Launching State in Current Business Models*, 54 PROC. INT’L INST. SPACE L. 376 (2011).

³⁹ Outer Space Treaty, *supra* note 1, art. VIII.

surface of the Earth or to aircraft in flight.”⁴⁰ “Launching State” is defined as either: (1) a State that launches or procures the launching of a space object; or (2) a State from whose territory or facility a space object is launched.⁴¹ Therefore, if two or more non-governmental actors from different States jointly procure the launch of a space object, or if a non-governmental actor from one State procures the launch and pays a foreign State to launch the object on its land, more than one State can be considered a launching State and be held liable for a single launch.⁴²

Indeed, the Liability Convention envisions the possibility of multiple responsible States.⁴³ Specifically, Article V references joint and several liability when two or more States jointly launch a space object.⁴⁴ Further, Article XXII notes that the Liability Convention shall “apply to any international intergovernmental organization which conducts space activities...”⁴⁵ The Article also notes that the State Members of that organization that are also members of the Liability Convention shall be jointly and severally liable for any damage caused by the international organization.⁴⁶ Though the Liability Convention is concerned with pecuniary responsibility for damages caused by outer space actions,⁴⁷ it nonetheless promotes the idea that multiple states could be held internationally responsible for a single outer space venture.

3. State Responsibility for Non-State Actors in the Registration Convention

The final outer space treaty that considers responsibility is the Convention on Registration of Objects Launched into Outer Space (Registration Convention). The Registration Convention requires launching States to reg-

⁴⁰ Convention on International Liability for Damage Caused by Space Objects art. II, Mar. 29, 1972, 961 U.N.T.S. 187 [hereinafter Liability Convention].

⁴¹ *Id.* art. I(c).

⁴² Frans G. von der Dunk, *1972 Liability Convention, Enhancing Adherence and Effective Application*, 41 PROC. L. OUTER SPACE 366, 370 (1998).

⁴³ Karl-Heinz Bockstiegel, *Term Launching State in International Space Law*, 37 PROC. L. OUTER SPACE 80, 81 (1994); Jakhu, *supra* note 31, at 444.

⁴⁴ Liability Convention, *supra* note 40, art. V.

⁴⁵ *Id.* art. XXII.

⁴⁶ *Id.* art. XXII (3); Lachs, *supra* note 15, at 115.

⁴⁷ Herbert Reis, *Some Reflections on the Liability Convention for Outer Space*, 6 J. SPACE L. 125, 128 (1978); Cocca, *supra* note 22, at 157.

ister space objects in orbit.⁴⁸ It uses the same definition of “launching state” as the Liability Convention,⁴⁹ and Article VII of the Registration Convention also allows for international intergovernmental organizations to register outer space objects as if they were States.⁵⁰

Also like the Liability Convention, the Registration Convention envisions the idea that multiple States could be responsible for a launch of an outer space object. When there is more than one launching State, Article II(2) of the Registration Convention requires the States to jointly determine “which one of them shall register the object.”⁵¹

Notably, Article II(2) references Article VIII (jurisdiction) of the Outer Space Treaty, stating that, when deciding which of the launching States shall register the object, the States should bear in mind the provisions of Article VIII of the Outer Space Treaty.⁵² Therefore, while allowing for more than one launching State, the Registration Convention only appears to limit the registering State’s jurisdictional responsibility for the object in outer space.

This clause allows for various States that are responsible for an outer space activity to make agreements among themselves as to who will register and retain jurisdiction of the object.⁵³ These agreements on which of the launching States retain jurisdiction and control of the space object leave open the possibility of modification as Article II(2) speaks of agreements (plural) “concluded or to be concluded.”⁵⁴

Jurisdiction over an object in space, as evidenced by registration under the Registration Convention, does not necessarily translate to exclusive international responsibility for the whole activity.⁵⁵ For example, State A could license and provide continuing supervision of a non-governmental space activity, such as a satellite constellation, in accordance with Article VI of the Outer Space Treaty. State B could both launch and register the

⁴⁸ Convention on Registration of Objects Launched into Outer Space art. II, Jan. 14, 1975, 1023 U.N.T.S. 15 [hereinafter Registration Convention].

⁴⁹ *Id.* art. I.

⁵⁰ *Id.* art. VII.

⁵¹ *Id.* art. II(2).

⁵² *Id.*

⁵³ LYALL & LARSEN, *supra* note 25, at 87.

⁵⁴ Registration Convention, *supra* note 48, art. II(2); BIN CHENG, *supra* note 23, at 628.

⁵⁵ BIN CHENG, *supra* note 23, at 628.

satellites of that activity, making State B responsible under Article VII of the Outer Space Treaty and under the Liability and Registration Conventions. In such a situation, State B would have jurisdiction over the outer space objects under Article VIII of the Outer Space Treaty, but State A would also bear international responsibility as State A licensed the satellites' launches, and provides continual supervision under Article VI of the Outer Space Treaty.⁵⁶

An even more likely example would occur if State A licenses and provides supervision of a non-governmental space activity, such as a six-satellite constellation. State A launches and registers the first two satellites of the constellation, but then the non-governmental space activity is sold to a company in State B. State B then licenses and provides continuing supervision of the company and launches and registers the last four satellites of the constellation. Under the Liability and Registration conventions, State A still retains jurisdiction over the first two satellites as State B could never be considered the launching state; however, State B is answerable for the other responsibilities outlined in Article VI of the Outer Space Treaty, namely overall international accountability.⁵⁷

A final example draws out the complications associated with dealing with international organizations. If an international organization were to launch a satellite constellation, the organization and the member States would be responsible pursuant to Article VI of the Outer Space Treaty, Article XXII of the Liability Convention, and Article VII of the Registration Convention. If the organization were then to privatize, the State where the private company is incorporated would likely license and provide continuing supervision over the in-orbit satellites. That State, however, could not be considered the launching State for purposes of the Liability and Registration Conventions.⁵⁸

⁵⁶ Setsuko Aoki, *In Search of the Current Legal Status of the Registration of Space Objects*, 53 PROC. INT'L INST. SPACE L. 245, 248 (2010) (noting a case where China launched and registered Iridium Satellites that were wholly controlled by Motorola, a U.S. company).

⁵⁷ UNCOPUOS, *Note verbale dated 29 July 2003 from the Permanent Mission of the Netherlands to the United Nations (Vienna) addressed to the Secretary-General*, U.N. Doc. A/AC.105/806 (2003), http://www.unoosa.org/pdf/reports/ac105/AC105_806E.pdf. Here, a non-State Dutch enterprise acquired two in orbit satellites. The Kingdom of the Netherlands noted that it was not the "launching State," "State of registry," or "launching authority" for the purposes of the Liability and Registration Conventions, but that it did bear international responsibility under Article VI of the OST for their operation.

⁵⁸ UNCOPUOS, *Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space, Note verbale dated 9 September 2002 from the Permanent Mission of the United Kingdom of Great Britain and Northern*

When reading the Liability and Registration Conventions in conjunction with Article VI of the Outer Space Treaty, there is some debate as to whether assigning jurisdiction to a certain State for an outer space object carries with it all of the international responsibilities for that outer space activity.⁵⁹ It appears the majority of scholars argue that the State with jurisdiction is the only one that can bear international responsibility for that object.⁶⁰ However, it appears that more than one State can exercise jurisdiction over an outer space activity.⁶¹ As noted publicist Bin Cheng argues, there may well be “more than one appropriate state de facto or even de jure” under Article VI of the Outer Space Treaty.⁶²

Cheng specifically provides a hierarchy of States that could be jurisdictionally responsible for a non-State actor’s space activity. The States that could be responsible (in order of precedence) are those with non-State actors that undertake a space activity from that State’s jurisdiction; non-State actors that undertake a space activity from ships, aircraft, or spacecraft licensed by that State, and, finally, space activities conducted by nationals of a State, even if not done from that State’s jurisdiction.⁶³

Cheng’s responsibility hierarchy under Article VI entails a more comprehensive State responsibility than do the Liability and Registration Conventions. Not only could at least one State be held internationally responsible, but if that State were to fail to uphold its international obligations, a second State could be sought. His idea that international responsibility is

Ireland to the United Nations (Vienna) addressed to the Secretary-General, U.N. Doc. ST/SG/SER.E/417/Rev.1 (2002). After INMARSAT’s satellites transitioned from being controlled by an international organization to a non-State actor licensed by the United Kingdom (UK), the UK noted that it could not be considered the launching State under the Liability or Registration Conventions, but that it now licensed the activities.

⁵⁹ COLOGNE COMMENTARY, *supra* note 31, at 112.

⁶⁰ *Id.* at 112; HANNEKE LOUISE VAN TRAA-ENGELMAN, COMMERCIAL UTILIZATION OF OUTER SPACE: LAW AND PRACTICE 52 (1993), <https://books.google.ca/books?hl=en&lr=&id=XSIpVmFdJhgC&oi=fnd&pg=PR15&dq=commercial+utilization+of+outer+space&ots=y2zw4-RsJm&sig=YWHsz7CFeQDfWTcDotuc9LHXjz8> (last visited May 9, 2017).

⁶¹ Frans G von der Dunk, *Private enterprise and public interest in the European “spacescape”: towards harmonized national space legislation for private space activities in Europe* [International Institute of Air and Space Law, Faculty of Law, Leiden University], 1998) [unpublished] at 21”Both states under whose jurisdictions a certain private activity has occurred remain internationally responsible if that activity violates international space law.”; Cheng, *supra* note 22 at 622.

⁶² Cheng, *supra* note 15 at 29.

⁶³ *Id.* at 24–25.

... tied to competence to act allows that “every State party should be directly responsible (sic) for any space activity that is within its legal power or competence to control....”⁶⁴

C. Interaction Between General International Law and International Space Law

As seen above, imputation of non-government actions differs between general international law, where the State is not typically responsible for non-government actions, and international space law, where the State is responsible for non-government actions.

To resolve this conflict, the concept of specialized law, known in Latin as “*lex specialis derogat legi generali*,”⁶⁵ is outlined in Article 55 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts.⁶⁶ Specifically, the rules of general international law give way when special rules of international law apply to a certain field, like international space law.⁶⁷ In signing and ratifying the Outer Space Treaty, States first specifically accepted that general international law applies in outer space with Article III, which provides that “States Parties to the Treaty shall carry on activities in the exploration and use of outer space... in accordance with international law including the Charter of the United Nations...”⁶⁸; and then accepted that States are responsible for their non-State actors with the provisions of Article VI.⁶⁹

These special rules—designed to govern one aspect of international law—can change what constitutes an internationally wrongful act.⁷⁰ In such instances, the general international law rule would yield to the specialized rule of law.

Taking the three space treaties together, three major conclusions become apparent: (1) States are responsible for all non-State actors’ actions in

⁶⁴ *Id.* at 23.

⁶⁵ This principle of legal reasoning means that special law prevails over general law.

⁶⁶ DASR, *supra* note 3, art. 55.

⁶⁷ Jakhu & Freeland, *supra* note 23, 11; H.L. van Traa-Engelman, *Clearness Regarding Property Rights on the Moon and Other Celestial Bodies*, 39 PROC. L. OUTER SPACE 38 (1996).

⁶⁸ Outer Space Treaty, *supra* note 1, art. III.

⁶⁹ *Id.* art. VI.

⁷⁰ DASR, *supra* note 3, art. 55.

outer space; (2) More than one State can be responsible for a space endeavor; and (3) When a conflict exists between general international law and international space law, international space law will prevail.

III. THE LAW OF NEUTRALITY

A. What is the Law of Neutrality?

The law of neutrality defines the rights and obligations of States involved in an international armed conflict, called belligerents, and the rights and obligations of States not involved in the armed conflict, or neutrals.⁷¹ It has developed over centuries and harkens to a time when war was considered a valid means to achieve foreign policy and when States declared their war intentions while others declared their neutrality.⁷² More recently, as declarations of war have become rare⁷³ and armed conflicts often involve insurgency or terrorist components, the law of neutrality has become more amorphous.⁷⁴

B. Historical Overview of the Law of Neutrality through the U.N. Charter

The law of neutrality, borne of States' desire for more certainty regarding belligerents' actions in a war, can be traced back to the Middle Ages.⁷⁵ Both customary international law and treaties deal with the law of neutrality.⁷⁶ The right of a neutral not to participate in a war along with the obligation of a neutral not to give any assistance were formally outlined in the eighteenth

⁷¹ Paul Seger, *The Law of Neutrality*, in THE OXFORD HANDBOOK OF INTERNATIONAL LAW IN ARMED CONFLICT 248 (Andrew Clapham & Paola Gaeta eds., 2014), <http://www.oxfordhandbooks.com/view/10.1093/law/9780199559695.001.0001/law-9780199559695-e-10?mediaType=Article>; Michael Bothe, *The law of neutrality*, in HANDBOOK OF INTERNATIONAL HUMANITARIAN LAW 571, 594 (Dieter Fleck ed., 2d ed. 2008).

⁷² U.S. NAVAL WAR COLLEGE, ANNOTATED SUPPLEMENT TO THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS 365 (A.R. Thomas & James C. Duncan eds., 1999), <https://permanent.access.gpo.gov/gpo3917/Naval-War-College-vol-73.pdf> [hereinafter LONO HANDBOOK SUPP.].

⁷³ ROBERT W. TUCKER, THE LAW OF WAR AND NEUTRALITY AT SEA 201 (2005).

⁷⁴ LONO HANDBOOK SUPP., *supra* note 72, at 366.

⁷⁵ Seger, *supra* note 71, at 250.

⁷⁶ Bothe, *supra* note 71, at 551.

century⁷⁷ and the law of neutrality was codified in treaties beginning in 1780.⁷⁸ Over the next century, a series of treaties followed that continued to shape the law of neutrality,⁷⁹ but it was not until the 1907 Hague Convention that a major codification of the core set of rules about neutrality was developed.⁸⁰

The Hague Convention of 1907 was a series of thirteen treaties, two of which—the Convention relative to the Rights and Duties of Neutral Powers and Persons in case of War on Land (Hague (V)) and the Convention concerning the Rights and Duties of Neutral Powers in Naval War (Hague (XIII))—outlined neutral and belligerent rights. Though they are over 100 years old, they remain the “main body of law of neutrality.”⁸¹

1. The Law of Neutrality Under Hague (V)

Hague (V) focuses on the rights and duties of neutrals in land wars.⁸² It begins with the most fundamental right of a neutral: that its territory is inviolable. In other words, a neutral is protected from belligerents’ military actions.⁸³ Further, belligerents are prohibited from moving troops, munitions, or supplies through neutrals’ territory.⁸⁴ Importantly for this article, Article 3 of Hague (V) prohibits belligerents from erecting a “wireless telegraphy station or other apparatus for the purpose of communicating with belligerent forces.”⁸⁵ It also prohibits the use of these belligerent-run communications stations for military purposes even if they were installed before the war.⁸⁶ Beyond prohibiting belligerents from erecting and using their own com-

⁷⁷ EMER DE Vattel, *THE LAW OF NATIONS, OR, PRINCIPLES OF THE LAW OF NATURE, APPLIED TO THE CONDUCT AND AFFAIRS OF NATIONS AND SOVEREIGNS, WITH THREE EARLY ESSAYS ON THE ORIGIN AND NATURE OF NATURAL LAW AND ON LUXURY* 523-524 (Béla Kapossy & Richard Whatmore eds., Thomas Nugent trans., 2008), http://files.libertyfund.org/files/2246/Vattel_1519_LFeBk.pdf.

⁷⁸ Seger, *supra* note 71, at 250.

⁷⁹ *Id.* at 250-251.

⁸⁰ *Id.* at 251.

⁸¹ *Id.* at 249.

⁸² Hague Convention (V) Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land pmbll., Oct. 18, 1907, U.S.T.S. 540 [hereinafter Hague (V)].

⁸³ Bothe, *supra* note 71, at 559, states, “Above all, this means that the armed forces of the parties to the conflict may not enter neutral territory. They may not in any way use this territory for their military operations, or for transit or similar purposes.”

⁸⁴ Hague (V), *supra* note 82, art. 2.

⁸⁵ *Id.* art. 3(a).

⁸⁶ *Id.* art 3(b).

munication stations, Hague (V) also requires neutrals to take actions to stop belligerents from placing communications stations on their territory. Specifically, Article 5 prohibits neutrals from allowing their territory to be used in such a fashion (i.e., neutrals must prevent belligerents from building and using communication systems on a neutral's territory).⁸⁷

An important point throughout the law of neutrality during the early twentieth century is that neutrals are to remain impartial in relation to the belligerents.⁸⁸ Therefore, although belligerents cannot move arms or supplies through a neutral's territory, a neutral can allow the transport or export of arms or munitions to a belligerent⁸⁹ by one of its non-State actors, so long as it treats both belligerents equally.⁹⁰ Likewise, although the treaty prohibits belligerents from erecting or using their own communication systems on a neutral's territory, it gives neutrals the ability to allow belligerents to use telegraph, telephone cables, or wireless technology that belong to the neutral or private companies or individuals.⁹¹ The only requirement is that the neutral must not favor one belligerent over another in providing these services.⁹²

Hague (V) also provides that neutrals are not responsible for people crossing their border to assist belligerents, nor are neutrals required to prevent the export or transport of arms or munitions to belligerents.⁹³ On the communications front, Hague (V) also grants a neutral the right to not forbid or restrict the use on "behalf of the belligerents of telegraph or telephone cables or of wireless telegraphy apparatus belonging to it or to companies or private individuals."⁹⁴

2. The Law of Neutrality Under Hague (XIII)

Hague (XIII) focuses on neutrals' rights and responsibilities during a naval war.⁹⁵ It also begins with a proclamation that belligerents must respect

⁸⁷ *Id.* art 5.

⁸⁸ Walter L. Jr. Williams, *Neutrality in Modern Armed Conflicts: A Survey of the Developing Law*, 90 MIL. L. REV. 9, 21 (1980); TUCKER, *supra* note 73, at 202.

⁸⁹ Hague (V), *supra* note 82, art. 7.

⁹⁰ *Id.* art. 9.

⁹¹ *Id.* art. 8.

⁹² *Id.* art. 9.

⁹³ *Id.* arts. 6-7.

⁹⁴ *Id.* art. 8.

⁹⁵ Convention concerning the Rights and Duties of Neutral Powers in Naval War, Oct. 18,

the sovereignty of neutrals.⁹⁶ It states that belligerents cannot use neutral ports as a base of naval operations and that neutral powers must not favor one belligerent over another in their actions.⁹⁷ Like Hague (V), Hague (XIII) also states that a neutral power does not need to prevent the export or transit of arms to a belligerent,⁹⁸ so long as the neutral acts impartially.⁹⁹

Hague (XIII) also references belligerents' use of wireless communications. Article 5 specifically forbids belligerents from erecting "wireless telegraphy stations or any apparatus for the purpose of communicating with the belligerent forces on land or sea."¹⁰⁰ Though not envisioned at the time, the broad term "any apparatus" would presumably include any satellite ground stations established in neutral ports.

3. The Law of Neutrality During World War II

As the twentieth century progressed, the law of neutrality changed. War was renounced as an instrument of national policy.¹⁰¹ It became more difficult to determine whether States were at war.¹⁰² During World War II, a new category outside the traditional "belligerents" and "neutrals" emerged. That category, claimed by the United States prior to its entry into World War II, is that of "non-belligerent."¹⁰³

"Non-belligerent" refers to a State that is not actively involved in a war, but does not necessarily adhere to traditional notions of impartiality.¹⁰⁴

1907, U.S.T.S. 545 [hereinafter Hague (XIII)].

⁹⁶ *Id.* art. 1.

⁹⁷ *Id.* arts. 5, 8.

⁹⁸ *Id.* art. 7.

⁹⁹ *Id.* art. 9.

¹⁰⁰ *Id.* art. 5.

¹⁰¹ Treaty Between the United States and Other Powers Providing for the Renunciation of War as an Instrument of National Policy art. 1, Aug. 27, 1928, 94 L.N.T.S. 57 [hereinafter Kellogg-Briand Pact].

¹⁰² Christopher Greenwood, *The concept of war in modern international law*, 36 INT'L COMP. L. Q. 283, 285 (1987).

¹⁰³ Bothe, *supra* note 71 (citing G. P. POLITAKIS, MODERN ASPECTS OF THE LAW OF NAVAL WARFARE AND MARITIME NEUTRALITY 458 et seq. (1998)).

¹⁰⁴ Tucker, *supra* note 73, at 192; U.S. DEP'T OF DEFENSE, LAW OF WAR MANUAL §§ 15.1.2.3, 17.18.1 (June 2015, updated Dec. 2016), <https://tjaglespublic.army.mil/documents/27431/61281/DoD+Law+of+War+Manual+-+June+2015+Updated+Dec+2016/5a02f6f8-eff3-4e79-a46f-9cd7aac74a95> [hereinafter DoD LAW OF WAR MANUAL].

Such a State may provide support to one belligerent over another, which runs counter to the Hague Convention and the laws of neutrality. For example, the United States provided war materiel to the Allies in World War II prior to entering the war. Though many other States have provided assistance to one belligerent over another, and at least one State has recently declared itself a non-belligerent,¹⁰⁵ the status of non-belligerency has not been uniform enough to be recognized in customary international law.¹⁰⁶

Although the law of neutrality was changing, many aspects of the Hague Conventions persisted. Notably on the communications front during World War II, “practically all neutral nations prohibited the employment by belligerents of radiotelegraph and radiotelephone apparatus within their territorial sea.”¹⁰⁷

C. Law of Neutrality After Adoption of the U.N. Charter

With the adoption of the Charter of the United Nations after World War II, the whole idea of neutrality changed.¹⁰⁸ Though the U.N. Charter clarified the law of neutrality by validating notions of territorial sovereignty and the inherent right to self-defense,¹⁰⁹ it also envisioned an idea of international collective security,¹¹⁰ which in some ways allows for and in some ways obviates the idea of remaining neutral.¹¹¹

Most importantly, the Charter attempted to prohibit war.¹¹² Article 2(4) requires member States to refrain from “the threat or use of force against the territorial integrity or political independence of any state.”¹¹³ Additionally, States party to the Charter are required to “give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United

¹⁰⁵ Natalino Ronzitti & M. Ragazzi, *Italy's Non-belligerency during the Iraqi War*, in *INTERNATIONAL RESPONSIBILITY TODAY: ESSAYS IN MEMORY OF OSCAR SCHACHTER* 197, 201 (2005).

¹⁰⁶ Bothe, *supra* note 71, at 550.

¹⁰⁷ LONO HANDBOOK SUPP., *supra* note 72, at 373.

¹⁰⁸ Seger, *supra* note 71, at 251; Bothe, *supra* note 71, at 552.

¹⁰⁹ U.N. Charter arts. 1, 51.

¹¹⁰ Bothe, *supra* note 71, at 552.

¹¹¹ Seger, *supra* note 71, at 251.

¹¹² KELSEN, *supra* note 14, at 41-42.

¹¹³ U.N. Charter art. 2(4).

Nations is taking preventive or enforcement action.”¹¹⁴ The Charter also allows for the Security Council to determine whether there has been an armed attack and which State is the aggressor.¹¹⁵

These two articles notwithstanding, States may remain neutral in some instances, as the articles allow for, but do not necessarily require, any action.¹¹⁶ Thus, even taking these two articles together, a State, by taking no action, could remain impartial in an international conflict where the Security Council has determined an aggressor.¹¹⁷

However, there are situations where the U.N. Charter leaves no room for neutrality. The U.N. Charter allows for the Security Council to require actions of States who are not otherwise involved in the conflict.¹¹⁸ Specifically, the Security Council could require an otherwise neutral State to cease economic relations with a belligerent.¹¹⁹ Important for this article, the Security Council could require a State to cease telegraphic, radio, and other means of communications with an aggressor.¹²⁰ The Security Council could also require military action against an aggressor.¹²¹ If a State is required to provide armed forces members to take action against an aggressor, it follows that that State could not claim to be an impartial neutral.

All member States are required to “carry out the decisions of the Security Council.”¹²² If the U.N. worked seamlessly and collective security worked in all instances, the law of neutrality would be obsolete as there would never be a need for a neutral state.¹²³ However, in practice, the Security Council infrequently adopts mandatory resolutions¹²⁴ and leaves neutrality as a viable option.

¹¹⁴ *Id.* art 2(5).

¹¹⁵ *Id.* art 39.

¹¹⁶ *Id.* art 51.

¹¹⁷ DIETRICH SCHINDLER, *TRANSFORMATIONS IN THE LAW OF NEUTRALITY SINCE 1945*, at 373 (1991).

¹¹⁸ KELSEN, *supra* note 14, at 45.

¹¹⁹ U.N. Charter art. 41.

¹²⁰ *Id.*

¹²¹ *Id.* arts. 42, 48.

¹²² *Id.* art. 25.

¹²³ Seger, *supra* note 71, at 262; Hague (V), *supra* note 82, art. 3.

¹²⁴ George K. Walker, *Information Warfare and Neutrality*, 33 *VAND. J. TRANSNAT'L L.* 1079, 1131 (2000).

Practice since adoption of the U.N. Charter verifies that the law of neutrality is still valid.¹²⁵ The International Court of Justice recognized that the law of neutrality, subject to the provisions of the U.N. Charter, was customary international law.¹²⁶ In 1995, the United Nations General Assembly recognized and supported the permanent neutrality of Turkmenistan.¹²⁷ Although war and neutral status may not often be declared,¹²⁸ State practice, too, continues to recognize the law of neutrality as defining the relationship between belligerents and neutrals.¹²⁹ As long as the Security Council has not determined that some action must be taken against an aggressor, a State is still free to remain impartial in an international conflict and maintain its neutrality.

The law of neutrality as it relates to communications also remains valid. Because it was written in 1907, Hague (V) does not address either modern satellite communications or other space-based applications that could be valuable to a State at war in the twenty-first century. However, the communications principles outlined in Article 3 of the treaty are still viable and applicable to modern telecommunications.¹³⁰ Neutral States are still prohibited from establishing, or, if established, from allowing continued use of military communications facilities that belong to a belligerent.¹³¹

¹²⁵ Williams, *supra* note 88, at 17.

¹²⁶ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Rep. 226, 261 (July 8):

The Court finds that as in the case of the principles of humanitarian law applicable in armed conflict, international law leaves no doubt that the principle of neutrality, whatever its content, which is of a fundamental character similar to that of the humanitarian principles and rules, is applicable (subject to the relevant provisions of the United Nations Charter), to all international armed conflict, whatever type of weapons might be used.

¹²⁷ G.A. Res. 50/80 § A, Maintenance of international security; Permanent neutrality of Turkmenistan (Dec. 12, 2015), <http://www.un.org/documents/ga/res/50/a50r080.htm>.

¹²⁸ Greenwood, *supra* note 102, at 3; LONO HANDBOOK SUPP., *supra* note 72, at 366; Tucker, *supra* note 73, at 201.

¹²⁹ U.S. NAVY, U.S. MARINE CORPS & U.S. COAST GUARD, NWP 1-14M/MCTP 11-10B/COMDTPUB P5800.7A, THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS § 7.1 (2017), https://www.jag.navy.mil/distrib/instructions/CDRs_HB_on_Law_of_Naval_Operations_AUG17.pdf [hereinafter LONO HANDBOOK].

¹³⁰ Bothe, *supra* note 71, at 564.

¹³¹ DoD LAW OF WAR MANUAL, *supra* note 104, at 947, 949.

Further, during an armed conflict, communications systems and infrastructure used by a belligerent could constitute a proper military target.¹³² So long as the communications system both makes an effective contribution to the military and provides a “definite military advantage” if attacked,¹³³ it would meet the two pronged-test establishing it as a proper object of attack. A State that would like to remain neutral, therefore, cannot allow the continued use of a foreign State’s military communications system on its territory after the outbreak of hostilities.

In space, a neutral State could not, therefore, provide satellite imagery to help a belligerent plan an attack¹³⁴ unless it wanted to risk its neutral status.¹³⁵ Likewise, a neutral State cannot allow a satellite payload used for military communications to continue to be used after the using State becomes a belligerent unless the neutral State was willing to jeopardize its neutral status.

Importantly, if there were a conflict between some international agreement and the U.N. Charter, the U.N. Charter would prevail. States accepted the supremacy of the U.N. Charter when they ratified it. Specifically, under Article 103, the U.N. Charter notes that “in the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.”¹³⁶

These treaties and state practices lead to two major conclusions about the law of neutrality: (1) The Law of Neutrality is still valid, though it must give way to U.N. Security Council Decisions; and (2) While existing non-military communications systems can continue to be used after a State declares war, a neutral State must not let a belligerent construct or use a communications infrastructure on neutral land for military purposes, even if the infrastructure was built prior to the State becoming a belligerent.¹³⁷

¹³² LONO HANDBOOK SUPP., *supra* note 72, at 402; TUCKER, *supra* note 73, at 143; DoD LAW OF WAR MANUAL, *supra* note 104, at 209.

¹³³ DoD LAW OF WAR MANUAL, *supra* note 104, at 208.

¹³⁴ Bothe, *supra* note 71, at 565.

¹³⁵ *Id.*

¹³⁶ U.N. Charter art. 103.

¹³⁷ Bothe, *supra* note 71, at 564.

IV. NON-STATE ACTORS IN SPACE

Outer space, once solely the purview of governmental superpowers, has infiltrated all aspects of life. What began in the late 1950s with an orbiting metal sphere sending radio pulses to Earth has transitioned into a \$330-billion-per-year space industry.¹³⁸ Television, radio, cellphones and broadband communications all now have space-based components. Pictures of most parts of the Earth down to 30-centimeter (cm) resolution are now available to consumers.¹³⁹ Weather satellites allow for unprecedented forecasting accuracy and climate change monitoring.¹⁴⁰ Global positioning satellites allow for accurate worldwide navigation down to a few centimeters.¹⁴¹

Most importantly for this article, significant changes have occurred as to who is procuring, launching, and maintaining those satellites. Gone are the days where two States were the only players in space. Now, in addition to the sixty-plus space-faring nations, services are also provided by private multinational companies.

A. History of Non-State Actors in Space Through the 1980s

1. Telecommunications Satellites

The first non-State satellite in space, Telstar, was an experimental communications satellite put up by AT&T on a NASA rocket in 1962.¹⁴² Though the satellite proved fickle,¹⁴³ non-State actors would soon become

¹³⁸ Bryce Space & Technology, *Satellite Industry Association State of the Industry Report 7* (2016), https://brycotech.com/download.php?f=downloads/Start_Up_Space_2016.pdf.

¹³⁹ *Satellite imagery*, DIGITALGLOBE, <https://www.digitalglobe.com/products/satellite-imagery> (last visited May 21, 2019).

¹⁴⁰ Emma Gray Ellis, *New Weather Satellites Can Spot Floods Before They Happen*, WIRED (Jan. 26, 2017), <https://www.wired.com/2017/01/new-weather-satellites-can-spot-floods-happen/>; Mike Wall, *Next-generation weather satellite launches to begin forecasting “revolution”*, SPACE NEWS (Nov. 20, 2016), <http://spacenews.com/next-generation-weather-satellite-launches-to-begin-forecasting-revolution/>.

¹⁴¹ U.S. NAT’L COORDINATION OFFICE FOR SPACE-BASED POSITIONING, NAVIGATION & TIMING, *GPS Accuracy*, <http://www.gps.gov/systems/gps/performance/accuracy/> (last visited May 21, 2019).

¹⁴² S. Neil Hosenball, *Law Applicable to the Use of Space for Commercial Activities*, 26 PROC. L. OUTER SPACE 143, 143 (1983); Newton N. Minow, *Second Chance Essay*, 47 FED. COMM’N L.J. 299, 302 (1994); Abram Chayes & Leonard Chazen, *Policy Problems in Direct Broadcasting from Satellites*, 5 STAN. J. INT’L STUD. 4, 4 (1970).

¹⁴³ *Report to the Congress of Activities under the Communications Satellite Act*, 3 I.L.M.

a major player in space. The U.S. government, shortly after the launch of Telstar, proceeded with legislation that paved the way for a global, private telecommunications satellite system with the Communication Satellite Act of 1962 (Comsat Act).¹⁴⁴

This legislation declared a policy to establish, in cooperation with other countries, a “commercial communications satellite system as part of an improved global communications network....”¹⁴⁵ The Comsat Act authorized the creation of a for-profit private corporation, COMSAT, to run the United States’ portion of the satellite system¹⁴⁶ that would become INTELSAT.¹⁴⁷ This private corporation could, in conjunction with foreign governments or businesses, own a commercial communication satellite system, own satellite terminals, and procure launches, so long as the launches were performed by the U.S. government.¹⁴⁸

After the Comsat Act, the U.S. government continued to work to acquire international partners for COMSAT.¹⁴⁹ The resulting international consortium, named INTELSAT, launched its first satellite in 1965. This geosynchronous satellite, Intelsat 1, was launched by NASA, and regular telecommunications service via commercial satellites became viable.¹⁵⁰ Satellite telecommunications became an immediate multi-million dollar industry. INTELSAT launched four additional next-generation satellites in quick succession.¹⁵¹ It was against this backdrop of an international consortium where the private COMSAT corporation represented both U.S. interests and more

218, 221 (1964).

¹⁴⁴ Communication Satellite Act of 1962, Pub. L. No. 87-624, 76 Stat. 419 (1962) (codified as amended at 47 U.S.C. §§ 701-769 (2018)) [hereinafter Comsat Act].

¹⁴⁵ *Id.* § 102(a).

¹⁴⁶ *Id.* §§ 102(c), 301.

¹⁴⁷ Joanne Irene Gabrynowicz, *One Half Century and Counting: The Evolution of U.S. National Space Law and Three Long-Term Emerging Issues*, 4 HARV. L. & POL’Y REV. 405, 409 (2010); Patrick A. Salin, *Illustration of the Privatization Process of Outer Space—The Evolution of the Legal Status of the COMSAT Corporation, from Public National Satellite Communications Agency to Private Global Satellite Operator*, 50 Z. LUFT- & WELTRAUMRECHT—GER. J. AIR & SPACE L. 217, 219 (2001).

¹⁴⁸ Comsat Act §§ 305(a)(1), 305(a)(3) & 305(b)(3).

¹⁴⁹ Jonathan F. Galloway, *INTELSAT’s Markets and the New Competitors: The Politics of International Telecommunications*, 42 INT’L J. 256, 256 (1986); Francis Lyall, *On the Privatisation of INTELSAT*, 28 J. SPACE L. 101, 103-104 (2000).

¹⁵⁰ Hosenball, *supra* note 142, at 143.

¹⁵¹ *Id.* at 143.

than half of the voting shares of the corporation,¹⁵² that the Outer Space Treaty came into force. When Article VI of the Outer Space Treaty was agreed to, there were very few non-State actors in space. However, they would proliferate in the years that followed.

INTELSAT continued to expand and prosper.¹⁵³ It grew to more than 100 nations¹⁵⁴ and the U.S. government continued to launch a series of commercial INTELSAT satellites throughout the 1980s.¹⁵⁵ Other international, intergovernmental organizations surfaced with similar structures: INTER-SPUTNIK arose to meet the telecommunication needs of the eastern bloc countries,¹⁵⁶ INMARSAT came to be in the late 1970s to provide maritime satellite communication services,¹⁵⁷ and EUTELSAT also developed in the late 1970s, providing satellite communications in Europe.¹⁵⁸

However, two significant things changed in the 1980s with regard to the telecommunication satellite industry: (1) More non-State actors (private companies) were being created and looking to profit in space ventures; and (2) These non-State actors were looking to lessen COMSAT's perceived advantages borne of being the U.S. signatory to INTELSAT.

2. Remote Sensing Satellites

Remote sensing satellites use a space platform to obtain information about the features of the Earth.¹⁵⁹ Their military value was clear at the dawn of the space age.¹⁶⁰ The U.S. started launching Corona spy satellites to take

¹⁵² Galloway, *supra* note 149, at 256.

¹⁵³ LYALL & LARSEN, *supra* note 25, at 336.

¹⁵⁴ Galloway, *supra* note 149, at 257.

¹⁵⁵ Hosenball, *supra* note 142, at 143; Galloway, *supra* note 149, at 265.

¹⁵⁶ LYALL & LARSEN, *supra* note 25, at 364.

¹⁵⁷ *Id.* at 344-346.

¹⁵⁸ *The Early Years; Our History 1977-1989*, EUTELSAT, <http://www.eutelsat.com/en/group/our-history.html> (last visited May 21, 2019).

¹⁵⁹ U.S. NAT'L OCEAN SERV., *What is remote sensing?*, <http://oceanservice.noaa.gov/facts/remotesensing.html>.

¹⁶⁰ Carl Q. Christol, *Gathering and Dissemination of Space-Based Data in Time of Armed Conflict*, 47 PROC. L. OUTER SPACE 465, 466 (2004). As Christol notes, when remote sensing satellites are used for military operations, they are usually called, "military surveillance," but for civil operations, "remote sensing." For this paper, I use the term "remote sensing" for all satellites that gather information about the features of the earth from space.

pictures of the Earth in 1959.¹⁶¹ The pictures recovered from the Corona satellites showed that remote sensing had both military and non-military capabilities.¹⁶² The commercial value of space-based Earth-sensing, also obvious from an early stage, includes potential uses in agriculture, forestry, and oil and mineral exploration.¹⁶³ Military surveillance remains a valuable application.¹⁶⁴

The first civil remote sensing satellite went into orbit in 1972 when the U.S. government launched Landsat-1,¹⁶⁵ a remote sensing satellite dedicated to civilian uses.¹⁶⁶ For more than a decade, the United States ran the satellite and its successors in the Landsat constellation. The United States made the data available to foreign States for just the cost of duplication,¹⁶⁷ and agencies of the U.S. government also purchased the data to assist developing nations.¹⁶⁸

Privatization of the remote sensing field in the United States came with the Land Remote-Sensing Commercialization Act of 1984 (Commercialization Act). The act opened up the potentially lucrative field for individual companies to market the data provided by satellites.¹⁶⁹ Part of the Reagan administration's idea of selling off non-military satellites,¹⁷⁰ the plan was to sell the whole Landsat system to private industry.¹⁷¹

Outside of the United States, non-State actors in remote sensing also gained traction. In the early 1980s in France, Spot-Image incorporated to sell

¹⁶¹ Gabriella Sgrosso, *Military Applications and Space Law*, 49 PROC. L. OUTER SPACE 311, 315 (2006).

