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Future War and the War Powers Resolution

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FUTURE WAR AND THE WAR POWERS RESOLUTION

*Eric Talbot Jensen**

ABSTRACT

Since its passage in 1973 over the veto of then-President Nixon, the War Powers Resolution (WPR) has been laden with controversy. Labeled as everything from ineffective to unconstitutional, the WPR has generally failed in its design to require notification and consultation to Congress by the President. Despite numerous proposals to amend the WPR, it continues to languish in the twilight of Executive war powers, and its future is bleak.

With emerging technologies such as drones, cyber tools, nanotechnology, and genomics, the ineffectiveness of the WPR will prove even more profound. The WPR's reliance on "armed forces" and "hostilities" as triggers for the reporting and consulting requirements of the statute will prove completely inadequate to regulate the use of these advanced technologies. Rather, as the President analyzes the applicability of the WPR to military operations using these advancing technologies, he will determine that the WPR is not triggered and he has no reporting requirements. Recent conflicts (or potential conflicts) in Libya, Syria and Iraq highlight this inevitability.

For the WPR to achieve the aim it was originally intended to accomplish, Congress will need to amend the statute to cover emerging technologies that do not require "boots on the ground" to be effective and which would not constitute "hostilities." This article proposes expanding the coverage of the WPR from actions by armed forces to actions by armed forces personnel, supplies or capabilities. The article also proposes expanding the coverage of the statute to hostilities and violations of the sovereignty of other nations by the armed forces.

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INTRODUCTION	501
I. FUTURE ARMED CONFLICT	504
A. <i>Means of Warfare</i>	505
1. <i>Drones</i>	505
2. <i>Cyber</i>	507
3. <i>Robots and Autonomous Weapons</i>	509
4. <i>Nanotechnology</i>	512
5. <i>Virology and Genomics</i>	513
B. <i>Methods of Warfare</i>	515
1. <i>Latent Attacks</i>	516
II. THE WAR POWERS RESOLUTION	517
A. <i>History</i>	517
B. <i>Text</i>	521
C. <i>Issues</i>	522
1. <i>Section 5</i>	522
2. <i>Section 4</i>	525
a. <i>Armed Forces</i>	526
b. <i>Hostilities</i>	530
3. <i>Geographic Space</i>	533
4. <i>Substantial Enlargement</i>	534
III. INEFFECTIVENESS OF THE WPR	534
A. <i>Armed Forces</i>	535
1. <i>Drones</i>	535
2. <i>Cyber Operations</i>	537
3. <i>Other Emerging Technologies</i>	539
B. <i>Hostilities</i>	540
1. <i>Drone Operations</i>	540
2. <i>Cyber Operations</i>	541
3. <i>Other Emerging Technologies</i>	543
IV. AMENDING THE WPR	543
A. <i>Previously Proposed Solutions</i>	544
1. <i>Legislative Proposals</i>	544
2. <i>War Powers Consultation Act of 2009</i>	546
3. <i>Rules of Engagement (ROE)</i>	548
4. <i>All Offensive Strikes</i>	550
B. <i>A Proposal for Future Armed Conflicts</i>	552
1. <i>Supplies or Capabilities</i>	552
2. <i>Violation of Sovereignty</i>	553
CONCLUSION	555

INTRODUCTION

As United States President Barack Obama contemplated taking military action against Syria in the wake of alleged chemical attacks, he stated that he had authority to do so without Congressional approval.¹ However, after deciding to consult Congress, he was told that the wording of any resolution that would receive Congressional approval would have to be narrowly tailored, limiting the use of armed forces both in time and type.² In fact, Senator John McCain threatened that if President Obama were to put “boots on the ground” in Syria, he would face impeachment.³ These preconditions for Congressional approval invoke the traditional tension between Congress’s constitutional power to “declare war”⁴ on one hand and the Executive’s foreign affairs power and the President’s role as Commander in Chief on the other.⁵

The debate is not new. Books,⁶ judicial opinions,⁷ commission reports,⁸ law reviews,⁹ and newspapers¹⁰ regularly discuss this tension between Congress

¹ Matthew Larotonda & Jon Garcia, *President Obama Seeks Congressional Approval for Syria Action*, ABC NEWS, (Aug. 31, 2013), <http://abcnews.go.com/Politics/president-obama-seeks-congressional-approval-syria-action/story?id=20127274> (quoting President Obama, who said, “I believe I have the authority to carry out this military action without specific congressional authorization . . .”).

² Karen Tumulty, *Reps. Chris Van Hollen, Gerry Connolly draft narrow authorization of force in Syria*, WASH. POST (Sept. 3, 2013), http://www.washingtonpost.com/politics/van-hollen-connolly-draft-narrow-authorization-of-force-in-syria/2013/09/03/7cbc6b60-14c0-11e3-b182-1b3bb2eb474c_story.html.

³ Sean Sullivan, *McCain: Obama would face impeachment if he puts “boots on the ground” in Syria*, WASH. POST, Sept. 6, 2013, <http://www.washingtonpost.com/blogs/post-politics/wp/2013/09/06/mccain-obama-would-face-impeachment-if-he-puts-boots-on-the-ground-in-syria/>.

⁴ U.S. CONST. art. 1, § 8, cl. 11.

⁵ U.S. CONST. art. 2, § 2, cl. 1.

⁶ See HAROLD HONGJU KOH, *THE NATIONAL SECURITY CONSTITUTION: SHARING POWER AFTER THE IRAN-CONTRA AFFAIR* (1990); MARIAH ZEISBERG, *WAR POWERS: THE POLITICS OF CONSTITUTIONAL AUTHORITY I* (2013).

⁷ See, e.g., *Dames & Moore v. Regan*, 453 U.S. 654 (1981); *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579 (1952); *Curtiss-Wright Export Corp.*, 299 U.S. 304 (1936).

⁸ See JAMES A. BAKER, III ET AL., UNIV. OF VA., MILLER CTR. OF PUB. AFFAIRS, *NAT’L WAR POWERS COMM’N REPORT 11–19* (2008), available at <http://millercenter.org/policy/commissions/warpowers/report>.

⁹ See, e.g., David J. Barron & Martin S. Lederman, *The Commander in Chief at the Lowest Ebb* *A Constitutional History*, 121 HARV. L. REV. 941 (2008); Curtis A. Bradley & Trevor W. Morrison, *Historical Gloss and the Separation of Powers*, 126 HARV. L. REV. 411 (2012); Michael A. Newton, *Inadvertent Implications of the War Powers Resolution*, 45 CASE W. RES. J. INT’L L. 173, 179–80 (2012); Saikrishna Prakash, *Unleashing the Dogs of War: What the Constitution Means by “Declare War”*, 93 CORNELL L. REV. 45 (2007); Peter Raven-Hansen & William C. Banks, *Pulling the Purse Strings of the Commander In Chief*, 80 VA. L. REV. 833, 835 (1994); Robert F. Turner, *The War Powers Resolution at 40: Still an Unconstitutional, Unnecessary, and Unwise Fraud That Contributed Directly to the 9/11 Attacks*, 45 CASE. W. RES. J. INT’L L. 109 (2012); Robert F. Turner, *The War Powers Resolution: Unconstitutional, Unnecessary, and Unhelpful*, 17 LOY. L.A. L. REV. 683 (1984), available at <http://digitalcommons.lmu.edu/llr/vol17/iss3/5>.

and the President on the use of military force. The debate has been characterized by what seems to be an ever-increasing adventurism by the President and an ever-decreasing willingness to exert power by the Congress.¹¹ Perhaps the last show of real strength in the debate from Congress came in the immediate aftermath of the Vietnam War.¹² With the President in crisis,¹³ Congress passed a joint resolution that became known as the War Powers Resolution (WPR).¹⁴ It was intended to re-exert Congress's power over war making and force the President to provide notification and seek approval for the use of the military.¹⁵ After passage, President Nixon immediately vetoed the Resolution, claiming it was clearly an unconstitutional infringement on his role as the Executive.¹⁶

Congress responded by overriding President Nixon's veto on November 7, 1973.¹⁷ Almost immediately, the War Powers Resolution became a source of great controversy. In addition to President Nixon and his successors,¹⁸ scholars¹⁹ have claimed the WPR is an unconstitutional infringement on Commander-in-Chief powers. These constitutional issues can be broadly characterized in two major categories: the allocation of war powers between the President and Congress; and, the requirement for the President to withdraw

¹⁰ See, e.g., Stephen G. Rademaker, *Congress and the myth of the 60-Day Clock*, WASH. POST (May 24, 2011), http://articles.washingtonpost.com/2011-05-24/opinions/35233150_1_libya-operation-war-powers-resolution-president-obama; Charlie Savage & Mark Landler, *White House Defends Continuing U.S. Role in Libya Operation*, N.Y. TIMES, June 16, 2011, at A16.