¹⁶² Christol, *supra* note 160, at 465.

¹⁶³ U.S. CONGRESS, OFFICE OF TECH. ASSESSMENT, REMOTE SENSING AND THE PRIVATE SECTOR: ISSUES FOR DISCUSSION—A TECHNICAL MEMORANDUM, OTA-TM-ISC-20 (1984); Carl Q. Christol, *Remote Sensing and International Space Law*, 16 J. SPACE L. 21, 24 (1988); LYALL & LARSEN, *supra* note 25, at 411-412.

¹⁶⁴ Christopher C. Joyner & Douglas R. Miller, *Selling Satellites: The Commercialization of LANDSAT*, 26 HARV. INT'L LAW J. 63, 65 (1985); Christol, *supra* note 160, at 465.

¹⁶⁵ Joyner & Miller, *supra* note 164, at 66.

¹⁶⁶ *Id.* at 65-66.

¹⁶⁷ *Id.* at 68.

¹⁶⁸ *Id.*.

¹⁶⁹ Land Remote-Sensing Commercialization Act of 1984, Pub. L. No. 98-365, 98 Stat. 451 (1984) (repealed 1992).

¹⁷⁰ Joyner & Miller, *supra* note 164, at 70.

¹⁷¹ *Id.* at 63.

data from the French government's Spot satellite constellation even before the first satellite was launched.¹⁷²

It was against this backdrop, prior to any non-State remote sensing satellites being in orbit, that the United Nations General Assembly passed the Principles Relating to the Remote Sensing of Earth from Space. Specifically, Principle XIV provided that "States operating remote sensing satellites shall bear international responsibility for their activities and assure that such activities are conducted in accordance with the provisions of the Treaty and the norms of international law, irrespective of whether such activities are carried out by governmental or non-governmental entities."¹⁷³ There were no non-State remote sensing corporations at the time, but apparently, the United Nations General Assembly suspected they would be coming.

B. Non-State Space Actors 1980s to Present

1. Telecommunications Satellites

There has been an abundance of activity and development among non-State space actors since the 1980s. In 1984, the President of the United States stated that separate international satellite communication systems (in addition to INTELSAT's) were required as a U.S. national interest.¹⁷⁴ Satellite telecommunications remained extremely lucrative. New areas of telecommunications, such as satellite television, radio, and broadband emerged. For-profit companies like PanAmSat, GlobalStar, SES, Iridium, and Orbcomm joined the fray.¹⁷⁵

The U.S. government's relationship with COMSAT, including COMSAT's role as the U.S. representative as the sole signatory to INTELSAT, led to antitrust and monopoly allegations by these new companies.¹⁷⁶ One

¹⁷² R. Oosterlinck, *Legal Protection of Remote Sensing Data*, 27 PROC. L. OUTER SPACE 112, 112 (1984).

¹⁷³ G.A. Res. 41/65, Principles relating to remote sensing of the earth from space (Dec. 3, 1986), <http://www.un.org/documents/ga/res/41/a41r065.htm>.

¹⁷⁴ RONALD REAGAN, MEMORANDUM ON INTERNATIONAL COMMUNICATIONS SATELLITE SYSTEMS, PRESIDENTIAL DETERMINATION NO. 85-2 (Nov. 28, 1984), <https://www.reaganlibrary.gov/research/speeches/112884b>.

¹⁷⁵ Stephan Hobe, *The Impact of New Developments on International Space Law*, 15 UNIF. L. REV. 869, 872 (2010); LYALL & LARSEN, *supra* note 25, at 379-380.

¹⁷⁶ Fred Landman, *Emerging Competitive Forces in International Communications: Satellites and Cables*, 1985 REP. PROC. ANN. MEETING SEC. PUB. UTIL. L. 43 (1985); Salin,

competitor, PanAmSat, sued COMSAT for anti-competitive practices in the late 1980s.¹⁷⁷ PanAmSat's case was dismissed twice when, seemingly bolstering PanAmSat's concerns, courts ruled that COMSAT was immune to U.S. antitrust laws as it was the sole U.S. INTELSAT signatory.¹⁷⁸ Nonetheless, PanAmSat launched its first communications satellite in 1988, becoming a direct competitor to INTELSAT.

For a myriad of reasons, including INTELSAT's inefficiency, its ability to react to market forces, and fairness to other non-State actors,¹⁷⁹ pressure grew to move INTELSAT (and the other international satellite organizations mentioned above) from a multinational intergovernmental organization to a private corporation.¹⁸⁰ In the late 1990s, INTELSAT spun off a private company headquartered in the Netherlands called New Skies¹⁸¹ and transferred five satellites to it.¹⁸² This move was just the beginning of privatization.

In 2000, the United States amended the Comsat Act by passing the Open-market Reorganization for Betterment of International Telecommunications Act (ORBIT Act). The act aimed to make a competitive satellite communication market and fully privatize INTELSAT.¹⁸³ The ORBIT Act addressed PanAmSat's concerns head-on by requiring that INTELSAT's resultant corporation not be afforded any privileges or immunities by any national governments.¹⁸⁴ In July 2001, INTELSAT privatized, transferring its holdings to Intelsat, Ltd.¹⁸⁵

supra note 147, at 220; Lyall, *supra* note 149, at 108; U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-04-891, INTELSAT PRIVATIZATION AND THE IMPLEMENTATION OF THE ORBIT ACT 6 (2004), <http://purl.access.gpo.gov/GPO/LPS55270>; Michael Potter, *International Satellite Organizations: From Monopoly to Cartel*, 35 PROC. L. OUTER SPACE 120, 123 (1992).

¹⁷⁷ Salin, *supra* note 147, at 221.

¹⁷⁸ *Id.*

¹⁷⁹ LYALL & LARSEN, *supra* note 25, at 382.

¹⁸⁰ Lyall, *supra* note 149, at 105–108; LYALL & LARSEN, *supra* note 25, at 337, 380–381.

¹⁸¹ Lyall, *supra* note 149, at 110.

¹⁸² LYALL & LARSEN, *supra* note 25, at 337.

¹⁸³ Open-market Reorganization for Betterment of International Telecommunications Act (ORBIT Act), Pub. L. No. 106-180, 114 Stat. 48 § 2 (2000).

¹⁸⁴ *Id.* § 621(3)(B).

¹⁸⁵ GAO-04-891, *supra* note 176, at 8.

Both the number of satellites and the private companies providing telecommunications services have increased since Intelsat's privatization. Today, there are more than 500 operational satellites dedicated to commercial communications, more than in any other field.¹⁸⁶ Single companies like SES (44),¹⁸⁷ Orbcomm (27),¹⁸⁸ and Intelsat (50+)¹⁸⁹ operate dozens of satellites. Other companies like OneWeb, Boeing, and SpaceX have plans to launch constellations of hundreds or even thousands of satellites¹⁹⁰ with the Federal Communications Commission (FCC) recently approving OneWeb's proposed 720-satellite constellation for the U.S. market.¹⁹¹ The value of space-based telecommunications continues to expand¹⁹² and private telecommunications companies now dominate the market.

2. Remote Sensing Satellites

Like telecommunications, remote sensing has gone from a primarily government-run service¹⁹³ to one where both governments and private corporations have large stakes.¹⁹⁴ The remote-sensing transition, however, was not as smooth as the telecommunications transition.

Although the United States intended to privatize Landsat after the Commercialization Act through competition, and a few corporations initially threw their hats into the ring, only one company remained interested after all the terms were made clear—Earth Observations Satellite Corporation

¹⁸⁶ Bryce Space & Technology, *supra* note 138, at 8.

¹⁸⁷ *Satellites*, SES, <https://www.ses.com/our-coverage/satellites> (last visited May 21, 2019).

¹⁸⁸ Peter B. de Selding, *Orbcomm Eagerly Awaits Launch of New Satellite on Next Falcon 9*, SPACE NEWS (May 25, 2012), <http://spacenews.com/orbcomm-eagerly-awaits-launch-new-satellite-next-falcon-9/>.

¹⁸⁹ *Intelsat Satellite Network*, INTELSAT, <http://www.intelsat.com/global-network/satellites/overview/> (last visited May 21, 2019).

¹⁹⁰ Caleb Henry, *FCC approves OneWeb for US market as it considers other constellations*, SPACE NEWS (June 23, 2017), <http://spacenews.com/fcc-approves-oneweb-for-us-market-as-it-considers-other-constellations/> (“contenders include SpaceX, which is proposing a system of more than 4,000 LEO satellites; Boeing, with up to 3,000 satellites; and ViaSat and Telesat, among others”).

¹⁹¹ *Id.*

¹⁹² Ram Jakhu, *Legal issues of satellite telecommunications, the geostationary orbit, and space debris*, 5 ASTROPOLITICS 173, 173-174 (2007).

¹⁹³ LYALL & LARSEN, *supra* note 25, at 414.

¹⁹⁴ Hobe, *supra* note 175, at 872-873.

(EOSAT).¹⁹⁵ EOSAT signed a ten-year contract, substantially raised prices for images, and became a federally-subsidized monopoly.¹⁹⁶

The Commercialization Act was replaced with the Land Remote Sensing Policy Act of 1992 (Policy Act), in which Congress found that, under EOSAT, the “cost of Landsat data has impeded the use of such data for scientific purposes, such as for global environmental change research, as well as for other public sector applications.”¹⁹⁷ It also noted that “full commercialization of Landsat program cannot be achieved within the foreseeable future...however, commercialization of land remote sensing should remain a long-term goal of United States policy.”¹⁹⁸ This act moved the Landsat program back into the public sphere¹⁹⁹ and laid out the requirements for a forthcoming successor to the Landsat remote sensing system.²⁰⁰

The successor remote sensing system could be run by the private sector, an international consortium, the U.S. government, or a cooperative effort between the U.S. government and the private sector.²⁰¹ In 1999, the Landsat Data Continuity Mission sought a private sector company.²⁰² Although there were various bidders throughout the process, once again, prior to award, there was only one company that remained. This time, however, the company’s proposal was rejected.²⁰³ Additionally, the public-private option was also rejected.²⁰⁴ As a result, Landsat remains a joint government initiative between the U.S. Geological Survey and NASA.²⁰⁵

¹⁹⁵ Joanne I. Gabrynowicz, *The Perils of Landsat from Grassroots to Globalization: A Comprehensive Review of US Remote Sensing Law with a Few Thoughts for the Future*, 6 CHI. J. INT’L L. 45, 54 (2005).

¹⁹⁶ *Id.* at 55.

¹⁹⁷ Land Remote Sensing Policy Act of 1992 § 2(4), 102 Pub. L. No. 555, 106 Stat. 4163 (codified as amended at 51 U.S.C. §§ 60101-60162 (2018)).

¹⁹⁸ *Id.* § 2(6).

¹⁹⁹ Gabrynowicz, *supra* note 195, at 59.

²⁰⁰ Land Remote Sensing Policy Act of 1992 § 401.

²⁰¹ *Id.*

²⁰² Gabrynowicz, *supra* note 195, at 60.

²⁰³ *Id.*

²⁰⁴ *Id.* at 61.

²⁰⁵ *Landsat Missions*, U.S. GEOLOGICAL SERVICE, <https://landsat.usgs.gov/landsat-project-description> (last visited May 22, 2019).

Aside from the United States and Landsat, other States employ their own version of public/private remote sensing in which the government still has a major stake in the satellite constellation. In Canada, RADARSAT-2 is owned and operated by a private corporation—MDA—but the Canadian Space Agency helped fund the satellite.²⁰⁶ France, India, Germany, and the European Space Agency all have some form of a public/private remote sensing partnership.²⁰⁷ In each of these, the States maintain control not just through their Article VI Outer Space Treaty requirements, but also through actually being at least partial owners of the system.

Purely private non-State actors have also entered the scene and thrived in the remote sensing business. In 1994, Lockheed received permission from the U.S. government to operate a high-definition remote sensing satellite system.²⁰⁸ The resultant launch of the IKONOS satellite in 1999 allowed for a purely private company, DigitalGlobe, to market and sell the high-resolution imagery. The first Earth Resources Observation Satellite (EROS), a private remote sensing satellite run by an Israeli company, was launched the following year.²⁰⁹

As the costs of building satellites and launching them into space have come down, the number of privately-owned remote sensing satellites and private companies marketing the images provided by the satellites has proliferated. Not only have the costs for launching the satellites dropped, but the quality of the images available continues to improve.²¹⁰

As of September 2016, ten companies operated 225 commercial remote-sensing satellites in orbit.²¹¹ An additional ten remote sensing com-

²⁰⁶ RADARSAT-2, CAN. SPACE AGENCY, <http://www.asc-csa.gc.ca/eng/satellites/radarsat2/> (last visited May 22, 2019); Michel Bourbonnière, Louis Haeck & Pierre Nadeau, *Radarsat-2 Regulatory Issues and International Law Perspectives on Commercial Remote Sensing and Military Operations*, 44 PROC. L. OUTER SPACE 258, 259 (2001).

²⁰⁷ Hobe, *supra* note 175, at 872–873.

²⁰⁸ *Company News; Lockheed Wins License for Satellite Sensing System*, N.Y. TIMES, Apr. 26, 1994, <http://www.nytimes.com/1994/04/26/business/company-news-lockheed-wins-license-for-satellite-sensing-system.html>.

²⁰⁹ *EROS Satellite Overview*, IMAGE SAT INT’L (ISI), <http://www.imagesatintl.com/eros-sat/> (last visited May 22, 2019).

²¹⁰ Paul B. Larsen, *Limited Right of Access to Remote Sensing Data for the Prevention and Mitigation of Disasters*, 50 PROC. L. OUTER SPACE 705, 706 (2007).

²¹¹ Bryce Space & Technology, *supra* note 138, at 15.

panies are in some stage of developing 500+ new remote sensing satellites.²¹² Indeed, satellites have become so small and relatively inexpensive to launch that a U.S. company launched 88 remote sensing satellites on an Indian rocket in a single launch in February 2017.²¹³

As important as the sheer number of private satellites and operators is the services they provide and the manner in which the images are marketed. In addition to agriculture and mineral exploration, the satellite company Planet, the company that put up eighty-eight satellites in one launch, offers a Defense and Intelligence service.²¹⁴ Under this service, the marketing materials show a U.S. Navy Yard and an airstrip on a disputed island chain. The company offers historical images and images of the same location each day.²¹⁵

Likewise, ImageSat, the Israeli company that processes images from the EROS satellites, markets intelligence reports in addition to high resolution imagery. These reports help “monitor border areas, detect unrest and suspicious activities.”²¹⁶

The growth of private remote sensing companies is expected to continue. New entrants, including companies from States beyond established nuclear powers, continue to “raise capital, develop satellites, and deploy their constellations.”²¹⁷

C. Iterations and Intricacies of Present Day Non-State Actors in Space

Outer-space corporations are like most corporations, fluid and market based. Therefore, they acquire other (possibly foreign based) corporations, they combine with other (again, possibly foreign based) corporations, and they sign joint ventures.²¹⁸ Unlike other fields, however, when space non-State

²¹² *Id.*

²¹³ Sarah Scoles, *88 New Satellites Will Watch Earth, All the Time, All the Places*, WIRED (Feb. 14, 2017) <https://www.wired.com/2017/02/88-tiny-satellites-will-watch-time-everywhere/>.

²¹⁴ *Defense & Intelligence*, PLANET LABS, INC., <https://planet.com/markets/defense-and-intelligence/> (last visited May 22, 2019).

²¹⁵ *Id.*

²¹⁶ *Intelligence Reports: Mastering big data to provide huge insights*, ISI, <http://www.imagesatintl.com/solutions-services/intelligence-reports/> (last visited May 22, 2019).

²¹⁷ Bryce Space & Technology, *supra* note 138, at 13.

²¹⁸ *Id.* at 15.

actors combine or are overtaken with little to no international responsibility implications for their respective States, the States responsible for their non-State actors in space could become internationally responsible for their actions.

Some corporations set up a series of subsidiaries, some in foreign States, and may have the foreign-based subsidiary license and operate the satellite constellation. An illustrative example is Intelsat License LLC, one of the companies that resulted from the INTELSAT privatization mentioned above. Intelsat License LLC is a Delaware (U.S.) corporation that owns and operates certain Intelsat satellites (including Intelsat-22, discussed below and analyzed in the next section).²¹⁹ The address for Intelsat License LLC, as submitted to U.S. government regulators, is in Luxembourg.²²⁰ Intelsat License LLC is wholly owned by Intelsat License Holdings LLC, a U.S. company, which is wholly owned by Intelsat Jackson Holdings, S.A., a Luxembourg company.²²¹ Intelsat Jackson Holdings is a wholly-owned subsidiary of six additional Luxembourg companies, under the parent company Intelsat Global Holdings, S.A.²²² This is just one example. As far as State responsibility is concerned, this structure could become much more complicated when space companies are sold. When these corporations are sold, the States responsible for their space-based endeavors (which could include military communications and actionable military intelligence valuable to belligerents at war) could also change.

²¹⁹ FCC, *supra* note 7.

²²⁰ Intelsat, “*Application for Pro Forma Assignment of Intelsat 28 Space Station Authorization*,” FCC (2012) http://licensing.fcc.gov/myibfs/download.do?attachment_key=981737.

²²¹ *Id.*

²²² *Id.* at 4-5. As the application details:

Intelsat License LLC is a Delaware limited liability company that is wholly owned by Intelsat License Holdings LLC, also a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat S.A., a Luxembourg company. Intelsat S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Intelsat Investment Holdings S.à r.l., a Luxembourg company. Intelsat Investment Holdings S.à r.l. is wholly owned by Intelsat Global Holdings S.A., a Luxembourg company. Each of these entities may be contacted at the following address: 4 rue Albert Borschette, L-1246 Luxembourg.

D. Conclusion

The relationship between States and non-State actors has become more complicated. In the telecommunications and remote-sensing realm, what began as a heavily subsidized private monopolistic near arm of government has evolved to include purely private companies that provide capacity that governments lease, images governments buy, and satellite bus space on which governments pay to put their payloads.

With each iteration of use, if governments allow their non-State actors to sell capacity or images to a foreign State or if a State is using a foreign non-State actor's satellite in its war effort, the implications for a State's neutrality multiply. Would a State be responsible and thus have its neutrality status implicated if its non-State actor provides previously leased telecommunications to a State that becomes a belligerent? Would a State whose non-State actor provides remote sensing images lose its neutrality status? What about a State that licensed a company to provide a hosted payload to a foreign State's defense forces and that State now becomes a belligerent?

V. PRESENT-DAY INTERACTION BETWEEN STATES AND NON-STATE ACTORS

A. States Represent Non-State Actors Internationally

Companies like Intelsat License Holdings and DigitalGlobe do not have an international personality. While they can contract with foreign companies or States, they need a State to obtain internationally recognized frequencies and orbital positions in international fora, like the United Nations.

This representation is critical for any non-State actor that wants to place a satellite in orbit. Every functioning satellite that communicates with an earth ground station will need to have both frequency allocations and an orbital position. The International Telecommunication Union (ITU), a specialized agency of the U.N.,²²³ regulates frequency allocations and orbital positions.²²⁴

²²³ International Telecommunication Convention annex 5, art. 1, Oct. 2, 1947, 63 Stat. 1399, T.I.A.S. 1901, <https://www.loc.gov/law/help/us-treaties/bevans/m-ust000004-0570.pdf> [hereinafter ITU Convention].

²²⁴ Constitution of the International Telecommunication Union art. 1 § 2, Dec. 22, 1992, 1825 U.N.T.S. 31251, <https://treaties.un.org/doc/Publication/UNTS/Volume%201825/volume-1825-I-31251-English.pdf> [hereinafter ITU Constitution]; Hobe, *supra* note 175, at 878.

Because only States have the international personality to request frequencies and orbital positions, non-State actors must go to their States early in their planning process. The non-State actor must ask its State to request the needed frequencies and orbital position for the non-State actor's planned satellite. The State then makes the request to the ITU. If the ITU grants the request, it grants the frequencies and orbital position to the State. The State can then assign the frequency and orbital position to its non-State actor.

B. Licensing of Non-State Actors

The licensing process will likely start well before a State petitions the ITU and will vary by State. While Article VI of the Outer Space Treaty requires States to be responsible for their non-State actors, the requirement can take various forms as the Outer Space Treaty gives States discretion in overseeing their non-State actors.²²⁵

States have developed and implemented their national laws in a variety of ways based on their policy considerations from Russia's concern to controlling foreign non-State actors using Russia State launch services²²⁶ to India's goal of exporting space commercial launch services.²²⁷ The United States, still the biggest player in space, has a robust set of laws, as it has been American policy since at least the early 1960s to expand the number of commercial operators in space. The United States sought to commercialize

²²⁵ COLOGNE COMMENTARY, *supra* note 31, at 117.

²²⁶ LYALL & LARSEN, *supra* note 25, at 484.

²²⁷ *Id.* at 481; Ram Jakhu, *International Law Governing the Acquisition and Dissemination of Satellite Imagery*, 29 J. SPACE L. 65, 81 (2003).

fields from telecommunications,²²⁸ to remote sensing,²²⁹ to space launch,²³⁰ and, most recently, weather satellites.²³¹

The United States places responsibility for implementation of the above laws in different agencies depending on their function. This analysis focuses on telecommunications and remote sensing satellites. The FCC issues regulations and licenses associated with telecommunications satellites. The National Oceanographic and Atmospheric Administration (NOAA) issues regulations and licenses related to remote sensing satellites. Both agencies provide the authorization and continuing supervision of non-State actors.

1. Telecommunications Satellites

For telecommunications, the U.S. government requires any person who uses or operates space or Earth stations for communications to have an appropriate license issued by the FCC.²³² The applicant begins the licensing process by filing an application with the FCC. The FCC requires that the applicant adhere to numerous rules, including citizenship rules,²³³ follow ITU regulations; and pay any ITU cost recovery fees.²³⁴ The FCC will then “submit the filings to the ITU on behalf of the applicant.”²³⁵ If the ITU approves the FCC request, the FCC can license the applicant for its space venture. However, even after a satellite system is licensed, the FCC maintains continuing

²²⁸ Comsat Act, *supra* note 144.

²²⁹ Joyner & Miller, *supra* note 164, at 63.

²³⁰ Commercial Space Launch Act of 1984, Pub. L. No. 98-575, 98 Stat. 3055 (1984) (codified as amended at 51 U.S.C. §§ 50901-50923 [hereinafter CSLA 1984]).

²³¹ Jeff Foust, *President signs commercial satellite weather bill*, SPACENEWS (Apr. 21, 2017), <http://spacenews.com/president-signs-commercial-satellite-weather-bill/>.

²³² 47 C.F.R. § 25.102 (2019).

²³³ *Id.* § 25.105.

²³⁴ *Id.* § 25.111.

²³⁵ *Id.*

supervision of its non-State satellite operators by requiring results of in-orbit testing,²³⁶ notifications to modifications of Earth and space stations,²³⁷ and annual reports from its licensees.²³⁸ The FCC also allows for administrative sanctions, to include forfeiting a license, if the licensee fails to comply with the Communications Act or the terms of its license, or fails “to cooperate in Commission investigations with respect to international coordination.”²³⁹

Most important for the discussion of non-State actors being bought or sold, the FCC requires that a company must apply for authorization to “transfer, assign, [or] dispose...a station license, or accompanying rights...”²⁴⁰ Further, the FCC will grant such an “application only if it finds that doing so will serve the public interest, convenience, and necessity.”²⁴¹

The FCC meets the U.S. obligation of authorization and continuing supervision of telecommunications satellites. It ensures that U.S. non-State actors comply with U.S. policy and, if a non-State actor were to attempt to sell an in-orbit satellite, the FCC would ensure that U.S. interests are met prior to approving the transfer of the satellite.

2. Remote Sensing Satellites

American remote sensing companies must apply for and receive a license from NOAA.²⁴² NOAA’s stated purpose in regulating non-State actors’ space-based remote sensing activities includes preserving “the national security” of the United States and observing “the foreign policies and international obligations of the United States.”²⁴³ Through its statutory authority,²⁴⁴ NOAA confers with the Departments of Defense, State, and Treasury to ensure the private company does not jeopardize national security interests.²⁴⁵

²³⁶ *Id.* § 25.173.

²³⁷ *Id.* § 25.117.

²³⁸ *Id.* § 25.170e.

²³⁹ *Id.* § 25.160.

²⁴⁰ *Id.* § 25.119.

²⁴¹ *Id.*

²⁴² *About Commercial Remote Sensing Regulatory Affairs*, U.S. NAT’L OCEANIC & ATMOSPHERIC ADMIN. [hereinafter NOAA], <https://www.nesdis.noaa.gov/CRSRA/> (last visited May 22, 2019).

²⁴³ *Id.*

²⁴⁴ 51 U.S.C. §§ 60101-60506 (2012).

²⁴⁵ NOAA, *supra* note 242; Mike Gruss, *DigitalGlobe: No clarity on 2013 request to*

The process put in place to stop data collection in the interests of national security carries particular importance for this article. The restrictions on remote sensing operators appear to be somewhat stricter than those on telecommunications operators. Specifically, remote sensing operators must “maintain operational control from a location within the United States at all times, including the ability to override all commands issued by any operations centers or stations.”²⁴⁶ U.S. law can also require the “licensee to limit data collection and/or distribution by the system during periods when national security or international obligations and/or foreign policies may be compromised, as determined by the Secretary of Defense or the Secretary of State.”²⁴⁷ If the non-State actor is bought, or a license is otherwise to be transferred, NOAA approval must be sought and the Departments of Defense, State, and the Interior are given an opportunity to provide input on the proposed license transfer.²⁴⁸

C. State Use of Non-State Actors’ Space Assets

In addition to regulating non-State actors and exercising control over where they place ground stations and the types of data that can be sold, States can make use of two programs where a State may not exercise direct ownership over the satellite or the processing, but nonetheless utilize a satellite for a State interest. This section focuses on the situation where the government uses a private satellite for military functions. Specifically, a State can become a customer by leasing a commercial telecommunications satellite’s capability or by purchasing remote sensing data, or it can have a private satellite host a government payload.

1. State as Customer

The military value of satellite telecommunications has been obvious since the advent of the technology, and the U.S. Department of Defense once launched and operated its own satellites.²⁴⁹ However, the military leasing of

NOAA to sell high-res imagery, SPACENEWS (May 18, 2016), <http://spacenews.com/digitalglobe-no-clarity-on-2013-request-to-noaa-to-sell-high-res-imagery/>.

²⁴⁶ 15 C.F.R. § 960.11 (2019).

²⁴⁷ Fact Sheet Regarding the Memorandum of Understanding Concerning the Licensing of Private Remote Sensing Satellite Systems, 15 C.F.R. pt. 960 app. 2 (Feb. 2, 2000).

²⁴⁸ 15 C.F.R. § 960.7 (2019).

²⁴⁹ Bob Work, Deputy Secretary of Defense, Speech at the Satellite Industries Association (Mar. 7, 2016) (transcript available at <https://dod.defense.gov/News/Speeches/Speech->

commercial satellite telecommunications did not begin until the late 1980s.²⁵⁰ Shortly after the military necessity of satellite telecommunications was proved in the first Gulf War, the DoD realized that its satellite communications requirements were greater than it could provide through military satellites.²⁵¹ It sought to augment its abilities with commercial satellite communications.²⁵²

In 1992, Congress directed the DoD to move toward maximizing its use of commercial satellites.²⁵³ Although the DoD continued to procure ever more advanced military communications satellites, its communications needs outstripped its ability to procure, launch, and operate new satellites.²⁵⁴ This resulted in the DoD beginning to rely more heavily on leased commercial satellite communications.²⁵⁵ Now, the DoD leases the vast majority of its communications needs²⁵⁶ and is the commercial industry's single biggest customer.²⁵⁷

In remote sensing, too, the U.S. government is a major customer of commercial satellites' products. In 2003, President George W. Bush signed

View/Article/696289/satellite-industries-association/).

²⁵⁰ Patrick Rayermann, *Exploiting commercial SATCOM: A better way*, 33 PARAMETERS 54, 54 (2003).

²⁵¹ GAO, GAO/T-NSIAD-92-39, MILITARY SATELLITE COMMUNICATIONS: POTENTIAL FOR GREATER USE OF COMMERCIAL SATELLITE CAPABILITIES 2 (1992), <https://www.gao.gov/assets/110/104553.pdf>; H. Rausch, Jamming commercial satellite communications during wartime an empirical study, PROC. FOURTH IEEE INT'L WORKSHOP ON INFO. ASSURANCE (2006), 118.

²⁵² GAO, *supra* note 251, at 3.

²⁵³ Rayermann, *supra* note 250, at 54.

²⁵⁴ Ram Jakhu & Karan Singh, *Space Security and Competition for Radio Frequencies and Geostationary Slots*, 58 Z. LUFT- & WELTRAUMRECHT - GER. J. AIR & SPACE L. 74, 82 (2009).

²⁵⁵ Rayermann, *supra* note 250, at 54.

²⁵⁶ CLAY WILSON, CONG. RESEARCH SERV., RL32411, NETWORK CENTRIC WARFARE: BACKGROUND AND OVERSIGHT ISSUES FOR CONGRESS 8 (2004), <https://apps.dtic.mil/dtic/tr/fulltext/u2/a476256.pdf>.

²⁵⁷ Mike Gruss, *Military Satellite Communications | Panel Ties U.S. Troop Rotations to Satellite Interference Spikes*, SPACENEWS (June 24, 2013), <http://spacenews.com/35948military-satellite-communications-panel-ties-us-troop-rotations-to/>.”plainCitation”.”Mike Gruss, “Military Satellite Communications | Panel Ties U.S. Troop Rotations to Satellite Interference Spikes”, (24 June 2013

the Commercial Remote Sensing Space Policy. This policy directed the U.S. government to “[r]ely to the maximum practical extent on U.S. commercial remote sensing space capabilities for filling imagery and geospatial needs for military, intelligence, foreign policy, homeland security, and civil users.”²⁵⁸

Telecommunications and remote sensing satellites are not the only space applications valuable to the military. Most space applications are dual-use, capable of performing both military and civilian missions.²⁵⁹ Thus, space launch, weather, and navigation satellites are also valuable to both military units in the field and civilian corporations looking to earn a profit.

2. Hosted Payloads

Governments and, specifically, militaries, do not just lease satellites to meet their communications needs. They can also place their own payloads on commercial satellites. When a company has a satellite it wants to launch with excess space on it,²⁶⁰ that company can sell that space to another company or to a government agency, including the military. The government agency can then build “an instrument or package of equipment” to affix to a host spacecraft that will operate in orbit. This package of equipment, called a hosted payload, can then make “use of available capabilities of that spacecraft, including mass, power, and/or communications.”²⁶¹

These hosted payloads are beneficial to both the commercial companies and the government agencies. The companies who own the satellite can use the whole satellite’s capacity and earn revenue for the extra space on their satellite.²⁶² The government agency or entity with a hosted payload can get its payload into orbit without paying for a whole satellite or the whole

²⁵⁸ NOAA, U.S. COMMERCIAL REMOTE SENSING SPACE POLICY FACT SHEET (Apr. 25, 2003), <https://www.nesdis.noaa.gov/CRSRA/files/Commercial%20Remote%20Sensing%20Policy%202003.pdf>.

²⁵⁹ Sarah M. Mountin, *The Legality and Implications of Intentional Interference with Commercial Communication Satellite Signals*, 90 INT’L L. STUD. 101, 113 (2014); LYALL & LARSEN, *supra* note 25, at 500; Howard J. Taubensfeld, *Outer Space-Past Politics and Future Policy*, 55 AM. SOC. INT’L L. PROC. 176, 176 (1961).

²⁶⁰ Milton Smith & Stephen E. Smith, *Legal Issues Presented by Hosted Payloads*, 55 PROC. INT’L INST. SPACE L. 495, 496 (2012).

²⁶¹ FUTRON CORP., HOSTED PAYLOAD GUIDEBOOK 10 (Aug. 2010), <http://acqnotes.com/wp-content/uploads/2017/07/Hosted-Payload-Guidebook-by-Utron-Aug-10.pdf>.

²⁶² Smith & Smith, *supra* note 260, at 496.

cost of launch.²⁶³ This could be an especially attractive option for a military that would like to test its next-generation payloads. These payloads can be placed in orbit much quicker and for much less money than it would cost to acquire and launch a dedicated satellite.²⁶⁴

The idea of hosted payloads has been around for years and militaries have been prime players in utilizing them. From the mid-1980s to 1990, IntelSat launched five Leasat satellites which each had an Ultra-High Frequency (UHF) communications payload for the U.S. Navy.²⁶⁵ In 2009, U.S. Strategic Command put an Internet Routing in Space payload on an IntelSat satellite.²⁶⁶ Expanding beyond just hosting communications, the U.S. Air Force put a Commercially Hosted Infrared Payload (CHIRP) on a commercial satellite in 2011. This payload, designed to detect missile launches, was put on a commercial satellite owned by a company headquartered in Luxembourg.²⁶⁷ Following this success, the Air Force created a new contract vehicle, the Hosted Payload Solutions program, to help place military payloads on commercial satellites.²⁶⁸

The U.S. military is not the only armed force to use hosted payloads. Australia's military, too, has taken advantage of hosted payloads. In 2012, the Australian Defense Forces put a UHF communications payload on an Intelsat communications satellite.²⁶⁹ This payload connects the Australian

²⁶³ *Id.* at 496.

²⁶⁴ Northern Sky Research, *Hosted Payloads on Commercial Satellites*, MILSATMAGAZINE (May 2010), <http://www.milsatmagazine.com/story.php?number=1593901906>; Smith & Smith, *supra* note 260 at 498; James D. Rendleman, *Brave New World of Hosted Payloads* 39 J. Space L. 129, 151 (2013).

²⁶⁵ INTELSAT GEN. CORP., *supra* note 6.

²⁶⁶ SpaceNews Staff, *After Hosted Payload Success, U.S. Air Force Plans Follow-on*, SPACENEWS (Apr. 13, 2012), <http://spacenews.com/after-hosted-payload-success-us-air-force-plans-follow/>; Smith & Smith, *supra* note 260, at 499.

²⁶⁷ Mike Gruss, *U.S. Air Force Decision To End CHIRP Mission Was Budget Driven*, SPACENEWS (Dec. 12, 2013), <http://spacenews.com/38628us-air-force-decision-to-end-chirp-mission-was-budget-driven/>.

²⁶⁸ Mike Gruss, *U.S. Air Force Picks 14 Companies To Support Hosted Payload Efforts*, SPACENEWS (July 11, 2014), <http://spacenews.com/41223us-air-force-picks-14-companies-to-support-hosted-payload-efforts/>; Rendleman, *supra* note 264, at 158.

²⁶⁹ Foust, *supra* note 6; INTELSAT GEN. CORP., *supra* note 6; *Satellite Launch Success*, 4 DEFENCE MAG. (2012), <http://www.defence.gov.au/defencemagazine/working/issue/4/articles/8.html>.

Defence Forces and is estimated to save more than \$150 million compared to the cost of launching its own satellite.²⁷⁰

Having important military communications capabilities on a foreign company-owned private satellite shows two things: (1) Australia trusts Intelsat, a U.S.-based company, to remain solvent and take care of the satellite's bus and orbit for the expected fifteen-year life of their payload; and (2) Australia trusts the government that licensed and is ultimately internationally responsible for Intelsat.

D. Conclusion

Through both licensing and use, States can gain enormous advantages. Particularly in times of conflict, non-State space actors can provide the critical infrastructure that a State needs to prosecute its war at a fraction of the price it would cost the State to develop, launch, and operate a dedicated constellation. Through commercial remote sensing satellites, a State gains information about its enemy's locations, centers of gravity, and movements. Through commercial telecommunications satellites, a State can maintain critical lines of communication between military leaders at headquarters and field commanders. Soon, through commercial weather satellites, a State can use additional data and forecasting tools to plan or defend against attacks.²⁷¹

In addition to the tactical advantages, being the licensing authority for a non-State satellite constellation allows a State to dictate terms that could further the State's advantage in a conflict. For example, a State that licenses a remote sensing company can include a clause that allows the licensing State to receive higher-quality images than foreign customers. Therefore, if a foreign State were planning for a war and relied on a potential enemy's non-State actor for its remote sensing images, it could be relying on less accurate images than its potential adversary, the State who licensed the non-State actor. For telecommunications satellites, a State can include a clause that either a certain portion of the bandwidth must be reserved for State agencies or prohibit certain foreign States from using the satellite.

²⁷⁰ INTELSAT GENERAL, "Hosted Payloads" <https://www.intelsatgeneral.com/hosted-payloads/>.

²⁷¹ Paul Voosen, *NOAA issues first contracts for private weather satellites*, SCIENCE (Sept. 16, 2016), <http://www.sciencemag.org/news/2016/09/noaa-issues-first-contracts-private-weather-satellites>; Foust, *supra* note 231.

Perhaps most important for a State engaged in an armed conflict, national security clauses can be written into the licensing agreements, creating unique advantages for the State. Many of these non-State space companies count national governments as their biggest customers. During a war, a State can stop its non-State actors from providing imagery to a potential enemy. Likewise, it could stop a non-State actor from providing satellite telecommunications or remote sensing or weather data to a belligerent State that may have come to rely on such space abilities.