¹¹ Geoffrey S. Com, *Triggering Congressional War Powers Notification: A Proposal to Reconcile Constitutional Practice with Operational Reality*, 14 LEWIS & CLARK L. REV. 687, 690 (2010). "Presidents will invariably interpret the failure of Congress to affirmatively oppose such initiatives as a license to continue operations." *Id.*; John Yoo, *Like It or Not, Constitution Allows Obama to Strike Syria Without Congressional Approval*, FOX NEWS, Aug. 30, 2013, <http://www.foxnews.com/opinion/2013/08/30/constitution-allows-obama-to-strike-syria-without-congressional-approval/> (summarizing the historical tension between Congress' power to declare war and the President's role as Commander in Chief).

¹² Louis Fisher & David Gray Adler, *The War Powers Resolution: Time To Say Goodbye*, 113 POL. SCI. Q. 1 (1998). "The War Powers Resolution (WPR) of 1973 is generally considered the high-water mark for congressional reassertion in national security affairs." *Id.*

¹³ Newton, *supra* note 9, at 179–80 (explaining that President Nixon was in the throes of the Watergate scandal at this time).

¹⁴ War Powers Resolution of 1973, Pub. L. No. 93-148 §8, 87 Stat. 559 (codified as 50 U.S.C. §§ 1541–1548 (2006)).

¹⁵ *Id.* at § 1541.

¹⁶ Veto of War Powers Resolution, 9 WEEKLY COMP. PRES. DOC. 1285 (Oct. 24, 1973).

¹⁷ 119 Cong. Rec. 36, 198, 221–22 (1973) (Senate); *id.* at 36, 221–22 (House).

¹⁸ For example, see President Nixon's explanation of his veto of the proposed law. Veto of War Powers Resolution, 9 WEEKLY COMP. PRES. DOC. 1285 (Oct. 24, 1973), 5 Pub. Papers 893 (Oct. 24, 1973).

¹⁹ See, e.g., BAKER ET AL., *supra* note 8, at 23; Abraham D. Sofaer, *The War Powers Resolution: Fifteen Years Later*, 62 TEMP. L. REV. 317, 326 (1989); Turner, *supra* note 9.

forces either after sixty days of inaction by Congress approving the deployment or after a concurrent resolution by Congress.²⁰

One of the topics that has received insufficient attention in the continuing discourse, and the topic of this article, is the potential impact and applicability of the WPR to future armed conflicts.²¹ The world stands on the threshold of incredible advances in weapons technology that are of such a qualitative nature the borders of the current laws governing the use of force will be pushed.²² The use of cyber tools to accomplish military operations, the development and weaponization of nanotechnology, the linkage of virology to individual or group DNA, the automation of weapons systems, and the development of robotics all represent likely aspects of future armed conflicts whose effects on the WPR have not yet been considered.

The WPR is not sufficiently clear with respect to its application to future weapon systems. The triggering language of “in any case in which United States Armed Forces are introduced—(1) into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances; [or] (2) into the territory, airspace or waters of a foreign nation,” was written in an era where the means and methods of armed conflict were centered on humans interacting on a geographically limited battlefield.²³ Though this will continue to be true in the future for most armed conflicts, technologically advanced nations such as the United States are developing and will continue to develop new weapons that will not require human interaction in combat to be effective.²⁴ The current language of the WPR is ineffective to ensure Congressional participation in the President’s use of these weapons. If Congress intends the WPR to act as a restraint on presidential use of force in the future, the WPR needs to be amended to clarify that “boots on the ground” and hostilities are not the only required trigger to invoke the WPR’s provisions.

²⁰ RICHARD F. GRIMMETT, *THE WAR POWERS RESOLUTION: AFTER THIRTY-SIX YEARS*, CONG. RESEARCH SERV. 6–9 (2010).

²¹ Newton, *supra* note 9, at 181.

²² See Eric Talbot Jensen, *The Future of the Law of Armed Conflict: Ostriches, Butterflies, and Nanobots*, 35 MICH. J. INT’L L. 253 (2014).

²³ See 50 U.S.C. § 1543.

²⁴ Because this Article will deal specifically with U.S. domestic legislation known as the War Powers Resolution, the paper will focus on emerging technologies and weapons within the context of the United States.

Part I of this paper will highlight some of the advancing technologies and resulting current and future weapons systems that the United States has and will have in its arsenal. Part II will briefly discuss the passage of the War Powers Resolution and the demonstrated intent of Congress. Part II will then address the triggering language of the WPR, including its original understanding, and its subsequent evolution. Part III will demonstrate the inadequacy of the current language of the WPR to effectively apply to future weapon systems. Part IV will analyze various proposed amendments to the WPR, show how they also do not account for future technologies, and then propose a simple amendment to the WPR that will accomplish this important objective.

I. FUTURE ARMED CONFLICT

It would be nearly impossible to accurately guess what weapons technologies will be developed in the future, or even in the next few decades. However, what does seem clear is that weapons technology is advancing at a rapid rate and that this trend will continue.²⁵ Many of these advancing technologies will be so qualitatively different from current means and methods of warfare that they will undercut the fundamental understanding of the WPR and Congress's intent to regulate the use of military force by the President.

The following section will briefly describe some of the known areas of advancing technology in weapons. The focus will be on discussing weapons that will likely raise important questions as to the applicability and effectiveness of the WPR as those weapons are put into use. The means of

²⁵ There is no way to adequately describe even a small number of the new technologies that will become a common part of armed conflict in the future; see Duncan Blake & Joseph Imburgia, "Bloodless Weapons"? *The Need to Conduct Legal Reviews of Certain Capabilities and the Implications of Defining Them as Weapons*, 66 A.F. L. REV. 157 (2010); David Axe, *Military Must Prep Now for 'Mutant' Future, Researchers Warn*, WIRED.COM (Dec. 31, 2012, 6:30 AM), <http://www.wired.com/dangerroom/2012/12/pentagon-prepare-mutant-future/>; Patrick Lin, *Could Human Enhancement Turn Soldiers Into Weapons That Violate International Law? Yes*, THE ATLANTIC (Jan. 4, 2013), <http://www.theatlantic.com/technology/print/2013/01/could-human-enhancement-turn-soldiers-into-weapons-that-violate-international-law-yes/266732/>; Anna Mulrine, *Unmanned Drone Attacks and Shape-shifting Robots: War's Remote-control Future*, CHRISTIAN SCI. MONITOR (Oct. 22, 2011), <http://www.csmonitor.com/USA/Military/2011/1022/Unmanned-drone-attacks-and-shape-shifting-robots-War-s-remote-control-future>; Noah Schachtman, *Suicide Drones, Mini Blimps and 3D Printers: Inside the New Army Arsenal*, WIRED.COM (Nov. 21, 2012), <http://www.wired.com/dangerroom/2012/11/new-army-arsenal/>; Noah Schachtman, *DARPA's Magic Plan: 'Battlefield Illusions' To Mess With Enemy Minds*, WIRED.COM (Feb. 14, 2012), <http://www.wired.com/dangerroom/2012/02/darpa-magic/>; Mark Tutton, *The Future of War: Far-out Battle Tech*, CNN.COM (Dec. 16, 2011), <http://www.cnn.com/2011/12/15/tech/innovation/darpa-future-war/index.html>.

warfare will be addressed first, followed by a shorter section on methods of warfare.

A. *Means of Warfare*

The means of warfare, or armed conflict as it is more generally described in modern usage, refers to the implements used to conduct the conflict.²⁶ More broadly, they can be thought of as the weapons of warfare, such as rifles, artillery shells, or bombs.²⁷ As the products of advancing research, future weapons will be more lethal, more accurate, more survivable, and less expensive. Most importantly for this article, they will also be less human. In other words, as these emerging weapons do their harm, they will create greater distance, both in time and space, between the weapon's deleterious effects and the human that creates, authorizes, initiates, or uses them. The following examples demonstrate the point and provide instructive illustrations as to why the WPR is becoming less and less effective as a means of ensuring Congressional input on the use of military force, as will be discussed in Part III.

1. *Drones*

Drones are a quickly developing technology whose use has been widely documented.²⁸ Both armed and unarmed drones are being used in combat zones, along borders,²⁹ and across the world.³⁰ Within the U.S. drones are being used by local law enforcement and the U.S. Federal Aviation

²⁶ See Blake & Imburgia, *supra* note 25, at 168–69.

²⁷ *Id.* at 170.