VI. ANALYSIS OF LAW OF NEUTRALITY VIS-À-VIS NON-STATE ACTORS IN SPACE

A. The Case of Intelsat-22

As discussed in the previous section, the Australian Defence Forces (ADF) contracted to place a UHF communications hosted payload on Intelsat-22, a commercial telecommunications satellite, for the purpose of military communications.²⁷² Intelsat, LLC, a U.S. company that is wholly owned (with nine subsidiary intermediaries) by Intelsat Global, SA, a Luxembourg company,²⁷³ placed Intelsat-22 into orbit in 2012.

Like all telecommunications satellites put up by non-State actors in the U.S., the FCC licensed Intelsat-22. Uniquely, the license grant notes that Intelsat is authorized to operate Intelsat-22 but that the UHF payload “will be owned and operated by the ADF and will be licensed by the Administration of Australia.”²⁷⁴ Therefore, the United States licenses and exercises control over the satellite itself, including orbital location and power levels. The ITU granted the United States the authorization for the frequencies and orbital position needed for the satellite. (Australia likely would not have needed to go to the ITU as military communications are excluded from the purview of the ITU).²⁷⁵ Indeed, the FCC stated that it would view the satellite “as a US space object for purposes of registering the satellite under the Convention on Registration of Objects Launched into Outer Space.”²⁷⁶ However, Australia wholly owns, operates, licenses, and controls one telecommunications payload on the satellite.

²⁷² Foust, *supra* note 6; INTELSAT GEN. CORP., *supra* note 6.

²⁷³ Intelsat, *supra* note 220.

²⁷⁴ FCC, *supra* note 7, atch. at 1.

²⁷⁵ ITU Convention, *supra* note 224, art. 48 (“Member States retain their entire freedom with regard to military radio installations”).

²⁷⁶ FCC, *supra* note 7, at 7.

With two States functionally authorizing and providing continuing supervision over the same outer space object, what would the law of neutrality implications be for the United States if Australia were to attack and declare war on State A and use the UHF payload to help prosecute the war? Could Luxembourg's neutrality, as the State where Intelsat's parent company is registered, be implicated? Could U.S. neutrality be implicated? What if State A were to declare war on Australia?

1. Australia Attacks and Declares War on State A

If Australia declared war on State A, the U.N. Security Council could, pursuant to Article 39 of the U.N. Charter, declare Australia to be the aggressor State.²⁷⁷ The Security Council could also require measures be taken to "maintain and restore international peace and security" pursuant to Article 41 of the Charter. One such measure could be that the United States would stop its non-State actor from allowing Australia to utilize its hosted payload by either cutting power to that portion of the satellite bus or deorbiting the satellite. The United States would be required to comply with the directive pursuant to Article 25 of the U.N. Charter.

However, because the United States is a member of the U.N. Security Council, a far more likely scenario is that the Security Council would remain silent vis-à-vis Australia's aggression. If that were the case, Luxembourg's neutrality should not be implicated because Luxembourg would not exercise any actual control over Intelsat-22. (The idea of actual control being required prior to neutrality being implicated is discussed in detail below in the DigitalGlobe example.)

However, what are the options for the United States? The United States provides authorization and continuing supervision over the satellite. Would Australia implicate U.S. neutrality if it continues to use the payload? Would the United States be risking its own neutrality if it allowed Australia to continue to use the payload? Could the United States disclaim responsibility for the UHF payload because it is licensed under Australia's laws?

²⁷⁷ This hypothetical here becomes far-fetched because the United States is both a member of the Security Council and the State responsible for IntelSat and its hosted payload. Though the U.S. is first, not likely to vote to declare Australia an aggressor and second, not going to order itself through the U.N. Security Council to stop the hosted payload, I nonetheless use the hypothetical to bring forth the underlying issues that could occur if a State other than a permanent Security Council member were to have a hosted payload.

Both the United States and Australia have some control over the UHF payload. Australia provides the licensing and continuing supervision of the UHF payload pursuant to Article VI of the OST (and thus accepts international responsibility for the payload) while the United States licenses and provides continuing supervision of the Intelsat-22 satellite. Through its FCC license, the United States accepts responsibility under Article VI of the OST for all of Intelsat-22 except the ADF UHF payload. However, the United States also stated that it would register Intelsat-22 on its registry pursuant to the Registration Convention. Under Article VIII of the OST, a State “shall retain jurisdiction and control over” an object carried on its registry.²⁷⁸ The United States, therefore, has jurisdiction over Intelsat-22. Though jurisdiction and territory (as outlined in the Hague Conventions) are not synonyms, having jurisdiction over the UHF payload could be similar to an Australian telecommunications station erected on U.S. territory.

As discussed above, under Hague(V), Article 3, belligerents are forbidden to “erect on the territory of a neutral Power a wireless telegraphy station or other apparatus for the purpose of communicating with belligerent forces on land or sea”;²⁷⁹ or if erected, belligerents are forbidden to “use any installation of this kind established by them before the war on the territory of a neutral Power for purely military purposes....”²⁸⁰ Further, Article 5 of Hague(V) establishes an obligation that a neutral power must not allow the use of a telecommunications station to occur on its territory.²⁸¹ These prohibitions survive post-U.N. Charter and are applicable to modern telecommunications.²⁸² Therefore, belligerent States cannot establish on neutral territory, or, if established, cannot continue using military communications facilities, and neutrals have a duty to stop such use.²⁸³

Applying this law to the case of the ADF-hosted payload, the telecommunications station is under U.S. jurisdiction pursuant to Article VIII of the OST. The UHF payload is being used for military communications from a neutral territory by a belligerent to prosecute a war. In so doing, Australia is implicating the neutrality of the United States. If the United States continues to allow the use of the UHF payload, it risks being declared a belligerent by

²⁷⁸ Outer Space Treaty, *supra* note 1, art. VIII.

²⁷⁹ Hague (V), *supra* note 82, art. 3(a).

²⁸⁰ *Id.* art. 3(b).

²⁸¹ *Id.* art. 5.

²⁸² Bothe, *supra* note 71, at 564.

²⁸³ DoD LAW OF WAR MANUAL, *supra* note 104, at 947, 949.

State A. If the United States desires to maintain its neutrality, it would need to exercise any control it has over Intelsat-22 to stop the ADF from using the UHF payload. The United States could invoke some type of national security clause in regard to its Intelsat-22 license²⁸⁴ and, if technically feasible, order Intelsat to turn off the UHF payload. (If not technically feasible, the United States could order Intelsat to de-orbit the satellite.) What the United States could not do is disclaim responsibility of the one UHF payload from the Intelsat-22 satellite even though it has not licensed and does not provide continuing supervision over that payload. That is, the United States cannot continue to claim its neutrality while passively allowing the ADF to use U.S. territory to prosecute its war.

2. State A Attacks and Declares War on Australia

If Australia were attacked by State A and continued to use its hosted payload for military purposes, no State's neutrality is likely to be implicated. The UN Security Council would likely declare State A's actions as acts of aggression.²⁸⁵ Any mandatory actions that the Security Council imposes to restore peace and security would be aimed at reining in State A. The United States could continue to assist Australia through the use of its hosted payload without having its neutrality questioned.

However, even though U.S. neutrality would not be implicated, it may still be in the United States' interests to stop Australia from using its payload. The mere fact that the United States allowed a non-State actor to host a foreign State's military's payload could make objects on U.S. territory valid military targets subject to an attack because U.S. ground control stations could still be used to assist Australia in prosecuting its actions. During a conflict, the ADF would likely be using its UHF military communications payload to further its military campaign. The United States' own definition of a proper military objective (objects that may be the object of attack) includes communications stations.²⁸⁶ If the hosted payload made an effective contribution to Australia's military action and if State A gained a military advantage from attacking the

²⁸⁴ Though the FCC regulations regarding national security are not as clear as the NOAA regulations for remote sensing satellites, the FCC maintains authority to forfeit a license "for failure to cooperate in Commission investigations with respect to international coordination." 47 C.F.R. § 25.160 (2019).

²⁸⁵ U.N. Charter art. 39.

²⁸⁶ DoD LAW OF WAR MANUAL, *supra* note 104, at 209.

hosted payload, it would be a proper military target.²⁸⁷ Therefore, if Australia insists on using the hosted payload, the whole of Intelsat-22 could be attacked as the satellite is helping Australia prosecute its military actions.²⁸⁸

B. The Case of DigitalGlobe:

DigitalGlobe is a commercial remote sensing company that owns and operates a three-satellite constellation.²⁸⁹ Its satellites can provide 31-cm resolution images and among its clients are more than 40 governments.²⁹⁰ As with all United States remote sensing companies, NOAA licenses DigitalGlobe.²⁹¹ After coordinating with several agencies, including the Department of Defense, NOAA allowed DigitalGlobe to sell satellite imagery to a certain resolution, but allowed for better-resolution satellite imagery to be sold only to agencies of the U.S. Government.²⁹² If DigitalGlobe would like to increase the quality of the resolution it sells, it would need to submit an application to NOAA to do so.²⁹³ The U.S. government is therefore meeting its “authorization and continuing supervision” obligations for non-State actors as required under Article VI of the OST.²⁹⁴ It bears international responsibility for DigitalGlobe’s actions and appears to be exercising adequate control over its private company through licensing.

Therefore, if DigitalGlobe signed a contract in compliance with its NOAA license with State A to provide daily imagery of State A’s northern border with State B, the U.S. Government would have already implicitly

²⁸⁷ *Id.* at 208.

²⁸⁸ This assumes that State A does not have the ability to discriminate between the UHF payload and the rest of the satellite.

²⁸⁹ *About DigitalGlobe*, DIGITALGLOBE, <https://www.digitalglobe.com/company/about-us> (last visited May 22, 2019).

²⁹⁰ *Id.*; *Defense & Intelligence Programs*, DIGITALGLOBE, <https://www.digitalglobe.com/markets/defense-and-intelligence> (last visited May 22, 2019).

²⁹¹ NOAA, *supra* note 242.

²⁹² Gruss, *supra* note 245.

²⁹³ Colin Clark, *DigitalGlobe, Eager for Foreign Biz, Presses NOAA For Quarter Meter Resolution*, BREAKING DEF. (Aug. 23, 2013), <http://breakingdefense.com/2013/08/digitalglobe-hoping-for-foreign-biz-presses-noaa-for-quarter-meter-resolution/>; Andrea Shalal, *DigitalGlobe gains U.S. govt license to sell sharper satellite imagery*, REUTERS, June 11, 2014, <http://www.reuters.com/article/digitalglobe-imagery-idUSL2N00R2UX20140611>.

²⁹⁴ Outer Space Treaty, *supra* note 1, art. VI.

authorized the contract in granting the license. But what would the implications be to the United States if State A were to declare war on State B?

1. United States Implications for DigitalGlobe Providing Military Intelligence

State A, by declaring war, would likely be a belligerent under international law. It would now likely be using the imagery of its northern border to augment its military intelligence, to see troop or vehicle movements of State B. The platform providing the imagery, both DigitalGlobe's satellites and its ground stations in the United States, would likely be valid military targets.²⁹⁵

If DigitalGlobe felt that it was in its best interest to continue to provide imagery to State A knowing that it could risk having its satellites and ground stations targeted by State B, the United States would have two options: (1) Decide to invoke the national security clause of its license with DigitalGlobe to force it to stop providing the images;²⁹⁶ or (2) Decide to do nothing, which risks the United States' neutrality status, conceivably dragging the United States into war with State B if State B were to target the satellite constellation or U.S.-based ground stations.

Whether the U.S. government chooses to rein in its non-State actor or to allow it to continue to provide images in this scenario, would be just that—a choice. The United States has accepted international responsibility for DigitalGlobe's actions. Further, it exercises control of the images DigitalGlobe sells through its licensing process. The United States could therefore weigh the value of having a successful remote sensing company, its relationship with States A and B, and any additional foreign policy/diplomatic considerations, and make an informed decision. Regardless of whatever decision the United States were to make, it would maintain sole responsibility for its neutrality through its authorization and continuing supervision of its space non-State actor.

A possible problem arises if the United States does not make any decision—if it, through inertia or poor oversight, just allows the contract for imagery to continue. DigitalGlobe has contracts with 40 governments.²⁹⁷ The

²⁹⁵ Bothe, *supra* note 71, at 564.

²⁹⁶ 15 C.F.R. pt. 960 app. 2, *supra* note 247.

²⁹⁷ DIGITALGLOBE, *Defense & Intelligence Programs*, *supra* note 290 (“More than 40 governments and global organizations have partnered with us to modernize

United States, though it provides “continuing supervision,” may not go to such detail in that supervision that it knows what the terms are of each contract DigitalGlobe has with foreign governments. If the United States were to make no decision because it was unaware of DigitalGlobe’s actions, to State B this could appear as if the United States had decided to allow the contract to continue. State B could then attack the United States, and DigitalGlobe would have then opened the United States to both attack and war.

The plain text of Article VI would hold that the State is accountable when the breach occurred whether or not the State approved of such a breach. Cheng asserts, “State responsibility occurs the moment the breach is committed and not when the State is seen to have failed in its duty to prevent, suppress, or repress such a breach.”²⁹⁸

However, this is an untenable result in the post-U.N. Charter law of neutrality. When dealing with the law of neutrality, Article VI of the OST should be read in the context of the purpose of the U.N. Charter, “to maintain international peace and security.”²⁹⁹ Declaring the United States a belligerent or attacking American assets would obviate the purpose of the Charter. As noted in Article 103 of the Charter, when there is “conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.” The Charter would, therefore, take precedence over Article VI of the OST. In this scenario, U.S. assets should not be subject to attack unless the United States were to take some positive action approving or authorizing its non-State actor’s actions.

A final wrinkle in the above scenario is what would happen if a non-State actor purposefully acts against the wishes of its licensing State. Such an example could arise if DigitalGlobe, contrary to its license and direction from its State, sells data to State A to further State A’s war effort. Here, too, Article VI would seem to impute DigitalGlobe’s actions to the United States even though the United States would seek to prohibit DigitalGlobe from providing the data. Though not directly on point, Cheng notes that even criminal actions by non-governmental actors in outer space would be

their intelligence programs, successfully addressing complex strategic and tactical requirements.”).

²⁹⁸ Bin Cheng, *supra* note 16, at 15.

²⁹⁹ U.N. Charter, *supra* note 108, art 1(1).

considered as having been committed by agents of the State and, therefore, attributed to the State.³⁰⁰

When dealing with the law of neutrality, because the risk is so egregious and irreversible, a State should have to take some positive step affirming its non-State actor's actions after the outbreak of war prior to being declared a belligerent so that States are not being dragged into a war on a technicality.

2. DigitalGlobe's Sale to a Foreign Corporation

Making the above scenario far more complicated is the fact that in February 2017, MDA, the Canadian company that owns and operates its own remote sensing satellite, purchased DigitalGlobe.³⁰¹ The purchase is contingent upon U.S. government regulatory approval.³⁰² Under the agreement, DigitalGlobe will remain a stand-alone division under MDA's U.S. operating company, SSL MDA Holdings.³⁰³ Since it will maintain its name, location, and remain a U.S. company, DigitalGlobe's licenses for its five-satellite constellation would likely remain unaffected and be transferred to SSL MDA Holdings by NOAA.³⁰⁴ The United States would remain internationally responsible for DigitalGlobe's space venture through SSL MDA Holdings. However, the parent corporation, MDA, which will own its U.S. subsidiaries including its five remote sensing satellites, is already a remote sensing corporation that Canada is internationally responsible for. Indeed, its RADARSAT-2 satellite was funded by the government of Canada.³⁰⁵ Once the sale goes through, Canada would likely also be held internationally responsible for the entire satellite constellation run by MDA and its subsidiaries because Canada's non-State actor will own and operate all of the satellites either by itself or through its subsidiaries.

³⁰⁰ Cheng, *supra* note 16, at 18.

³⁰¹ Jeff Foust, *MDA to acquire DigitalGlobe*, SPACE NEWS (Feb. 24, 2017), <http://spacenews.com/mda-to-acquire-digitalglobe/>; DigitalGlobe, *supra* note 9. I note here that MAXAR, a parent company was established and incorporated in the U.S. Therefore, the U.S. has international responsibility for DigitalGlobe's satellites under Article VI of the Outer Space Treaty.

³⁰² Stephen Clark, *Canada's MDA buys DigitalGlobe, reveals next-generation WorldView satellite fleet*, SPACEFLIGHT NOW (Feb. 27, 2017), <https://spaceflightnow.com/2017/02/27/canadas-mda-buys-digitalglobe-reveals-next-generation-worldview-satellite-fleet/>.

³⁰³ DigitalGlobe, *supra* note 9.

³⁰⁴ 15 C.F.R. § 960.7, *supra* note 248.

³⁰⁵ Bourbonnière, Haeck & Nadeau, *supra* note 206.

Further muddying the waters, RADARSAT-2 data has already been combined with DigitalGlobe's images to provide militarily valuable intelligence. Specifically, by combining RADARSAT's data with DigitalGlobe's new images, "new military structures and activities could be identified" with a program that compares "historical RADARSAT-2 imagery with new imagery and automatically detect(s) new man-made structures, which appear as bright spots."³⁰⁶

a. Implications of Two States Having International Responsibility for One Company

We, therefore, have two responsible international space-faring nations, both of whom accept their Article VI OST responsibilities for their non-State actors. The United States will likely retain responsibility for the data from the five original DigitalGlobe satellites because the resultant corporation running the DigitalGlobe constellation will be a U.S. corporation. Even if the resultant corporation were not based in the United States, the U.S. regulatory approval process required prior to the sale going through would ensure that American laws and policies are abided by the resultant corporation.

As nothing is changing with RADARSAT, Canada will retain responsibility for its RADARSAT-2 data. Therefore, the question as it pertains to the law of neutrality is: what happens if the United States and Canada disagree as to what images can/should be sold during a time of conflict? What if Canada does not believe that MDA should provide higher resolution images to U.S. agencies than Canadian agencies? What if Canada believes that MDA should be allowed to both collect and disseminate high-resolution satellite imagery of Israel and Israeli occupied territories even though that runs counter to U.S. law?³⁰⁷ What if Canada, in asserting its responsibility for its non-State actors, does as the Netherlands did in 2003 when its non-State actor acquired two in-orbit satellites: give notice to the United Nations accepting international responsibility for the satellites even though it was not the launching state for purposes of the Registration and Liability conventions?³⁰⁸

³⁰⁶ Paul Millhouse, *RADARSAT-2 Content On GBDX*, DIGITALGLOBE (June 5, 2017), <https://platform.digitalglobe.com/radarsat-2-content-gbdx/>.

³⁰⁷ Nat'l Def. Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, § 1064, 110 Stat. 2422. (1997) [hereinafter *Kyl-Bingaman Amendment*].

³⁰⁸ UNCOPUOS, *supra* note 57.

The above scenarios may involve diplomatic conferences and high-level meetings between the two States to resolve this incongruity. However, what if the above State A/State B scenario were to occur with the new corporation? If MDA had a contract with State A to provide high-resolution imagery of some part of its land every 12 hours, including images that combined data from the DigitalGlobe satellites with RADARSAT-2 data allowing new military structures to be seen,³⁰⁹ it would now be done pursuant to both United States and Canadian licensing and both the United States and Canada would have international responsibility for the non-State actor. If State A thereafter declares war on State B, both State A and State B would be considered belligerents pursuant to the law of neutrality. If MDA continued to provide imagery to State A, both the United States and Canada's neutrality could be at risk.

The analysis for the United States and its neutrality is the same as it is above. The United States is still exercising appropriate control over its non-State actor as MDA's subsidiary corporation is located in the United States. If the United States did not want its neutrality implicated, it could invoke the national security clause of its license and force the company to stop selling imagery to a belligerent.

However, what if Canada, after the outbreak of war, wanted MDA to stop providing images to State A, but the United States had no objection to the continued sale of images? MDA, being a for-profit company with fiduciary responsibilities to its shareholders and a vested interest in making as much money as it can, would likely decide to continue to sell its images. What could Canada do and what are the implications for its neutrality? First, Canada could require RADARSAT-2 data be stripped from any images sold to State A pursuant to its licensing agreement.³¹⁰ In so doing, the Canadian ground stations that run the RADARSAT-2 satellite would not be valid military targets.³¹¹ However, MDA, the Canadian company, would still be providing militarily useful intelligence to a belligerent.

³⁰⁹ Millhouse, *supra* note 306.

³¹⁰ GOV'T OF CANADA, *Government of Canada issues operating licence for RADARSAT-2* (Nov. 16, 2007), <https://www.canada.ca/en/news/archive/2007/11/government-canada-issues-operating-licence-radarsat-2.html?=&wbdisable=true>.

³¹¹ CAN. SPACE AGENCY, *supra* note 206.

b. Possible Interpretations of Article VI of the OST

Three possible interpretations of Article VI of the OST would then be available: a broad interpretation that holds Canada and the United States responsible, a moderate interpretation that would only hold the United States responsible, and a narrow interpretation that would not hold any State responsible.

i. Broad Interpretation

A broad interpretation would look at the plain language of Article VI of the OST. Such an interpretation could lead to the problematic result of Canada being held internationally responsible for its non-State actor's actions over which it has no control.

The first line of Article VI notes that States bear “international responsibility for national activities in outer space...whether such activities are carried on by governmental agencies or their non-governmental entities...”³¹² There is no obviating this responsibility. States are responsible for their private commercial operators,³¹³ and MDA is a Canadian non-governmental entity. Canada would therefore have international responsibility for MDA, its subsidiaries, and its subsidiaries' satellite constellation even if Canada did not license the constellation.

In such a scenario, Canada may argue that it is not responsible because it does not license the DigitalGlobe satellites as they were launched prior to MDA's acquisition of DigitalGlobe. Canada could also argue that they were not the launching state under the Liability and Registration Conventions and that they do not have jurisdiction under Article VIII of the OST. Canada could bolster its claim if it did not report to the United Nations that it accepted responsibility for the constellation after its non-State actor acquired the in-orbit constellation.

In short, Canada would be arguing either that the DigitalGlobe constellation and resultant images do not constitute Canadian “national activities” under the first sentence of Article VI of the OST or Canada could argue that, based on the second sentence of Article VI, Canada is either not the “appropriate State” or that the United States is a more “appropriate State.”

³¹² Outer Space Treaty, *supra* note 1, art. VI.

³¹³ LYALL & LARSEN, *supra* note 25, at 470.

The second sentence states that the “activities of non-governmental entities in outer space . . . shall require authorization and continuing supervision by the appropriate State party.”³¹⁴ Canada, by noting that the United States continues to license the five-satellite constellation, could argue that the United States is the de facto “appropriate State” for the “authorization and continuing supervision” of the constellation.

Under this broad interpretation of Article VI, these arguments fall flat. Either Canada is responsible for MDA and all of its space activities, or it is not. If Canada were to attempt to parse out different sections of MDA’s business and say that it is only responsible for that part of the business that it authorized (licensed) pursuant to the second sentence of Article VI, the plain language of Article VI would be ignored.

As it stands, and as most scholars agree, the whole point of this Article VI provision is to have a State answerable for the space activities of its nationals. Manfred Lachs, the late International Court of Justice judge and leading space law publicist, noted that “States are under obligation to take appropriate steps to ensure that their natural and juridical persons engaged in outer space activity conduct it in accordance with international law.”³¹⁵ Thus, if MDA, through a subsidiary, wholly owns and operates a satellite constellation, Canada would be responsible even if it was unable to exercise control over a portion of MDA’s subsidiary. Such a reading, though technically accurate, leads to the result that Canada could lose its neutrality in a war and be subject to attack because of the uncontrollable actions of a non-State actor. This result is not tenable as a matter of international law.

Canada could be dragged into a war by one of its non-State actors, a war that it had no intent of entering and, in fact, attempted to stop from entering by preventing its non-State actor from selling imagery to an aggressor. Under such an interpretation, it would appear that Canada, with its non-State actor acquiring an in-orbit constellation, would gain all of the international responsibility without gaining any of the space benefits. Canada would bear international responsibility for a satellite constellation over which it has no control. Canada cannot force its non-State actor to sell it the best quality imagery because its U.S. license precludes such a sale. Canada cannot limit the imagery its non-State actor sells to foreign governments, even if Canada’s foreign policy would dictate such a limitation. Ultimately, Canada could be

³¹⁴ Outer Space Treaty, *supra* note 1, art VI.

³¹⁵ LACHS, *supra* note 15, at 114.

dragged into a war, with no ability to stop its non-State actor from selling imagery that would open them to attack.

ii. Moderate Interpretation

A moderate interpretation of Article VI would limit the meaning of the term “national activities” in the first sentence of Article VI to those activities over which a State has conceivable operational control. Likewise, the term “appropriate State” would also be limited to the State that does the actual licensing and supervision. Under this interpretation, Canada’s arguments would find footing. Its inability to control the DigitalGlobe constellation would be evidence that it is not the most appropriate state to be held internationally responsible. Its inability to tell its corporation to stop providing imagery to State A should not lead to its neutrality being questioned. For this scenario, this moderate interpretation would lead to a more equitable result.

Though it would keep Canada from being pulled into a war, this interpretation could also be problematic in that it allows States to disclaim the actions of their non-State actors in space and it incentivizes not accepting responsibility for non-State actors who acquire in-orbit satellite constellations. For example, in the present case, Canada would get to disclaim the actions of MDA because MDA chose to establish a subsidiary in the United States to operate the satellite constellation even though Canada was aware of MDA’s intentions at the time of the sale. Though this makes business sense (as the U.S. Government is DigitalGlobe’s biggest customer), this type of action could allow States to encourage their non-State actors to shop for the “appropriate state” forum. In this instance, States like Canada would get to reap the tax benefits of having a multi-national space company headquartered in their territories by allowing their corporations to incorporate subsidiaries the world over. This would represent a benefit to the corporations as they would be incentivized to set up subsidiary satellite corporations in States that have the least amount of business restrictions.

A further question that this moderate interpretation raises is how long Canada would get to disclaim responsibility for a Canadian corporation that exercises ultimate control of a satellite constellation. When the next satellite in the constellation is launched (the oldest one, WorldView-1, has been in-orbit over ten years)³¹⁶ will the Canadian corporation get to decide if the United

³¹⁶ GBDX University, *WORLDVIEW-1*, <https://gbdxdocs.digitalglobe.com/docs/worldview-1> (last visited Jul. 9, 2019).

States or Canada is internationally responsible based on which subsidiary it chooses will own the satellite? If it chooses the United States, does Canada get the tax revenue generated from a multi-billion dollar corporation while accepting none of the responsibility? What if the corporation were to find an even better business environment in a third State? Does Canada have no international responsibility under the moderate interpretation of Article VI?

iii. Narrow Interpretation

A narrow interpretation would go against the text of Article VI to reach the conclusion that neither the United States nor Canada is responsible for its non-State actor. Although Article VI states that “States...bear international responsibility for national activities in outer space whether such activities are carried on by governmental or non-governmental entities,”³¹⁷ a narrow interpretation claims that because the OST “does not say all activities require oversight”, there is room for States to not be completely responsible for their non-State actors. It also does not say which activities must be regulated. States are therefore free to choose which activities to regulate and not regulate.³¹⁸

The narrow interpretation indicates that States’ international obligations for non-State actors in space are not created unless and until they choose to regulate their non-State actors. Laura Montgomery, a former manager of the Space Law Branch in the Federal Aviation Administration’s Office of the Chief Counsel and now a sole practitioner,³¹⁹ espoused this interpretation in recent congressional testimony.³²⁰ In the same testimony, she questioned, counter to the plain language of the OST, whether non-State actors must abide by all of the OST’s provisions.³²¹ While this interpretation conflicts with the Vienna Convention on the Law of Treaties notion that a “treaty be interpreted in good faith in accordance with the ordinary meaning given

³¹⁷ Outer Space Treaty, *supra* note 1, art VI.

³¹⁸ *Regulating Space: Innovation, Liberty, and International Obligations: Hearing Before the H. Comm. on Sci., Space & Tech., Subcomm. on Space*, 115th Cong. (2017) (statement of Laura Montgomery, Attorney & Sole Proprietor, Ground Based Space Matters, LLC), <http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=105659>.

³¹⁹ *Regulating Space: Innovation, Liberty, and International Obligations: Hearing Before the H. Comm. on Sci., Space & Tech., Subcomm. on Space*, 115th Cong. (2017) (biography of Laura Montgomery, Attorney & Sole Proprietor, Ground Based Space Matters, LLC), <http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=105659>.

³²⁰ MONTGOMERY, *supra* note 318.

³²¹ *Id.* at 13.

to the terms...³²² and may in fact be a detriment to U.S. national security interests,³²³ an analysis of the MDA/DigitalGlobe case above also shows the shortcomings of this interpretation.

As it stands, the United States could still be held liable if MDA/DigitalGlobe assists State A under this narrow interpretation because it has chosen to regulate remote sensing space activities.³²⁴ Canada, too, has opened itself up to international responsibility under this interpretation because it passed the Remote Sensing Space Systems Act (RSSA) noting that “no person shall operate a remote sensing space system in any manner, directly or indirectly, except under the authority of a license.”³²⁵ Further, the license requirement applies to actions of Canadian citizens and Canadian corporations even if they were acting outside of Canada.³²⁶ Thus, both States could have their neutrality implicated because they voluntarily undertook to license and provide continuing supervision of their remote sensing non-State actors.

However, either State at any time could decide to rescind its remote sensing legislation. If a State were to do so, it would no longer have any international responsibility under Article VI of the OST. Such an interpretation would mean that Article VI does not impose any international obligations at all.³²⁷

If both States were to rescind their legislation, no State would be responsible for either DigitalGlobe or MDA, nor would any State provide the required “authorization and continuing supervision.” This narrow interpretation goes against the intent of Article VI and would allow non-State actors to help belligerents without implicating a State’s neutrality.

³²² Vienna Convention on the Law of Treaties art. 31(1), May 23, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention or VCLT].

³²³ John Goehring, *Properly Speaking, The United States Does Have an International Obligation to Authorize and Supervise Commercial Space Activity*, 78 AIR FORCE L. REV. 101, 123 (2017).

³²⁴ Land Remote Sensing Policy Act of 1992, *supra* note 196.

³²⁵ Remote Sensing Space Systems Act, S.C. 2005, c 45 (Can.) <http://laws-lois.justice.gc.ca/eng/acts/R-5.4/page-1.html#h-6>.

³²⁶ *Id.*

³²⁷ Goehring, *supra* note 323, at 2.

iv. Preferred Interpretation

A moderate interpretation of the OST is the best approach when dealing with the law of neutrality. Since the founding of the United Nations, all State actions must be performed in the context of Article 1 of the U.N. Charter, which outlines the purposes of the U.N. Notably, the first purpose is “to maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace... ”³²⁸ In short, war is different from all other State actions and responsibilities, and States must act in such a way to stop wars from starting or, if started, to stop them from expanding.

The moderate interpretation of Article VI, though somewhat counter to the plain language of the OST, allows for limited war and does not drag a State into war that has no ability to stop its non-State actor. This interpretation is particularly pertinent in regard to the example above, when satellites are launched pursuant to a licensing agreement from one State and then are sold to a corporation from another State. When read in the context of the law of neutrality and the U.N. Charter, the Article VI term “national activities” should only encompass responsibility for those activities the State has a possibility of regulating and controlling.

The process of transferring in-orbit satellites could add clarity and support to this interpretation. When a corporation with in-orbit space assets is sold, as in the case of DigitalGlobe, the sale will be done pursuant to regulatory requirements of its licensing State. That State could make the sale contingent upon the requirement that the foreign State accept international responsibility for the space activities prior to allowing the sale to go through.³²⁹ Or, in the alternative, the State could note that the licensing State will continue to authorize and provide continuing supervision over the in-orbit satellites.

This idea of States being responsible for their nationals’ activity vis-à-vis the law of neutrality was not envisioned when the OST was signed and is difficult to implement in twenty-first century space endeavors. Today, multi-national public corporations can have investors the world over. Such an interpretation could lead to not only Canada being held responsible as

³²⁸ U.N. Charter, art. 1(1).

³²⁹ Michael Gerhard, *Transfer of Operation and Control with Respect to Space Objects—Problems of Responsibility and Liability of States*, 51 Z. LUFT- & WELTRAUMRECHT—GER. J. AIR & SPACE L. 571, 574-5 (2002).

MDA is a Canadian corporation, but other States as well. If there were MDA board members from India and China who voted to purchase DigitalGlobe or helped decide what types of satellites that MDA would launch, China and India would be responsible for their actions and, in the above example, could also be at risk of losing their neutrality.

Second, third, and fourth States should not risk attack and be labeled belligerents because their nationals are part of a multi-national space corporation at a time of conflict. Rather, the responsible State should be the State capable of making the decisions that plunge it into war.

Because war is different, and more consequential, from other aspects of international law, there should be a higher level Article VI responsibility standard prior to a State's neutrality being implicated. Though States remain responsible for their non-State actors' actions in space, when war erupts and States party to the conflict use space assets of other States, the other States should make an affirmative declaration that they approve of and accept the neutrality implications of their non-State actors' continued support of a State at war prior to their neutrality being implicated.

VII. CONCLUSION

Non-State space actors are more numerous and more complex than they have ever been. Foreign hosted payloads and the sale of non-State space actors to foreign States were not envisioned at the time of the signing and ratification of the space treaties.³³⁰ These events have occurred recently and will almost certainly continue to occur.

During the time it took to write this article, Intelsat both began merger talks with a startup space corporation, OneWeb,³³¹ and the merger subsequently fell through.³³² This article does not include an analysis of the law of neutrality implications of this merger as both Intelsat and OneWeb are based

³³⁰ LYALL & LARSEN, *supra* note 25, at 471.

³³¹ Caleb Henry, *Intelsat's stock soars on report of OneWeb merger*, SPACENEWS (Feb. 27, 2017), <http://spacenews.com/intelsats-stock-up-sharply-on-report-of-possible-oneweb-merger/>.

³³² Caleb Henry, *OneWeb says no steam lost despite Intelsat merger unravelling*, SPACENEWS (June 1, 2017), <http://spacenews.com/oneweb-says-no-steam-lost-despite-intelsat-merger-unravelling/>.

in the United States³³³ and, even if it were not, the analysis would have been similar to the Canada/U.S. analysis with DigitalGlobe. However, this serves as another example of how quickly space non-State actors are evolving and responding to market pressures.

The plain text of Article VI would indicate that States bear international responsibility as soon as a non-State actor acts, even if it implicates that State's neutrality. A better interpretation when issues of war are implicated, is that States must affirmatively approve of its non-State actor's actions prior to the State's neutrality being implicated. War is different. States should not be dragged into war on a technicality.

³³³ Even though OneWeb is based in the U.S., its biggest investor is the Japanese conglomerate Softbank. *UPDATE 1-SoftBank to invest \$1 billion in U.S. venture OneWeb as part of \$50 billion pledge*, BUS. INSIDER, Dec. 19, 2016, <http://www.businessinsider.com/r-update-1-softbank-to-invest-1-billion-in-us-venture-oneweb-as-part-of-50-billion-pledge-2016-12>; *OneWeb LLC: Private Company Information*, BLOOMBERG, <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=282689076> (last visited May 22, 2019).

POWER AND PROPORTIONALITY:
THE ROLE OF EMPATHY AND ETHICS ON VALUING
EXCESSIVE HARM

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*O, it is excellent
To have a giant's strength, but it is tyrannous
To use it like a giant*¹

I. INTRODUCTION

Military lawyers provide regular instruction to members of the U.S. military on the subject of international humanitarian law (IHL).² This instruction generally focuses on broad principles of IHL: Military necessity, humanity, proportionality, distinction, and honor.³ In this context, proportionality is often described, almost poetically, as the principle that creates balance and harmony between the competing concepts of necessity and humanity.⁴ However, a codified rule of proportionality did not appear in IHL treaties before the first Protocol Additional to the Geneva Conventions (AP 1) of 1977, a treaty the U.S. has never ratified.⁵ Yet, notwithstanding the relatively recent appearance of the rule, it is beyond question that proportionality, as a limitation on attacks, has quickly and convincingly become binding customary international law.⁶

¹ WILLIAM SHAKESPEARE, *MEASURE FOR MEASURE*, act 2, sc. 2.

² See U.S. AIR FORCE, POL'Y DIRECTIVE 51-4, *Compliance with the Law of Armed Conflict* ¶ 4.1 (Aug. 4, 2011).

³ See U.S. DEP'T OF DEFENSE, *LAW OF WAR MANUAL* ¶ 2.1 (June 2015, updated Dec. 2016) [hereinafter *DoD Law of War Manual*]. The *DoD Law of War Manual* states here that the "foundation" of the law of war comprises the three interdependent principles of military necessity, humanity and honor. *Id.* Proportionality and distinction are "other principles" related to the primary three. *Id.*

⁴ See *id.* ¶ 2.1.2.3 ("Law of war principles work as interdependent and reinforcing parts of a coherent system...proportionality requires that even when actions may be justified by military necessity, such actions not be unreasonable or excessive"); see also AUSTL. DEFENCE FORCE, *AUSTL. DEFENCE DOCTRINE PUBL'N 06.4, LAW OF ARMED CONFLICT*, ¶ 2.8 (May 2006) ("The principle of proportionality provides a link between the concepts of military necessity and unnecessary suffering").

⁵ W. Hays Parks, *Air War and the Law of War*, 32 *A.F. L. REV.* 1, 170 (1990). The Judge Advocate General's Legal Center & School's publication, *Operational Law Handbook*, stated that proportionality "is not a separate legal standard" at all, but rather "a method by which military commanders can balance" the competing interests of humanity and necessity. U.S. ARMY JUDGE ADVOCATE GENERAL'S LEGAL CENTER & SCHOOL, *INT'L & OPERATIONAL LAW DEP'T, OPERATIONAL LAW HANDBOOK* 13 (16th ed. 2016).

⁶ See Michael J. Matheson, *The United States Position on the Relation of Customary International Law to the 1977 Protocols Additional to the 1949 Geneva Conventions*, 2 *AM. U. J. INT'L L. & POL'Y* 415, 423 (1987). It is also generally accepted that the principle also applies to non-international armed conflicts. JEAN-MARIE HENCKAERTS & LOUISE DOSWALD-BECK, *1 CUSTOMARY INTERNATIONAL HUMANITARIAN LAW* 46 (2005).