²⁸ See Peter Bergen & Katherine Tiedemann, *Washington's Phantom War: The Effects of the U.S. Drone Program in Pakistan*, 90 FOREIGN AFF. 12 (2011); Mark Bowden, *The Killing Machines: How to Think About Drones*, THE ATLANTIC (Sept. 2013), available at <http://www.theatlantic.com/magazine/archive/2013/09/the-killing-machines-how-to-think-about-drones/309434/>; see also, Tony Rock, *Yesterday's Laws, Tomorrow's Technology: The Laws of War and Unmanned Warfare*, 24 N.Y. INT'L L. REV. 39 (2011) (discussing the use of drones and their legal implications).

²⁹ Perry Chiamonte, *UN using drones to monitor Congo border, fleet to grow this spring*, FOX NEWS, (Mar. 1, 2014), <http://www.foxnews.com/world/2014/03/01/un-using-drones-to-monitor-congo-border-fleet-to-grow-this-spring/>; Tim Gaynor, *U.S. drones to watch entire Mexico border from September 1*, REUTERS (Aug. 30, 2010), <http://www.reuters.com/article/2010/08/30/us-usa-immigration-security-idUSTRE67T5DK20100830>.

³⁰ Bergen & Tiedemann, *supra* note 28; Craig Whitlock, *U.S Expands Secret Intelligence Operations in Africa*, WASH. POST (June 13, 2012), http://articles.washingtonpost.com/2012-06-13/world/35462541_1_burkina-faso-air-bases-sahara.

Administration has been tasked with determining how to regulate the use of domestic airspace for drones.³¹

As the technology continues to develop, drones' lethality and capability will dramatically increase, while their size and detectability will dramatically decrease.³² In combination with other advancing technologies discussed below, the United States will soon be able to deploy miniature (microscopic) drones in large quantities from great distances and which have significant lethal and non-lethal effects. Their potential for affecting future warfare has caused P.W. Singer to describe drones as a "game changer" on the level with the atomic bomb.³³

Important for this article, drones can be remotely guided³⁴ or even preprogrammed.³⁵ No human need be anywhere close to the drone as it takes its lethal or non-lethal action. Rather, large numbers of drones can be engaged in significant actions at great distances and at delayed times from the pilots who both fly the drones and direct the action.³⁶ This resulting lack of risk to U.S. military personnel has already been the topic of much discussion, especially among ethicists who worry that the "low-cost" of war will make it too easy of an option.³⁷ These same characteristics will also cause concerns

³¹ WELLS C. BENNETT, UNMANNED AT ANY SPEED 55 (2012), available at <http://www.brookings.edu/research/papers/2012/12/14-drones-bennett>.

³² Elisabeth Bumiller & Thom Shanker, *War Evolves With Drones, Some Tiny as Bugs*, N.Y. TIMES (June 19, 2011), <http://www.nytimes.com/2011/06/20/world/20drones.html?pagewanted=all>.

³³ *US Expert Discusses Robotics in War*, AUSTL. BROAD. CORP. (Feb. 29, 2012), <http://www.abc.net.au/lateline/content/2012/s3442876.htm>.

I think the way to think about [unmanned drones] is they are a game-changer when it comes to both technology, but also war and the politics that surrounds war. This is an invention that's on the level of gunpowder or the computer or the steam engine, the atomic bomb. It's a game changer.

Id.

³⁴ Bryony Jones, *Flying Lessons: learning how to pilot a drone*, CNN (June 30, 2011, 8:32 AM), <http://www.cnn.com/2011/WORLD/europe/06/29/drone.flying.lesson/>.

³⁵ Mike Hanlan, *Little Bird Helicopter Without a Pilot*, GIZMAG (July 12, 2006), <http://www.gizmag.com/go/5863/>.

³⁶ See Patrick Lin, *Drone-Ethics Briefing: What a Leading Robot Expert Told the CIA*, THE ATLANTIC (Dec. 2011), available at <http://www.theatlantic.com/technology/print/2011/12/drone-ethics-briefing-what-a-leading-robot-expert-told-the-cia/250060/>.

³⁷ See, e.g., *id.* ("Some critics have worried that UAV operators—controlling drones from half a world away—could become detached and less caring about killing, given the distance, and this may lead to more unjustified strikes and collateral damage.").

with respect to the intended purposes of the WPR,³⁸ as will be discussed in Part III.

2. *Cyber*

Cyber tools are already demonstrating their effectiveness. Recent cyber incidents include facilitating the theft of millions of dollars from automated teller machines,³⁹ state-sponsored theft of corporate trade secrets,⁴⁰ and the disruption of government communication systems during a military attack.⁴¹ The infamous STUXNET⁴² malware “infected about 100,000 computers worldwide, including more than 60,000 in Iran, more than 10,000 in Indonesia and more than 5,000 in India”⁴³ in the process of destroying almost 1,000 centrifuges in an Iranian nuclear facility.⁴⁴ The recent Flame malware⁴⁵ was designed to gather immense amounts of secretive government data and “exceeds all other known cyber menaces to date” according to Kaspersky Lab and CrySys Lab which discovered the malware.⁴⁶

Similar to drones, cyber operations have also been written about extensively,⁴⁷ including the recently published Tallinn Manual on the

³⁸ See Julia L. Chen, *Restoring Constitutional Balance: Accommodating the Evolution of War*, 53 B. C. L. REV. 1767, 1788–90 (2012).

³⁹ Marc Santora, *In Hours, Thieves Took \$45 Million in A.T.M. Scheme*, N.Y. TIMES (May 10, 2013), at A1.

⁴⁰ Lee Ferran, *Report Fingers Chinese Military Unit in US Hack Attacks*, ABC NEWS (Feb. 18, 2013), <http://abcnews.go.com/Blotter/mandiant-report-fingers-chinese-military-us-hack-attacks/story?id=18537307>.

⁴¹ Collin Allan, *Direct Participation in Hostilities from Cyberspace*, 54 VA. J. INT'L L. 173, 174 n.5 (2013); Paulo Shakarian, *The 2008 Russian Cyber Campaign Against Georgia*, MIL. REV. 63 (Dec. 2011).

⁴² Amr Thabet, *STUXNET Malware Analysis Paper*, CODEPROJECT (Sept. 6, 2011), <http://www.codeproject.com/Articles/246545/Stuxnet-Malware-Analysis-Paper>.

⁴³ Holger Stark, *Stuxnet Virus Opens New Era of Cyber War*, SPIEGEL ONLINE (Aug. 8, 2011, 3:04 PM), <http://www.spiegel.de/international/world/mossad-s-miracle-weapon-stuxnet-virus-opens-new-era-of-cyber-war-a-778912.html>. Admittedly, STUXNET was governed by the *jus ad bellum*, but similar malware will undoubtedly be used during armed conflict in the future. For an analysis of STUXNET under the *jus in bello*, see Jeremy Richmond, *Evolving Battlefields: Does STUXNET Demonstrate a Need for Modifications to the Law of Armed Conflict?*, 35 FORDHAM INT'L L.J. 842 (2012).

⁴⁴ See Atika Shubert, *Cyber Warfare: A Different Way to Attack Iran's Reactors*, CNN (Nov. 8, 2011), <http://www.cnn.com/2011/11/08/tech/iran-stuxnet/>.

⁴⁵ *Full Analysis of Flame's Command and Control Servers*, SECURELIST (Sept. 17, 2012, 1:00 PM), http://www.securelist.com/en/blog/750/Full_Analysis_of_Flame_s_Command_Control_servers.

⁴⁶ David Gilbert, *Flame Virus Update: UK Servers Used to Control Malware*, INT'L BUS. TIMES NEWS (June 6, 2012), <http://www.ibtimes.co.uk/articles/349195/20120606/flame-update-servers-shut-down.htm>.

⁴⁷ E.g. Michael N. Schmitt, *The Principle of Distinction in 21st Century Warfare*, 2 YALE HUM. RTS. & DEV. L.J. 143 (1999); Sean Watts, *Combatant Status and Computer Network Attack*, 50 VA. J. INT'L L. 391 (2010); MICHAEL N. SCHMITT ET AL., 76 INTERNATIONAL LAW STUDIES: COMPUTER NETWORK ATTACK AND

International Law Applicable to Cyber Warfare (Tallinn Manual) which provides rules and commentary on the application of the law of armed conflict (LOAC) to cyber operations.⁴⁸ Many nations are embracing the capabilities that cyber tools provide⁴⁹ because of their bloodless nature⁵⁰ and the increased set of targets to which such tools provide access.⁵¹

In addition to nations, cyber tools are increasingly available to non-state actors. Individual hackers have been known to develop sophisticated malware and cause great damage.⁵² Large markets have now developed around the production and sale of cyber tools,⁵³ making them available to the highest bidder at very reasonable prices. One of the unique characteristics of cyber tools is their propensity to be reengineered or “copycatted.”⁵⁴ As reported by David Hoffman,

Langner [who first discovered the STUXNET malware] warns that such malware can proliferate in unexpected ways: “Stuxnet’s attack code, available on the Internet, provides an excellent blueprint and jump-start for developing a new generation of cyber warfare weapons.” He added, “Unlike bombs, missiles, and guns, cyber weapons can be copied. The proliferation of cyber weapons cannot be controlled. Stuxnet-inspired weapons and weapon technology will soon be in the hands of rogue nation states, terrorists, organized crime, and legions of leisure hackers.”⁵⁵

INTERNATIONAL LAW (2002); Eric Talbot Jensen, *Unexpected Consequences From Knock-on Effects: A Different Standard for Computer Network Operations?*, 18 AM. U. INT’L L. REV. 1145, 1150 (2003).