The principle of proportionality holds that attacks are prohibited if they are expected to cause excessive incidental harm in relation to the concrete and military advantage anticipated.⁷ This restriction on attacks is perhaps the most curious of all IHL principles, and more academic writing has focused on proportionality than any other principle.⁸ The curiosity arises primarily from its ambiguity and resulting discretion that is given to commanders. The law can only be found at the extremes.⁹ Proportionality prohibits those attacks which are *clearly* excessive.¹⁰ It does not prohibit those that are *clearly not* excessive.¹¹ All potential attacks between these two extremes are subject to a vague balancing test that tells commanders to weigh incommensurable and dissimilar interests.¹² As a result, commanders have a burdensome amount of discretion and very little guidance. They cannot use mathematical equations. There is no chart to reference. Commanders are forced to rely on intuition in assessing the proportionality of an attack.¹³

Recent scholarship has sought to consider this proportionality assessment in light of social science, particularly cognitive biases and heuristics.¹⁴ This work has generally sought to draw attention to weaknesses and vulner-

⁷ See Protocol Additional to the Geneva Conventions of 12 August 1949 and Relating to the Protection of Victims of International Armed Conflict, *opened for signature* Dec. 12, 1977, arts. 51(5)(b) & 57(2)(b), 1125 U.N.T.S. 3 [hereinafter “Additional Protocol 1” or “AP 1”].

⁸ See Jens David Ohlin, *Targeting and the Concept of Intent*, 35 MICH. J. INT’L L. 79, 86 (2013).

⁹ MICHAEL BOTHE, KARL JOSEF PARTSCH & WALDEMAR A. SOLF, *NEW RULES FOR VICTIMS OF ARMED CONFLICT* 309-10 (2d ed. 2013).

¹⁰ *Id.* at 309-10, *cf.* Ohlin, *supra* note 8, at 86. It should be noted here that the prohibition of indiscriminate attacks in Additional Protocol 1 does not use the word “clearly,” but because “the two sides of the question cannot be quantified, only an obvious imbalance can be considered disproportionate or excessive.” *Id.*

¹¹ *Id.*

¹² See INT’L COMM. OF THE RED CROSS (ICRC), COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, ¶ 1979 (1987) [hereinafter “ICRC COMMENTARY”].

¹³ Military commanders receive substantial training on the subject of decision-making, including the famous “OODA loop,” which teaches commanders to observe, orient, decide and act. See generally, John R. Boyd, *Destruction and Creation*, U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE, (Sept. 3, 1976). Such decision-making methods are beyond the scope of this article. It is, however, worth noting that the term “intuition” is not meant to imply commanders take a shallow or impulsive approach. Rather, they are left with intuition alone because there is simply no other way to make these decisions.

¹⁴ See generally, *id.* at 577-580.

abilities in lethal decision making, while simultaneously calling for more research on the subject.¹⁵ In reading such works, one senses a rising tide of scholarship intended to inform the decision-making process commanders undertake when considering an attack. This article seeks to contribute to that work by identifying another potential obstacle to assessing whether incidental harm is excessive. Specifically, a growing body of research suggests that an individual's power may have substantial effects on, among other things, risk tolerance and capacity for empathy.¹⁶

Most practitioners will be quick to point out that, in practice, commanders more often wrestle with questions of factual certainty than proportionality. The rule of proportionality prohibits excessive civilian casualties that are *expected* by the reasonably well-informed person, making reasonable use of the information available.¹⁷ Commanders often consider attacks knowing that uncertainty surrounds the possibility of civilian harm. Attacks with *expected* civilian harm are far less common. Nonetheless, in an asymmetrical conflict, expected civilian harm occasionally arises during the targeting process. In such cases, the commander's staff at the targeting cell presents information on the target and the value it presents to operations;¹⁸ they show the collateral damage estimate, which approximates, among other things, expected civilian deaths;¹⁹ the lawyer then repeats what the commander already knows, "The attack cannot cause excessive civilian harm in relation to the anticipated military advantage,"²⁰ The room falls silent as the commander quietly makes a final decision.

¹⁵ *Id.*; see also Tomer Broude, *Behavioral International Law*, 163 U. PA. L. REV. 1099 (2015).

¹⁶ Jerry Useem, *Power Causes Brain Damage*, THE ATLANTIC, Aug. 2017, at 24.

¹⁷ Prosecutor v. Galić, Case No. IT-98-29-T Appeals Chamber Judgment (Int'l Crim. Trib. for the Former Yugoslavia Dec. 5, 2003). For example, a nearby, low-traffic road presents the possibility of transient civilians, but does not create an expectation of civilian harm. In this sense commanders may sense that "what I don't know matters enormously." Interview by Krista Tippett with Daniel Kahneman, Professor of Psychology, Princeton University (Oct. 5, 2017), available at <https://onbeing.org/programs/daniel-kahneman-why-we-contradict-ourselves-and-confound-each-other-oct2017/> [hereinafter: "Kahneman Interview"]. This is very different from proportionality decisions of expected incidental harm.

¹⁸ Lieutenant Commander Luke A. Wittemore, *Proportionality Decision Making in Targeting: Heuristics, Cognitive Biases, and the Law*, 7 HARV. NAT'L SEC. J. 577, 622 (2016).

¹⁹ *Id.*

²⁰ See DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 2.4.1.2.

This article will summarize the elusive principle of proportionality, and the effect of power on that principle. Because the law leaves commanders to wrestle with ambiguity, this article is focused less on what the law requires and more on the ethics of applying the law. The term ethics is used here to describe the branch of knowledge that deals with moral principles.²¹ More simply, it is “doing the right thing,” as explained by former Secretary of Defense James Mattis.²² The primary purpose of this article is to identify an obstacle to finding that “right thing” in proportionality tests. After identifying that obstacle, this article will conclude with several ideas on how to overcome it, with an emphasis on the role of the legal advisor.

II. THE PRINCIPLE OF PROPORTIONALITY

A. Express Law

The principle of proportionality is codified in Articles 51(5)(b) and 57(2)(b) of AP 1.²³ Article 51(5)(b) states an attack is indiscriminate and prohibited if it “may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”²⁴ This provision of AP 1 was identified by the International Committee for the Red Cross (ICRC) as a critical component of the Protocol, and the ICRC referred to it as a “key article.”²⁵ Similarly, Article 57(2)(b) states, “an attack shall be cancelled or suspended if it becomes apparent that . . . the attack may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”²⁶ The United States has publicly expressed its view that these provisions are customary international law.²⁷

²¹ MACQUARIE DICTIONARY 486 (4th ed. 2005).

²² U.S. Dep’t of Defense, Memorandum from James Mattis, U.S. Secretary of Defense, to all Department of Defense employees (Aug. 4, 2017), <https://www.defense.gov/Portals/1/Documents/pubs/Ethical-Standards-for-All-Hands-SecDef-04-Aug-17.pdf> [hereinafter Mattis Memorandum].

²³ See Additional Protocol 1, *supra* note 7.

²⁴ *Id.* art. 51(5)(b).

²⁵ ICRC COMMENTARY, *supra* note 12, ¶ 1931.

²⁶ Additional Protocol 1, *supra* note 7, art. 57(2)(b).

²⁷ See Matheson, *supra* note 6.

Although Articles 51(5)(b) and 57(2)(b) are almost universally referred to as the rule or principle of proportionality, they do not contain the word “proportionality.” This is not an accident or a matter of semantics.²⁸ Rather, during Diplomatic Conferences related to AP 1, many States worried that the word “proportionality” implied an equilibrium exists between incidental harm and military advantage.²⁹ Many states wished to avoid implying that any sort of precise measurement or optimum decision calculus was possible, and thus adopted the language present in AP 1.³⁰ Nonetheless, “proportion” is the most intuitive word to describe the rule. The Department of Defense (DoD) Law of War Manual thus describes proportionality by stating the rule “weighs the justification for acting against the expected harms to determine whether the latter are disproportionate in comparison to the former.”³¹

B. Historical Background

As previously explained, this rule of proportionality in IHL treaty law is an invention of the 1970s,³² though commanders may have contemplated the principle for intuitive or practical reasons long before. During the American Civil War, the code of conduct applicable to Union soldiers was known as

²⁸ See DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 2.4.1.2; see also BOTHE, ET AL., *supra* note 9, at 309-10.

²⁹ BOTHE ET AL., *supra* note 9, at 309-10.

³⁰ *Id.*

³¹ DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 2.4.1.2. Despite the clear language of the treaty and clear explanations by secondary sources, proportionality is often misunderstood by operators and others, who often explain the principle as prohibiting the use of six bombs when five would have been enough. Hays Parks, *supra* note 5, at 170. This common misunderstanding is illustrated by the recent high-profile investigation into the airstrike on a Doctors Without Borders Hospital in Kunduz, Afghanistan. Major General William B. Hickman, Army Regulation 15-6 Report of Investigation of the Airstrike on the Médecins Sans Frontières/Doctors Without Borders Trauma Center in Kunduz, Afghanistan on 3 October 2015 (Nov. 11, 2015). The investigation noted that proportionality assumes an attack on a legitimate military objective, but nonetheless concluded that the aircrew “failed to exercise the principle of proportionality in relation to the direct military advantage.” *Id.* This conclusion noted that because the aircrew fired a large number of rounds without identifying a threat to ground forces, their response was disproportionate. *Id.* In fact, the aircrew made a mistake of positive identification, not proportionality.

³² Robert D. Sloane, *Puzzles of Proportion and the Reasonable Military Commander: Reflections on the Law, Ethics, and Geopolitics of Proportionality*, 6 HARV. NAT’L SEC. J. 299, 310 (2015); Parks, *supra* note 5, at 175. It should be noted that the article is focusing exclusively on *jus in bello*. Proportionality in a *jus ad bellum* context is a natural and historic part of the Just War Tradition. *Id.* at 171.

the Lieber Code.³³ The Lieber Code mentions incidental harm, but only with permissive language: “Military necessity admits of all direct destruction of life on armed enemies, and of other persons whose destruction is incidentally unavoidable.”³⁴ Operating under the Lieber Code, General William Sherman explained that his attack of Atlanta was justified by military necessity.³⁵ Sherman implicitly argued that the incidental harm was proportionate,³⁶ and that the responsibility for proportionality was with the defending, rather than the attacking force. This argument continues to be embraced by some critics of AP 1.³⁷

The modern practitioner, who no longer focuses on the enemy’s responsibility for proportionality, must wonder at whether Truman would have paused before Hiroshima, had a lawyer confronted him with today’s proportionality test. When reflecting on his decision just over one year later,³⁸ Truman wrote that he had “no qualms about it whatever,”³⁹ and that he had not lost a wink of sleep over the decision.⁴⁰ The moral philosopher Michael Walzer points out that this is not the sort of statement we expect from leaders.⁴¹ We want them to bear the burdens of painful decisions.⁴² Truman at least objected to a film’s portrayal of him making a snap judgement on the issue.⁴³ But, with the notable exception of Eisenhower, subsequent Presidents have, at least implicitly, agreed that the decisions to drop the atomic bombs on

³³ See U.S. Dep’t of War, General Order No. 100, Instructions for the Government of the Armies of the United States in the Field by Order of the Secretary of War (1863).

³⁴ *Id.* art. 15. This article is more descriptive of the principle of military necessity, and is cited by the DoD Law of War Manual to support necessity, not proportionality. DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 2.2.1. The article is, nonetheless, relevant to today’s proportionality rule as it authorizes unavoidable, incidental harm.

³⁵ Letter from General William T. Sherman to General John Bell Hood (Sept. 10, 1864), reprinted in WILLIAM T. SHERMAN, MEMOIRS 120 (1957).

³⁶ *Id.*

³⁷ See Parks, *supra* note 5, at 112, 153-54.

³⁸ See Greg Mitchell, *When Harry Truman Got Actor Fired from MGM Epic*, HUFFINGTON POST (July 3, 2013), https://www.huffingtonpost.com/greg-mitchell/when-harry-truman-got-act_b_3208940.html.

³⁹ Robert Jay Lifton & Greg Mitchell, *The Presidents Have No Regrets*, L.A. TIMES, Aug. 4, 1996, http://articles.latimes.com/1996-08-04/opinion/op-31196_1_american-president.

⁴⁰ MICHAEL WALZER, JUST AND UNJUST WARS 5 (1977).

⁴¹ *Id.*

⁴² *Id.*

⁴³ Lifton, *supra* note 39.

Hiroshima and Nagasaki were the correct ones.⁴⁴ This surprising unanimity raises questions about the limiting effect of proportionality in practice.⁴⁵

More modern examples show proportionality is an accepted restraint, but applying it remains challenging. For instance, during Israel's 2006 conflict with Hezbollah, Israel targeted and killed two Hezbollah combatants, but incidentally killed four civilians.⁴⁶ Based purely on the numbers, killing four civilians alongside only two combatants seems disproportionate. Yet, even the non-government organization Human Rights Watch found this attack unobjectionable under the circumstances.⁴⁷ In another more recent example, the Trial Chamber of the International Criminal Tribunal for the Former Yugoslavia (ICTY) attempted to establish a specific standard for proportionality tests.⁴⁸ The Trial Chamber ruled in *Prosecutor v. Gotovina* that attacks which impacted more than 200 meters from a military objective were, *per se*, indiscriminate, and a violation of the rule of proportionality.⁴⁹ This unusual ruling was unanimously overturned by the Appeal Chamber, with all five Judges concluding the trial court's failure to provide a reason for its 200-meter standard was legal error.⁵⁰ The Appeal Chamber did not provide an alternative standard. Thus, historical practice does not demonstrate norms or provide specific guidance to commanders.

⁴⁴ *Id.*

⁴⁵ Presenting a similar idea, Canadian legal officer Lieutenant Colonel William J. Fenrick questioned whether the codified rule of proportionality might have prevented the bombing of 25,000 civilians at Dresden during World War II. William J. Fenrick, *The Rule of Proportionality and Protocol I in Conventional Warfare*, 98 MIL. L. REV. at 127.

⁴⁶ HUMAN RIGHTS WATCH, WHY THEY DIED: CIVILIAN CASUALTIES IN LEBANON DURING THE 2006 WAR 126 (2007), <https://www.hrw.org/report/2007/09/05/why-they-died/civilian-casualties-lebanon-during-2006-war>.

⁴⁷ *Id.*

⁴⁸ *Prosecutor v. Gotovina, et. al.*, Case No. IT-06-90-A, Appeals Chamber Judgment (Int'l Crim. Trib. for the Former Yugoslavia Nov, 16, 2012).

⁴⁹ *Id.* ¶ 25.

⁵⁰ *Id.* ¶¶ 61, 65.

C. Interpretation of the Proportionality Principle.

The proportionality test is found in broad U.S. military doctrine,⁵¹ as well as specific tactical procedure.⁵² However, these publications do little more than repeat the rule from AP 1; a rule that France complained during Diplomatic Conferences would “seriously hamper” military operations with overwhelming complexity.⁵³ The complexity referenced here is not in identifying the rule or understanding the principle. Rather, the difficulty is found in applying the general rule to specific circumstances.⁵⁴ In 1990, after harshly criticizing AP 1 in general, and the proportionality rule in particular, W. Hays Parks stated that if the proportionality test was a domestic U.S. law, it would be constitutionally void for vagueness.⁵⁵

In an attempt to clarify this vague and complex rule, the U.S. Air Force wrote that an attack meets the requirements of the law “if the commander

⁵¹ JOINT CHIEFS OF STAFF, JOINT PUBL’N 3-60, *Joint Targeting* app. A, § 4.a.(1) (Sept. 26, 2018) [hereinafter JP 3-60]. The doctrine primarily repeats the test from Additional Protocol 1.

⁵² CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTR. 3160.01C, NO-STRIKE AND THE COLLATERAL DAMAGE ESTIMATION METHODOLOGY B-1 (Apr. 9, 2018). It must be clarified that the proportionality analysis does not become relevant in the targeting process until, after all feasible precautions are taken, incidental harm appears unavoidable. *See id.* In such cases the Chairman’s instruction explains: “The anticipated injury or loss of civilian or noncombatant life, damage to civilian or noncombatant property, or any combination thereof, incidental to attacks must not be excessive in relation to the anticipated military advantage.” *Id.* at B-4.

⁵³ HENCKAERTS & DOSWALD-BECK, *supra* note 6, at 46. Some critics of Additional Protocol 1 argue that some of the drafters wished to make the law impossibly complex with the hope it would discourage future conflict. Parks, *supra* note 5, at 75. W. Hays Parks claims the senior ICRC representative, Jean Pictet, informally stated during the diplomatic conference that “if we cannot outlaw war we will make it too complex for the commander to fight!” *Id.*

⁵⁴ ICTY, Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia ¶¶ 49-50 (June 13, 2000) [hereinafter “Final Report to the Prosecutor”].

⁵⁵ Hays Parks, *supra* note 5, at 173. Near the middle of Parks’s colossal article he quotes Clausewitz as saying that rules and formulas in war are “worse than useless” because “in war everything is uncertain, and calculations have to be made with variable quantities.” *Id.* at 183. Other scholars have disputed this assertion by pointing out that many laws rely on a nebulous “reasonable actor” standard. Robert D. Sloane, *Puzzles of Proportion and the Reasonable Military Commander: Reflections on the Law, Ethics, and Geopolitics of Proportionality*, 6 HARV. NAT’L SEC. J. 299, 302-03 (2015). The author here notes that “reasonableness, after all, is a ubiquitous standard in both international and domestic law.” *Id.*

can clearly articulate in a reasonable manner what the military importance of the target is and why the anticipated civilian collateral injury or damage is outweighed by the military advantage to be gained.”⁵⁶

This Air Force guidance is clearly based on the “reasonable military commander” standard, first articulated by the ICTY.⁵⁷ In the ICTY case, *Prosecutor v. Galić*, the Trial Chamber stated: “In determining whether an attack was proportionate it is necessary to examine whether a reasonably well-informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack.”⁵⁸

Providing more detail on this test, the ICTY stated in its Final Report to the Prosecutor that commanders in such circumstances should ask the following questions:

(a) What are the relative values to be assigned to the military advantage gained and the injury to non-combatants and or the damage to civilian objects? (b) What do you include or exclude in totaling your sums? (c) What is the standard of measurement in time or space? and (d) To what extent is a military commander obligated to expose his own forces to danger in order to limit civilian casualties or damage to civilian objects?⁵⁹

The ICTY further stated that the answers to these questions are difficult, and will vary based on the background and values of the com-

⁵⁶ U.S. AIR FORCE JUDGE ADVOCATE GENERAL’S SCHOOL, AIR FORCE OPERATIONS AND THE LAW 18 (3d ed. 2014).

⁵⁷ Final Report to the Prosecutor, *supra* note 54.

⁵⁸ *Prosecutor v. Galić*, *supra* note 17, ¶ 58. Two points regarding the Galić case are worth noting. First, it is an extensive opinion of 770 paragraphs, only one of which addresses proportionality. Second, the proportionality test here is stated in terms of a negative obligation to commanders that invokes criminal liability. Similarly, the Rome Statute states that commanders are prohibited from the use of force that is “clearly excessive” and is known to be clearly excessive. Rome Statute of the International Criminal Court art. 8(2)(b)(iv), July 17, 1998, 2187 U.N.T.S. 38544. Some scholars have argued that although this lower hurdle of criminal liability should not be read into the positive obligation of Additional Protocol 1, in practical terms, it most likely informs that understanding. WILLIAM H. BOOTHBY, THE LAW OF TARGETING 97 (2012).

⁵⁹ Final Report to the Prosecutor, *supra* note 54, ¶¶ 49-50.

mander.⁶⁰ Indeed, the ICTY acknowledged that it would be unlikely for commanders with different experiences or doctrinal backgrounds to always agree in close cases.⁶¹

This concession by the ICTY gives context to the commonly used, though slightly misplaced, adjective in describing a commander's decision in a proportionality test: "subjective."⁶² The DoD Law of War Manual states that the exercise of judgment required by proportionality contains "subjective aspects."⁶³ But the reasonable commander test is not, strictly speaking, a subjective standard.⁶⁴ A proportional use of force is based on a reasonable valuation, in consideration of external facts; it is not a conclusion peculiar to an individual commander, based on sincere belief alone. When commentators use the word subjective, they mean to say that there is no precise measurement. They mean that two reasonable commanders can come to two different conclusions.⁶⁵

D. The Delicate Problem

Differing conclusions are probable, in part, because the rule of proportionality presents what the ICRC describes as a "delicate problem."⁶⁶ That problem is that commanders are asked to compare two concepts (military advantage and incidental harm) that are consistently recognized as "dissimilar,"⁶⁷ "unlike,"⁶⁸ and "heterogeneous."⁶⁹

⁶⁰ *Id.* ¶ 50.

⁶¹ *Id.*

⁶² IAN HENDERSON, *THE CONTEMPORARY LAW OF TARGETING* 221-22 (2009).

⁶³ DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 5.10.2.3 (Dec. 2016).

⁶⁴ *Id.* The Israeli Supreme Court, in *Ajuri v. IDF Commander*, wrote that although commanders have significant discretion, they must operate within a "zone of reasonableness." H CJ 7015/02 *Ajuri v. IDF Commander* (2002) (Isr.); HENDERSON, *supra* note 62, at 223 ("The test for whether expected collateral damage will be excessive is an objective one based on what a reasonable person (commander) would conclude in the circumstances").

⁶⁵ *See, e.g.*, DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 5.10.2.3.

⁶⁶ ICRC COMMENTARY, *supra* note 12, ¶ 1979.

⁶⁷ *See* MICHAEL SCHMITT, *ESSAYS ON LAW AND WAR AND THE FAULT LINES* (2012).

⁶⁸ *See* HENDERSON, *supra* note 62, at 223.

⁶⁹ *See* JACOB KELLENBERGER, *INTERNATIONAL HUMANITARIAN LAW AT THE BEGINNING OF THE 21ST CENTURY* (2002). One scholar recently suggested a change to the proportionality test wherein, rather than requiring an "apples to oranges" comparison, the commander would instead compare the immediate harm of attack with the probable future harm of

The ICRC attempts to solve this delicate problem by stating that if there is “reason for hesitation. . . the interests of the civilian population should prevail.”⁷⁰ The ICRC admits that some proportionality decisions will be easy.⁷¹ To bomb an entire village so as to kill one enemy combatant, visiting on leave, is clearly excessive.⁷² Incidentally destroying a small, uninhabited, civilian building, so as to attack an enemy command and control center, is clearly not excessive.⁷³ Circumstances falling between these two extremes, as many targets do, might give reason for hesitation. In such circumstances the ICRC suggests withholding attack; guidance that is admirably cautious, but would likely paralyze legitimate uses of force.⁷⁴ The commander’s task is not so easy as to always err on the side of caution.

What the proportionality test asks of commanders is not just delicate. It is nearly impossible. Before concluding an attack is proportionate, commanders must first attach a value to the expected incidental harm, including civilian deaths. But, as the ICTY has elegantly understated, “one cannot easily assess the value of innocent human lives.”⁷⁵

This idea is highlighted in the famous ethics thought experiment known as the Magistrate’s problem. The British philosopher Philippa Foot first introduced the experiment in modern literature in 1967.⁷⁶ In the experiment, the reader imagines he or she is a Judge or Magistrate.⁷⁷ An angry mob confronts the Judge and demands a criminal be found and executed, or else they will kill five hostages.⁷⁸ The Judge has no reasonable prospect at

withholding attack. JENS DAVID OHLIN, LARRY MAY & CLAIRE FINKELSTEIN, *WEIGHING LIVES IN WAR* 1 (2017). This approach presents a way to meet proportionality while comparing two similar concepts. It is likely commanders already make this comparison intuitively, but it is not the law.

⁷⁰ ICRC COMMENTARY, *supra* note 12, ¶ 1979.

⁷¹ *Id.*

⁷² YVES SANDOZ, CHRISTOPHER SWINARSKI & BRUNO ZIMMERMAN, COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, at 2213 (1987).

⁷³ Michael Schmitt, *The Principle of Discrimination in 21st Century Warfare*, 2 YALE HUM. RTS. & DEV. L. J. 143, 170 (1998).

⁷⁴ *See generally*, HENDERSON, *supra* note 62, at 224.

⁷⁵ Final Report to the Prosecutor, *supra* note 54, ¶ 48.

⁷⁶ *See* Philippa Foot, *The Problem of Abortion and the Doctrine of the Double Effect*, in *VIRTUES AND VICES* (1967).

⁷⁷ *Id.*

⁷⁸ *Id.*

finding the true criminal, and is thus faced with two choices: (1) Frame and execute an innocent person or (2) allow the mob to kill the five hostages.⁷⁹ The problem is intended to highlight competing ethical concepts of morality and utility; it asks whether simple mathematical consequences justify an otherwise immoral action. The problem also shows the impossibility of placing relative values on human life. Centuries of debate among philosophers have failed to create meaningful answers to the question, and yet proportionality asks commanders to make similar decisions routinely, weighing whether the value in the destruction of an enemy's personnel or capabilities is sufficient to destroy innocent lives as well.⁸⁰

The fact remains that while jurists and theorists have “struggled mightily to invest proportionality with greater determinacy,”⁸¹ no specific international consensus exists with respect to proportionality assessments, beyond: “It depends on the circumstances.”⁸²

III. PROPORTIONALITY IN THE TARGETING PROCESS

A. Collateral Damage Estimation Methodology

Commanders receive some assistance in this “delicate problem” by way of a formalistic process to attempt to standardize targeting decisions to the extent possible.⁸³ One step in the targeting process used by the U.S. military is known as the collateral damage estimation methodology (CDM).⁸⁴ The CDM ensures that intelligence resources, scientific weapons data, and other information are combined to take all feasible precautions to avoid

⁷⁹ *Id.* Empirical data on a similar “trolley problem” shows that 90% of ordinary people state they would pull the lever, killing one and saving five lives. A. Bleske-Rechek et al., *People Save Five over One Unless the One Is Young, Genetically Related, or a Romantic Partner*, 4 J. SOC., EVOLUTIONARY, & CULTURAL PSYCHOL. 3 (2010). However, 24% of philosophers could not answer, revealing a subtle complexity. David Bourget & David Chalmers, *What Do Philosophers Believe?* (Nov. 30, 2013), <https://philpapers.org/archive/BOUWDP>.

⁸⁰ Oscar Schachter, *Remarks by Oscar Schachter*, 86 PROC. ASIL ANNUAL MEETING 39-40 (1992).

⁸¹ Sloane, *supra* note 32.

⁸² *Id.*

⁸³ See generally CJCSI 3160.01C, *supra* note 52.

⁸⁴ *Id.*

incidental harm.⁸⁵ The CDM does this through a process designed to allow the commander to answer five questions:

1. Has [positive identification] of the target been established?
2. Are there collateral objects, including noncombatant personnel... within the effects range of the weapon selected to attack the target?
3. Can damage to those collateral concerns be mitigated by engaging the target with a different weapon or method of employment, yet still accomplish the mission?
4. If not, how many civilian and noncombatant casualties will the attack be expected to cause?
5. Would the collateral effects exceed the guidance published by the [Commander], requiring elevation of this decision?⁸⁶

Each question involves detailed technical analysis and requires answers to specific factual questions.⁸⁷ For example, to establish positive identification, or to ensure that a defined object of attack is a legitimate military target, operators may reference “pattern of life” observation through full motion video, human intelligence, signals intelligence and others.⁸⁸ Later questions will require operators to consult reference tables specific to each weapon as well as the method of deployment, which are grounded in research, experiment and battle experience.⁸⁹ These tables calculate a radius of probable harm from blast, fragments and other risks.⁹⁰ The final step is only reached after all these mitigating steps are taken and incidental harm

⁸⁵ See Maj R. Scott Adams, *Lancelot in the Sky: Protecting Wounded Combatants from Incidental Harm*, HARV. NAT'L SEC. J (Aug. 8, 2017), http://harvardnsj.org/2017/08/lancelot-in-the-sky-protecting-wounded-combatants-from-incident-harm/#_edn33.

⁸⁶ CJCSI 3160.01C, *supra* note 52, at E-8, E-9.

⁸⁷ Adams, *supra* note 85.

⁸⁸ See CJCSI 3160.01C, *supra* note 52, at D11.

⁸⁹ See generally, *id.* at D-1, E-6.

⁹⁰ *Id.* at E-6.

remains unavoidable.⁹¹ The estimation calculated in the fourth step will then be compared to the casualty estimate limitations published by higher commanders.⁹² Such limitations on command authority are established in the Rules of Engagement, not the CDM.⁹³

A proportionality test, as framed in the fifth step, is only accomplished if the target goes through all five steps and is within the commander's authority. Many strikes will not require the final step because no harm is expected. But once a targeting decision is within the proper authority, the commander⁹⁴ will decide if the estimated collateral effects are excessive in relation to the expected military advantage.⁹⁵ This is where the CDM stops providing useful guidance and asks the commander to compare the value of civilian lives with the value of striking a target.

B. Commanders

This formal process raises the question of who has authority to make such decisions. Treaty law does not use the term "commander," in the context of proportionality.⁹⁶ The codified proportionality rule in Article 52(1) of AP I uses the passive voice, without referring to a decision maker.⁹⁷ But Article 57(2)(a) expressly applies to "those who plan or decide upon an attack,"⁹⁸ an implicit description of commanders. The ICTY refers to a "reasonably well-informed person,"⁹⁹ rather than "commander," in its *Galić* case.¹⁰⁰ But the ICTY suggested in its Final Report to the Prosecutor, that it is the "reasonable military commander" that determines relative values of incidental harm and military advantage.¹⁰¹

⁹¹ *Id.* at E-E-1.

⁹² *Id.*

⁹³ Adams, *supra* note 85.

⁹⁴ JP 3-60, *supra* note 51, at II-14, II-17 to II-18.

⁹⁵ CJCSI 3160.01C, *supra* note 52, at E-E-1.

⁹⁶ "Commander" is intended to broadly describe someone with authority over military personnel and operations.

⁹⁷ See Additional Protocol 1, *supra* note 7, art. 52(1).

⁹⁸ *Id.* art. 57(2)(a).

⁹⁹ Prosecutor v. Galić, *supra* note 17, ¶ 58.

¹⁰⁰ *Id.*

¹⁰¹ Final Report to the Prosecutor, *supra* note 54, ¶¶ 49-50.

Military manuals and secondary sources, quite naturally, refer to the test as one made by a reasonable “commander.”¹⁰² This is because commanders naturally plan and decide upon attacks and because commanders are in the best position to assess military advantage. The “reasonable commander” test has been adopted by a diverse range of courts,¹⁰³ academics,¹⁰⁴ military manuals¹⁰⁵ and non-government organizations.¹⁰⁶ The CDM likewise provides guidance for the abstract “commander,” in whom decision-making authority is placed.¹⁰⁷ But the CDM does not identify the correct level of command for targeting decisions.¹⁰⁸ Those lines of authority are established in more specific documents created by higher headquarters, known as targeting directives and rules of engagement.¹⁰⁹ These more specific documents often refer to key decision makers in the targeting process not as the “commander” but as the target engagement authority (TEA).¹¹⁰

Identification of the correct TEA is required for each attack, and may vary based on the circumstances of that attack.¹¹¹ For example, for a time sensitive target, the TEA will likely be a lower ranking official, such as a field-grade officer, but not a general officer. The TEA for such dynamic strikes is typically held at a lower level¹¹² because the decision must be made quickly,

¹⁰² See, e.g., DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 5.10.2.2.

¹⁰³ See, e.g., HCJ 769/02 Public Committee against Torture in *Israel v. Government of Israel*, 62(1) PD 507 [2006]. This Israeli case concluded that the court’s primary question, as relates to proportionality, is whether “a reasonable military commander could have made the decision which was made.” *Id.*

¹⁰⁴ See, e.g., International Law Association Study Group, *The conduct of hostilities and international humanitarian law: challenges of 21st century warfare*, Interim report, INTERNATIONAL LAW ASSOCIATION 13 (Terry Gill, Robert Heinsch & Robin Geiss eds., 2014), https://pure.uva.nl/ws/files/2346971/157905_443635.pdf.

¹⁰⁵ See, e.g., DoD LAW OF WAR MANUAL, *supra* note 3, ¶ 5.10.2.2.

¹⁰⁶ See, e.g., Human Rights Watch & International Human Rights Clinic, *Making the Case: The Dangers of Killer Robots and the Need for a Preemptive Ban* (Dec. 9, 2016), <https://www.hrw.org/report/2016/12/09/making-case/dangers-killer-robots-and-need-preemptive-ban>. Human Rights Watch is arguing against autonomous weapon systems, but as an aside, states, “the generally accepted standard for assessing proportionality is whether a reasonable military commander would have launched a particular attack.” *Id.*

¹⁰⁷ CJCSI 3160.01C, *supra* note 52, at E-E-1.

¹⁰⁸ See *id.* at A-7-A-8.

¹⁰⁹ See *id.* at A-3.

¹¹⁰ See NATO STANDARD AJP-3.9, *Allied Joint Doctrine for Joint Targeting A-4* (Apr. 2016).

¹¹¹ *Id.*

¹¹² *Id.*

often within minutes. Of course, expected incidental harm will elevate the decision,¹¹³ but absent such an expectation, the TEA might be as low as a lieutenant colonel with command experience.¹¹⁴ More complex attacks may be elevated much higher, likely to a general officer with substantial command and combat experience.¹¹⁵ If a proposed strike carries a higher casualty estimate than the commander is authorized to approve, the decision will be elevated further still, possibly even to the President.¹¹⁶ But regardless of who the specific TEA is, it will be a “commander,” at some level, who will make the final decision.

C. Decision Vulnerability

That commander must estimate the value of civilian harm and compare it to military advantage, without any specific guidance or assistance on how to weigh or assign these values. Yet, commanders are not paralyzed by the absence of an optimal answer to valuing civilian lives. The question must be answered, and thus, commanders are forced to rely on intuition. This cannot be said to be improper, but it makes decisions vulnerable to heuristics based on a commander’s experience, while bringing into play his or her biases and disposition.¹¹⁷

Recent scholarship has provided examples of potential heuristic effects,¹¹⁸ which often arise through the method by which information is presented to the Commander.¹¹⁹ For example, the military advantage of a strike is often presented first, and in certain, concrete terms, while civilian

¹¹³ See CJCSI 3160.01C, *supra* note 52, at D-3. Here the Chairman’s instruction tells commanders to follow an elevated and more sensitive process, requiring higher authority, when the target has “the potential for damaging effects and/or injury to civilian or noncombatant property and persons.” *Id.*

¹¹⁴ See generally JP 3-60, *supra* note 51, at A-1.

¹¹⁵ See generally *id.* Doctrine places general authority for targeting with the “Joint Force Commander.” *Id.* In many cases in current operations that may be the Combined Forces Air Component Commander, a three-star general responsible for all air operations in Central and Southwest Asia. See, e.g., USAF Biography of Lieutenant General Joseph T. Guastella, Commander, U.S. Air Forces Central Command, <http://www.af.mil/About-Us/Biographies/Display/Article/108743/lieutenant-general-joseph-t-guastella/>.

¹¹⁶ See CJCSI 3160.01C, *supra* note 52, at E-E-7.

¹¹⁷ See Wittemore, *supra* note 18, at 602.

¹¹⁸ *Id.* at 618-20.

¹¹⁹ *Id.* at 622.

losses are usually presented later, and in uncertain estimates.¹²⁰ This process might create an endowment effect, wherein the commander overvalues the military advantage because it is presented first and in clearer and more definitive terms.¹²¹

An example of a relevant cognitive bias is the anchoring effect. Anchoring is the tendency to rely too heavily on an initial piece of information as it relates to subsequent decisions.¹²² If a customer looks at the sticker price of a vehicle before discussing price with the seller, that number inevitably affects later negotiations. Similarly, specific authority limitations on casualty estimates create an anchor in the proportionality test. Because the limitation is established in the rules of engagement,¹²³ the commander will already know the authority limitation for the strike before he or she is told how many casualties are estimated. This number will inevitably affect the commander's consideration of how many civilian losses will be excessive (if the number of expected civilian deaths is lower than the commander is authorized to approve, it will not likely be determined excessive).¹²⁴ Other examples reveal alarming weaknesses inherent in the proportionality test,¹²⁵ and there is much room for additional scholarship in this area.

Yet heuristics and biases may not be the most significant vulnerabilities in a commander's decision-making process. A commander's disposition likely has an even greater impact on decisions. The amount of sleep, life stress, hunger, education, religion, and life experiences, as well as the current political climate, can all affect a commander's valuation of civilian life.¹²⁶ One very popular, but simple illustration of this point is found in a 2011 study on Israeli parole board rulings.¹²⁷ The study by professors at the Ben-Gurion

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² Jim Holt, *Two Brains Running*, N.Y. TIMES, Nov. 27, 2011, at 16 (relying on DANIEL KAHNEMAN, THINKING FAST AND SLOW (2011)).

¹²³ See CJCSI 3160.01C, *supra* note 52, at E-E-1.

¹²⁴ The above claim is one based on intuition, not collected data. More research is necessary to confirm the accuracy of this hypothesis. It is also worth noting that this issue raises the question of whether some heuristics are valuable. See Wittemore, *supra* note 18, at 602. No doubt the civilian casualty limitations were established as a constraint on commanders from a strategic perspective, and are often very low.

¹²⁵ See generally Wittemore, *supra* note 18.

¹²⁶ *Id.* at 618.

¹²⁷ *I think it's time we broke for lunch...*, THE ECONOMIST, Apr. 14, 2011, <http://www.economist.com/node/18557594>.