⁴⁸ THE TALLINN MANUAL ON THE INTERNATIONAL LAW APPLICABLE TO CYBER WARFARE 4–5 (Michael N. Schmitt ed., 2013) (hereinafter THE TALLINN MANUAL).

⁴⁹ Susan W. Brenner & Leo L. Clarke, *Civilians in Cyberwarfare: Casualties*, 13 SMU SCI. & TECH. L. REV. 249, 249 (2010); Graham H. Todd, *Armed Attack in Cyberspace: Detering Asymmetric Warfare with an Asymmetric Definition*, 64 A.F. L. REV. 65, 96 (2009).

⁵⁰ Blake & Imburgia, *supra* note 25, at 181–83.

⁵¹ See generally THE TALLINN MANUAL, *supra* note 48; Eric Talbot Jensen, *President Obama and the Changing Cyber Paradigm*, 37 WILLIAM MITCHELL L. REV. 5049 (2011).

⁵² E.g., David Kleinbard & Richard Richtmyer, *U.S. Catches ‘Love’ Virus*, CNNMONEY (May 5, 2000, 11:33 PP), <http://money.cnn.com/2000/05/05/technology/loveyou/>.

⁵³ Michael Riley & Ashley Vance, *Cyber Weapons: The New Arms Race*, Bloomberg Businessweek (July 20, 2011), <http://www.businessweek.com/magazine/cyber-weapons-the-new-arms-race-07212011.html>.

⁵⁴ Mark Clayton, *From the man who discovered Stuxnet, dire warnings one year later*, CHRISTIAN SCI. MONITOR (Sept. 22, 2011), <http://www.csmonitor.com/USA/2011/0922/From-the-man-who-discovered-Stuxnet-dire-warnings-one-year-later>.

⁵⁵ David E. Hoffman, *The New Virology*, 185 FOREIGN POL’Y 78, 78 (2011), available at http://www.foreignpolicy.com/articles/2011/02/22/the_new_virology?print=yes&hidecomments=yes&page=full.

Because of the proliferation of cyber tools across all levels of society, the United States will continue to need to develop and use cyber capabilities to conduct both defensive protective measures, but also offensive cyber actions. In fact, the Air Force recently announced that it has classified six specific cyber tools as “weapons”⁵⁶ and Congress recently provided authorization for the United States Department of Defense (“DoD”) to conduct “offensive operations in cyberspace.”⁵⁷ Additionally, U.S. Cyber Command, General Keith Alexander, announced in March 2013 that the Pentagon will have 13 offensive cyber teams by fall 2015.⁵⁸

In addition, the Guardian newspaper recently reported that President Obama “ordered his senior national security and intelligence officials to draw up a list of potential overseas targets for U.S. cyber-attacks,”⁵⁹ and the Washington Post reported that “U.S. intelligence services carried out 231 offensive spy-operations in 2011.”⁶⁰

Cyber weapons are, and will continue to be, a part of the United States’ military arsenal. As will be seen in Part III, the distance in both time and space by which these cyber tools can be effectively used demonstrates the ineffectiveness of the WPR in future armed conflicts.⁶¹

3. *Robots and Autonomous Weapons*

The use of robotics and autonomous systems by the United States military has not progressed as far or as fast as that of drones and cyber operations, but their use is clearly increasing. As noted by Singer,

⁵⁶ Andrea Shalal-Esa, *Six U.S. Air Force Cyber Capabilities Designated “Weapons”*, REUTERS (Apr. 8, 2013), <http://www.reuters.com/article/2013/04/09/net-us-cyber-airforce-weapons-idUSBRE93801B20130409>.

⁵⁷ National Defense Authorization Act for Fiscal Year 2012, Pub. L. No. 112-81, Sec. 954, 125 Stat. 1298, 354 (2011).

⁵⁸ Ellen Nakashima, *Pentagon Creating Teams to Launch Cyberattacks as Threat Grows* (Mar. 12, 2013), WASH. POST, http://articles.washingtonpost.com/2013-03-12/world/37645469_1_new-teams-national-security-threat-attacks.

⁵⁹ Glenn Greenwald & Ewen MacAskill, *Obama Orders US to Draw Up Overseas Target Lists for Cyber-Attacks*, GUARDIAN (June 7, 2013), <http://www.theguardian.com/world/2013/jun/07/obama-china-targets-cyber-overseas>.

⁶⁰ Barton Gellman & Ellen Nakashima, *U.S. Spy Agencies Mounted 231 Offensive Cyber-Operations in 2011, Documents Show*, WASH. POST (Aug. 30, 2013), http://www.washingtonpost.com/world/national-security/us-spy-agencies-mounted-231-offensive-cyber-operations-in-2011-documents-show/2013/08/30/d090a6ac-119e-11e3-b4cb-fd7ce041d814_story.html.

⁶¹ See also Chen, *supra* note 38, at 1790–92.

When the U.S. military went into Iraq in 2003, it had only a handful of robotic planes, commonly called “drones” but more accurately known as “unmanned aerial systems.” Today, we have more than 7,000 of these systems in the air, ranging from 48-foot-long Predators to micro-aerial vehicles that a single soldier can carry in a backpack. The invasion force used zero “unmanned ground vehicles,” but now we have more than 12,000, such as the lawnmower-size Packbot and Talon, which help find and defuse deadly roadside bombs.⁶²

Thomas Adams, a retired Army Colonel, argues that “[f]uture Robotic weapons ‘will be too fast, too small, too numerous and will create an environment too complex for humans to direct,’” and “[i]nnovations with robots ‘are rapidly taking us to a place where we may not want to go, but probably are unable to avoid.’”⁶³

The development and use of autonomous systems, including robots, unarmed and armed unmanned aerial and underwater vehicles,⁶⁴ auto-response systems such as armed unmanned sentry stations,⁶⁵ and a host of other similar weapon systems is clearly increasing.⁶⁶ In addition to the United States, “there are 43 other nations that are also building, buying and using military robotics today.”⁶⁷ In 2005, a published military report “suggested autonomous robots on the battlefield will be the norm within 20 years,”⁶⁸ and a recent DoD report titled *Unmanned Systems Integrated Roadmap FY2011-2036*, stated that it “envisions unmanned systems seamlessly operating with manned systems

⁶² Peter W. Singer, *We, Robot*, SLATE (May 19, 2010), http://www.slate.com/articles/news_and_politics/war_stories/2010/05/we_robot.html; see also Elisabeth Bumiller & Thom Shanker, *War Evolves With Drones, Some Tiny as Bugs*, N.Y. TIMES (June 19, 2011), http://www.nytimes.com/2011/06/20/world/20drones.html?pagewanted=all&_r=0.

⁶³ *Robots on Battlefield: Robotic Weapons Might be the Way of the Future, But They Raise Ethical Questions About the Nature of Warfare*, TOWNSVILLE BULL. (Sept. 18, 2009).

⁶⁴ Damien Gayle, *Rise of the Machine: Autonomous killer robots ‘could be developed in 20 years’*, DAILYMAIL (Nov. 20, 2012), <http://www.dailymail.co.uk/sciencetech/article-2235680/Rise-Machines-Autonomous-killer-robots-developed-20-years.html>.

⁶⁵ Jonathan D. Moreno, *Robot Soldiers Will Be a Reality And a Threat*, WALL ST. J. (May 11, 2012, 6:07 PM), <http://online.wsj.com/article/SB10001424052702304203604577396282717616136.html>.

⁶⁶ John Markoff, *U.S. aims for robots to earn their stripes on the battlefield*, INT’L HERALD TRIBUNE (Nov. 27, 2010).

⁶⁷ Steve Kanigher, *Author talks about military robotics and the changing face of war*, LAS VEGAS SUN (Mar. 17, 2011, 2:01 AM), <http://www.lasvegassun.com/news/2011/mar/17/military-robotics-and-changing-face-war/>.

⁶⁸ P.W. Singer, *In the Loop? Armed Robots and the Future of War*, DEFENSE INDUSTRY DAILY (Jan. 28, 2009, 20:09), <http://www.defenseindustrydaily.com/In-the-Loop-Armed-Robots-and-the-Future-of-War-05267/>.

while gradually reducing the degree of human control and decision making required for the unmanned portion of the force structure.”⁶⁹

Current controversy has erupted around autonomous systems when the DoD issued *Autonomy in Weapon Systems*,⁷⁰ a directive that applies to the “design, development, acquisition, testing, fielding, and employment of autonomous and semi-autonomous weapon systems, including guided munitions that can independently select and discriminate targets.”⁷¹ The Directive deals specifically with the autonomous nature of future systems and states that “It is DoD policy that . . . [a]utonomous and semi-autonomous weapon systems shall be designed to allow commanders and operators to exercise appropriate levels of human judgment over the use of force.”⁷² Immediately following the issuance of the DoD Directive, Human Rights Watch published a report⁷³ calling for a multilateral treaty that would “prohibit the development, production, and use of fully autonomous weapons.”⁷⁴ This report has, in turn, been assailed by law of war experts who attack the underlying legal and practical assumptions it contains.⁷⁵

At this point, it is unclear how the issues surrounding robots and autonomous weapon systems will all resolve, but it seems very unlikely that the military will abandon such a useful tool. In fact, it seems much more likely that research, development, and employment of robots and autonomous systems, including autonomous weapon systems, will continue to increase and become an even larger portion of the military arsenal. The employment of these non-human weapons has significant potential impact on the effectiveness of the WPR, as will be discussed below.

⁶⁹ U.S. DEP’T OF DEFENSE, UNMANNED SYSTEMS INTEGRATED ROADMAP FY2011-2036 (2011), available at <http://www.acq.osd.mil/sts/docs/Unmanned%20Systems%20Integrated%20Roadmap%20FY2011-2036.pdf>.

⁷⁰ U.S. DEP’T OF DEFENSE, DIRECTIVE No. 3000.09, AUTONOMY IN WEAPON SYSTEMS (Nov. 21, 2012). The Directive followed a DoD Defense Science Board Task Force Report that was issued in July of 2012. U.S. DEP’T OF DEFENSE SCIENCE BOARD, THE ROLE OF AUTONOMY IN DOD SYSTEMS (July 2012), available at <http://www.fas.org/irp/agency/dod/dsb/autonomy.pdf>.

⁷¹ DEPARTMENT OF DEFENSE, DIRECTIVE No. 3000.09 § 2(a)(2), The Directive does not apply to “autonomous and semi-autonomous cyberspace systems for cyberspace operations; unarmed, unmanned platforms; unguided munitions; munitions manually guided by the operator (e.g. laser- or wire-guided munitions); mines; or unexploded explosive ordnance.” *Id.* § 2(b).

⁷² *Id.* § 4(a).

⁷³ HUMAN RIGHTS WATCH, LOSING HUMANITY: THE CASE AGAINST KILLER ROBOTS (2012), available at http://www.hrw.org/sites/default/files/reports/arms1112ForUpload_0_0.pdf.

⁷⁴ *Id.* at 5.

⁷⁵ See, e.g., Michael Schmitt, *Autonomous Weapon Systems and International Humanitarian Law: A Reply to the Critics*, 4 HARV. NAT’L SEC. J. 1 (2013).

4. *Nanotechnology*

According to a U.S. government website, “[n]anotechnology is the understanding and control of matter at the nanoscale, at dimensions between approximately 1 and 100 nanometers, where unique phenomena enable novel applications.”⁷⁶ In the United States, the National Science and Technology Council oversees nanotechnology development with the goal to “expedite[] the discovery, development and deployment of nanoscale science, engineering, and technology to serve the public good through a program of coordinated research and development aligned with the missions of the participating agencies.”⁷⁷ China and Russia are also “openly investing significant amounts of money in nanotechnology.”⁷⁸

The U.S. DoD was quick to recognize the potential benefits of nanotechnology. In 2006, *Forbes* reported:

The Department of Defense has spent over \$1.2 billion on nanotechnology research through the National Nanotech Initiative since 2001. The DOD believed in nano long before the term was mainstream. According to Lux Research, the DOD has given grants totaling \$195 million to 809 nanotech-based companies starting as early as 1988. Over the past ten years, the number of nanotech grants has increased tenfold.⁷⁹

Potential applications of nanotechnology to military purposes are numerous. Blake and Imburgia, both military lawyers, have written:

Scientists believe nanotechnology can be used to develop controlled and discriminate biological and nerve agents; invisible, intelligence gathering devices that can be used for covert activities almost anywhere in the world; and artificial viruses that can enter into the human body without the individual’s knowledge. So called “nanoweapons” have the potential to create more intense laser technologies as well as self-guiding bullets that can direct themselves to a target based on artificial intelligence. Some experts also believe nanotechnology possesses the potential to attack buildings as a

⁷⁶ *What it is and How it Works*, NANO.GOV, <http://www.nano.gov/nanotech-101/what> (last visited Mar. 5, 2013).

⁷⁷ *NNI Vision, Goals, and Objectives*, NANO.GOV, <http://www.nano.gov/about-nni/what/vision-goals> (last visited Mar. 5, 2013).

⁷⁸ Blake & Imburgia, *supra* note 25, at 180.

⁷⁹ Josh Wolfe & Dan van den Bergh, *Nanotech Takes on Homeland Terror*, FORBES.COM (Aug. 14, 2006, 6:00 AM), http://www.forbes.com/2006/08/11/nanotech-terror-cepheid-homeland-in_jw_0811soapbox_inl.html.

“swarm of nanoscale robots programmed only to disrupt the electrical and chemical systems in a building,” thus avoiding the collateral damage a kinetic strike on that same building would cause.⁸⁰

Foreseeable weapons advances from nanotechnology include improving the strength and longevity of machinery,⁸¹ advances in stealth technology,⁸² allowing the creation of more powerful and efficient bombs,⁸³ and the miniaturization of nuclear weapons.⁸⁴ Perhaps most importantly for this article, nanotechnology will likely eventually allow for the creation of microscopic nanobots that can not only act as sensors to gather information, but also serve as delivery systems for lethal toxins or genomic alterers into human bodies.⁸⁵

Nanotechnology will make weapons smaller, more mobile, and more potent. It will provide easier, quicker, and more accurate means of collecting information. It will allow greater range, effect, and lethality. And it will do all of this at great distances from any human influence and with kinetic effects that cover the full spectrum of possibilities. The WPR currently does not seem to encompass the military application of such technology.

5. *Virology and Genomics*

These two areas of advancing technologies are early in their development. Insofar as they overlap with biological weapons, such use by nations has already been internationally prohibited.⁸⁶ However, their increased accessibility to the general public has raised grave concerns amongst

⁸⁰ Blake & Imburgia, *supra* note 25, at 180 (citations omitted).

⁸¹ *Benefits and Applications*, NAT'L NANOTECHNOLOGY INST., <http://nano.gov/you/nanotechnology-benefits> (last visited Oct. 2, 2012).

⁸² Clay Dillow, *Carbon Nanotube Stealth Paint Could Make Any Object Ultra-Black*, POPSCI (Dec. 6, 2011, 12:15 BST), <http://www.popsci.com/technology/article/2011-12/paint-imbued-carbon-nanotubes-could-make-any-object-absorb-broad-spectrum-light>.

⁸³ Adrian Blomfield, *Russian Army 'Tests the Father of All Bombs'*, TELEGRAPH (Sept. 12, 2007, 12:01 AM), <http://www.telegraph.co.uk/news/worldnews/1562936/Russian-army-tests-the-father-of-all-bombs.html>.

⁸⁴ *Military Uses of Nanotechnology: The Future of War*, THENANOAGE.COM, <http://www.thenanoage.com/military.htm> (last visited Feb. 7, 2013).

⁸⁵ Scientists and the University of California, Berkeley, are already working on the Micromechanical Flying Insect Project. *Micromechanical Flying Insect*, U. CAL. BERKELEY, <http://robotics.eecs.berkeley.edu/~ronf/mfi.html/index.html> (last visited Feb. 7, 2013); *Nanotech Weaponry*, CENTER FOR RESPONSIBLE NANOTECHNOLOGY (Feb. 12, 2004), http://www.crnano.typepad.com/crnblog/2004/02/nanotech_weapon.html; Caroline Perry, *Mass-Production Sends Robot Insects Flying*, LIVE SCI. (Apr. 18, 2012, 5:51 PM), <http://www.livescience.com/19773-mini-robot-production-nsf-ria.html>.