University of Negev showed that the probability of a parole board granting an application for parole steadily decreased as board sessions progressed.¹²⁸ Boards began by granting approximately 60-70% of applications, followed by a steady decline to zero.¹²⁹ Once the board took a break for a snack or meal, the probability jumped back to the original rate, and again steadily declined until the next break.¹³⁰ The study's authors concluded the steady decline was a result of mental fatigue.¹³¹ The application of this finding to proportionality decisions is limited, in part because targeting decisions are made very differently. But generally, the study demonstrates that humans making critical decisions are shockingly vulnerable to weaknesses in mental processing.

Many of these specific weaknesses have been addressed in various military publications.¹³² These publications acknowledge vulnerability in the decision-making process and seek to bring them to commanders' attention.¹³³ However, no such publication has previously addressed a significant weakness that has broad application to military decision-making, and influence on targeting decisions specifically: the effect of power.

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.* The files were randomly selected, not organized so as to make repeat requesters, or unlikely requests placed at the bottom. *Id.*

¹³¹ *Id.* Scholars have revisited these results and added the fact, not considered in the original study, that granting parole takes considerably longer than denial. Andreas Glockner, *The Irrational Hungry Judge Effect Revisited: Simulations Reveal That the Magnitude of the Effect is Overestimated*, 11 *Judgment and Decision Making* 6, 601-10 (2016). This additional point shows other factors may have contributed to the decline, but does not contradict the original authors' conclusion. *Id.*

¹³² See, e.g., U.S. ARMY HUMAN DIMENSION CAPABILITIES DEVELOPMENT TASK FORCE, COGNITIVE BIASES AND DECISION MAKING: A LITERATURE REVIEW AND DISCUSSION OF IMPLICATIONS FOR THE US ARMY WHITE PAPER (2016), http://usacac.army.mil/sites/default/files/publications/HDCDTF_WhitePaper_Cognitive%20Biases%20and%20Decision%20Making_Final_2015_01_09_0.pdf [hereinafter ARMY WHITE PAPER].

¹³³ See *id.* at 5. It is worth noting that, despite the significant attention that heuristics and biases have received across a broad spectrum of disciplines, Daniel Kahneman recently complained that his work has been too influential. See Kahneman Interview, *supra* note 17. Kahneman feels that his work has led people to exaggerate the effect of bias on human thinking, and consequently, underestimate other human errors. *Id.* However, despite Kahneman's broad influence, it remains very difficult to convince those in power to make changes to mitigate bias in human thinking. See Useem, *supra* note 16.

IV. THE POWER PARADOX

In one of his many broad, but clever descriptions of human nature, Henry Adams, the famous historian, wrote that “the effect of power...on all men is a sort of tumor that ends by killing the victim’s sympathies.”¹³⁴ To be clear, Adams was not saying that all powerful men are bad. Rather Adams, and this article, narrowly seek to highlight an inverse relationship between power and empathy. A recent and ominous pattern of research has surfaced showing that Adams’ imagery of a “tumor” is a surprisingly accurate description.¹³⁵ Social science literature clearly shows that power, simply defined as the capacity to control others,¹³⁶ has a strong relationship with the mind’s ability to process certain information.¹³⁷

A. Physiological Effects of Power

Within the frontal lobe of the brain exists what neuroscientists refer to as an “empathy network.”¹³⁸ It is the frontal lobe that detects the pain of others.¹³⁹ Studies have shown that increases in power fundamentally change how this empathy network operates.¹⁴⁰

For example, in 2014, researchers from Canada’s McMaster University conducted a study on power and mirroring.¹⁴¹ Researchers asked one third of the 45 subjects to describe an experience when they had power over others.¹⁴² Another third described an experience when they were under the power of another, and the final third wrote a neutral essay.¹⁴³ Scientists have

¹³⁴ HENRY ADAMS, *THE EDUCATION OF HENRY ADAMS* 126 (1906).

¹³⁵ See Useem, *supra* note 16.

¹³⁶ MACQUARIE DICTIONARY 1118 (4th ed. 2005).

¹³⁷ Sukhvinder S. Obhi, Jeremy Hogeveen & Michael Inzlicht, *Power Changes How the Brain Responds to Others*, 143 *J. EXPERIMENTAL PSYCHOL.: GEN.*, 2, 755-762 (2014).

¹³⁸ Leigh Weingus, *Power Has a Scary Effect on the Brain, According to Science*, HUFFINGTON POST (Oct. 15, 2015), http://www.huffingtonpost.com.au/entry/power-the-brain_n_6470370.

¹³⁹ *Id.*

¹⁴⁰ Chris Benderev, *When Power Goes to your Head, It May Shut Out Your Heart*, NPR (Aug. 10, 2013), <https://www.npr.org/2013/08/10/210686255/a-sense-of-power-can-do-a-number-on-your-brain>; see Useem, *supra* note 16.

¹⁴¹ Obhi et al., *supra* note 138.

¹⁴² *Id.*

¹⁴³ *Id.* The neutral essay asked subjects to describe what they did the day prior. *Id.*

shown that this act of “priming” subjects by asking them to focus on a power dynamic they experienced is an effective method of replicating a sense of power.¹⁴⁴ After writing the essays, the subjects watched a video of a hand squeezing a rubber ball.¹⁴⁵ While the subjects watched the video, researchers used surface electrodes to measure motor resonance, or the degree to which the subject’s arm muscles would respond by mirroring the actions in the video.¹⁴⁶ The study concluded by finding “a linear relationship between power and the motor resonance system, whereby increasing levels of power are associated with decreasing amounts of resonance.”¹⁴⁷ The finding is significant because motor resonance is one manifestation of the physiological tendency to mirror others.¹⁴⁸

Mirroring is the physiological response that causes us to laugh when those around us are laughing, to feel nervous when speaking with a nervous person, to feel sad when others cry.¹⁴⁹ Mirroring is also the cornerstone of empathy, the capacity to understand and feel what others are experiencing from their frame of reference.¹⁵⁰ Adding to previous work related to mirroring, the researchers from the rubber ball study concluded that the results “shed light on the tendency for the powerful to neglect the powerless.”¹⁵¹ Other studies have demonstrated that power priming where the subjects were primed for a “high power” condition led to hormonal changes causing “increased hypocrisy, moral exceptionalism, and egocentricity.”¹⁵² This high power priming also led to an increase in subjects’ illusion of control over matters that were entirely random.¹⁵³

¹⁴⁴ Adam Galinsky, Joe C. Magee, M. Ena Inesi & Deborah H. Gruenfeld, *Power and Perspectives Not Taken*, 17 PSYCHOL. SCI. 12, 1068-1074 (2006).

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* The study provides an exhaustive explanation as to what type of electrodes were used, how they were placed and other considerations. *See id.* It is sufficient here to state the electrodes were intended to cause minimal disruption in the subject’s natural response to the video. *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *See Useem, supra* note 16.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*; *see also* MACQUARIE DICTIONARY 466 (4th ed. 2005).

¹⁵¹ Obhi et al., *supra* note 138.

¹⁵² Ian H. Roberson, *How Power Affects the Brain*, 26 THE PSYCHOLOGIST 186-89 (2013), <https://thepsychologist.bps.org.uk/volume-26/edition-3/how-power-affects-brain>.

¹⁵³ *See* Nathanael Fast, Deborah Gruenfeld, et al., *Illusory Control: A Generative Force Behind Power’s Far Reaching Effects*, 20 PSYCHOL. SCI. 4 (2009). These and other findings were based partly on a series of studies involving “power poses.” Subsequent attempts to

This ominous research is made worse by the fact that some evidence indicates powerful people cannot be guided back to their earlier empathetic inclinations.¹⁵⁴ Knowledge of mental weaknesses is often a catalyst for improvement.¹⁵⁵ However, a recent study showed that explaining mirroring and asking powerful persons to be more compassionate had no impact on behavior,¹⁵⁶ further highlighting the physiological impact.

B. Psychological Effects

The research also shows significant psychological impacts that power has on social behavior and perspective.¹⁵⁷ Powerful people tend to ignore peripheral matters; they do not easily process information about the less powerful people around them, and instead focus on actions that forward their own goals.¹⁵⁸ This tendency to ignore peripheral information can have positive effects in non-social settings.¹⁵⁹ But it also results in a reduced capacity to understand the actions and emotions of others.¹⁶⁰

Professor of Psychology Dacher Keltner refers to this concept as “the power paradox” because a growing body of research shows that as people gain more power they create an “empathy deficit.”¹⁶¹ Under the influence

replicate these results failed, causing some to argue that the original studies were a case of scientific overreaching. Andrew Gelman & Kaiser Fung, *The Power of the ‘Power Pose,’* SLATE (Jan. 19, 2016), <https://slate.com/technology/2016/01/amy-cuddys-power-pose-research-is-the-latest-example-of-scientific-overreach.html>. It should be noted that the Harvard Business School study authors, who received significant attention from the original study, could have pointed to some flaws in the subsequent research. For example, in the second study, and unlike the first, test participants were told that their poses were being studied. Cathleen O’Grady, *‘Power Poses’ Might Not Be So Powerful After All,* ARS TECHNICA (Apr. 7, 2015), <https://arstechnica.com/science/2015/04/power-poses-might-not-be-so-powerful-after-all/>. The second study was also conducted in a foreign country, and did not control for cultural differences. *Id.*

¹⁵⁴ Useem, *supra* note 16.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.* Other researchers dispute that conclusion, arguing that compassion training, and reminding powerful persons of a time they were weak and vulnerable can increase empathy. Susanne Gargiulo, *Does Power Make You Mean?*, CNN (Oct. 20, 2013), <http://edition.cnn.com/2013/10/24/business/does-power-make-you-mean/index.html>.

¹⁵⁷ Obhi et al., *supra* note 138.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ Useem, *supra* note 16.

of power, people become more impulsive, less risk-aware and less adept at seeing things from other people's points of view.¹⁶²

In an attempt to measure this empathy deficit, researchers from Northwestern, New York, and Stanford Universities completed a study in 2006 aimed at finding whether power affected consideration of others' perspectives.¹⁶³ Researchers took 57 subjects and asked them to write an essay to prime them for high power, subordination (low power) or neutrality, as described in the rubber ball experiment.¹⁶⁴ This priming exercise was further reinforced by having the high-power subjects decide how to allocate rewards among other subjects, while the low-power subjects were merely asked to predict how many rewards would be given to them.¹⁶⁵ After this task, the subjects were told to write the letter "E" on their forehead with a marker, using the dominant hand.¹⁶⁶ Although the subjects were not told the point of the study, researchers were primarily interested in which direction the subject would write the letter "E."¹⁶⁷ Would the subject write as though he or she is reading it, leading to a backward and illegible "E" from the perspective of others?¹⁶⁸ Or would they write from others' perspective, producing a legible "E" that would seem backward as the subject wrote?¹⁶⁹ The study showed that subjects in the high-power group were three times more likely to write the letter from his or her own point of view.¹⁷⁰

A similar study showed that powerful persons were not as accurate as their less powerful counterparts in identifying emotion displayed in a portrait.¹⁷¹ The study's authors concluded that "high-power individuals anchor too heavily on their own perspectives and demonstrate a diminished ability to correctly perceive others' perspectives."¹⁷²

¹⁶² *Id.*

¹⁶³ *See Galinsky et al., supra note 145.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* Subjects understood the letter "E" would be visible to others during and after the study.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *See Galinsky et al., supra note 145.*

¹⁷⁰ *Id.* More specifically, of the 24 high-power subjects, eight of them, or 33%, wrote from their own perspectives, versus four of the 33 low-power subjects, or 12%.

¹⁷¹ *Id.*

¹⁷² *Id.*; *see also* Ian H. Roberson, *How Power Affects the Brain*, 26 *THE PSYCHOLOGIST*

C. Exceptions and Weaknesses

The data demonstrating the negative effects of power is strong, but it is important to note that this research is still in its early stages.¹⁷³ Additionally, the studies have some weaknesses. For example, because it is difficult to obtain truly powerful persons as subjects for university studies, the researchers instead prime the subjects to power, as previously explained. This generally means that researchers do not separate subjects based on any differences in background, social position, or any other pre-existing category. Thus, the studies measure perceptions of power, not actual power, and there may be significant differences between truly powerful people and people merely primed for it. This significant difference shows a need for caution in interpreting the data, but more than likely this limitation causes the data to understate powers' effects.¹⁷⁴ Additionally, the studies do not provide any data to distinguish between various levels of power. This second point is especially significant in the military, where a strict hierarchy grants commanders extensive power and control over the lives of their subordinates.¹⁷⁵ At the same time, most commanders exercising such power remain under the control of higher authorities. Is broad power and discretion over subordinates sufficient to impair empathy if the commander knows his discretion will be scrutinized by superiors? The research suggests the answer is yes but does not provide clear answers. Thus, although one may safely assume that a president is affected by power, the research does not answer the question of

186-89 (2013), <https://thepsychologist.bps.org.uk/volume-26/edition-3/how-power-affects-brain>.

¹⁷³ Galinsky et al., *supra* note 145.

¹⁷⁴ Real power more likely causes stronger effects than priming for power. Indeed, long-term power leads to what British neurologist Lord David Owen refers to as "hubris syndrome" which is a disorder manifest through 14 clinical features including contempt for others, loss of contact with reality, restless or reckless actions, and displays of incompetence. Lord David Owen & Jonathon Davidson, *Hubris Syndrome: An Acquired Personality Disorder? A Study of US Presidents and UK Prime Ministers Over the Last 100 Years*, 132 *BRAIN* 5, 1396-1406 (2009), <https://academic.oup.com/brain/article/132/5/1396/354862>.

¹⁷⁵ Unlike civilian employers, military commanders have authority to punish their subordinates for criminal behavior, poor performance, or even insubordination. See 10 U.S.C. §§ 891-892 (2019) (Uniform Code of Military Justice articles 91 and 92). Under certain circumstances, commanders have power to limit speech and religious observance, compel medical or psychiatric treatment, or even compel removal of a tattoo. U.S. AIR FORCE JUDGE ADVOCATE GENERAL'S SCHOOL, *THE MILITARY COMMANDER AND THE LAW* 170, 173, 214, 250 (15th ed. 2019), <https://www.afjag.af.mil/Portals/77/documents/Publications/MCL2019%20web7.pdf?ver=2019-03-26-151939-853>.

whether a lieutenant colonel has sufficient power to be affected. Additionally, the research does not adequately explain why power causes a loss of empathy, giving rise to the classic mantra of statisticians: “Correlation is not causation.”¹⁷⁶ Some experts have speculated that success causes egocentricity, an excessive focus on the self, and eventually the “I am the center of the universe” phenomenon.¹⁷⁷

Additionally, true life always reveals exceptions to the general rule. Indeed, Henry Adams’ remark on the “tumor of power” was not intended as a sharp criticism of human nature, but rather to emphasize the remarkable character of his mentor, Thurlow Weed.¹⁷⁸ The sentence was praise for Weed, who Adams wrote was “a rare immune” to the effects of power.¹⁷⁹ Similar experiences abound in the military. The present author briefly met a Marine general officer in a highly influential position in Afghanistan. The meeting lasted less than an hour. Two years later the author encountered the same general in Washington D.C., and was embarrassed to find that, unlike the author’s vague memory, the general remembered both the first and last name of this subordinate, Air Force, staff officer. Clearly this powerful man did not struggle to process information about the less powerful people around him. Current research also reveals surprising exceptions in the studies. For instance, a 2009 study concluded, against the bulk of research, that powerful people were more likely to demonstrate interpersonal sensitivity.¹⁸⁰ The authors argued this result was caused by a stronger desire for respect from peers, a need to be liked by others.¹⁸¹

¹⁷⁶ Nathan Green, *Correlation is Not Causation*, THE GUARDIAN (Jan. 7, 2012), <https://www.theguardian.com/science/blog/2012/jan/06/correlation-causation>. Green calls the phrase a “statistics mantra” that is “drilled, military school-style, into every budding statistician.” *Id.*

¹⁷⁷ Dean C. Ludwig & Clinton O. Longenecker, *The Bathsheba Syndrome: The Ethical Failure of Successful Leaders*, 12 J. BUS. ETHICS 265 (1993). The authors of “The Bathsheba Syndrome” also argue that successful leaders are more likely to act unethically, in part, because success causes an illusion in one’s ability to manipulate outcomes. *Id.*

¹⁷⁸ HENRY ADAMS, THE EDUCATION OF HENRY ADAMS 126 (1906).

¹⁷⁹ *Id.*

¹⁸⁰ M. Schmid Mast, K. Jonas & J.A. Hall, *Give a Person Power and He or She Will Show Interpersonal Sensitivity: The Phenomenon and its Why and When*, 97 J. PERS. SOC. PSYCHOL. 5, 835-50 (2009).

¹⁸¹ *Id.*

These and other examples highlight the need for further research. Nevertheless, there is a growing consensus in the academic community that, despite the limitations of the current body of research, the general conclusion is clear: though not universal or quantifiable, increases in power correlate with decreases in empathy.¹⁸²

V. EMPATHY

Empathy may be understood as the capacity to understand information from the perspective of another. In the proportionality context, an empathetic commander is one capable of understanding the full effects of targeting on those persons likely to suffer from those effects. The idea of a commander with a diminished capacity to understand the suffering of others, authorizing a strike with expected incidental harm, brings to mind T.S. Eliot's description: "They don't mean to do harm. But the harm doesn't interest them."¹⁸³

A. Empathy and the Law

The prospective valuation of military advantage requires an understanding of military operations, but the law does not expressly require empathy. The prospective valuation of incidental harm requires a reasonable, military commander's consideration, and if a measure of empathy is required by the law, it is only insofar as it plays into this reasonableness.¹⁸⁴ While commanders gain seniority and responsibility, they become better at assessing military advantage.¹⁸⁵ But, the research suggests that they simultaneously lose empathy.¹⁸⁶ However, because the "zone of reasonableness"¹⁸⁷ is so broad and because the law only operates at the extreme ends of that broad zone, the loss or diminishing of empathy does not make decisions per se unlawful.

¹⁸² See generally Useem, *supra* note 16.

¹⁸³ T.S. ELIOT, *THE COCKTAIL PARTY*, act 2, sc. 1.

¹⁸⁴ See Final Report to the Prosecutor, *supra* note 54, ¶¶ 49-50. The ICTY spends over 35 pages considering the difficult question of how commanders can apply the proportionality test to real life. See *id.* Nowhere in the ICTY's long analysis is the word "empathy." But as in other formulations of the proportionality test, the ICTY suggests assigning a relative value to civilian harm, something that may implicitly require empathy.

¹⁸⁵ Senior commanders are more likely to bring a holistic view to military operations because they are in a better position to view tactical operations in the context of broader strategic objectives.

¹⁸⁶ See Useem, *supra* note 16.

¹⁸⁷ See *Ajuri v. IDF Commander*, *supra* note 64.

B. Empathy and Operations

One must also consider the possibility that excessive empathy, far from being legally required, may perhaps be an obstacle to those tasked with accomplishing a mission through violence. In 2009, following the Israeli conflict with Palestinians in the Gaza Strip, Michael Walzer wrote an editorial in the *New York Times*.¹⁸⁸ Israel was under heavy criticism at the time for causing hundreds of civilian casualties after using heavy firepower in urban areas.¹⁸⁹ Walzer argued that Israeli commanders were undervaluing the lives of Palestinians in their proportionality analyses.¹⁹⁰ To mitigate this problem, Walzer proposed that when assessing the value of civilian lives, the attacking force should place the same value on those enemy civilians as they would their own forces, or civilians of their own State.¹⁹¹

The *Times* later published a response to this editorial, written by Israeli Professor Asha Kasher and Israeli Major General Amos Yadlin.¹⁹² Kasher and Yadlin argued first that Walzer's proposal is inconsistent with the practice of all States in all conflicts.¹⁹³ They further argued that even minimal amounts of collateral damage have never been considered morally acceptable in solving domestic problems, and therefore, Walzer's proposal would effectively prohibit asymmetrical conflict.¹⁹⁴ Such a policy would be an incredible boon to terrorism, encouraging its use and enhancing its effectiveness.¹⁹⁵ In his empathetic drive for peace, Walzer misses the fact that collateral damage is permitted under IHL precisely because one of the

¹⁸⁸ See Avashai Margalit & Michale Walzer, *Israel: Civilians & Combatants*, N.Y. TIMES (May 14, 2009), <http://www.nybooks.com/articles/2009/05/14/israel-civilians-combatants/>.

¹⁸⁹ *Goldstone report: Israel and Palestinians respond to UN*, BBC NEWS, (Jan. 29, 2010), <http://news.bbc.co.uk/2/hi/8487301.stm>.

¹⁹⁰ Margalit & Walzer, *supra* note 189.

¹⁹¹ *Id.*

¹⁹² See Asha Kasher & Maj Gen Amos Yadlin, '*Israel and the Rule of War*': *An Exchange*, N.Y. TIMES (June 11, 2009), <http://www.nybooks.com/articles/2009/06/11/israel-the-rules-of-war-an-exchange/>.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

best ways to diminish the horrors of war is for it to be brief.¹⁹⁶ If incidental harm were strictly prohibited, armed conflict might drag on *ad infinitum*.¹⁹⁷

Similarly, ordinary soldiers commonly possess a natural aversion to killing.¹⁹⁸ Research on this subject tends to show a linear relationship exists between the aversion to killing and proximity to the enemy.¹⁹⁹ The further one gets from the enemy, the weaker the aversion to killing.²⁰⁰ Some historical examples suggest that, in close proximity, this aversion is so strong that, soldiers in the infantry failed to fire at the enemy, even when their own lives were at risk.²⁰¹ Like empathy in general, aversion to killing in general is not an essential piece of a reasonable commander's calculus, and an excessive aversion to killing would have an adverse effect on military decision-making.

Notwithstanding the practical implications of excessive empathy, the law requires a valuation and balancing of civilian harm.²⁰² It is never easy to assess the value of innocent human life, but an impaired empathy network artificially lowers that value. Expected civilian harm often includes horrendous injuries, and the deaths of vulnerable individuals on the ground. With power and distance, commanders may not think, as poets do “of the bodies of children, strangely like our own, with blood staining out over cotton” or “of women swollen in pregnancy, crouching, clutching, filled with foreknowledge as their death approaches.”²⁰³ Commanders should not be

¹⁹⁶ JENS DAVID OHLIN, LARRY MAY & CLAIRE FINKELSTEIN, *WEIGHING LIVES IN WAR* 1 (2017).

¹⁹⁷ *Id.*

¹⁹⁸ DAVID GROSSMAN, *ON KILLING* 4 (2009).

¹⁹⁹ *Id.* at 98.

²⁰⁰ *Id.* This idea led Harvard Law Professor Roger Fisher to propose planting nuclear codes in a capsule, inside the chest of a volunteer. Philip M. Boffey, *Social Scientists Believe Leaders Lack a Sense of War's Reality*, N.Y. TIMES, Sep. 7, 1982, <http://www.nytimes.com/1982/09/07/science/social-scientists-believe-leaders-lack-a-sense-of-war-s-reality.html?pagewanted=all>. The President would then obtain the codes only after killing and cutting open the chest of the volunteer. *Id.* Fisher's seemingly absurd proposal has never been taken seriously, but the idea is simply to increase the aversion to killing by making it more personal and realistic.

²⁰¹ *Id.* One of many historical examples used to illustrate this point is the fact that among the 27,575 muskets recovered at Gettysburg, nearly 90 percent were loaded, and 12,000 contained at least two balls, indicating that many soldiers were not firing at all. *Id.* at 23. Some collected data, recently popularized by Grossman, show that as many as 85% of infantry soldiers in World War II would not fire their rifles at the enemy. *Id.* at 3-4.

²⁰² See Additional Protocol 1, *supra* note 7.

²⁰³ THOMAS W. SHAPCOTT, *Collateral Damage*, in *THE CITY OF HOME* (1995), <https://www.poetrylibrary.edu.au/poets/shapcott-thomas-w/collateral-damage-0140021>.

emotionally paralyzed, but they should feel the burden they bear.²⁰⁴ Commanders must understand the suffering operations cause. Otherwise, they are not placing an ethical value on civilian harm. Therefore, the final question is how to ensure commanders make decisions ethically, and do not rely on intuition without empathy.

C. Mitigating the Empathy Deficit

Several policies have attempted to assist commanders with similarly difficult issues. The U.S. Army has published guidance on mitigating the effects of biases and heuristics in operations.²⁰⁵ Among other things, the Army suggests that commanders should “take an outsider’s perspective,” or consider the opposite of whatever decision they are about to make.²⁰⁶ These and other similar suggestions, such as empathy training, may be valuable, but are not likely to move beyond the realm of abstract ideas.

Other ideas include potential compensation or reporting schemes that place additional accountability on commanders. For example, DoD could create internal regulations requiring the commander’s staff to actively identify and compensate victims following targeting decisions with known incidental harm.²⁰⁷ The financial and manpower effect of such a regulation would likely deter incidental harm, but deterrence alone is not the goal. Additionally, DoD could create reporting requirements, wherein commanders would write a memorandum explaining the decision each time he or she orders a target execution knowing it will cause a civilian death. The act of writing the report, or contemplating it prospectively, could create a more calculated approach to the final decision, and place more thought into the consequences of civilian harm.

Another formalistic effort at injecting empathy into the targeting process is found within North Atlantic Treaty Organization (NATO) targeting operations, wherein some States have inserted a policy advisor on the commander’s staff.²⁰⁸ Like the legal advisor, the policy advisor merely informs

²⁰⁴ See Walzer, *supra* note 40.

²⁰⁵ ARMY WHITE PAPER, *supra* note 133.

²⁰⁶ *Id.* at 21.

²⁰⁷ Civilian casualty incidents are already investigated by U.S. combatant commands. The idea here would create a positive obligation to provide compensation in all cases where the decision to attack was made with an anticipated incidental loss of life.

²⁰⁸ See generally NORTH ATLANTIC TREATY ORG., NATO STANDARD AJP-3.9, *Allied Joint*

the commander. But the policy advisor is there to address policy implications of specific targeting decisions. Whereas legal advisors are often experienced, military lawyers, often field grade officers, policy advisors are commonly young civilians without combat experience. The United States does not mention the role of a policy advisor in official U.S. targeting doctrine or regulation, but the United Kingdom has formally adopted the practice and has policy advisors consult with commanders on tactical decisions. A civilian without combat experience as policy advisor is likely to possess more empathy than the powerful commander. Thus, his or her input may mitigate negative effects of the commander's power by drawing attention to peripheral information. Similarly, the legal advisor can play a significant role in assisting commanders in proportionality analyses in a way that mitigates the negative effects of a commander's power.

D. Legal Advisor's Role

Department of Defense doctrine directs commanders to consult with their legal advisor early and frequently in the targeting process, due to the complexity of the law.²⁰⁹ The doctrine also assigns the legal advisor responsibilities that include reviewing target selection for compliance with the law and rules of engagement.²¹⁰ But the doctrine also states that legal advisors have the responsibility to “highlight[] potential associated issues, such as harmful environmental impacts or other consequences, that should be considered in the targeting process.”²¹¹ This statement is the closest that U.S. doctrine comes to inviting the legal advisor to introduce ethics and empathy into the targeting calculation.

Some lawyers are reluctant to cross over from reviewing for compliance with the law, into advising on the broad and ambiguous “other consequences.”²¹² This reluctance may be wise in some circumstances. Commanders are not always happy to receive non-legal counsel from a lawyer. Additionally, lawyers with an established relationship with their commander may wish to avoid the appearance of replacing command discretion with

Doctrine for Joint Targeting 1-10 (Apr. 2016).

²⁰⁹ JP 3-60, *supra* note 51, at A-7. As most U.S. documents do on the subject, Joint Publication 3-60 refers to the legal advisor as the “Staff Judge Advocate.”

²¹⁰ *Id.* at III-11.

²¹¹ *Id.*

²¹² *Id.* The fact that some lawyers are reluctant to advise on “other considerations” is based on the author's experience from military operations and exercises.

their own. For example, some commentators claim Israeli legal officers have excessive influence on targeting decisions, wherein they have a practical, if not formal, veto over targeting decisions.²¹³ Legal officers must be careful to avoid snatching veto power over proportionality decisions.²¹⁴ However, standards of conduct do not limit the lawyer's counsel to simply restating the law.

The American Bar Association (ABA)'s Model Rules of Professional Conduct contemplate that a lawyer will not merely identify legal limits, but will also argue, when appropriate, to change those limits.²¹⁵ NATO similarly has published the NATO Legal Deskbook, to provide guidance to legal advisers in NATO operations.²¹⁶ The Deskbook states that legal advisers fulfill four different roles: (1) subject matter expert, (2) advocate, (3) ethical adviser, and (4) counselor.²¹⁷ The ethical adviser and counselor roles reach beyond the law and advise the commander on the prudence of proposed actions, in the context of "ethical precepts," values and social expectations.²¹⁸ In this way, the legal advisor to the TEA is not merely an umpire,²¹⁹ but an active participant in the process.

²¹³ See Craig A. Jones, *Frames of Law: Targeting Advice and Operational Law in the Israeli Military*, 33 ENV'T & PLANNING: SOC'Y & SPACE 4, 688 (2015). Jones directs very harsh criticism toward military legal advisors in general and Israeli legal officers in particular. He argues that far from facilitating compliance with the law, military lawyers instead give ostensible legitimacy to acts that extend rather than limit violence. *Id.* at 676-96. While the point of this citation is to note the lawyer can be excessively influential, it is also worth noting that Jones' argument is an abstract accusation not grounded in reality. Empirical data and experience show that the military lawyer is a powerful tool for ensuring compliance with the law. Laura A. Dickinson, *Military Lawyers on the Battlefield: An Empirical Account of International Law Compliance*, 104 AM. J. INT'L L. 1 (2010). The more military lawyers a State has, the more likely it is to comply with international law.

²¹⁴ Usurping a commander's authority can lead to power and an empathy deficit for the lawyer, causing him or her to fall into the same trap he or she intends to prevent. But more importantly, by law and regulation it is the commander's decision, not the legal officer's. See generally CJCSI 3160.01C, *supra* note 52.

²¹⁵ See MODEL RULES OF PROF'L CONDUCT r. 3.1 (AM. BAR ASS'N 2012); Jamil N. Jaffer, *The Ethics of National Security Lawyering: A Response to Jeh Johnson*, 31 YALE L. & POL'Y REV. 1, 173, 175 (2012).

²¹⁶ See NORTH ATLANTIC TREATY ORG., NATO LEGAL DESKBOOK, (2d ed. 2010), <https://info.publicintellgence.net/NATO-LegalDeskbook.pdf>.

²¹⁷ *Id.* at 141.

²¹⁸ *Id.*

²¹⁹ The comparison of an "umpire" to legal counsel was made famous by Chief Justice John Roberts during his 2005 confirmation hearing. Chris Cilliza, *John Robers, Umpire*

The role of ethical adviser is further embraced by a memorandum that former Secretary of Defense James Mattis recently issued, addressing “those entrusted by our nation with carrying out violence.”²²⁰ Mattis urged DoD employees to avoid “running the ethical sidelines.”²²¹ Instead, Mattis encouraged use of what he called the “ethical midfield,” where commanders can be confident their conduct is not only lawful, but soundly ethical.²²² Mattis’ statement is a strong contrast to General Mike Hayden, who stated he was not doing his job properly unless he had “chalk dust on his cleats,” meaning he believed that he needed to operate as close as possible to the legal and ethical boundary.²²³ Hayden intended to convey his aggressive approach to getting the job done, but his analogy clearly fails in the proportionality context. Proportionality presents a unique “field.” To continue the sports metaphor, the proportionality athlete finds himself in a vast arena where he may think he has an intuitive sense of where the boundaries are, off in the distance, but he cannot see them and does not know if his sense for the boundary may be illusory. This athlete needs the advice of those who can see the boundary more clearly and can guide him on where he should play on the vast area of permissible space.

VI. CONCLUSION

The rule of proportionality requires a decision of tremendous importance. Yet the rule leaves significant ambiguity, and vulnerability to decision-making weaknesses. Foremost among these weaknesses, for a decision requiring the evaluation of incidental harm to innocent civilians, is a potential lack of or diminished sense of empathy in a powerful decision-maker. This empathy imbalance can inhibit a proper valuation of incidental harm, resulting in a lopsided and ethically questionable proportionality test. A soundly ethical proportionality test necessarily includes an empathetic understanding of the suffering of civilians. Legal advisors cannot ensure commanders have empathy. But they can provide meaningful legal and ethical counsel that address empathetic concerns.

WASH. POST (June 28, 2012), https://www.washingtonpost.com/blogs/the-fix/post/john-roberts-umpire/2012/06/28/gJQAx5ZM9V_blog.html?utm_term=.25feb31e267.

²²⁰ Mattis Memorandum, *supra* note 22.

²²¹ *Id.*

²²² *Id.*

²²³ See Jeff Stein, ‘Playing to the Edge’ by Michael Hayden, N.Y. TIMES (Feb. 25, 2006), <https://www.nytimes.com/2016/03/06/books/review/playing-to-the-edge-by-michael-v-hayden.html> (book review).

Legal advisors often avoid offering counsel on proportionality decisions, other than to repeat the law found in AP 1. This is not an appropriate response. This narrow approach to legal counsel hangs all legal risk on the commander, without providing meaningful assistance for the present circumstances. Legal advisors should advise on the law, offer an opinion as to how it applies to the current circumstances, and advise on the prudence of the proposed action within that unique legal situation. This approach allows legal advisors to encourage empathy for potential civilian victims. It does not ensure an optimal answer to the impossibly difficult task of valuing civilian harm. But it increases the probability of operating within the ethical midfield of the zone of reasonableness.

ARTIFICIAL INTELLIGENCE AND THE FIFTH DOMAIN

*MAJOR AARON D. KIRK**

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I. INTRODUCTION

Quietly perched in the forested areas of the demilitarized zone between North and South Korea sits a steel killing machine, capable of dispensing automated, lethal force when necessary. This is the SGR-1 robot, a sentry robot.¹ The SGR-1, which looks like a security camera mounted on top of an automatic rifle, can detect North Korean soldiers and, in its automatic mode, engage targets with lethal force without a human operator.² This sentry robot is just one of several examples of what are known as lethal autonomous weapon systems (AWS). Concerns over how lethal AWS or “killer robots” would be used in armed conflicts have spurred an extensive debate about how the autonomy of a weapon system affects its legality in international law.³

Subsumed in the debate surrounding lethal AWS is the issue of nation-states using artificial intelligence (AI) in and outside of state conflicts. The mere mention of AI seems to conjure images of “slaughterbots” run amok in a dystopian future.⁴ For the purpose of this discussion, a better starting point is Google Assistant.⁵ Google Assistant is a software application that takes advantage of AI to perform its tasks more smartly than its competitors.⁶ It is a software application or “app” that can be downloaded to your phone. Military AI programs could, like Google Assistant, be used to accomplish tasks without requiring advanced, weaponized architecture like the SGR-1. Instead, the AI software agent or “softbot” could exist entirely in an artificial environment defined by the physical architecture underlying the relevant

¹ See HUMAN RIGHTS WATCH, LOSING HUMANITY: THE CASE AGAINST KILLER ROBOTS 19 (Nov. 2012), https://www.hrw.org/sites/default/files/reports/arms1112_ForUpload.pdf [hereinafter LOSING HUMANITY].

² *Id.*

³ See *id.*; see also HUMAN RIGHTS WATCH, MIND THE GAP THE LACK OF ACCOUNTABILITY FOR KILLER ROBOTS (Apr. 2015), https://www.hrw.org/sites/default/files/reports/arms0415_ForUpload_0.pdf; Jen Gerson, *Killer Robots are Coming: Scientists warn UN Needs Treaty to Maintain Human Control over all Weapons*, NAT'L POST, Nov. 15, 2017, <http://nationalpost.com/news/world/killer-robots-are-coming> (discussing “slaughter bots” and other weapons that use AI to choose targets); cf. Michael N. Schmitt, *Autonomous Weapon Systems and International Humanitarian Law: A Reply to the Critics*, HARV. NAT'L SEC. J. FEATURES (2013), <http://harvardnsj.org/2013/02/autonomous-weapon-systems-and-international-humanitarian-law-a-reply-to-the-critics/> [hereinafter Schmitt, *A Reply to the Critics*] (responding to the legal arguments raised in LOSING HUMANITY).

⁴ Gerson, *supra* note 3.

⁵ Laurie Beaver, *Google's AI is Much Smarter than Siri*, BUS. INSIDER, Oct. 4, 2017, <http://www.businessinsider.com/google-assistant-ai-vs-siri-2017-10>.

⁶ *Id.*

cyberspace.⁷ This paper will focus on this aspect of AI agents—specifically the legality of using AI to automate and accomplish tasks associated with hostile state cyber activities.

Google Assistant is a software application that uses AI to accomplish tasks, albeit benign tasks, in cyberspace. But, what is cyberspace? The answer to that question is neither intuitive nor consistent. Cyberspace has been described as a “fifth domain” of warfare with the other “natural” domains of warfare being air, land, maritime, and space. However, this definition of cyberspace is far from uniform.⁸ This paper will examine different definitions of cyberspace and offer some foundational principles that help distinguish cyberspace from the other, natural domains. From these principles we can better conceptualize how AI could be used to automate certain state cyber operations in compliance with international law.

Assessing the legal issues associated with the use of AI in hostile state cyber activities requires an appreciation of what AI *is* and what it *is not*. In writing about a rapidly developing technology, the discussion is inherently limited to what exists at the time of writing and the foreseeable future. Thus, this paper focuses on legal issues dealing with applications using task-specific or “narrow” AI.⁹ General AI, commonly thought of as AI “with the scale and fluidity of a human brain,” is not addressed, as it is uncertain if or when this capability will be achieved.¹⁰ However, even software applications using “narrow AI” (referred to as AI-enhanced software agents or “softbots”) have already demonstrated the capacity to automatically defend and respond to hacking attempts.¹¹ While this technology is

⁷ STUART J. RUSSELL & PETER NORVIG, *ARTIFICIAL INTELLIGENCE: A MODERN APPROACH* 41 (2015) [hereinafter *MODERN APPROACH*].