⁸⁶ Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction art. I, Apr. 10, 1972, 26 U.S.T. 583, T.I.A.S. No. 8062.

successive United States administrations; to the extent that natural or synthetic viruses and similar naturally occurring organisms do not fall within the proscriptions of international law, they provide potentially potent weapons or weapons platforms, especially in combination with advances in genomics.⁸⁷ Additionally, such international regulation only applies to States,⁸⁸ and any impact on non-state actors depends on domestic implementation of the Treaty provisions and effective enforcement, normally through criminal actions that only take effect after the crime has occurred.⁸⁹

Genomics is the “study of genes and their function.”⁹⁰ The rapid advances in genomics⁹¹ have not only provided numerous benefits for modern medicine and science in general, but have also provided the opportunity for significant weapons advancements. “A couple of decades ago, it took three years to learn how to clone and sequence a gene, and you earned a PhD in the process. Now, thanks to ready-made kits you can do the same in less than three days . . . the cost of sequencing DNA has plummeted, from about \$100,000 for reading a million letters, or base pairs, of DNA code in 2001, to around 10 cents

⁸⁷ Will S. Hylton, *How Ready are We for Bioterrorism?*, N.Y. TIMES (Oct. 26, 2011), <http://www.nytimes.com/2011/10/30/magazine/how-ready-are-we-for-bioterrorism.html?pagewanted=all>; BOB GRAHAM ET AL., WORLD AT RISK: THE REPORT OF THE COMMISSION ON THE PREVENTION OF WMD PROLIFERATION AND TERRORISM, xv (2008), available at <http://www.absa.org/leg/WorldAtRisk.pdf>; A former director at the Defense Advanced Research Projects Agency, or DARPA, argues that “What took me three weeks in a sophisticated laboratory in a top-tier medical school 20 years ago, with millions of dollars in equipment, can essentially be done by a relatively unsophisticated technician. . . . A person at a graduate-school level has all the tools and technologies to implement a sophisticated program to create a bioweapon.” Wil S. Hylton, *Warning: There’s Not Nearly Enough Of This Vaccine To Go Around*, N.Y. TIMES SUNDAY MAGAZINE, Oct. 30, 2011, at MM26. Similarly, Michael Daly writes that “there is already information in public databases that could be used to generate highly pathogenic biological warfare (BW) agents.” Michael J. Daly, *The Emerging Impact of Genomics on the Development of Biological Weapons: Threats and Benefits Posed by Engineered Extremophiles*, 21 CLINICS IN LABORATORY MED. 619, 621 (2001), available at <http://www.usuhs.edu/pat/deinococcus/pdf/clinicsLabMedicineVol21No3.pdf>.

⁸⁸ See generally, Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction Apr. 10, 1972, 26 U.S.T. 583, T.I.A.S. No. 8062.

⁸⁹ See, e.g., S.C. Res. 1540, paras. 2-3, U.N. Doc. S/RES/1540 (Apr. 28, 2004) (calling on member States to develop domestic procedures to enforce treaty provisions relating to non-state actors’ use of nuclear, chemical or biological weapons).

⁹⁰ MedicineNet.com, *Definition of Genomics*, (Oct. 26, 2014) at <http://www.medterms.com/script/main/art.asp?articlekey=23242>.

⁹¹ David E. Hoffman, *The New Virology: The future of war by other means*, FOREIGN POLICY, p. 78, March/April 2011, available at http://www.foreignpolicy.com/articles/2011/02/22/the_new_virology?print=yes&hidecomments=yes&page=full where the author states, “One thing is certain: The technology for probing and manipulating life at the genetic level is accelerating. . . . But the inquiry itself highlighted the rapid pace of change in manipulating biology. Will rogue scientists eventually learn how to use the same techniques for evil?”

today.”⁹² The ability to tailor a weapon to the exact DNA of your intended target would allow for precision targeting in a way not formerly possible.

For example, Andrew Hessel, Marc Goodman, and Steven Kotler, writing recently in the *Atlantic*, proposed a hypothetical where a virus that was genetically coded to the President of the United States was created and transmitted through unwitting individuals with lethal effect on only the President.⁹³ Advances in genomics, particularly linked to similar advances in virology and nanotechnology, move this hypothetical from the world of science fiction to the realm of potential weapons.

As with the prior weapons discussed in this section, viral and genomic weapons have effects at great distances, in both time and space, from their initiator. There is no requirement for the human designer or user to be on the same continent when the lethal effect occurs. Furthermore, the pinpoint accuracy of a genetically coded weapon could limit the scale in such a way as to stay far below the level of armed conflict.

B. Methods of Warfare

In contrast to means of warfare, the method of warfare is not about the weapon or means of warfare itself, but about how warfare is conducted—the tactics of warfare.⁹⁴ For example, the use of camouflage is considered a ruse⁹⁵ and is a method of warfare. Advancing technologies will allow for new and innovative methods of warfare that will raise interesting legal issues. One in particular is worth mentioning here—latent attacks.

1. Latent Attacks

Latent attacks are “characterized by the placing or embedding of some weapon in a place or position where it will not be triggered until signaled

⁹² Charisius, Friebe, and Karberg, *Becoming Biohackers: Learning the Game*, BBC (Jan. 22, 2013), available at <http://www.bbc.com/future/story/20130122-how-we-became-biohackers-part-1>.

⁹³ Andrew Hessel, Marc Goodman & Steven Kotler, *Hacking the President's DNA*, ATLANTIC MAGAZINE (Nov. 2012), <http://www.theatlantic.com/magazine/archive/2012/11/hacking-the-presidents-dna/309147/>.

⁹⁴ *Methods of Warfare*, PRC MANUAL ON INTERNATIONAL LAW APPLICABLE TO AIR AND MISSILE WARFARE, <http://www.ihlresearch.org/amw/manual/section-a-definitions/v> (last visited Dec. 14, 2014).

⁹⁵ See Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, U.N. Doc A/32/144, art. 37.2 (June 8, 1977); see also GEOFFREY CORN ET AL., THE LAW OF ARMED CONFLICT: AN OPERATIONAL APPROACH 223–24 (2012) (discussing ruses versus perfidy).

sometime in the future or activated by some future action.”⁹⁶ The eventual attack may be triggered by a remote signal or specific occurrence and may even be triggered by the victim himself.⁹⁷ For example, consider viral genetic material that is implanted by a nanobot into the intended victim far in advance of a future attack. The latent but lethal genetic material may only be activated upon some signal by the attacker or some other event, potentially by an unknowing third party or the victim himself, such as ingesting some supposed antidote. Additionally, the triggering event may never occur, but the potential would always be there.

Latent computer attacks are already well documented.⁹⁸ Embedded source code in the hardware of computer components or software found on computers would provide an adversary with a powerful future weapon.⁹⁹ For example, consider that the United States sells F-16 aircraft to numerous countries throughout the world. The United States could certainly implant in the computer functions of that aircraft some computer code that will not allow the F-16 to engage aircraft that it identifies as belonging to the U.S. military. In fact, if the U.S. has this capability, it may be irresponsible to not take such preemptive actions. As the largest producer of weapons worldwide,¹⁰⁰ and one of the largest exporters,¹⁰¹ latent attacks should be an important consideration for the U.S. military industrial complex.

The capability to implant, hide and trigger latent attacks is technologically dependent. But as the ability to do so continues to develop, it seems clear that the United States and other technologically capable nations, would likely use such technology, even against current allies, as a hedge against future changes in the geopolitical situation. As with the means of warfare discussed above, this method of attack would take place in time and space at great distances from the initial human action, taking it outside the current regulation of the WPR.

⁹⁶ Jensen, *supra* note 22, at 309.

⁹⁷ *Id.*

⁹⁸ Steve Stecklow, *U.S. Nuclear Lab Removes Chinese Tech Over Security Fears*, REUTERS (Jan. 7, 2013, 3:32 PM), <http://www.reuters.com/article/2013/01/07/us-huawei-alamos-idUSBRE90608B20130107>; Jayadeva Ranade, *China and the Latent Cyber Threat*, 1 NATIONAL DEFENSE AND AEROSPACE POWER 1 (2010).

⁹⁹ *Wary of Naked Force, Israel Eyes Cyberwar on Iran*, REUTERS, (July 7, 2009), <http://www.ynetnews.com/articles/0,7340,L-3742960,00.html>.

¹⁰⁰ Stockholm International Peace Research Institute, *The SIPRI Top 100 arms-producing and military services companies in the world, excluding China, 2012*, available at <http://www.sipri.org/research/armaments/production/Top100>.

¹⁰¹ Stockholm International Peace Research Institute, *TIV of arms exports from all, 2012-2013*, available at http://armstrade.sipri.org/armstrade/html/export_values.php.

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In all of these cases, where the human connection is attenuated and the type of action is different from the normal kinetic model, there are significant impacts on the application of the WPR. It is to this topic that the paper now turns.