⁸ See, e.g., NATO COOPERATIVE CYBER DEFENCE CENTRE OF EXCELLENCE, *CYBER DEFINITIONS*, <https://ccdcoc.org/cyber-definitions.html> (last visited Apr. 22, 2018) (containing numerous state definitions for “cyber space”).

⁹ See GREG ALLEN & TANIEL CHAN, BELFER CENTER STUDY, *ARTIFICIAL INTELLIGENCE AND NATIONAL SECURITY* 8 (Jul. 2017); see also *MODERN APPROACH*, *supra* note 7, at 1055 (using the terms “weak AI” and “strong AI” to describe the same concepts).

¹⁰ *Id.*

¹¹ See, e.g., Devin Coldewey, *Carnegie Mellon’s Mayhem AI takes home \$2 Million from DARPA’s Cyber Grand Challenge*, *TECHCRUNCH* (Aug. 5, 2016), <https://techcrunch.com/2016/08/05/carnegie-mellons-mayhem-ai-takes-home-2-million-from-darpas-cyber-grand-challenge/> (demonstrating AI’s ability to exploit systems while also protecting data without human interaction).

still in its infancy, nations have already expressed an interest in adapting the technology for future military use.¹²

This paper takes the position that AI softbots could comply with international law and be used in cyber operations occurring between states, without human intervention, under certain conditions. This proposition is explored in three steps. Section II begins by establishing a common understanding of AI and introduces the key concepts of design, task environment, and transparency. Section III introduces foundational principles associated with cyberspace and explores how basic international legal principles apply to hostile state cyber activities. This section concludes by recognizing that cyber activities between states exist in a “gray zone” due to factual and legal ambiguities associated with cyber operations.¹³ Finally, Section IV uses these principles to discuss the challenges of employing AI softbots under international law and how AI softbots can legally be used in a variety of hostile state activities.

II. ARTIFICIAL INTELLIGENCE

This section introduces the reader to the first of two conceptual constructs that are the subjects of this paper’s international legal analysis: AI and cyberspace. Both of these constructs are complicated, multifaceted subjects that could easily extend beyond the present discussion. For the purposes of this legal analysis, a brief treatment of both subjects is presented in order to establish a *lingua franca* with the reader.

¹² See, generally ALLEN, *supra* note 9 (exploring the national security implications of developments in AI); ELSA B. KANIA, BATTLEFIELD SINGULARITY: ARTIFICIAL INTELLIGENCE, MILITARY REVOLUTION, AND CHINA’S FUTURE MILITARY POWER (Nov. 28, 2017), <https://www.cnas.org/publications/reports/battlefield-singularity-artificial-intelligence-military-revolution-and-chinas-future-military-power> (discussing China’s surging interest in AI); Shay Herskovitz, *Artificial Intelligence is Rapidly Transforming the Art of War*, THE HILL, Mar. 27, 2018, <http://thehill.com/opinion/technology/380472-artificial-intelligence-is-rapidly-transforming-the-art-of-war> (noting AI is already used by attackers and defenders in cyberspace).

¹³ U.S. SPECIAL OPERATIONS COMMAND, WHITE PAPER: THE GRAY ZONE 1 (2015), <https://www.soc.mil/swcs/ProjectGray/Gray%20Zones%20-%20USSOCOM%20White%20Paper%209%20Sep%202015.pdf> [hereinafter USSOCOM WHITE PAPER] (defining “gray zone” challenges).

A. Intelligent Machines

As a scientific discipline, artificial intelligence (AI) is a branch of computer science that “studies the properties of intelligence by synthesizing intelligence.”¹⁴ AI, as a discipline, attempts to understand and then replicate intelligent behavior in machines. In this endeavor, AI has benefited immensely from advances in a host of other disciplines, including psychology, linguistics, economics, neuroscience, biology, and engineering, to name a few.¹⁵ The recent boom in AI advances has been the result of increases in computing power, the use of graphics processors capable of running parallel tasks, and the rise of large data sets available to enhance machine learning.¹⁶

The field of artificial intelligence consists of several subfields that contribute to the larger goal of getting a machine to behave intelligently. Of principal importance to this discussion, machine learning is a “subset of AI that includes abstruse statistical techniques that enable machines to improve at tasks with experience.”¹⁷ Within the subfield of machine learning is the even more specific “deep learning” field of study that focuses on techniques loosely modeled after the human brain.¹⁸ Significant advances in deep learning have also contributed to many of the recent improvements in AI.¹⁹

The term “artificial intelligence” was coined in 1956 when it was first used at a Dartmouth conference of scientists and mathematicians.²⁰ However, the roots of AI, or the concept of a machine “thinking” like a human, go back

¹⁴ STANDING COMM. OF THE ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE, STANFORD UNIVERSITY, ARTIFICIAL INTELLIGENCE AND LIFE IN 2030 13 (2016), https://ai100.stanford.edu/sites/g/files/sbiybj9861/f/ai_100_report_0831fnl.pdf [hereinafter STANFORD STUDY]; see also Michelle Cantos, *Artificial Intelligence in Cyber Warfare: A Primer*, BRIGHTTALK (Mar. 15, 2018), <https://www.brighttalk.com/webcast/7451/305191> [hereinafter Cantos Webinar].

¹⁵ STANFORD STUDY, *supra* note 14, at 13-14; see also MODERN APPROACH, *supra* note 7, at Chapter 1.

¹⁶ STANFORD STUDY, *supra* note 14, at 14; ALLEN, *supra* note 9, at 7-8.

¹⁷ Roger Parloff, *Why Deep Learning is Suddenly Changing Your Life*, FORTUNE, Sept. 28, 2016, <http://fortune.com/ai-artificial-intelligence-deep-machine-learning/>.

¹⁸ Cantos Webinar, *supra* note 14.

¹⁹ STANFORD STUDY, *supra* note 14, at 14-15.

²⁰ NAT'L SCI. & TECH. COUNCIL, COMM. ON TECH., PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE 5 (2016) [hereinafter NSTC REPORT]; also Ass'n for the Advancement of Artificial Intelligence, *A Brief History of AI*, AITOPICS, <https://aitopics.org/misc/brief-history> (last visited Apr. 22, 2018) [hereinafter AITOPICS].

much further in time, with some scholars tracing AI's history as far back as Greek myths of Hephaestus, the blacksmith god that built mechanized men.²¹ That being said, there is currently no universally accepted definition of AI.²² Generally, AI is thought to be a "computerized system that exhibits behavior that is commonly thought of as requiring intelligence."²³ However, several competing definitions exist, some of which include the requirement of robotics.

One operational definition for AI is found in the well-regarded Turing Test, proposed by Alan Turing in 1950.²⁴ The Turing Test views the achievements of AI in terms of how "humanly" the computer acts—whether an interrogator is unable to tell if the answers to her questions came from a person or a computer.²⁵ The Turing Test identified four areas necessary to provide a "satisfactory operational definition of intelligence" for AI, specifically: (1) natural language processing, (2) knowledge representation (storing information), (3) automated reasoning (using stored information to make decisions), and (4) machine learning (ability to adapt).²⁶ The "Total Turing Test" adds in two additional areas to further mimic the capabilities of humans, specifically: (1) computer vision (ability to perceive objects) and (2) robotics (to manipulate objects and move about).²⁷ The total Turing Test, however, has been criticized as too narrow a conception, with some scientists pointing out that the goal of aeronautical engineering was never to craft "machines that fly so exactly like pigeons that they can fool even other pigeons."²⁸

A competing conception of artificial intelligence is offered by Professor Nils John Nilsson, a founding researcher in the field of AI, who suggests that intelligence lies on a multi-dimensional spectrum.²⁹ In Professor Nilsson's view, the factors to be considered are "scale, speed, degree of autonomy, and generality."³⁰ For example, while a simple calculator may

²¹ See AITOPICS, *supra* note 20.

²² See NSTC REPORT, *supra* note 20, at 6.

²³ *Id.*

²⁴ MODERN APPROACH, *supra* note 7, at 2.

²⁵ *Id.*

²⁶ *Id.* at 3.

²⁷ *Id.*

²⁸ *Id.*

²⁹ STANFORD STUDY, *supra* note 14, at 12

³⁰ *Id.*

exist on this spectrum, it exhibits substantially less autonomy than more advanced AI programs.

Associated with the broad concept of intelligence is “rationality.”³¹ For something to behave rationally it must have some criterion to assess the consequences of its actions. In the field of AI, this is referred to as a performance measure.³² A performance measure is an element of the AI’s programming that conveys a notion of desirability based on a comparison between the state of the previous environment and the state of the current environment.³³ A rational actor “should select an action that is expected to maximize its performance measure” given its knowledge of the environment, its history of perceptions, and any prior knowledge.³⁴ Performance measures can vary in complexity and can be used to express simple goals that take the form of achieved vs. not achieved or more complex models that rely on the concept of utility from economics.³⁵

Apart from the performance measure and the environment, one must also consider how the agent can interact with its environment (actuators) and receive input from its environment (sensors).³⁶ The combination of these four variables is referred to as the AI agent’s “task environment.” Broadly speaking then, AI tries to design rational or intelligent agents that maximize their expected performance in a variety of task environments.³⁷

B. Rational Agents

An agent is anything that perceives its environment through sensors (receives inputs), maps those inputs to a given action through an agent function, and then acts upon its environment.³⁸ In this sense, an agent can be a human that receives inputs through his eyes, thinks about his choices (agent function), and then acts upon his environment using an actuator such as voice, hands, legs, etc.

³¹ MODERN APPROACH, *supra* note 7, at 37-40.

³² *Id.*

³³ *Id.*

³⁴ *Id.* at 35-37.

³⁵ *Id.* at 37, 46-54.

³⁶ *Id.* at 39-40.

³⁷ *Id.* at 34.

³⁸ *Id.* at 34.

An agent could also be a software agent or softbot that receives its inputs through keystrokes, applies an algorithm, and then acts on its environment by displaying something on a screen or sending a network packet.³⁹ The key to understanding AI decision-making is the complexity and capabilities of the algorithm that serves as the “agent function” for the artificial agent. Plainly put, an algorithm formally expresses a set of guidelines on how to perform a specific task, in this case by a computer.⁴⁰ These guidelines are expressed using formal general mathematics and are used for logical deduction.⁴¹ Algorithms are central to computer science, because computer code is actually a precise way of implementing an algorithm that a machine can follow and understand.⁴²

In a machine using AI, an “agent program” is the implementation of the agent function.⁴³ Algorithms are not without limitations and not everything can be accomplished with an algorithm.⁴⁴ The “intelligence” of the agent’s decision hinges on the complexity and capabilities of the algorithm that is applied to the inputs received. To create an agent that behaves rationally, AI researchers have developed a number of subfields that operate along many of the lines initially recognized by the Turing Test.

Machine learning is an AI subfield that uses algorithms in order to teach machines to “learn” by effectively adapting their own programming to new information.⁴⁵ This technique has been called “software writing software,” because the algorithm that serves as the decision function for the

³⁹ *Id.* at 34-35.

⁴⁰ *Id.* at 8; also see Jacob Brogan, *What’s the Deal with Algorithms?*, Slate, Feb. 2, 2016, http://www.slate.com/articles/technology/future_tense/2016/02/what_is_an_algorithm_an_explainer.html.

⁴¹ MODERN APPROACH, *supra* note 7, at 8; also Brogan, *supra* note 40.

⁴² Caitlin Duncan & Tim Bell, CS Education Research Group, University of Canterbury, Computer Science Field Guide, Chapter 2, <http://csfieldguide.org.nz/en/chapters/algorithms.html> (last visited Apr. 21, 2018).

⁴³ MODERN APPROACH, *supra* note 7, at 35.

⁴⁴ Duncan, *supra* note 42, at Chapter 11 (discussing tractability and problems that algorithms cannot solve).

⁴⁵ See Bernard Marr, *What is the Difference Between Artificial Intelligence and Machine Learning?*, FORBES, Dec. 6, 2016, <https://www.forbes.com/sites/bernardmarr/2016/12/06/what-is-the-difference-between-artificial-intelligence-and-machine-learning/2/#281c4a71483d> (last visited Apr. 22, 2018); also Lee Bell, *Machine Learning Versus AI: What’s the Difference?*, WIRED, Dec. 1, 2016, <http://www.wired.co.uk/article/machine-learning-ai-explained> (last visited Apr. 22, 2018).

software agent is actually adapted and changed over time.⁴⁶ What makes this process possible is a network structure of layered nodes or units that were originally inspired by the structure of neurons in the brain.⁴⁷ These artificial “neural network structures,” sometimes called “deep neural networks” work in layers, with the outputs in one layer becoming “weighted” inputs in the next layer.⁴⁸ By taking in large amounts of training data and using a technique called “back-propagation,” these densely connected nodes modify their weights and threshold values in order to “learn,” a process which ultimately yields improved results.⁴⁹

Machine learning requires a large amount of data for an agent to effectively adapt its decision-making algorithm.⁵⁰ AI agents typically use large amounts of “training data” to improve their models over time before being applied to novel situations.⁵¹ AI agents have also relied on expert knowledge to develop their agent functions, leading these systems to be called “expert systems” because they are designed to mimic the behavior of experts in the field.⁵² Some tax preparation software use this technique.⁵³

An example of the power of machine learning is found in the AI program called AlphaGo, “the first computer program to defeat a world champion at the ancient Chinese game of Go.”⁵⁴ AlphaGo accomplished its task by learning from a set of training data derived from human amateur and professional games.⁵⁵ Another example of how training data can be used to improve an algorithm is found in image recognition programs. Image recognition programs previously learned how to recognize an image of a dog as a dog by processing numerous, labeled animal pictures.⁵⁶ The training data helped the algorithm develop patterns so that it could “see” a new picture

⁴⁶ Parloff, *supra* note 17.

⁴⁷ MODERN APPROACH, *supra* note 7, at 10-11, 741.

⁴⁸ Larry Hardesty, *Explained: Neural Networks*, MIT NEWS OFFICE, Apr. 14, 2017, <http://news.mit.edu/2017/explained-neural-networks-deep-learning-0414>.

⁴⁹ *Id.*; see also MODERN APPROACH, *supra* note 7, at 746-747.

⁵⁰ Parloff, *supra* note 17.

⁵¹ See NSTC REPORT, *supra* note 20, at 8-9.

⁵² Cantos Webinar, *supra* note 14; see also NSTC REPORT, *supra* note 20, at 8-9.

⁵³ Cantos Webinar, *supra* note 14.

⁵⁴ Demis Hassabis & David Silver, *AlphaGo Zero: Learning from Scratch* (2017), <https://deepmind.com/blog/alphago-zero-learning-scratch/> (last visited Apr. 22, 2018).

⁵⁵ *Id.*

⁵⁶ Parloff, *supra* note 17.

as a picture of a dog by comparing the new picture against the patterns it previously established based on the training data that represented a “dog.”

This process, known as “supervised training,” has given way to more powerful neural networks that use a form of “reinforcement learning” to teach themselves without the need of human assistance in the form of training data.⁵⁷ This new model of reinforcement learning has led to, for example, AlphaGo Zero. AlphaGo Zero, no longer constrained by the limits of human knowledge, became the best Go player in history by defeating AlphaGo 100 games to 0.⁵⁸ AlphaGo Zero “learned” by becoming its own teacher, rapidly playing games against itself over a three-day time period, with no prior knowledge of the game provided. Impressively, AlphaGo Zero demonstrated “new knowledge, developing unconventional strategies and creative new moves.”⁵⁹

AlphaGo and AlphaGo Zero are simple examples provided to illustrate the basic concepts of AI. AlphaGo and AlphaGo Zero both represent limited or narrow AI programs that are designed for a specific task. These programs use machine learning in order to re-write their game-playing algorithms in a manner that leads to better or more intelligent results. The value of the result of each game is assessed by an external element of the agent’s software called the critic, which provides feedback that is then incorporated into the learning element of the software.⁶⁰ The learning element then modifies how the agent interacts with the environment based on feedback established by a performance measure, applied by the critic element.⁶¹ The performance measure serves as an external limitation on the agent, by distinguishing part of the incoming information and translating that into a reward or penalty.⁶² For an agent designed to achieve a certain goal, such as “win a game of Go,” this process teaches the agent which actions contribute to accomplishing its goal.⁶³

⁵⁷ See Hardesty, *supra* note 48; Hassabis, *supra* note 54; see also STANFORD STUDY, *supra* note 14, at 15.

⁵⁸ Hassabis, *supra* note 54.

⁵⁹ *Id.*

⁶⁰ MODERN APPROACH, *supra* note 7, at 55.

⁶¹ *Id.*

⁶² *Id.* at 56-59.

⁶³ *Id.* at 52-53.

C. Assessing AI Agents

While some AI agents may be superhuman in their ability to accomplish their assigned task, they are not capable of spontaneously conducting new tasks.⁶⁴ As AlphaGo Zero illustrates, an AI agent could come up with new, creative *ways* to achieve an established task, even though that task is unchanging.⁶⁵ Thus, AlphaGo Zero, despite being capable of learning new and creative ways to play Go, is unable to learn how to play chess.⁶⁶ Functionally, AI is limited by its design.

These examples illustrate important considerations for assessing AI software agents. First, one cannot ignore the negative when assessing AI.⁶⁷ The world of possibilities open to AlphaGo Zero was limited to the game of Go. Narrow AI programs can only do the task they are programmed to do. Conversely, if AI programs are not specifically limited, then they may take an undesirable action because it maximizes their performance measure.⁶⁸ For example, an autonomous truck might plow through a house without regard to its inhabitants when the program determines that this driving route is the shortest path between two points and the truck's software agent was not constrained to "know" not to leave the road. While AI agents are limited to what they are told to do by their human designers, they must also be instructed on what not to do. Microsoft's "Tay" chatbot, a machine learning and natural language processing project, when released on social media, became a rampant racist because the designers failed to program Tay on how *not* to act.⁶⁹

⁶⁴ See Alan L. Schuller, *At the Crossroads of Control: The Intersection of Artificial Intelligence in Autonomous Weapon Systems with International Humanitarian Law*, HARV. NAT'L SEC. J. 379, at 403, 412 (2017) (noting that AI robots only know what they are told through their programming despite demonstrating sophistication at limited tasks).

⁶⁵ Hassabis, *supra* note 54.

⁶⁶ *But see* DAVID SILVER ET AL., MASTERING CHESS AND SHOGI BY SELF-PLAY WITH A GENERAL REINFORCEMENT LEARNING ALGORITHM (2017), <https://arxiv.org/pdf/1712.01815.pdf> (describing how AlphaZero, an advancement from AlphaGo Zero, uses a more generic learning algorithm that has proven to excel at Chess, Shogi, and Go with only the rules of each game as a starting point).

⁶⁷ See Schuller, *supra* note 64, at 423 ("The focus of the [International Humanitarian Law] inquiry should therefore delve not only into the capabilities of a given system, but also scrutinize the ways in which the capacity of the system could be bounded through limitations on authorities and capabilities").

⁶⁸ *Id.* at 422 (describing how simple machine learning in a system could lead to violations of International Humanitarian Law).

⁶⁹ Alex Hern, *Microsoft Scrambles to Limit PR Damage Over Abusive AI Bot Tay*, THE GUARDIAN, Mar. 24, 2016 <https://www.theguardian.com/technology/2016/mar/24/>

Secondly, the task environment is a crucial component to assessing a given AI agent. More complex task environments represent more complex challenges to designing an agent program. Task environments exist along spectrums that vary across several dimensions, including: fully observable vs. partially observable, single agent vs. multi-agent, deterministic vs. stochastic, episodic vs. sequential, static vs. dynamic, discrete vs. continuous, and known vs. unknown.⁷⁰ The most complex task environment would involve an agent operating in a continuous, dynamic, uncertain environment with unobserved elements, where its previous actions affected its future actions and multiple other agents were also operating.⁷¹

AI agents can also operate in completely artificial environments, such as the World Wide Web, though not necessarily in the same manner as a human.⁷² For example, an AI software agent would not perceive the World Wide Web through sensors viewing pixels on a screen. Instead an AI softbot would view the Web as “a character string consisting of ordinary words interspersed with formatting commands in the HTML markup language.”⁷³ For an AI softbot, the “Internet is an environment whose complexity rivals that of the physical world and whose inhabitants include many artificial and human agents.”⁷⁴ While demanding a different programming perspective, the distinction between real and artificial matters less than “the complexity of the relationship among the behavior of the agent, the percept sequence generated by the environment, and the performance measure.”⁷⁵

A final consideration is whether an AI agent’s rationale is transparent. This concept is called “explainable” AI and is important for transparency and applying the law.⁷⁶ A common criticism of AI is that it is a “black box” technology because researchers struggle to explain “why” an AI program made

microsoft-scrambles-limit-pr-damage-over-abusive-ai-bot-tay?CMP=tw_t_gu.

⁷⁰ MODERN APPROACH, *supra* note 7, at 42-44.

⁷¹ *Id.*

⁷² *Id.* at 41, 470.

⁷³ *Id.* at 470-471.

⁷⁴ *Id.* at 41.

⁷⁵ *Id.*

⁷⁶ DAVID GUNNING, DARPA, EXPLAINABLE ARTIFICIAL INTELLIGENCE (XAI) 5-6 (2016), <https://www.darpa.mil/attachments/DARPA-BAA-16-53.pdf>; *See also* Cliff Kuang, *Can A.I Be Taught to Explain Itself?*, N.Y. TIMES, Nov. 21, 2017, <https://www.nytimes.com/2017/11/21/magazine/can-ai-be-taught-to-explain-itself.html>.

a particular choice for a given set of inputs.⁷⁷ Broadly speaking, this is due to the complexity of how neural networks work, the hidden layers between them, and how the agent's program changes over time. While efforts are being made to address this issue in the research community, this continues to be a concern when considering whether or not to apply AI technology to certain critical tasks. The extent to which an AI program is capable of explaining its decisions ultimately translates to the degree to which a human operator can trust the AI's decision.

We will return to these considerations of design, task environment, and transparency when analyzing how AI agents may legally operate in the artificial environment of cyberspace. Up to this point we have referred to cyberspace, but have not provided a clear definition of what cyberspace is. The next section explores the concept of cyberspace by discussing what makes this domain unique and how some of the features of this domain can create challenging legal issues. This lays the foundation for analyzing how States can legally employ AI softbots in cyber activities.

III. INTERNATIONAL LAW AND CYBER OPERATIONS

Cyberspace is a curious concept that seems intuitive, yet consistently escapes a clear, agreed upon definition.⁷⁸ A typical dictionary definition describes cyberspace as “the online world of computer networks and especially the Internet.”⁷⁹ This definition is sufficient for everyday use, but it masks some of the subtleties of the domain. In order to assess the law applicable to an AI softbot's actions conducted in or through cyberspace, we must first establish what “cyberspace” is and how it is different from the other “natural” domains of land, sea, air, and space. This section will compare and contrast competing definitions in order to distill some foundational principles for understanding cyberspace. We then must examine the international legal framework applied to state activities taking place in and through cyberspace. The information presented does not address non-state actors or the application of domestic law, even though actions taken in cyberspace by state actors

⁷⁷ Tom Simonite, *AI Experts Want to End 'Black Box' Algorithms in Government*, WIRED, Oct. 18, 2017, <https://www.wired.com/story/ai-experts-want-to-end-black-box-algorithms-in-government/>.

⁷⁸ MARCO ROSCINI, *CYBER OPERATIONS AND THE USE OF FORCE IN INTERNATIONAL LAW* 10 (2014).

⁷⁹ *Cyberspace*, MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/cyberspace> (last visited Apr. 23, 2018).

often implicate the victim state's domestic criminal law.⁸⁰ This paper proposes that state cyber operations must be analyzed in a way that separates the data from the machine architecture in order to facilitate the proper application of international law. Finally, this section concludes by examining how the unique nature of cyber operations has allowed these activities to thrive in "gray zone" conflicts.

A. Cyberspace

In order to define cyberspace, a good starting place is the origin of the term.⁸¹ William Gibson originally coined the term in the 1984 sci-fi classic *Neuromancer*, in which he describes it as a "consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts.... A graphic representation of data abstracted from the banks of every computer in the human system."⁸²

William Gibson's description remains one of the best descriptions because it highlights several key elements of cyberspace. Working backwards through his description, he articulated that cyberspace is derived from data stored in computers. Next, this data is graphically represented and thereby consumed by human operators.⁸³ Finally, this group, consensual "hallucination" or subjective experience of interacting with the graphical representation of data is collectively viewed as cyberspace. Cyberspace can thus be described in layers, with the base layer being physical in nature (computers), the next layer being logical (data), and the final layer being the collective human experience (subjective) of interacting with that data. This layered approach to understanding cyberspace is a common feature of robust definitions.⁸⁴

⁸⁰ See, e.g. Jack Goldsmith, *Why Did the DOJ Indict the Chinese Military Officers?*, LAWFARE (May 20, 2014) <https://www.lawfareblog.com/why-did-doj-indict-chinese-military-officers>.

⁸¹ See MARTIN C. LIBICKI, CONQUEST IN CYBERSPACE 5 (2007)(attributing the first use of the term cyberspace to William Gibson's 1984 classic, *Neuromancer*); But see Dictionary.com, *Cyber Monday and the Origin of the Word "Cyber,"* <http://www.dictionary.com/e/cyber-monday-cyberspace/> (last visited Apr. 23, 2018)(attributing the first use of the term to William Gibson's 1982 story, *Burning Chrome*).

⁸² WILLIAM GIBSON, NEUROMANCER 51 (1984).

⁸³ In *Neuromancer* people "jacked into" the consoles connected to cyberspace, something that today would be seen more akin to virtual reality. However, the concept still holds for users who consume data through screens.

⁸⁴ See, e.g., NATO COOPERATIVE CYBER DEFENCE CENTRE OF EXCELLENCE, CYBER DEFINITIONS, *supra* note 8.

Note that under this definition cyberspace does not independently exist—it is not a single place or thing—but rather a subjective experience of humans interacting with data over a network. Bluntly, there is no *there* there.

The United States Joint Chiefs of Staff (JCS), in the publicly released doctrine on cyberspace operations, describe cyberspace as “A global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers.”⁸⁵ This definition acknowledges the role of networked machine architecture and data, while also identifying cyberspace as a global domain that is broader than the Internet.

The JCS doctrine on cyberspace operations further develops the concept of cyberspace by describing it as consisting of three layers: the physical network, the logical network, and cyber-persona.⁸⁶ The physical network is comprised of the physical machine architecture and network components over which cyberspace exists.⁸⁷ This includes all the wires, cables, radio frequency, routers, switches, satellite links, cabled links, and so on that store or enable the transfer of data.⁸⁸ The physical layer is tied to physical domains and can be a touchpoint for legal issues.

The second layer in the JCS doctrine is the logical network layer, which exists at a higher level of abstraction from the first layer.⁸⁹ The example provided by the joint doctrine is a website that is tied to a uniform resource locator (URL).⁹⁰ The website can be accessed by entering the URL into a web browser, but the data comprising that website could be stored across several different physical locations. Even at this level we can see something that could and often is subjectively referred to as a “place,” but that is actually being reconstructed on a computer screen from data transiting multiple physical locations.⁹¹

⁸⁵ U.S. JOINT CHIEFS OF STAFF, JOINT PUBL’N 3-12, *Cyberspace Operations* GL-4 (June 8, 2018) [hereinafter JP 3-12)].

⁸⁶ *Id.* at I-2 to I-4.

⁸⁷ *Id.* at I-2 to I-3.

⁸⁸ *Id.*

⁸⁹ *Id.* at I-3.

⁹⁰ *Id.* at I-4.

⁹¹ *Id.*

The cyber-persona layer is “yet a higher level of abstraction” that uses the “rules that apply in the logical network layer” to create a “digital representation of an individual or entity identity in cyberspace.”⁹² This definition is more helpful for what it does not say than what it does say. It does not say that physical human beings are part of cyberspace. Rather, the only thing approximating an identity in cyberspace is a “digital representation” of an individual or entity.⁹³ One could think of the cyber-persona as something like an account name on social media.

The JCS doctrine implicitly acknowledges that attributing the actions of a particular “cyber-persona” to a human (or group of humans) is difficult, as these “cyber-personae” exist only as data that may not be tethered to any real-world individual or entity.⁹⁴ As we will see in section IV, attribution to a human (or state) plays an integral role in many of the legal issues confronting cyberspace operations. In the JCS Doctrine then, the “boundary” of cyberspace appears to end at the physical architecture wherein a cyber-persona resides and does not include the physical person interacting with cyberspace. However, a cyber-persona is only a “persona” when it is interpreted in context by a person; otherwise it is just data resident on a physical machine’s architecture. Thus, for a cyber-persona to have any meaning it requires human interpretation.

The next description of cyberspace we will examine is the one provided by the Tallinn Manual. The Tallinn Manual was originally created by a group of experts funded by the NATO Cooperative Cyber Defence Centre of Excellence in 2009.⁹⁵ A second edition, called the Tallinn Manual 2.0, was published in 2017.⁹⁶ The “international group of experts” (IGE) working on the first Tallinn Manual consisted of military and academic lawyers and technical experts from a few Western states working in their personal capacity.⁹⁷ The objective of the manual was to codify international law as it applied to “cyber warfare,” including the concepts of *jus ad bellum* (law governing the resort to force by States) and *jus in bello* (law governing State

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ TALLINN MANUAL ON THE INTERNATIONAL LAW APPLICABLE TO CYBER WARFARE 1 (Michael N. Schmitt ed., 2013) [hereinafter TALLINN 1.0].

⁹⁶ TALLINN MANUAL 2.0 ON THE INTERNATIONAL LAW APPLICABLE TO CYBER OPERATIONS (Michael N. Schmitt ed., 2d ed. 2017) [hereinafter TALLINN 2.0].

⁹⁷ ROSCINI, *supra* note 78, at 31.

conduct during hostilities).⁹⁸ Tallinn 2.0 expanded the scope of the first manual to include operations occurring in peacetime, and participation by a broader group of experts.⁹⁹

Both versions of Tallinn use an analytical approach characterized by the IGE applying historic treaties and customary international law related to physical military operations and extending it to cyber operations.¹⁰⁰ Both versions contain black letter law “rules” derived from the consensus of the IGE with commentary after each rule that describes whether there was disagreement about the rule or how the rule was derived.¹⁰¹ The key assumption of the Tallinn Manual IGE’s approach is that historic treaties, like the Additional Protocol I to the Geneva Conventions of 1949, used weapons and military force as “proxies” for the violent effects the weapons caused.¹⁰² This assumption allows the IGE to extend existing treaty provisions and customary international law principles to cyberspace operations based on the effects caused by those operations without regard to the nature of the operation itself.¹⁰³ This is commonly known as an “effects based” approach.

Neither Tallinn 1.0 nor Tallinn 2.0 have been officially adopted by any state.¹⁰⁴ Both documents are also limited to the personal views of the

⁹⁸ TALLINN 1.0, *supra* note 95, at 3; *See also* International Committee of the Red Cross, *Jus ad Bellum Jus in Bello*, Oct. 29, 2010, <https://www.icrc.org/en/document/jus-ad-bellum-jus-in-bello> (providing a brief explanation on jus ad bellum as the law limiting the resort to force between states and jus en bello as that aspect of international humanitarian law that governs the way warfare is conducted).

⁹⁹ Eric Talbot Jensen, *The Tallinn Manual 2.0: Highlights and Insights*, 48 *Geo. J. Int’l L.* 735, 738 (2017); *See also* TALLINN 2.0, *supra* note 96.

¹⁰⁰ *See, e.g.* TALLINN 1.0, *supra* note 95, at 105-110 (distilling the definition of “cyber attack” from Article 49(1) of Additional Protocol I to the Geneva Conventions of 1949 and the experts’ view that effects are the “crux of the notion”); *See also* TALLINN 2.0, *supra* note 96.

¹⁰¹ *Id.*

¹⁰² *See* HEATHER HARRISON DINNISS, *CYBER WARFARE AND THE LAWS OF WAR* 62-63 (2012) (attributing the idea that the consequences matter more than the instrumentality of coercion to Michael Schmitt and noting that such a results-based approach erodes the exclusion of economic and political coercion from the traditional understanding of armed force); *See also* TALLINN 1.0, *supra* note 95, at 105-110.

¹⁰³ *See* ROSCINI, *supra* note 79, at 45 (noting that the Tallinn Manual’s use of the “kinetic equivalence” doctrine as a circular approach to understanding the use of force that does not clarify “what scale and effects a ‘non-cyber operation’ must possess in order to qualify as a use a force”).

¹⁰⁴ *Id.* at 30-31 (noting that the Tallinn manual does not reflect the official position of any

participants.¹⁰⁵ Thus, both manuals lack controlling legal authority and are essentially scholarly exercises.¹⁰⁶ Additionally, the manuals have been criticized in various respects, to include the allegation that they merely re-state existing treaty obligations with the word “cyber” included.¹⁰⁷ That said, their comprehensive treatment of the topic merits consideration.

In Tallinn 2.0, the IGE describes cyberspace as having a “physical, logical, and social layer.”¹⁰⁸ The physical layer is defined the same way as the JCS defines it in the joint doctrine.¹⁰⁹ The logical layer is described as the “connections between network devices...that allow[s] the exchange of data across the physical layer.”¹¹⁰ This includes applications, data, and the protocols that allow the devices to transfer data between themselves. The social layer “encompasses individuals and groups engaged in cyber activities.”¹¹¹ The third layer represents a significant departure from the JCS doctrine as it explicitly includes people. It does not rely on their subjective experience, but rather sees individuals “engaged in cyber activities” as part of the cyberspace concept.¹¹²

The IGE observed that cyberspace has been described as a virtual “5th domain” that lacks physicality.¹¹³ The IGE rejected this description on the grounds that it disregards the “territorial features of cyberspace and cyber operations that implicate the principle of sovereignty.”¹¹⁴ The IGE then considered whether a state could reasonably be said to exercise sovereignty over cyberspace. The group concluded no one state could exercise sovereignty over all of cyberspace, because so much of the infrastructure existed in different states. However, a state can exercise sovereignty over that portion of cyberspace within its territorial borders. The IGE’s conclusion is a relatively

state or organization).

¹⁰⁵ TALLINN 1.0, *supra* note 95, at 10 (“the *Tallinn Manual* must be understood as an expression solely of the opinions of the International Group of Experts, all acting in their private capacity”); and TALLINN 2.0, *supra* note 96, at 2.

¹⁰⁶ ROSCINI, *supra* note 78, at 31.

¹⁰⁷ *Id.*

¹⁰⁸ TALLINN 2.0, *supra* note 96, at 11-13 (Rule 1 and its commentary).

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

straightforward application of sovereignty to the people and things existing in the state. But what about the information (data) contained in the logical layer?

Based on the commentary discussed above, the IGE agreed on this rule: “The principle of state sovereignty applies *in* cyberspace (emphasis added).”¹¹⁵ The use of the word “in” rather than “to” implies that sovereignty extends to the information (logical layer) “in” cyberspace. Based on the commentary, the rule was derived from an extension of traditional territorial concepts of sovereignty over the physical and social layers, but the Tallinn Manual’s definition of cyberspace would reasonably include the information traveling over and through these layers as well. This conclusion is at odds with how information crossing state lines has historically been treated in the satellite-broadcasting context.¹¹⁶ Generally speaking, information broadcast across state lines has been viewed by Western States as something to be encouraged, with the freedom of information being supported in documents such as the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights.¹¹⁷

The point of this discussion is not to criticize the IGE’s choice, but rather to illustrate how a rule affecting cyberspace, and how one defines cyberspace, can have legal ramifications beyond what may be initially apparent.

Drawing from each of these definitions, we see a reoccurring theme of physical and information elements present in cyberspace. This dual nature of cyberspace almost always creates tension in the law as legal regimes often treat tangible things differently from intangible things. In cyberspace, the information element occurs almost simultaneously on multiple physical devices, which may be located in different physical locations with different applicable laws.¹¹⁸

¹¹⁵ TALLINN 2.0, *supra* note 96 at 11.

¹¹⁶ See FRANS VON DER DUNK, HANDBOOK OF SPACE LAW 493-495 (Frans von der Dunk & Fabio Tronchetti eds., 2015)(discussing the international legal principles associated with satellite broadcasting across state lines).

¹¹⁷ *Id.*; See also G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948) (Article 19 reads: “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions with interference and to seek, receive and impart information and ideas through any media and regardless of frontiers” (emphasis added)); See also International Covenant on Civil and Political Rights art. 19(2), Oct. 5, 1977, 999 U.N.T.S. 171.

¹¹⁸ See, e.g. JAMES GRIMMELMANN, INTERNET LAW: CASES & PROBLEMS 61-63 (2017). The case of *Voyeur Dorm L.C. v. City of Tampa*, 265 F.3d 1232 (11th Cir. 2001) illustrates

In the case of sovereignty under Tallinn 2.0, the IGE did not seem to consider the rule's impact on the informational element.¹¹⁹ As a consequence, the rule's sweep may have been broader than envisioned because it declared state sovereignty existed over "cyberspace" as opposed to the architecture and people located within the state's borders.

The information element can also be said to exist in two broad forms with some overlap between them. These forms are syntactic and semantic.¹²⁰ To the extent cyberspace can be said to exist, it must exist over physical machines interacting with one another.¹²¹ This interaction occurs through physical connections, machine code, and protocols that facilitate the transfer of information. The functional or syntactic component of information allows for the transfer of the semantic component of information that is directed to users.¹²² These two elements are not always distinct, and certain hostile cyber operations, such as SQL injections, can occur by inserting syntactic information in a field intended for semantic inputs.¹²³

Generally though, one can think of syntactic information as that information primarily used by the code and machine architecture and semantic information as that information generally used by human operators. Martin Libicki, in his work *Cyberdeterrence and Cyberwar*, associates these forms of information with different layers of cyberspace.¹²⁴ Given the recognized overlap between the terms, I will use the terms to differentiate between

this point. The case was about a website that allowed users to view women as young as 18 engaged in "intimate acts of youthful indiscretion," and the city of Tampa's zoning code that prohibited adult entertainment in residential areas. The information being transferred online and how that information interacted with a zoning code (a law based on physical place) was at the heart of the case. The law prohibited the physical interaction of the viewer and the viewee. However, the law arguably did not regulate the exchange of information (visual) when it was divorced from the physical element of the original, in-person transaction.

¹¹⁹ TALLINN 2.0, *supra* note 96 at 9-13 (commentary to Rule 1).

¹²⁰ MARTIN C. LIBICKI, *CYBERDETERRENCE AND CYBERWAR* 12 (2009), https://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG877.pdf.

¹²¹ TIM WU & JACK GOLDSMITH, *WHO CONTROLS THE INTERNET? ILLUSIONS OF A BORDERLESS WORLD* 49-65 (2006).

¹²² *Id.* at 11-13 (the term "users" is used because some information can be used entirely by machines. Libicki uses the example of address lookup tables to demonstrate information that is "semantic in form, but syntactic in purpose.")

¹²³ *What is SQL Injection (SQLi) and How to Prevent It*, ACUNETIX, <https://www.acunetix.com/websitesecurity/sql-injection/> (last visited June 4, 2019).

¹²⁴ LIBICKI, *supra* note 120, at 11-13.

information that is functional and information that is subjectively meaningful. These two types of information are the basis for two different perspectives that can arise when describing an activity in cyberspace.¹²⁵

We can make two further generalizations about the nature of cyberspace beyond the dual nature concept. First, cyberspace is man-made or artificial, separating it from the other “natural” domains.¹²⁶ This means that many of the issues associated with cyberspace, including the use of packet switch technology and some of the challenges associated with attribution, are the result of design choices.¹²⁷ It also means that cyberspace is uniquely malleable.¹²⁸

Second, cyberspace exhibits “connectivity.” To put it another way, cyberspace exists as a function of different devices connected or capable of interacting with each other through some medium.¹²⁹ A significant consequence of cyberspace’s exhibiting connectivity is that, from the perspective of the machines operating on the network, the connected elements operate independent of geography.¹³⁰ Latency can occur over large distances or with different connection types and speeds, but that does not change that the individual elements can be characterized as a single “whole” when part of

¹²⁵ GRIMMELMANN, *supra* note 118, at 53-55 (citing Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L. J. 357 (2003)) (compares how the subjective experience of the user differs from objectively what is occurring on the machine architecture and how this divide can affect the application of the law).

¹²⁶ LIBICKI, *supra* note 120, at 11.

¹²⁷ See BARRY M. LEINER ET AL., A BRIEF HISTORY OF THE INTERNET 2-4 (1997), https://www.internetsociety.org/wp-content/uploads/2017/09/ISOC-History-of-the-Internet_1997.pdf; See also CURTIS E. LEMAY CENTER FOR DOCTRINE DEVELOPMENT AND EDUCATION, ANNEX 3-12 CYBERSPACE OPERATIONS 5 (2011), http://www.doctrine.af.mil/Portals/61/documents/Annex_3-12/3-12-D04-CYBER-Challenges.pdf (noting the challenges with anonymity which exists as a feature of the Internet).

¹²⁸ P.W. SINGER & ALLAN FRIEDMAN, CYBERSECURITY AND CYBERWAR WHAT EVERYONE NEEDS TO KNOW 14 (2014) (“The essential features remain the same, but the topography is in constant flux.”).

¹²⁹ See JP 3-12, *supra* note 85, at I-2. Note this definition also allows for the interaction to occur through proprietary or nonstandard protocols and through direct, physical connections. The necessary element is only that the machine be capable of interaction in order for it to exhibit “connectivity.”

¹³⁰ See LEINER ET AL., *supra* note 127, at 5 (“There are generally no constraints on the types of network that can be included or on their geographic scope, although certain pragmatic considerations will dictate what makes sense to offer.”)

a network.¹³¹ This is the principle that undergirds the resource sharing made possible by mainframes and, to an extent, modern cloud computing.¹³² This phenomenon also supports the perception of “cyberspace” as a place with qualities and information independent of the physical place from where the operator is logging in.

Together these three principles comprise what I will refer to as the principles of cyberspace: (1) dual nature; (2) artificiality; and (3) connectivity. The analysis of how an AI softbot operating in cyberspace differs from an AWS often relates back to how these principles separate cyberspace from the natural domains.

B. International Law

The three principles discussed in the previous section are intended to serve as aids when considering how a chosen legal framework, in this case international law, should apply to the cyberspace domain. Applying international law to cyber operations is not a straightforward matter. Even the premise that international law regulates cyber operations is not without its challenges.¹³³ Adherents to the principle that states are free to engage in acts not prohibited by international law, as described by the Permanent Court of International Justice (PCIJ) in the *Lotus* case, would argue that international law does not specifically regulate cyber operations between states.¹³⁴ The

¹³¹ *Id.* at 3 (history of the first time-shared computers used to share data and resources); See also OLIVIER BONAVENTURE, *COMPUTER NETWORKING: PRINCIPLES, PROTOCOLS AND PRACTICE* 5 (2011); and NATALIA OLIFER & VICTOR OLIFER, *COMPUTER NETWORKS: PRINCIPLES, TECHNOLOGIES AND PROTOCOLS FOR NETWORK DESIGN* 11-22 (2005) (discussing the history of networks, the use of powerful individual machines with user terminals in order to accomplish information and resource sharing, and the impact of advances in transmission technologies on modern networks).

¹³² OLIFER, *supra* note 131, at 12-14; See also Michael Otey, *Is the Cloud Really Just the Return of Mainframe Computing*, ITPRO TODAY, Mar. 22, 2011, <http://www.itprotoday.com/cloud-data-center/cloud-really-just-return-mainframe-computing> (discussing the similarities between cloud computing and the historic use of mainframe computers).

¹³³ Beatrice A. Walton, *Duties Owed: Low-Intensity Cyber Attacks and Liability for Transboundary Torts in International Law*, 126 *Yale L.J.* 1463-1464 (2017); Tim McCormack, *The Sony and OMP Double Whammy: International Law and Cyber Attacks*, 18 *SMU SCI. & TECH. L. REV.* 379, 384-385 (2015) (describing the discussions underpinning the Tallinn Manual concerning whether international law applies to cyber operations).

¹³⁴ McCormack, *supra* note 150, at 384-385; S.S. *Lotus* (Fr. v. Turk.), 1927 P.C.I.J. (ser. A) No. 10, at 31 (Sept. 7) (“Restrictions upon the independence of States cannot therefore

crux of this position is that states are free sovereign entities that have not consented to be limited in their pursuit of cyber activities, either by practice or by treaty.¹³⁵ Furthermore, efforts at establishing even basic, non-binding norms have failed on the international stage.¹³⁶ That said, most scholars have concluded that existing international law does apply to cyber operations and I will proceed on that basis.¹³⁷

International law is composed of consensual agreements (treaties) and binding customary international law (CIL) that results from the general and consistent practice of states followed out of a sense of legal obligation or *opinio juris sive necessitatis*.¹³⁸ Important to CIL is the widespread acceptance of and participation in a certain practice by states, though it is not necessary that every state subscribe to the practice. The behavior of specially affected states will often matter more.¹³⁹ There is also the concept of “soft law” or “norms” that do not have a legally binding character, but that may provide evidence of binding CIL.¹⁴⁰ United Nations General Assembly (UNGA) Resolutions, which are non-binding, are an example of “soft law” that may provide evidence for *opinio juris* or, if widely accepted, may eventually provide the basis for CIL.¹⁴¹ Generally speaking, treaties have the benefit of being clearer than CIL, but once CIL has been established it is considered binding on all states as opposed to just those that are party to a treaty.¹⁴²

be presumed”).

¹³⁵ *Id.*

¹³⁶ See Stefan Soesanto & Fosca D’Incau, *The UN GGE is Dead: Time to Fall Forward*, EUR. COUNCIL ON FOREIGN REL. (Aug. 15, 2017), http://www.ecfr.eu/article/commentary_time_to_fall_forward_on_cyber_governance; See also Ann Väljataga, *Back to Square One? The Fifth UN GGE Fails to Submit Conclusive Report at the UN General Assembly*, NATO COOPERATIVE CYBER DEF. CTR. OF EXCELLENCE (Sept. 1, 2017), <https://ccdcoe.org/back-square-one-fifth-un-gge-fails-submit-conclusive-report-un-general-assembly.html>.

¹³⁷ See, e.g. Väljataga, *supra* note 136 (“A whole school of legal and government experts have built a well-argued and coherent system of rules based on the premises that international law governs everything virtual just as it does everything tangible.”)

¹³⁸ IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 3-19 (6th ed. 2003); see also *North Sea Continental Shelf (Ger./Den.; Ger./Neth.)*, Judgment, 1969 I.C.J. Rep. 3, 42-44, ¶¶ 73-78 (Feb. 20); Statute of the International Court of Justice art. 38, June 26, 1945, 59 Stat. 1055, U.S.T.S. 993 [hereinafter ICJ Statute].

¹³⁹ *Id.*

¹⁴⁰ BROWNLIE, *supra* note 138, at 14-15.

¹⁴¹ *Id.* at 6-8.

¹⁴² *Id.* at 3-4.

A key aspect of understanding how a treaty affects the parties is the law on treaty interpretation. The Vienna Convention on the Law of Treaties (VCLT), the treaty on treaties, lays out the basic provisions.¹⁴³ Treaty terms are understood by their “ordinary meaning,” “in their context,” and in “light of their object and purpose.”¹⁴⁴ The context and purpose includes the preamble, annexes, and other agreements related to the treaty.¹⁴⁵ Also taken into account are subsequent agreements, subsequent practice, and other “relevant rules of international law.”¹⁴⁶ Supplementary means of treaty interpretation, when other means of interpretation leave the meaning ambiguous or obscure or would lead to a result which is “manifestly absurd or unreasonable,” include “preparatory work of the treaty and the circumstances of its conclusion.”¹⁴⁷ Additionally, legal opinions of the International Court of Justice (ICJ) and the preceding Permanent Court of International Justice (PCIJ), though technically non-binding beyond the immediate parties before them, also provide a useful resource for interpreting and understanding international law.¹⁴⁸

The Charter of the United Nations (UN Charter), which regulates *jus ad bellum*, is a conventional starting point for the international law potentially applicable to cyber operations between states. The UN Charter, in Article 2(4), states, “All Members shall...refrain from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.”¹⁴⁹ The ICJ has recognized this provision as CIL, described as the “principle of the non-use of force.”¹⁵⁰ The prevailing view on the term is that it refers to armed force.¹⁵¹ Supporting this position is the *travaux préparatoires*, or preparatory work, which excluded economic and political coercion from inclusion in the term.¹⁵² However, the term “use of force” has been in near

¹⁴³ Vienna Convention on the Law of Treaties arts. 31-32, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter VCLT].

¹⁴⁴ *Id.* at art. 31.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at art. 32.

¹⁴⁸ ICJ Statute, *supra* note 138, art. 59.

¹⁴⁹ U.N. Charter art. 2(4).

¹⁵⁰ Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. Rep. 14, 93-94, ¶ 174 (June 27) [hereinafter Nicaragua Case].

¹⁵¹ DINNISS, *supra* note 102, at 40.

¹⁵² *Id.*; ROSCINI, *supra* note 78, at 45-46; See also MICHAEL N. SCHMITT, COMPUTER NETWORK ATTACK AND THE USE OF FORCE IN INTERNATIONAL LAW: THOUGHTS ON A NORMATIVE

constant debate since it was created and some of the ambiguity surrounding its interpretation was likely the price of consensus.¹⁵³

In addition to a “use of force” there is also the concept of an “armed attack” under *jus ad bellum*. Found in the UN Charter in Article 51, an “armed attack” has been called the “most grave forms of a use of force” by the ICJ.¹⁵⁴ Thus, we can think of an “armed attack” as at least qualifying as a use of force. The UNGA in the Annex to Resolution 3314, adopted by consensus on December 14, 1974, defined “aggression” as the “use of armed force by a State,” and provided an illustrative list of acts that qualify as acts of aggression. While the term “act of aggression” refers to a standard applied by the Security Council under Article 39, it has been used by at least one member of the ICJ to interpret what could constitute an “armed attack” if the act had the requisite “scale and effects.”¹⁵⁵ Therefore, the list provided in UNGA Resolution 3314 is useful for considering what state activities may qualify as a use of force, or, if sufficiently grave, an armed attack. The list includes: (1) invasion or attack by the armed forces; (2) bombardment by the armed forces; (3) blockade of the ports or coasts; (4) attack by the armed forces on the land, sea, or marine and air fleets of another state; (5) sending of armed bands or mercenaries; and other actions concerning the use of armed forces or territory of another state to carry out acts against a third state with equivalent gravity to the other listed items.¹⁵⁶ This list supports the contention of some writers that when the UN Charter was drafted in 1945, force meant physical armed force, which was interpreted as traditional military force using traditional weapons.¹⁵⁷

In the Nicaragua Case, the ICJ declined to include the “provision of weapons or logistical or other support” in the concept of “armed attack,”

FRAMEWORK (1999) (citing Doc. 784, I/1/27, 6 U.N.C.I.O. Docs. 331, 334, 609 (1945)).

¹⁵³ Karl Zemanek, *Armed Attack*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW (2012), Vol I, at 599; DINNISS, *supra* note 102, at 45.

¹⁵⁴ Nicaragua Case, *supra* note 150, at 103-104, ¶ 195.

¹⁵⁵ *Id.*; See also Nicaragua Case, *supra* note 150, at 338-339 (dissenting opinion of Judge Schwebel) (stating, “Thus the Definition of Aggression is again directly and explicitly related to the use of force prohibited by Article 2 (4) of the Charter. Article 3 specifies certain acts that shall ‘qualify as aggression’, i.e., that constitute the use of force in in violation of Article 2 (4).”).

¹⁵⁶ G.A. Res. 3314 (XXIX), Definition of Aggression, Annex, art. 3 (Dec. 14, 1974).

¹⁵⁷ DINNISS, *supra* note 102, at 43 (referring to a quote from the United Kingdom representative made as part of the *travaux préparatoires* for article 2(4) as evidence that “force” meant traditional military force).

instead noting that this should be considered a threat or use of force, or a violation of the customary international legal principle of non-intervention.¹⁵⁸ This limitation by the ICJ supports an interpretation of “armed attack” that excludes indirect means of force, unless the sending state exercises “effective control” over the armed force.¹⁵⁹ This observation is drawn from the ICJ’s conclusion that providing weapons and training to a paramilitary group, thereby indirectly facilitating armed force against a state, was insufficient to establish an armed attack.¹⁶⁰ The treatment of indirect force and whether it can rise to an “armed attack” is important for understanding when a cyber operation could trigger a state’s right of self-defense under Article 51, because cyber operations are often considered indirect applications of force.¹⁶¹

The next consideration is the “principle of non-intervention,” considered CIL by the ICJ.¹⁶² The “principle of non-intervention” is derived from the understanding that states are equal sovereign entities, and therefore no state has the right to intervene or interfere with another state’s internal or external affairs.¹⁶³ The principle was laid out in UNGA Resolution 2625, adopted on 24 October 1970, and requires states not to intervene, “directly or indirectly, for any reason whatever, in the internal or external affairs of any other State.”¹⁶⁴ Prohibited interventions must include an element of coercion bearing on matters traditionally within the *domaine réservé* of the state, such as political, economic, social and cultural systems.¹⁶⁵ Importantly, not every action taken below the use of force can be considered an intervention, as many cyber activities do not impact areas that can be considered the *domaine réservé* of the state.¹⁶⁶

¹⁵⁸ Nicaragua Case, *supra* note 150, at 84, ¶ 195 & 105, ¶ 247.

¹⁵⁹ *Id.* at 64-65, ¶ 115.

¹⁶⁰ *Id.* at 103-104, ¶ 195.

¹⁶¹ DINNISS, *supra* note 102, at 65-66.

¹⁶² Nicaragua Case, *supra* note 150, at 93-94, ¶ 174; *but see id.* at 107-110 (finding that state practice does not justify a “right of intervention” in “contemporary international law” as opposed to a prohibition on non-intervention).

¹⁶³ G.A. Res. 2625 (XXV), Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations (Oct. 24, 1970); *see also* Nicaragua Case, *supra* note 150, at 93-94, ¶ 174.

¹⁶⁴ *Id.*

¹⁶⁵ Walton, *supra* note 133, at 1472-73.

¹⁶⁶ *Id.*

Apart from these three categories, there are other possibilities for cyber operations to incur the international responsibility of an offending state.¹⁶⁷ International responsibility for an internationally wrongful act attaches whenever a state breaches an international obligation of the state and that breach is legally attributable to the offending state.¹⁶⁸ The source of this obligation can exist as a treaty obligation or an obligation under CIL.¹⁶⁹ Some scholars have tried to reach low-intensity cyber operations through this area of law by appealing to concepts of sovereignty.¹⁷⁰

In its commentary on Tallinn 2.0, Rule 4, the IGE states, “Cyber operations that prevent or disregard another State’s exercise of sovereign prerogatives constitute a violation of such sovereignty and are prohibited by international law.”¹⁷¹ However, this comment lacks a direct citation and it is unclear what the basis for this is as an independent rule capable of being violated rather than a principle from which other rules flow, such as the prohibition on non-intervention.¹⁷² A later example provided in the commentary provides the example of a “non-consensual exercise of enforcement jurisdiction in another State’s territory as a violation of that State’s sovereignty” and refers to UN Security Council Resolution 138 for support.¹⁷³

Another prominent area of concern when assessing cyber operations is a state’s international obligations under international humanitarian law (IHL), also known as the law of armed conflict (LOAC). While not universally accepted, many states consider IHL to apply during an armed conflict between states as a *lex specialis* that displaces other international obligations between the conflicting parties.¹⁷⁴ This area of law, known as *jus in bello*, is

¹⁶⁷ *Id.* at 1474-76.

¹⁶⁸ *Id.*; See also Int’l Law Comm’n, Draft Articles on the Responsibility of States for Internationally Wrongful Acts, with commentaries, art. 2 [hereinafter ILC Draft Articles], in Report of the International Law Commission on the Work of Its Fifty-third Session, U.N. Doc. A/56/10 (2001).

¹⁶⁹ Walton, *supra* note 133, at 1474-76.

¹⁷⁰ *Id.*

¹⁷¹ TALLINN 2.0, *supra* note 96, at 19 (Rule 4 commentary).

¹⁷² Walton, *supra* note 133, at 1475-1477.

¹⁷³ TALLINN 2.0, *supra* note 96, at 19 (Rule 4 commentary, citing S.C. Res. 138, ¶ 1 (June 23, 1960)).

¹⁷⁴ Michael N. Schmitt, *Peacetime Cyber Responses and Wartime Cyber Operations under International Law: An Analytical Vade Mecum*, 8 HARV. NAT’L SEC. J. 239, 261 (2017) (hereinafter Schmitt Vade Mecum).

characterized by both treaty and customary international law. Violations of IHL can create both state and personal liability under international law.¹⁷⁵

Finally, it is worth noting that a cyber operation could also be characterized as an “unfriendly act” that is not inconsistent with any international obligation of the state.¹⁷⁶ Common examples of these types of acts include expelling diplomats, embargoes, or withdrawal of voluntary aid programs.¹⁷⁷ Espionage, while triggering harsh punishments under domestic law, also could be said to fit into this area of unfriendly actions that states have historically not treated as violations of international law.¹⁷⁸

The five categories outlined above: (1) Armed Attack; (2) Use of Force; (3) Prohibited Intervention; (4) Other (including IHL during an armed conflict), and (5) Unfriendly Acts, provide a range which we can use to begin assessing cyber operations. It bears repeating that this range is not exclusive and further granularity is possible; however, it does cover the major issues raised by cyber operations between states.

C. Applying International Law to Cyber Operations

In conducting this analysis, the “cyber” part of the cyber operation is not the weapon analyzed. The malware used to effectuate the harm often receives the most attention, with colorful names like virus, logic bomb, worm, and so forth.¹⁷⁹ The computer code, while interesting in its own right, is better understood as the method by which the operation is carried out. Some scholars treat the code itself as the weapon, triggering the requirement for a

¹⁷⁵ See, e.g. Rome Statute of the International Criminal Court, pmbl., *opened for signature* on July 17, 1998, 2187 U.N.T.S. 90 (entered into force July 1, 2002).

¹⁷⁶ ILC Draft Articles, *supra* note 168, at 128.

¹⁷⁷ *Id.*

¹⁷⁸ See Walton, *supra* note 133, at 1475-77; See also International Conferences (The Hague), *Hague Convention (IV) Respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land*, 18 October 1907, art. 29-31 (hereinafter *Hague Convention IV*)(the treatment of spies during an armed conflict including the right to a trial prior to punishment); See Schmitt Vade Mecum, *supra* note 174, at 256 (recognizing that espionage is not *per se* unlawful under international law).

¹⁷⁹ *What is the Difference: Viruses, Worms, Trojans, and Bots?*, Cisco, <https://www.cisco.com/c/en/us/about/security-center/virus-differences.html#2> (last visited June 4, 2019); see also DINNISS, *supra* note 102, at 294.

legal assessment under Article 36 of the Additional Protocol I to the Geneva Conventions (AP I).¹⁸⁰ Article 36 of AP I states:

“In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party.”¹⁸¹

As a treaty, this requirement is binding on the parties and would be interpreted using the ordinary meaning of the words.¹⁸² “Means” is normally defined as “an action or system by which a result is achieved,” and “method” is defined as “a particular procedure for accomplishing or approaching something, especially a systematic or established one.”¹⁸³ The International Committee of the Red Cross (ICRC) considers this requirement reflecting a legal truism applicable to all states, in that all states have a duty not to use illegal weapons, means, or methods of warfare.¹⁸⁴

Rule 41 of Tallinn 1.0 concludes: “‘means of cyber warfare’ are cyber weapons and their associated cyber systems.”¹⁸⁵ Tallinn 1.0 goes on to define “cyber weapons” as means of warfare when, based on their design, use, or intended use they create effects that would constitute an “attack” under Rule 30.¹⁸⁶ Notably, this suggests almost all cases involving cyber operations to date have not involved “cyber weapons.”¹⁸⁷

¹⁸⁰ See, e.g. ROSCINI, *supra* note 78, at 51 (citing Yoram Dinstein’s assertion that “cyber... must be looked upon as a new means of warfare—in other words, a weapon: no less and no more than other weapons.”).

¹⁸¹ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, art. 36, June 8, 1977, 1125 U.N.T.S. 3 (entered into force Dec. 7, 1978) [hereinafter AP I].

¹⁸² VCLT, *supra* note 143, at art. 31.

¹⁸³ *Method*, ENGLISH OXFORD LIVING DICTIONARY, <https://en.oxforddictionaries.com/definition/method> (last visited June 4, 2019); *Means*, ENGLISH OXFORD LIVING DICTIONARY, <https://en.oxforddictionaries.com/definition/means> (last visited June 4, 2019).

¹⁸⁴ INTERNATIONAL COMMITTEE OF THE RED CROSS, *A GUIDE TO THE LEGAL REVIEW OF NEW WEAPONS, MEANS AND METHODS OF WARFARE: MEASURES TO IMPLEMENT ARTICLE 36 OF ADDITIONAL PROTOCOL I OF 1977* 933 (2006).

¹⁸⁵ TALLINN 1.0, *supra* note 95, at 141 (Rule 41).

¹⁸⁶ *Id.* (commentary to Rule 41).

¹⁸⁷ See, e.g. INTERNATIONAL COMMITTEE OF THE RED CROSS, 32ND INTERNATIONAL

This approach is focused on the effects of the operation. If, for example, the code is used to turn something off, lock out the normal user, or cause the machine to run in a way so as to damage itself, then the malware's effects can be analogized to a physical weapon with similar effects on use. While the effects may, at first blush, appear similar to a weapon, it is only because of the manner in which the machine itself is being controlled.

Computer code is different from physical weapons. Cyber operations require deception, exploits, design errors and/or user errors to be effective.¹⁸⁸ Malware often does no lasting damage and can sometimes be neutralized just by rebooting or disconnecting the system.¹⁸⁹ It requires a thorough understanding of the adversary's system including how to exploit vulnerabilities in the software.¹⁹⁰ This requires extensive preparations, intelligence, and access. In many operations there is a complete absence of anything that could be described as force.¹⁹¹ The effects usually are not the same, because malware often boils down to competing or unauthorized instructions to a machine from a hostile actor.¹⁹² Thus, the amount of "harm" one can cause is usually limited by the design and function of the machine itself; not on the malware used to gain control. Malware, like money or logistics support, can be used to cause harm, but only with a corresponding element to influence.

As such, computer code is better characterized as a method of warfare, no matter what the ultimate effects caused. It is the "manner" in which one state takes control of another state's computer systems or data that matters. Even in data integrity operations that affect the data a machine is relying on for its decisions, the offending state is still effectively dictating the machine's actions.

In the commentary to Rule 41, in the final note, Tallinn 1.0 acknowledges that cyber operations that do not rise to their definition of "attack"

CONFERENCE, INTERNATIONAL HUMANITARIAN LAW AND THE CHALLENGES OF CONTEMPORARY ARMED CONFLICTS 39 (2015) [hereinafter ICRC 2015 Report] (noting that cyber warfare has not led to significant humanitarian consequences); *see also* Walton, *supra* note 133, at 1467 ("low-intensity cyber attacks [are] incredibly common" while noting that few if any cyber operations can be said to be armed attacks under international law).

¹⁸⁸ LIBICKI, *supra* note 120, at 13-20 (discussing how external, malicious "cyberattacks" work).

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.* at 19.

constitute methods of warfare.¹⁹³ Accordingly, the IGE acknowledges that absent certain effects, the code is not a weapon and therefore its use in an operation must be considered a method of warfare. Given the complete dearth of incidents that could qualify as a “cyber attack,” this amounts to tacit recognition that cyber operations *are* methods of warfare that *could theoretically* involve means.

The use of exploits, malware, and the like to gain access and then deny or manipulate an adversary’s system is always a tactic, technique, or procedure (TTP).¹⁹⁴ However, the machine element the code is controlling could be considered a weapon capable of causing an “armed attack” if the “scale and effects” of the physical damage caused were sufficient. This interpretation is consistent with state practice following 9/11.¹⁹⁵

Given that the same requirements apply under Article 36 of Additional Protocol I to conduct a legal review of both means and methods of warfare, this distinction does not change the analysis much.¹⁹⁶ However, it places the focus of the analysis back onto the only possible weapon—the machine the code is directing. Thus, a cyber operation without a corresponding machine weapon, would not qualify as an “armed attack.” This is because no “armed force” or weapon is being used by the offending state.

Finally, this author acknowledges that *all* actions through cyberspace are of a dual nature. It is impossible for an operation to occur through cyberspace without some form of information going to a physical machine. In essence then, it is almost impossible for this analysis to exist in clean distinctions—it is necessary to consider what is the primary *focus* and *nature* of the harm being inflicted in addition to the scale and effects in order to properly characterize a cyber operation under international law. The key contribution of this model is to recognize that cyber operations are inherently informational; but the machines controlled could legally be characterized as instrumentalities capable of inflicting attacks under international law.

¹⁹³ TALLINN 1.0, *supra* note 95, at 142 (Rule 41 commentary).

¹⁹⁴ *Id.* (describing cyber tactics, techniques, and procedures); *See also* JP 3-12, *supra* note 85, at II-7 (“cyberspace attacks” used to deny or manipulate adversaries’ systems).

¹⁹⁵ ROSCINI, *supra* note 78, at 70-71; *See also* S.C. Res. 1368, Threats to International Peace and Security Caused by Terrorist Acts, U.N. Doc. S/RES/1368 (2001); *and* S.C. Res. 1373, U.N. SCOR, 4385th mtg, Threats to International Peace and Security Caused by Terrorist Acts, (2001).

¹⁹⁶ API, *supra* note 181, art. 36.

However, given the current state of the law it is probably impossible to remove all of the legal ambiguities associated with operations in cyberspace. State practice in this area could be characterized as non-committal, with terms like “cyber vandalism” used to describe significant incidents.¹⁹⁷ Also, as previously noted, efforts at establishing even basic international norms for cyberspace have failed. The resulting legal ambiguity, in addition to the challenges associated with attribution, has contributed to what has been described as “gray zone conflicts” or “gray zone challenges.”¹⁹⁸ “Gray zone conflicts” exist when states are able to operate in a zone of legal and factual ambiguity that allows them to take actions below the threshold at which their adversary will forcefully respond.¹⁹⁹ Cyber operations are particularly attractive for these types of coercive actions because, along with the legal ambiguity already discussed, factual attribution is incredibly difficult.

D. Attribution and Ambiguity

Attribution in cyberspace presents a special challenge unique to cyber operations. Factual attribution is defined as “determining the identity or location of an attacker or an attacker’s intermediary.”²⁰⁰ This is different from legal attribution in international law, which is required in order for state responsibility to attach to a state for its internationally wrongful acts.²⁰¹ In order to establish legal attribution, a victim state will need evidence (factual attribution) that ties the wrongful conduct (action or omission) to a state organ, individual or group associated with the state.²⁰²

There are a number of reasons why factual attribution in cyberspace is challenging. The global Internet, which makes up most of what can be considered cyberspace, functions based on a suite of protocols.²⁰³ These protocols control how packets of data are transmitted over the Internet.²⁰⁴

¹⁹⁷ Walton, *supra* note 133, at 1477 (quoting President Obama’s characterization of the Sony hack as “cyber vandalism,” a term with no legal meaning).

¹⁹⁸ USSOCOM WHITE PAPER, *supra* note 13.

¹⁹⁹ *Id.* at 4 (“gray zone challenges feature *ambiguity* regarding the nature of the conflict, the parties involved or the relevant policy and legal frameworks”).

²⁰⁰ DAVID A. WHEELER & GREGORY N. LARSEN, INSTITUTE FOR DEFENSE ANALYSES, TECHNIQUES FOR CYBER ATTACK ATTRIBUTION, 1 (2003).

²⁰¹ ILC Draft Articles, *supra* note 168, at 34-36 (art. 2 and its commentary).

²⁰² *Id.*

²⁰³ See LEINER ET AL., *supra* note 130, at 3-6.

²⁰⁴ WHEELER, *supra* note 200, at 3.

Manipulating these protocols is considered trivial for nation-state hackers.²⁰⁵ Moreover, an operation or intrusion can literally last milliseconds, and result in no or only subtle changes to the computer system, making even detection of a cyber operation challenging, let alone attribution.²⁰⁶

A corollary to the connectivity principle also helps explain why attribution in cyberspace is challenging. As noted earlier, humans are not part of cyberspace. Humans are not connected to the network or any device. A cartoon by Peter Steiner of two dogs talking while one sits at a computer, captioned with the phrase “On the Internet, nobody knows you’re a dog,” nicely illustrates this point.²⁰⁷ The consequence of this principle is that information in cyberspace is always filtered through a machine and therefore subject to manipulation.

Attribution affects how the law applies to cyber operations in several ways. The necessity for factual attribution often requires information-gathering on the part of the victim state, a process that delays or inhibits a response.²⁰⁸ Additionally, this information-gathering process normally requires employing intelligence sources and techniques that states may not be willing to declassify.²⁰⁹ The result is that the information a state is willing to publicly disclose often appears incomplete, thus opening it to challenges.²¹⁰ Taken together, states are left with limited incentives to subject their evidence to legal scrutiny at the international level. This issue is further

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 18; *see also* LIBICKI, *supra* note 120, at 43 (“Computers do not leave distinct physical evidence behind”).

²⁰⁷ Michael Cavanaugh, ‘NOBODY KNOWS YOU’RE A DOG’: As Iconic Internet Cartoon Turns 20, Creator Peter Steiner Knows the Joke Rings as Relevant as Ever, WASH. POST, Jul. 31, 2013, https://www.washingtonpost.com/blogs/comic-riffs/post/nobody-knows-youre-a-dog-as-iconic-internet-cartoon-turns-20-creator-peter-steiner-knows-the-joke-rings-as-relevant-as-ever/2013/07/31/73372600-f98d-11e2-8e84-c56731a202fb_blog.html?utm_term=.1c4fb48bc2f7 (discussing the impact of Peter Steiner’s iconic cartoon).

²⁰⁸ DINNISS, *supra* note 102, at 101 (observing that the legal requirements for attribution necessitate a victim collect hard evidence and not engage in “hasty reactions”).

²⁰⁹ *See, e.g.* Jack Goldsmith, *The Sony Hack: Attribution Problems, and the Connection to Domestic Surveillance*, LAWFARE (Dec. 19, 2014), <https://www.lawfareblog.com/sony-hack-attribution-problems-and-connection-domestic-surveillance> (noting the FBI only released part of the information it was basing its attribution decision on in order to protect sensitive sources and methods).

²¹⁰ *Id.* (criticizing the FBI’s evidence as conclusory and questioning the value of making any attribution announcement based on the information provided).

compounded by the ICJ's stringent evidentiary requirements for attributing an armed attack to a state, as seen in the *Iran Oil Platforms* case.²¹¹

The difficulties associated with attributing a cyber operation to a given state actor, in conjunction with the legal ambiguities associated with characterizing the operation under international law, have enabled states to engage in what strategists have called "gray zone conflicts". Gray zone conflicts exist where there are "competitive interactions among and within state and non-state actors that fall between the traditional war and peace duality."²¹² Gray zone challenges are able to exist and persist where there is "ambiguity regarding the nature of the conflict, the parties involved or the relevant policy and legal frameworks."²¹³ As we have already seen, the difficulties inherent in characterizing and classifying cyber operations make them key candidates for this type of conflict. As one author notes, low intensity cyber operations defy easy legal characterization, often lack an element of force, and are more likely to fall into a gap in international law.²¹⁴

The summation of the concepts covered establishes why hostile state cyber operations can fairly be characterized as grey zone conflicts. Most, if not all, state cyber operations to date have been "low-intensity" operations that skirt the line below a use of force. None have risen to an armed attack, though the technical possibility exists. Instead, the actions taken remain in a nebulous legal zone that requires the victim state to characterize the harmful action in order to respond. Yet, armed reprisals are prohibited under international law and countermeasures are only available while a breach of an international obligation is ongoing.²¹⁵ Additionally, the ICJ's legal regime for attribution requires substantial evidence with the burden of proof placed on the victim state. Given the practical difficulties in obtaining the evidence for attribution, combined with the sensitivities associated with releasing how that evidence was gathered, states are unlikely to rely on formal international

²¹¹ See James A. Green, *The Oil Platforms Case: An Error in Judgment*, 9 J. CONFLICT & SEC. L. 357, 362-363 (2004) (discussing the ICJ's assessment of the evidence produced by the United States as insufficient to establish Iranian responsibility for a missile attack), *cf.* *Oil Platforms (Iran v. U.S.)*, 2003 I.C.J. Rep. (Nov. 6); *see also* DINNISS, *supra* note 102, at 101 (noting the ICJ placed the burden of proof for attribution on the state invoking the right of self-defence).

²¹² USSOCOM WHITE PAPER, *supra* note 13.

²¹³ *Id.*

²¹⁴ Walton, *supra* note 133, at 1469-1477.

²¹⁵ DINNISS, *supra* note 102, at 101; *See also* ILC Draft Articles, *supra* note 168, at 128-129.

legal mechanisms for adjudication or deterrence. Thus, the current state of hostile cyber operations between states, outside of international armed conflicts, is a persistent gray zone.

The existence of this gray zone for cyber operations characterizes the context in which AI softbots will be employed. The legal challenge of characterizing cyber operations combined with the inherent difficulties of attribution has made hostile state cyber activities a persistent presence in cyberspace. In order to deal with this persistent presence, some militaries are turning to AI.²¹⁶

IV. ARTIFICIAL INTELLIGENCE IN CYBER OPERATIONS

As seen in Section I, with the example of the SGR-1 Robot, AI is already being used by state armed forces. AI allows a state to delegate decision making in circumstances where machines are better suited to accomplish difficult or tedious tasks. Automated missile defense provides a clear example of a time-sensitive situation involving complex calculations where machines are better suited for the task than humans.²¹⁷ For cyber operations, AI represents a powerful means to intelligently automate and adapt certain types of software to address threats emerging at machine speed.²¹⁸ This capability is crucial for modern militaries.

Operations that occur in cyberspace, whether in offense or defense, occur near the speed of light. The connectivity principle of cyberspace means that, once a connection is established, the interaction is occurring as though part of a continuous unit. Humans are not physically part of cyberspace and therefore cannot keep up with events taking place in cyberspace.²¹⁹ As a result,

²¹⁶ ELSA B. KANIA, *BATTLEFIELD SINGULARITY, ARTIFICIAL INTELLIGENCE, MILITARY REVOLUTION, AND CHINA'S FUTURE MILITARY POWER* 6-8 (2017), <https://www.cnas.org/publications/reports/battlefield-singularity-artificial-intelligence-military-revolution-and-chinas-future-military-power>.

²¹⁷ Jack M. Beard, *Autonomous Weapons and Human Responsibilities*, 45 *Geo. J. Int'l L.* 617, 630-631 (discussing the human operator's role in the operation of automated missile defense).

²¹⁸ See, e.g. Sydney J. Freedberg Jr., *Do Young Humans + Artificial Intelligence = Cybersecurity?*, *BREAKING DEFENSE*, Nov. 13, 2017, <https://breakingdefense.com/2017/11/do-young-humans-artificial-intelligence-cybersecurity/> (discussing the strategic imperative for software automation that can detect and correct vulnerabilities without human intervention).