II. THE WAR POWERS RESOLUTION

The WPR is a federal law intended to inhibit the President's ability to use military force in a situation of armed conflict without involving Congress.¹⁰² Both its constitutionality and its practicality have been seriously questioned in the past,¹⁰³ including a very detailed discussion between the Executive and Legislative branches in connection with United States' support to military operations in Libya in 2011.¹⁰⁴ The next part will provide a brief historical background. The part will be followed by an introduction to the text of the Resolution, with emphasis on those portions pertinent to the thesis of this article. Issues raised by those specific provisions will then be discussed.

A. History

In the early 1970's, discontent with the Vietnam War was spreading throughout the citizenry of the United States¹⁰⁵ and the Congress. Congress demonstrated its frustration with the situation by repealing the Gulf of Tonkin Resolution, which was the Congressional grant of authority for the war.¹⁰⁶ With the publication of the Pentagon Papers¹⁰⁷ in June 1971, Congress felt betrayed by successive Presidential administrations that, it appeared, had not been keeping Congress fully informed of the military actions in Indochina.¹⁰⁸

¹⁰² WPR, sec. 2(a).

¹⁰³ GRIMMETT, *supra* note 20, at 6; BAKER ET AL., *supra* note 8, at 24; Fisher & Adler, *supra* note 12, at 10–14; Joseph R. Biden, Jr. & John B. Ritch III, *The War Power at a Constitutional Impasse: A "Joint Decision" Solution*, 77 GEO. L.J. 367, 385–90 (1988).

¹⁰⁴ See e.g. Charlie Savage & Mark Landler, *White House Defends Continuing U.S. Role in Libya Operation*, N.Y. TIMES, June 16, 2011, at A16; Stephen G. Rademaker, *Congress and the Myth of the 60-Day Clock*, WASH. POST (May 24, 2011), http://articles.washingtonpost.com/2011-05-24/opinions/35233150_1_libya-operation-war-powers-resolution-president-obama.

¹⁰⁵ Joseph Carroll, *The Iraq-Vietnam Comparison*, GALLUP (June 15, 2004), <http://www.gallup.com/poll/11998/iraqvietnam-comparison.aspx>.

¹⁰⁶ Pub. L. No 91-672, Sec. 12, 84 Stat. 2053 (1971).

¹⁰⁷ *The Pentagon Papers*, WASH. POST, <http://www.washingtonpost.com/wp-srv/nation/specialreports/pentagon-papers/> (last visited Oct. 22, 2013).

¹⁰⁸ Hedrick Smith, *Mitchell Seeks to Halt Series on Vietnam, but Times Refuses*, N.Y. TIMES, June 15, 1971, at 1.

In response, Congress passed the Mansfield Amendment¹⁰⁹ which “declared to be the policy of the United States to terminate at the earliest possible date all military operations of the United States in Indochina.”¹¹⁰

Despite this Congressional action, military involvement continued, and Congress turned to another source for stopping the war—funding. On May 31, 1973, Congress passed a bill telling the President that “None of the funds herein appropriated under this act or heretofore appropriated under any other act may be expended to support directly or indirectly combat activities in, over or from off the shores of Cambodia or in or over Laos by United States forces.”¹¹¹ President Nixon vetoed the bill but was forced to the bargaining table.¹¹² After negotiations, Congress passed a Joint Resolution which the President did not veto which stated “Notwithstanding any other provision of law, on or after August 15, 1973, no funds herein or heretofore appropriated may be obligated or expended to finance directly or indirectly combat activities by United States military forces in or over or from off the shores of North Vietnam, South Vietnam, Laos, or Cambodia.”¹¹³

During this same period, a stream of judicial cases flooded the Courts from citizens,¹¹⁴ members of the military,¹¹⁵ and eventually members of Congress.¹¹⁶ The results of these cases were mixed, and no clear standard was achieved as to the differing roles of Congress and the President in the use of the military. Though President Nixon complied with the Joint Resolution by ceasing bombing on August 14, 1973, Congress was left dissatisfied with their role in the Vietnam War and felt a great need to reign in Presidential power to engage the military in hostilities.¹¹⁷ That chance came in October 1973.¹¹⁸

¹⁰⁹ Pub. L. No. 92-156, Sec. 601(a), 85 Stat. 423, 430 (1971).

¹¹⁰ *Id.*

¹¹¹ 29 Cong. Q. Almanac 102 (1973).

¹¹² D.H.H., *The War Powers Resolution: A Tool for Balancing Power Through Negotiation*, 70 VA. L. REV. 1037, 1039 (1984).

¹¹³ Pub. L. No 93-52, Sec 108, 87 Stat. 130 (July 1, 1973).

¹¹⁴ See, e.g., *Velvel v. Nixon*, 415 F.2d 236 (10th Cir. 1969), cert. denied, 396 U.S. 1042 (1970); *Campen v. Nixon*, 56 F.R.D. 404 (N.D. Cal. 1972).

¹¹⁵ See *Da Costa v. Laird*, 448 F.2d 1368 (2d Cir.), cert. denied, 405 U.S. 979 (1972); *Orlando v. Laird*, 443 F.2d 1039 (2d Cir.), cert. denied, 404 U.S. 869 (1971); *Luftig v. McNamara*, 373 F.2d 664, 665-66 (D.C. Cir.).

¹¹⁶ See *Holtzman v. Schlesinger*, 484 F.2d 1307 (2d Cir.), cert. denied, 416 U.S. 936 (1974).

¹¹⁷ See *Fisher & Adler*, *supra* note 12, at 1, 4, 10.

¹¹⁸ *Id.* at 1-6.

As early as May 3, 1973, Representative Zablocki introduced a Joint Resolution that would require the President to work more closely with Congress when initiating military actions.¹¹⁹ The House passed the proposed legislation on July 18¹²⁰ and the Senate on July 20.¹²¹ It was reported to the Joint Conference Committee on October 4,¹²² and agreed to by the Senate on October 10¹²³ and the House on October 12.¹²⁴ The legislation was then sent to the President who vetoed it on October 24.¹²⁵

The President raised several issues in his veto,¹²⁶ including the claim that the legislation was clearly unconstitutional because it “would attempt to take away, by mere legislative act, authorities which the President has properly exercised under the Constitution for almost 200 years.”¹²⁷ President Nixon further argued that the legislation “would seriously undermine this Nation’s ability to act decisively and convincingly in times of international crisis.”¹²⁸ He also chided the Congress for trying to set up automatic cut-offs of authority without requiring particular action by Congress, arguing that “[i]n [his] view, the proper way for the Congress to make known its will on such foreign policy questions is through a positive action.”¹²⁹

Many of President Nixon’s arguments remain pertinent today in the continuing discussion of the constitutionality, as well as prudence, of the War Powers Resolution.¹³⁰ Nevertheless, an emboldened Congress¹³¹ overrode the

¹¹⁹ H.R.J. Res. 542 93rd Cong. 1973, available at <http://www.gpo.gov/fdsys/pkg/STATUTE-87/pdf/STATUTE-87-Pg555.pdf>.

¹²⁰ *Bill Summary & Status 93rd Congress (1973 1974) H.J. Res. 542 All Information*, LIBRARY OF CONGRESS, <http://thomas.loc.gov/cgi-bin/bdquery/z?d093:HJ00542:@@L&summ2=m&> (last visited Nov. 12, 2013).

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*; Veto of War Powers Resolution, 9 WEEKLY COMP. PRES. DOC. 1285 (Oct. 24, 1973).

¹²⁶ Veto of the War Powers Resolution, 5 PUB. PAPERS 893, 893–95 (Oct. 24, 1973).

¹²⁷ *Id.* at 893.

¹²⁸ *Id.*

¹²⁹ *Id.* at 894–95.

¹³⁰ See, e.g., *The War Powers Resolution Debate Continues*, CONST. DAILY (Sept. 4, 2013), <http://blog.constitutioncenter.org/2013/09/the-war-powers-resolution-debate-continues/> (describing both sides of the current debate); Robert F. Turner, *Why the War Powers Resolution Isn’t a Key Factor in the Syria Situation*, CONST. DAILY (Aug. 30, 2013), <http://blog.constitutioncenter.org/2013/08/why-the-war-powers-resolution-isnt-a-key-factor-in-the-syria-situation/> (arguing that President Nixon’s arguments against the WPR are still valid today).

¹³¹ See Michael A. Newton, *Inadvertent Implications of the War Powers Resolution*, 45 CASE W. RES. J. INT’L L. 173, 179–80 (2012).

President's veto, and the War Powers Resolution became law on November 7, 1973.