²¹⁹ See GREG ALLEN & TANIEL CHAN, *ARTIFICIAL INTELLIGENCE AND NATIONAL SECURITY* 24

if a human is included in the decision-making “loop,” a concept referred to as a “human-in-the-loop,” the operation will be limited by the speed of the human operator.²²⁰ AI softbots do not suffer from this limitation. Thus, AI offers the ability to delegate decision-making in a way that can keep pace with activities occurring in cyberspace.²²¹

Beyond being able to rapidly make decisions, AI also has the potential to adapt its software through machine learning.²²² This adaptation capability is important for defense against rapidly evolving and disparate threats.²²³ Yet, the ability of an AI program to change itself generates uncertainty with regard to its ability to comply with the law at some point in the future. One could imagine an AI enhanced program that, when initially reviewed, makes choices that are lawful, but at a later point has “learned” that those choices are less effective. While addressing this issue is primarily a matter of creating appropriate design limitations and transparency in its decision making process, it remains a legitimate concern due to the complexity and variability of the cyberspace environment.

Legal considerations for AI enhanced cyber operations fall under two broad areas of international humanitarian law: (1) whether it is *per se* unlawful for a state to use AI in cyber operations; and (2) *how* an AI softbot

(2017), <https://www.belfercenter.org/sites/default/files/files/publication/AI%20NatSec%20-%20final.pdf> (stating, “Most actors in cyberspace will have no choice but to enable relatively high levels of autonomy, or else risk being outcompeted by ‘machine speed’ adversaries”).

²²⁰ LOSING HUMANITY, *supra* note 1, at 2 (establishing three categories for human involvement in the decision to use force: (1) Human-in-the-Loop; (2) Human-on-the-Loop; and (3) Human-out-of-the-Loop, which correspond to (1) human control; (2) human oversight; and (3) human absent); *see also* Michael N. Schmitt & Jeffrey S. Thurnher, “*Out of the Loop*”: *Autonomous Weapon Systems and the Law of Armed Conflict*, 4 HARV. NAT’L. SEC. J. 231, 237-239 (2013) (noting that operational realities of the high tempo of automated combat will push the U.S. Department of Defense to give up its practice of having a human in the loop).

²²¹ ALLEN & CHAN, *supra* note 219, at 24.

²²² Cantos Webinar, *supra* note 14 (discussing machine learning in AI software systems); *See also* Ryan Kh, *How AI is the Future of Cybersecurity*, INFOSECURITY MAG., Dec. 1, 2017, <https://www.infosecurity-magazine.com/next-gen-infosec/ai-future-cybersecurity/> (discussing how machine learning allows AI to adapt over time to new risks).

²²³ *Id.*; *See also* MILES BRUNDAGE ET AL., THE MALICIOUS USE OF ARTIFICIAL INTELLIGENCE: FORECASTING, PREVENTION AND MITIGATION 31 (2018), <https://arxiv.org/ftp/arxiv/papers/1802/1802.07228.pdf> [hereinafter MALICIOUS AI REPORT] (noting AI is “already being deployed for purposes such as anomaly and malware detection”).

would be used in a cyber operation. For both issues, particular attention must be paid to the previously discussed concepts of design, task environment, and transparency and how those issues affect an AI softbot's ability to comply with international law.

This discussion specifically applies to the use of intelligent agents in software that make decisions concerning offensive or defensive cyber operations. It is important to recognize that this discussion leans forward on the technology that is currently available. Stand-alone AI software systems that can detect software flaws and automatically make changes to the system already exist, but only in simplified versions.²²⁴ As one report notes, a system that can detect software flaws for defense is equally applicable to offensive cyber operations.²²⁵ Thus much of this discussion pertains to how these systems will evolve over the next several years as the current simplified versions gain in complexity and capability.

For the immediate future though, it is more likely that AI will be used to automate and improve existing forms of harmful cyber activity, often on the production side.²²⁶ Examples of this include: creating fake news reports with realistic video and audio, improving autonomous exploit detection, automating “hyper-personalized disinformation campaigns,” and “denial-of-information attacks” that are used to clutter legitimate information sources with substantial amounts of false or distracting information.²²⁷

Many of the techniques that are used to create narrow, task oriented intelligent agents are currently used in a more limited fashion in other forms of defensive software.²²⁸ These include using neural nets in perimeter defense, machine learning to process large amounts of data in security logs, and search techniques used to model threat behavior and improve intrusion detection.²²⁹ AI techniques have also been used to enhance user authentication, detect

²²⁴ See, e.g. Devin Coldewey, *Carnegie Mellon's Mayhem AI takes home \$2 million from DARPA's Cyber Grand Challenge*, TECHCRUNCH (Aug. 5, 2016), <https://techcrunch.com/2016/08/05/carnegie-mellons-mayhem-ai-takes-home-2-million-from-darpas-cyber-grand-challenge/>.

²²⁵ MALICIOUS AI REPORT, *supra* note 223, at 16.

²²⁶ *Id.* at 23-29 (listing various ways AI is forecasted to be used by malicious actors over the next five years).

²²⁷ *Id.*

²²⁸ Enn Tyugu, *Artificial Intelligence in Cyber Defense*, PROC. 3RD INT'L CONF. ON CYBER CONFLICT 95 at 97-98 (Christian Czosseck, E. Tyugu & T. Wingfield eds., 2011).

²²⁹ *Id.* at 98-101.

phishing websites, and improve spam and malware detection.²³⁰ Yet, while AI enhanced security practices have been shown to be effective against human-authored malware, research has demonstrated that AI enhanced offensive systems can learn to evade these defenses.²³¹ Thus, even as defensive technologies are enhanced, so too are offensive applications of the technology.

The recent boom and rapid advances of AI make it prudent to begin considering how international law would apply to independently operating, intelligent AI softbots of increasing complexity and capability. It is this author's contention that legal compliance will hinge on design concepts that will need to be implemented at an early phase of the AI softbot's development.

A. Unique Considerations for AI Softbots

Several differences exist between lethal autonomous weapon systems that operate in the physical environment and AI softbots that primarily operate in cyberspace. Comparing these two systems is useful for distinguishing the unique considerations facing AI softbots. As demonstrated in Section III, the artificial domain of cyberspace is substantially different from the natural domains. For AI softbots operating in cyberspace the central difference for AI enhanced AWS is the task environment. Recall from Section II that a task environment consists of an AI agent's: (1) performance measure; (2) sensors; (3) actuators; and (4) environment. For an AI softbot, each one of these is conceivably unique, largely because cyberspace, as an artificial environment, is fundamentally different from the physical domains. The different task environment of AI softbots will generate numerous design differences, not all of which will be legally significant. In this section we will focus on the differences most likely to alter the way the law applies to AI softbots. Specifically, unlike lethal autonomous weapon systems operating in the physical environment, AI softbots: (1) are untethered from an obvious weapon system; (2) have greater task variance; (3) are less likely to produce violent effects; (4) can use machine learning along more dimensions; and (5) operate in an artificial and connected environment.

²³⁰ Dr. Yaron Wolfsthal, *How AI is Sharpening the Edge of Cybersecurity*, ISRAELDEF., Feb. 14, 2018, <http://www.israeldefense.co.il/en/node/33072>; See also MALICIOUS AI REPORT, *supra* note 223, at 32.

²³¹ MALICIOUS AI REPORT, *supra* note 223, at 33 (While next-generation anti-virus systems exhibit adaptability, "research has already shown that AI systems may be able to learn to evade them").

1. Untethered

With AI softbots, the AI element has been divorced from an obvious weapon system. For example, an AI program running on the SGR-1, an automated turret, is part of a weapon system, and thus its capabilities and limitations would need to be considered in conjunction with the attached machine.²³² There is no realistic ambiguity that this is a weapon system and a state would be under an obligation to review its capability to comply with international law pursuant to CIL and potentially Article 36 of API.²³³ In other words, the SGR-1's actuator or means of interacting with its environment includes what would traditionally be considered a weapon under international law. Conversely, AI softbots are not tied to obvious weapons and may have applications in state operations outside of interstate conflicts.

Any given AI softbot, in the extreme, could theoretically affect anything connected or reachable in or through cyberspace. In the case of an AI softbot that can interact with a large variety of physical machines, the physical component capable of being considered a weapon under international law is thus neither obvious, nor necessary.²³⁴ This generates ambiguity as to the legal framework applicable to AI softbots. AI softbots capable of operating in the "grey area" of low-intensity operations that cause little or no physical damage add to the legal ambiguity of whether a given AI softbot must comply with certain legal requirements, such as the IHL requirement of distinction or Article 36 of Additional Protocol I. These legal ambiguities, combined with the difficulties associated with attribution in cyberspace could create incentives for states willing to engage in norm-challenging behavior to deploy AI softbots without rigorous design and testing.

2. Task Variance

The same AI softbots could be used under *jus extra bellum* (outside of conflict) and *jus in bello* (during conflict) legal frameworks. Current AI

²³² LOSING HUMANITY, *supra* note 1, at 13-15 (describing the SGR-1); Schmitt & Thurnher, *supra* note 220, at 234-235 & 271-276 (discussing the "weapon system" concept and the requirement under article 36 of Additional Protocol I to conduct a legal review).

²³³ Schmitt, *A Reply to the Critics*, *supra* note 3, at 28 (observing non-Party states, like the United States, are only required to ensure weapons are lawful before use); *See also* API, *supra* note 181, at art. 36.

²³⁴ *See* ROSCINI, *supra* note 78, at 70-71 (noting that the use of a device "which results in a considerable loss of life and/or extensive destruction of property" fulfills the conditions of an armed attack).

agents are focused in their tasks; for example AlphaGo Zero is designed only to play Go.²³⁵ However, this will change moving forward. Already there is an AlphaZero AI program that can play and win at multiple games, all of which it taught itself (after first being provided the rules).²³⁶ As AI softbots continue to increase in complexity and generality they will be able to be set against multiple different tasks in cyberspace, implicating diverse legal concerns. This is because, unlike the SGR-1, the AI softbot's actuators are not necessarily pre-defined or limited by a designed physical architecture. This creates the potential for unrivaled complexity when compared to AWS that are based around a single weapon system.

3. Typically Non-Violent

In cyber operations, violent effects tend to be more theory than practice.²³⁷ This observation seems to mitigate many of the concerns raised by the Human Rights Watch (HRW) report, such as the necessity for "human judgment."²³⁸ Indeed, most states have only required a human in the decision making process when the capability was lethal in nature.²³⁹ If this practice were to crystallize into law, states could be incentivized to deploy more capabilities in cyberspace where significant but non-lethal effects can be achieved. Indeed, it is predicted that AI malware will in the future be used more often to maintain anonymity while producing harmful events on an increasingly

²³⁵ DAVID SILVER ET AL., *supra* note 66, at 1-2.

²³⁶ *Id.* at 4 (describing AlphaZero's ability to play Go, Shogi, and Chess); *But See* Jose Camacho Collados, *Is AlphaZero Really a Scientific Breakthrough in AI?*, MEDIUM (Dec. 11, 2017), <https://medium.com/@josecamachocollados/is-alphazero-really-a-scientific-breakthrough-in-ai-bf66ae1c84f2> (noting the "nuance" of teaching it the rules of the game first is not as simple as it may seem and that the generalization claims are thus not as robust).

²³⁷ *See* ICRC 2015 Report, *supra* note 187, at 39 (describing cyber warfare as computer operations used as a "means or method of warfare" that are technically possible of causing high numbers of civilian casualties).

²³⁸ LOSING HUMANITY, *supra* note 1, at 32-36 (describing the role of human judgment in subjective tests concerning proportionality and military necessity when applying lethal force).

²³⁹ U.S. DEP'T OF DEF., DIRECTIVE 3000.09, Autonomy in Weapon Systems 4(c)(3) (Nov. 12, 2012) [hereinafter DoDD 3000.09] (stating policy that "Autonomous weapon systems may be used to apply non-lethal, non-kinetic force"); *See also* Dr. Thomas Burri, *International Law and Artificial Intelligence*, 60 GER. Y.B. INT'L L. 91 2017 (vol. 60), Duncker & Humblot, Berlin 2019, pp. 91-108, at 98-99 (accessible at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3060191).

ambitious scale.²⁴⁰ The ability of AI enhanced cyber operations to effectively wage such “gray zone conflicts” will only encourage this trend, as, if cyber operations continue to remain below the clearer thresholds associated with armed attack, states are likely to struggle with how to respond.

4. Machine Learning

Machine learning at machine speed means AI softbots will adapt fast. AlphaZero went from knowing only the rules of the game of chess to beating Stockfish 8, a chess program already better than any human, after just four hours of self-play.²⁴¹ Future AI softbots will extend the technological capabilities of such tools even further and faster.²⁴² As a consequence of this, it would be impossible for any human lawyer, operator, or programmer to review every new iteration of an AI softbot for legal compliance. Moreover, AI softbots are more likely to be capable of changes in ways that frustrate legal review when compared to AI agents designed to work with physical machines. While it is possible to limit how AI programs learn, it is equally possible to construct learning mechanisms in ways that affect every component of the AI agent, which could produce a nigh infinite number of changes within a single program.²⁴³ The potential for extreme design and capability variations within a single AI softbot contrasts with AI systems designed to work with machine actuators that cannot be as rapidly modified or reproduced.

An AI softbot’s ability to adapt, through machine learning, will create additional challenges for states seeking to comply with Article 36 of AP I. Modifications to a “weapon system” normally trigger an additional legal review.²⁴⁴ An AI softbot, with capabilities that classify it as a weapon, would be capable of modifying itself (learning) in order to accomplish its tasks. Whether these changes are legally significant or not may require initial design efforts that place limits on what the AI softbot can learn. Thus, it may be incumbent upon designers and government lawyers to ensure legal compliance at the outset, rather than after the algorithm is completed and awaiting

²⁴⁰ MALICIOUS AI REPORT, *supra* note 223, at 21-22 (describing how AI will change the character of cyber threats).

²⁴¹ SILVER ET AL., *supra* note 66, at 4-7.

²⁴² MALICIOUS AI REPORT, *supra* note 223, at 16-18 (noting it has often been the case that once AI reaches human-level performance, it goes on to exceed even the most talented humans).

²⁴³ MODERN APPROACH, *supra* note 7, at 55.

²⁴⁴ Schmitt & Thurnher, *supra* note 220, at 272-273.

deployment. These efforts would require that AI softbots be “instructed” on *what not to do* prior to deployment in order to ensure compliance with IHL.

Similar concerns exist outside of IHL, where compliance with international law generally could be “unlearned” if careful, preventative design steps are not taken. This reinforces the need to consider design limitations at an early phase of development, as a policy matter, even if the AI softbot lacks “weapon capabilities.” As noted in Section II, it is possible to “bound” AI by limiting what aspects of its agent function can be modified through machine learning. Limiting how any AI program can adapt to accomplish its tasks is critical for legal compliance.

5. Cyberspace

The connectivity principle of cyberspace illustrates one of the ways cyberspace is a unique operating environment. For AWS like the SGR-1 or the drone swarms discussed earlier, the primary task environment is one or more of the physical domains. For an AI softbot, cyberspace is its only domain. The AI softbot may be able to cause a machine to act in one of the natural domains, but the AI softbot never “leaves” cyberspace. Cyberspace, as a domain of conflict, is an ever-changing environment that largely exists over civilian infrastructure. The connectivity and artificiality principles of cyberspace mean that the “landscape” of cyberspace can instantly change as both physical and logical parts of any given network are connected, removed, updated, or otherwise modified. This increases the uncertainty and dynamism of the environment.

The blending of civilian and military infrastructure in cyberspace also creates unique concerns for the AI softbot’s ability to comply with IHL.²⁴⁵ Outside of an armed conflict, the ability to distinguish civilian from military networks may matter less as, presumably, a state interested in complying with international law would not be seeking to cause any harm that could be characterized as a use of force.²⁴⁶ Even in the context of countermeasures, actions constituting a use of force are prohibited.²⁴⁷ Thus, a state could lawfully

²⁴⁵ Schmitt, *A Reply to the Critics*, *supra* note 3, at 14 (noting an AWS that “searches for and conducts cyber attacks against dual-use infrastructure. . . could be indiscriminate if designed in a way that makes it likely to spread to into the civilian network”).

²⁴⁶ U.N. Charter art. 2(4) (prohibiting the use of force in interstate relations).

²⁴⁷ ILC Draft Articles, *supra* note 168, at 131-132 (discussing in art. 50(a) and commentary how countermeasures do not affect the obligation of states to refrain from

engage in a non-violent cyber operation, as a countermeasure, which could affect civilian infrastructure or civilians. In this case, the AI softbot's ability to distinguish the nature of the network would matter less. However, there are several limitations on how a state can lawfully conduct countermeasures, and unintended or excessive effects, even if non-violent, could turn a lawful countermeasure into a violation of international law. Similar concerns would also apply to a state's ability to respond under a plea of necessity or retorsion.

In order to comply with international law, an AI softbot will need to either be deployed in known cyber environments and/or limited in the ways that it interacts with unknown cyber entities and networks. For example, an AI softbot could be set to defend a network with the automatic capability to "hack back" any intruder and shut down their connection. Here, the "hack back" would be intended as a lawful countermeasure, designed to protect critical state systems. Yet, if an intrusion attempt was routed through a civilian computer system that critically relied on its connectivity to function, the AI softbot's response could cause harmful effects beyond those that would be considered a lawful countermeasure.²⁴⁸ Even worse would be if the intrusion attempt were routed through another state's civilian computer system. This example presents the possibility for violating the requirement that a countermeasure be proportional and directed towards the violating state.²⁴⁹ The AI softbot would need to be designed with a means to assess the networks it was intending to affect or would need to otherwise limit how it interacted with unknown entities and networks.

This section addressed some of the ways in which an AI softbot operating in cyberspace differs from a similarly AI-enhanced AWS that is intended to operate in the natural domains. While issues of bounding affect both, the connectivity principle of cyberspace means that an AI softbot could create effects in numerous different networks and in any state reachable by the underlying infrastructure. Comparatively an AWS is much more likely to be bounded by the geography and physicality of the battle space in which it is deployed. Design, deployment, and "containment" concerns will be essential to preventing AI softbots from generating unintended or excessive effects in networks beyond the intended network.

the threat or use of force).

²⁴⁸ *Id.* at 75-76 (describing how countermeasures must be "proportional," "temporary or reversible," and directed at the offending state).

²⁴⁹ *Id.*

AI softbots have the potential of being employed in a range of operations that span the legal spectrum, whereas AWS are clearly weapons designed for deployment in armed conflicts. Thus, AI softbots of sufficient complexity and generality will introduce ambiguity into how they should be treated under international law, creating challenges for any proposed arms control schemes. Moreover, these, and many of the other aspects of AI softbots discussed in this section, are the same attributes that made cyber operations appealing for gray-zone conflicts. It is reasonable to assume this will increase the appeal of AI softbots to states as a “conflict technology” over and above its appeal as a “weapons technology.”

Human Rights Watch (HRW), working with the International Human Rights Clinic at Harvard Law School (IHRC), first raised awareness of some of the legal issues surrounding lethal autonomous weapon systems (AWS) in their article, “Losing Humanity: the Case Against Killer Robots.” Since that time, significant attention has been paid to if and how AWS could legally operate under international law. HRW raised issues concerning whether AWS wielding lethal force could comply with the rules on distinction and proportionality given the complexity of the modern military environment and difficulties associated with identifying civilians. Professor Michael Schmitt, wrote a direct reply to HRW in which he effectively argued that HRW had conflated IHL’s prohibitions on a weapon’s *per se* legality with how the weapon is used.²⁵⁰ Yet, both weapons law and targeting law under IHL could also apply to AI softbots if the softbot were of a nature to be considered a weapon.²⁵¹

B. Weapons Law

In “Losing Humanity: the Case Against Killer Robots” HRW argued that lethal AWS using AI were *per se* illegal under IHL.²⁵² The elements of international humanitarian law described as the principles of Distinction and

²⁵⁰ Schmitt, *A Reply to the Critics*, *supra* note 3, at 2-3; Charles J. Dunlap, Jr., *Accountability and Autonomous Weapons: Much Ado about Nothing?*, 30 *TEMPLE INT’L. & COMP. L.J.* 63, 63-64 (2016) (describing the back and forth between Professor Schmitt and the HRW).

²⁵¹ Jeffrey S. Thurnher, *The Law that Applies to Autonomous Weapon Systems*, 17:4 *AM. SOC’Y INT’L L. INSIGHTS* at 2 (2013), <https://asil.org/insights/volume/17/issue/4/law-applies-autonomous-weapon-systems> (describing how weapons law and targeting law both apply to autonomous weapon systems).

²⁵² *LOSING HUMANITY*, *supra* note 1, at 51 (claiming fully autonomous weapons could not comply with the principles of international humanitarian law).

Unnecessary Suffering, codified in Articles 51(4)(b) and 35(2) of Additional Protocol I and considered CIL, prohibit states from using weapons that are: (1) incapable of discriminating between civilians and military objectives (indiscriminate); and (2) are of a nature to cause superfluous injury or unnecessary suffering.²⁵³

Article 35(2) of API only prohibits weapons of a nature that cause unnecessary suffering and does not regulate the manner of engagement.²⁵⁴ Accordingly, a state's choice to delegate its decision-making for a cyber operation to an AI softbot would not run afoul of this rule. As a preliminary matter, it seems unlikely that an AI softbot would even have the capability to inflict unnecessary suffering on a combatant. Nevertheless, the Tallinn Manual makes the argument that a cyber operation could create the potential for unnecessary suffering in a combatant through the remote hack of a pacemaker.²⁵⁵ Presuming then that this exists as a theoretical possibility, it still seems unlikely based on how AI achieves its tasks.

An AI softbot, acting rationally, seeks to maximize its expected performance.²⁵⁶ Unless inflicting unnecessary suffering was part of the AI softbot's performance measure, an AI softbot would not adopt methods for accomplishing its task that used resources inefficiently. Of greater concern would be if the AI softbot was early in its process of learning and engaged in ineffective behavior that had the consequence of inflicting unnecessary suffering. This issue, however, speaks to specific design and testing concerns—there is nothing intrinsic about AI that suggests that AI softbots, generally, would inflict unnecessary suffering.²⁵⁷

The only other way an AI softbot could decide to inflict unnecessary suffering would be if it “learned” that this was a more effective strategy for maximizing its performance measure. While unlikely, it is reasonable for designers to take steps to ensure an AI softbot's programming was bounded

²⁵³ API, *supra* note 181, at art. 35(2) & art. 51(4)(b); *See also* Schmitt & Thurnher, *supra* note 220, at 244-250 (discussing how the prohibitions on weapons that cause superfluous injury and are incapable of discrimination applies to autonomous weapon systems).

²⁵⁴ Schmitt & Thurnher, *supra* note 220, at 244-245 (unnecessary suffering only addresses the weapon's effect on the target and not the manner of engagement).

²⁵⁵ TALLINN 1.0, *supra* note 95, at 142-144 (Rule 42 and commentary).

²⁵⁶ MODERN APPROACH, *supra* note 7, at 37.

²⁵⁷ Schmitt, *A Reply to the Critics*, *supra* note 3, at 35 (referring to AWS their “autonomy has no direct bearing on the probability they would cause unnecessary suffering or superfluous injury”).

in such a way to prevent it from ever “learning” to use such a strategy for achieving its task.

The bigger concern with an AI system is not that it would deliberately inflict unnecessary suffering on a combatant, but rather that it would adopt a strategy that was completely indifferent to its impact on human welfare. The previous example of a truck crashing into a house and killing its inhabitants because the system determined driving through the house was the shortest route is more illustrative of the type of challenges AI presents. This requires careful design limitations on AI. This can be done by instructing the system that “whatever you do, do not do X.”²⁵⁸ Thus, this issue is unlikely to result in a prohibition on use, but rather serve as a necessary design limitation and a need for transparency in the AI softbot’s decision-making process prior to deployment.

A weapon must also not be indiscriminate by its nature in order to comply with IHL.²⁵⁹ Whether a particular cyber activity is capable of being directed at a particular target is much more challenging in cyberspace where networks are often fairly characterized as dual use and interconnected with civilian networks. For an AI softbot, this issue can be dealt with in one of two ways. First, the AI softbot can be given a more limited task environment. This proposition is analogous to a geographic limitation placed on physical AWS.²⁶⁰

The second method is to program the ability to discriminate between civilians and military objectives into the design of the AI softbot. A modern example is found in the Stuxnet malware that was designed in a way not to cause harm unless it was in the specific environment it was targeted at.²⁶¹ Similarly, an AI softbot, designed with the principle of discrimination in mind, may only affect specific targets previously identified as lawful.

²⁵⁸ Schuller, *supra* note 64, at 425, n.197 (describing how design limitations could accomplish legal goals given uncertain behaviors).

²⁵⁹ API, *supra* note 181, art. 51(4)(b).

²⁶⁰ Schmitt & Thurnher, *supra* note 220, at 249-250 (noting that the prohibition only applies to weapon systems where there are no circumstances in which it can be used discriminately and that geographic and temporal limitations may resolve some issues).

²⁶¹ Gary D. Brown & Andrew O. Metcalf, *Easier Said than Done: Legal Reviews of Cyber Weapons*, 7 J. NAT’L SEC. L. & POL’Y 115, 120-122 (describing how Stuxnet worked).

However, as the softbot's task environment increases in complexity, so too will the challenge of bounding its programming. Nevertheless, failure to do so could create situations like the recent NotPetya incident.²⁶² NotPetya, a hostile cyber activity attributed to Russia, appeared to be intended to target the Ukraine, but ended up affecting numerous other states. Arguably this is a failure of design, making NotPetya an example of an indiscriminate cyber operation (though probably not a weapon). Similar concerns could also apply to AI softbots, especially if states do not require robust testing and review.²⁶³ Additionally, the AI softbot will also have to be bounded so that it does not learn to engage or affect other networks as part of its strategy for maximizing its performance measure. This rule may serve to set a technological high water mark that prevents the deployment of certain capabilities until they become advanced enough to meet associated challenges.

Outside of IHL, the international law regulating AI softbots is undefined, with no treaty banning or regulating their testing, creation, or use. However, state representatives have been discussing how treaty law may regulate AI within the forum of the Certain Conventional Weapon Convention (CCWC) in Geneva since 2013, with some convergence occurring around a ban on AI weapons that use lethal force outside of human control.²⁶⁴ In the future such a ban may be possible. However, given substantial investments by the United States, China, and Russia into AI weapons systems, it remains to be seen how well-received a proposed ban would be.²⁶⁵ Even if such a ban were to be broadly accepted, it is questionable to what extent it would apply to AI softbots that would be less likely to use lethal force. Additionally, one wonders how such a limitation could ever be enforced in the case of AI softbots operating anonymously through cyberspace.

²⁶² *UK and US Blame Russia for 'malicious' NotPetya Cyber-Attack*, BBC NEWS, Feb. 15, 2018, <http://www.bbc.com/news/uk-politics-43062113> (describing Russia's ransomware attack on Ukraine that recklessly spread across Europe).

²⁶³ Schmitt, *A Reply to the Critics*, *supra* note 3, at 14 (noting an AWS that "searches for and conducts cyber attacks against dual-use infrastructure. . . could be indiscriminate if designed in a way that makes it likely to spread to into the civilian network").

²⁶⁴ Dr. Thomas Burri, *International Law and Artificial Intelligence*, *supra* note 239.

²⁶⁵ See KANIA, *supra* note 216, at 8-9 (describing China's prioritization of AI investment); See also Ben Watson, *Artificial Intelligence: The Pros, Cons, and What to Really Fear*, DEFENSE ONE, <https://www.defenseone.com/feature/artificial-intelligence-pro-con/> (describing Russian, U.S., and Chinese investment in AI technology).

Artificially intelligent softbots offer a type of flexibility in design unavailable to physically-based autonomous weapon systems. Software environments have long been attractive for AI research because they are cheaper and more malleable.²⁶⁶ Thus, the legal concerns raised by the IHL addressing a weapon's *per se* legality largely devolve into careful design considerations. These considerations may also encourage a wider use of supervised learning, using curated training data sets, and further underscore the need for transparency in how an AI softbot is learning and making its decisions prior to deployment. The need for decision transparency as a prerequisite for greater employment of AI has already been recognized by DARPA.²⁶⁷

C. Targeting Law

Targeting law, a subset or limited application of the broader IHL, places constraints on how a weapon is used in conflict. The three core principles are: distinction, proportionality, and precautions in attack.²⁶⁸ The initial premise, that an AI softbot could be characterized as a weapon, is questionable. However, presuming that an AI softbot could create violent, physical effects by controlling a physical machine, then concepts of targeting law would apply. Note that in this analysis the AI softbot is effectively the combatant that is or is not complying with the law and the weapon is whatever machine the AI softbot controls in order to accomplish its task. Here more than any other area examined it is clear that the use of AI is essentially the delegation of decision-making authority from a human to a machine.

Distinction, as a customary legal principle, requires a combatant to distinguish between civilian objects and military objectives and between civilians and combatants.²⁶⁹ The same concerns regarding military and civilian networks that were present when discussing discrimination as a legal principle are also present here.

An additional challenge is that an AI softbot seeking to harm someone or something in the physical domain may have no sensor capable of verifying his or her status as a civilian or combatant. While AWS are designed to operate

²⁶⁶ See, e.g. Oren Etzioni & Daniel Weld, *A Softbot-Based Interface to the Internet*, ASS'N FOR THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE (1996), <https://www.aaai.org/Papers/ARPI/1996/ARPI96-020.pdf>.

²⁶⁷ GUNNING, *supra* note 76, at 1-2.

²⁶⁸ Thurnher, *supra* note 251, at 3 (describing the requirements of targeting law).

²⁶⁹ *Id.*

in conjunction with a specific weapon system, to include all required sensors, the same is not necessarily true for an AI softbot. Even most hypothetical examples of cyber operations that can be characterized as attacks involve the use of objects typically not thought of as weapons in a manner that causes physical damage and loss of life.²⁷⁰ An example may be an AI softbot that is capable of affecting a military aircraft's on-board computer in a manner that could cause it to crash. In order for an AI softbot to be able to comply with the requirement of distinction, it would likely need to be designed with limited targets or be capable of receiving inputs from other sensors operating in the area.

The second principle, that of proportionality, requires a combatant to weigh “whether the expected collateral damage from an attack would be excessive in relation to the anticipated military gain.”²⁷¹ This principle would be difficult for most AWS to comply with, as it requires a contextual analysis.²⁷² This difficulty would also afflict AI softbots. Once again, the AI softbot may suffer worse due to an inability to “sense” the complete context of its actions, even if it has an algorithm capable of making the necessary calculations.

Returning to the example of the crashing military aircraft, an independently operating AI softbot may have no sensor capable of determining if or how many civilians are in the city below or even on-board. In theory, it could be designed to attempt to secure this information before executing its attack by infiltrating some connected sensor or receiving inputs from friendly sensors. However, an AI softbot capable of independently selecting a target, gathering all of the required information on the target and surrounding context, and then weighing it in a meaningful manner prior to using another machine to cause physical harm seems unrealistic without a substantial leap forward in the technology. The more reasonable conclusion is that AI softbots will be unable to comply with this requirement except in limited, narrow deployments that involve human guidance or direction for the immediate future.²⁷³ For example, the AI softbot executes its attack at machine speed,

²⁷⁰ ICRC 2015 Report, *supra* note 187, at 39 (describing potential cyber attacks against “transportation systems, electricity networks, dams, and chemical or nuclear plants”).

²⁷¹ Thurnher, *supra* note 251, at 3-4.

²⁷² Schmitt & Thurnher, *supra* note 220, at 253-256 (discussing the necessary elements to consider when applying proportionality, including discerning military advantage based on context).

²⁷³ *Id.* at 257 (reaching a similar conclusion that humans would continue to conduct the

after a human has determined that the consequence would meet the requirement of proportionality.

The third core principle directs a combatant to take all feasible precautions in his or her attack.²⁷⁴ Feasibility means “that which is practicable or practically possible, taking into account all circumstances prevailing at the time, including humanitarian and military considerations.”²⁷⁵ Similar to weighing proportionality, this requirement requires a contextual judgment about what is practicable and feasible in a given situation. While it may be possible to design agent functions that can consider these variables, it is more likely that this will also require human input for the near future.

The feasible precaution principle, like the other two principles, also reasonably restricts military operators in deploying AI softbots in armed conflict. As stated by Professor Schmitt in his article “Out of the Loop: Autonomous Weapon Systems and the Law of Armed Conflict”, “the only situation in which an autonomous weapon system can lawfully be employed is when its use will realize military objectives that cannot be attained by other readily available systems that would cause less collateral damage.”²⁷⁶ This principle could cut both ways for AI-enhanced cyber operations. Cyber operations often are capable of causing less collateral damage than kinetic operations. However, if an AI softbot is unable to make effective decisions in compliance with the distinction, proportionality, and precautions in attack principles, then a military operator would be obligated to select a different means or method.

D. Martens Clause

HRW and the IHRC also raised concerns over whether lethal AWS violated the Martens Clause. The Martens Clause is considered CIL²⁷⁷ and states:

proportionality determination for the immediate future).

²⁷⁴ Thurnher, *supra* note 251, at 4.

²⁷⁵ *Id.* (citing HARVARD PROGRAM ON HUMANITARIAN POLICY AND CONFLICT RESEARCH, MANUAL ON INTERNATIONAL LAW APPLICABLE TO AIR AND MISSILE WARFARE, WITH COMMENTARY 38 (2009)).

²⁷⁶ Schmitt & Thurnher, *supra* note 220, at 261.

²⁷⁷ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Rep. 226 at 259, ¶ 84 (July 8) [hereinafter Nuclear Advisory Opinion].

“Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and the requirements of the public conscience.”²⁷⁸

From the perspective of HRW, the Martens Clause provides an independent prohibition on AWS that violate the “principles of humanity” and “dictates of public conscience.”²⁷⁹ The HRW argues that lawmakers should consider that the idea of AWS that are capable of taking human life is “shocking and unacceptable” to a “large number” of people. Several prominent figures have spoken out against AI, even in the context of AI softbots.²⁸⁰

The Martens Clause, however, adds little to the conversation because it is subject to wide interpretation.²⁸¹ From a legal prohibition standpoint, the Martens Clause also suffers from the presence of numerous competing state interpretations, undermining its ability to serve as an effective ban on any particular weapon system.²⁸² Notably, while the ICJ recognized the Martens Clause as CIL, it did not consider it sufficient to ban the use of nuclear weapons.²⁸³ Compared to AI softbots conducting cyber operations, which are typically non-lethal in nature, it is hard to imagine the Martens Clause acting as an effective legal limitation.

²⁷⁸ Hague Convention of 1899 (II) Respecting the Laws and Customs of War on Land, pmb., July 29, 1899, 32 Stat. 1803, U.S.T.S. 403.

²⁷⁹ LOSING HUMANITY, *supra* note 1, at 35.

²⁸⁰ See, e.g. Laura Hautala, *Rise of the Hacking Machines*, CNET (Aug. 5, 2016) <https://www.cnet.com/news/rise-of-the-hacking-machines-darpa-cyber-grand-challenge/> (reporting that Elon Musk compared the DARPA’s hacking challenge to the creation of Skynet, the technology that “launched the robot wars” in the Terminator movie series).

²⁸¹ Rupert Ticehurst, *The Martens Clause and the Laws of Armed Conflict*, INT’L COMM. OF THE RED CROSS, No. 317 (Apr. 30, 1997), <https://www.icrc.org/eng/resources/documents/article/other/57jnhy.htm> (observing that there is no accepted interpretation of the Martens Clause).

²⁸² *Id.* (Reviewing competing state interpretations of the Martens Clause submitted to the ICJ as part of the Nuclear Advisory Opinion).

²⁸³ Nuclear Advisory Opinion, *supra* note 277, at 265, ¶ 105.

V. CONCLUSION

This article represents an early step into thinking through some of the international law issues presented by states using AI softbots in different contexts. Some of the legal issues presented through such use are similar to those faced by lethal autonomous weapon systems operating in the physical domain, while others are unique to operations in cyberspace. The differences between AWS in the physical domains and AI softbots operating in cyberspace are the result of fundamentally different task environments. The unique environment of cyberspace, as an artificial and connected domain, especially contributes to the challenges associated with designing legally compliant AI softbots.

However, there is nothing intrinsic to AI softbots that prevents them from complying with international law. AI softbots operate according to their design, and as such, may be bounded in a way that compliance with the law is literally built-in. Key to this design process will be working closely with lawyers knowledgeable in international law and IHL. Additionally, testing and transparency in the AI softbot's decision making will assist in assuring legal compliance prior to deployment. The Stuxnet virus provides an informative example of how malware can be designed in order to ensure distinction in the connected environment that is cyberspace. In the near future, defining tasks narrowly and limiting the ways in which the softbot can interact with its digital environment will likely drive legal compliance. As AI softbots grow in complexity and generality, the design challenges of legal compliance will also become more complicated.

For AI softbots capable of controlling machines in a manner that could reasonably result in their treatment as weapons, compliance with targeting law will likely require human input for the foreseeable future. AI softbots, untethered to robust sensors, will likely be unable to comply with the all of requirements of distinction, proportionality, and precautions in attack, except when set against narrow tasks. While inputs from friendly sensors may eventually provide a means to work around these limitations, it is more likely that a human will need to work in conjunction with the AI softbot in order to provide the necessary contextual judgment for the foreseeable future. This suggests that in the context of armed conflicts, AI softbots should be put towards more narrow tasks in order to ensure legal compliance.

One consequence of the growth and proliferation of AI technology is that some state actors may choose not to invest in the steps necessary to make it compliant with international law. NotPetya provides a current example of the dangers possible when compliance with international law is not designed into the malware. Similarly, risk-acceptant states may choose to deploy AI software that has not been robustly designed, raising the specter of an indiscriminate weapon under IHL. However, if the effects generated by such an operation are non-violent or of low intensity, the state may reasonably hide behind issues of attribution and legal ambiguity in order to operate in a legal gray zone. The danger with the wider advent of AI is that the scale and effectiveness of these gray-zone activities may soon expand.