Since the passage of the WPR, every President has questioned the constitutionality of the War Powers Resolution as an "unconstitutional infringement on the President's authority as Commander-in-Chief."¹³² There is only one instance when the President has mentioned the WPR in sending a notification to Congress and that was after the event had occurred.¹³³ There have been numerous examples of President's filing reports "consistent with" their WPR obligations,¹³⁴ but generally with at least implicit and often explicit disclaimers as to the applicability of the WPR.¹³⁵ As of 2012, "Presidents have submitted 132 reports to Congress as a result of the War Powers Resolution. Of these, President Ford submitted 4, President Carter 1, President Reagan 14, President George H. W. Bush 7, President Clinton 60, President George W. Bush 39, and President Barack Obama 11."¹³⁶

There have also been a number of instances where armed forces have been deployed into potentially hostile environments, yet the President has not filed any kind of a report with Congress.¹³⁷ In at least some of these instances, the President has determined not to file, based on an opinion of the Department of Justice's Office of Legal Counsel (OLC) which was issued with respect to the deployment of U.S. military forces to Somalia in 1992.¹³⁸ According to the OLC, President Clinton did not need to consult with or report to Congress

¹³² See GRIMMETT, *supra* note 20, at 6; RICHARD F. GRIMMETT, WAR POWERS RESOLUTION: PRESIDENTIAL COMPLIANCE 2 (2012); see BAKER ET AL., *supra* note 8, at 26.

¹³³ See GRIMMETT, *supra* note 20, at 2; see BAKER ET AL., *supra* note 8, at 2 (referring to the 1975 seizure of the *Mayaguez* and the President's filing "cited section 4(a)(1), which triggers the time limit, . . . [but] in this case the military action was completed and U.S. armed forces had disengaged from the area of conflict when the report was made.").

¹³⁴ See generally Letter from Barack Obama, U.S. President, to John Boehner, U.S. Speaker of the House (June 14, 2013), available at <http://www.whitehouse.gov/the-press-office/2013/06/14/letter-president-regarding-war-powers-resolution> (regarding the War Powers Resolution); Letter to Congressional Leaders Reporting on the Deployment of United States Military Personnel as Part of the Kosovo International Security Force, 2 PUB. PAPERS 1544, 1544 (Nov. 14, 2003), available at <http://www.gpo.gov/fdsys/pkg/PPP-2003-book2/pdf/PPP-2003-book2-doc-pg1544.pdf>; Letter to Congressional Leaders on the Situation in Somalia, 1 PUB. PAPERS 836, 836 (June 10, 1993); Letter to Congressional Leaders on the Persian Gulf Conflict, 1 PUB. PAPERS 52, 52 (Jan. 18, 1991), available at <http://www.gpo.gov/fdsys/pkg/PPP-1991-book1/pdf/PPP-1991-book1-doc-pg52.pdf>; Letter to the Speaker of the House of Representatives and the President Pro Tempore of the Senate on the United States Reprisal Against Iran, 2 PUB. PAPERS 1212, 1212 (Oct. 20, 1987), available at <http://www.reagan.utexas.edu/archives/speeches/1987/102087e.htm>.

¹³⁵ See GRIMMETT, *supra* note 20, at 2-3, 81.

¹³⁶ See GRIMMETT, *supra* note 132, at 17.

¹³⁷ See GRIMMETT, *supra* note 20, at 74.

¹³⁸ Authority to Use United States Military Forces in Somalia, 16 OP. O.L.C. 6, 6 (1992).

because “Attorneys General and this Office ‘have concluded that the President has the power to commit United States troops abroad’ as well as to ‘take military action, for the purpose of protecting national interests.’”¹³⁹

A brief analysis of the text will demonstrate why the Executive objects to Congress’s actions in the WPR.

B. Text

The WPR is divided into ten sections.¹⁴⁰ Section 1 simply states the title, and Section 2 gives the purpose and policy of the legislation, stating Congress’s purpose is to “fulfill the intent of the framers of the Constitution of the United States and insure that the collective judgment of both the Congress and the President will apply to the introduction of United States Armed Forces into hostilities.”¹⁴¹ This purpose statement stakes out Congress’s position early, that the use of the military in armed conflict requires both branches of government.

Section 3 is titled “Consultation” and states that “[t]he President in every possible instance shall consult with Congress before introducing United States Armed Forces into hostilities.”¹⁴² This, of course, is made to address one of Congress’s major complaints during the Vietnam War.

Section 4, which will be analyzed in detail in the next section, is one of the most contentious, and the most significant for the purposes of this Article.¹⁴³ The section is titled “Reporting” and establishes reporting requirements for the President to the Congress under specified circumstances.¹⁴⁴

¹³⁹ *Id.* The OLC issued a similar opinion in relation to the 2011 military operation in Libya stating that Congress’s authority under the “declare war” clause of the Constitution only applied to armed conflicts that were “prolonged and substantial . . . typically involving exposure of U.S. military personnel to significant risk over a substantial period.” Authority to Use Military Force in Libya, 35 Op. O.L.C. 1, 24 available at http://www.justice.gov/sites/default/files/olc/opinions/2011/04/31/authority-military-use-in-libya_0.pdf. See also Chen, *supra* note 38, at 1798; Newton, *supra* note 9, at 186.

¹⁴⁰ See generally War Powers Resolution, 15 U.S.C. §§ 1541–1548 (2012).

¹⁴¹ *Id.* § 1541(a).

¹⁴² *Id.* § 1542.

¹⁴³ *Id.* § 1543.

¹⁴⁴ War Powers Resolution, 50 U.S.C. § 1543 (2012).

Section 5 also generates significant controversy, especially by those who think the WPR is unconstitutional.¹⁴⁵ It requires the President to terminate hostilities and remove forces after sixty days without Congress taking any further action.¹⁴⁶ This contested language in the WPR is likely moot after the 1997 Supreme Court case of *Raines v. Byrd*,¹⁴⁷ which will be discussed below.

Sections 6 and 7 are mostly procedural. Section 8 is titled “Interpretation” and states that nothing in the resolution “shall be construed as granting any authority to the President with respect to the introduction of United States Armed Forces into hostilities or into situations wherein involvement in hostilities is clearly indicated by the circumstances which authority he would not have had in the absence of this joint resolution.”¹⁴⁸

Section 9 deals with the separability of provisions within the Resolution,¹⁴⁹ and Section 10 is administrative.¹⁵⁰

C. Issues

For the purposes of this paper, Section 4 contains the language at issue with respect to future armed-conflict.¹⁵¹ However, Section 5 contains the most onerous requirements on the President and represents the most invasive move into what the President would claim as his exclusive authority as commander-in-chief.¹⁵² Therefore, a discussion of Section 5 is warranted first.

1. Section 5

As stated above, Section 5 of the WPR requires the President, in the absence of action by Congress, to withdraw any “United States Armed Forces” within sixty calendar days.¹⁵³ President Nixon and subsequent Presidents have

¹⁴⁵ See e.g. Stephen G. Rademaker, *Congress and the Myth of the 60-Day Clock*, WASH. POST, May 24, 2011, http://articles.washingtonpost.com/2011-05-24/opinions/35233150_1_libya-operation-war-powers-resolution-president-obama (discussing the controversy concerning Section 5 of the WPR).

¹⁴⁶ War Powers Resolution, 50 U.S.C. § 1545 (2012).

¹⁴⁷ *Raines v. Byrd*, 521 U.S. 811 (1997).

¹⁴⁸ War Powers Resolution, 50 U.S.C. § 1547 (2012).

¹⁴⁹ *Id.* § 1548.

¹⁵⁰ *Id.* § 1541(c).

¹⁵¹ *Id.* § 1544.

¹⁵² See *id.* § 1545.

¹⁵³ *Id.* § 1544(b) states:

Within sixty calendar days after a report is submitted or is required to be submitted pursuant to section 1543 (a)(1) of this title, whichever is earlier, the President shall terminate any use of

argued that Congress cannot, by inaction, bind the President to take action with respect to the use of armed forces.¹⁵⁴ The President's arguments seem to have received Supreme Court approval in *Raines v. Byrd*,¹⁵⁵ a Supreme Court case concerning the Line Item Veto Act.¹⁵⁶

In *Raines v. Byrd*, the members of Congress claimed that passage of the line item veto "causes a type of institutional injury (the diminution of legislative power), which necessarily damages all Members of Congress and both Houses of Congress equally."¹⁵⁷ The Supreme Court responded that this equated to a "loss of political power, not loss of any private right,"¹⁵⁸ and decided that "individual Members of Congress do not have sufficient 'personal stake' in this dispute and have not alleged a sufficiently concrete injury to have established Article III standing."¹⁵⁹

This decision became important with respect to the WPR in 1999 when Representative Tom Campbell and other members of Congress filed a complaint for declaratory relief to stop President Clinton's action with respect to the use of force in Kosovo.¹⁶⁰ Campbell sought

a declaration from the judicial branch that the President, the head of the executive branch, has violated the War Powers Clause of the Constitution and the War Powers Resolution by conducting air strikes in the Federal Republic of Yugoslavia without congressional authorization.¹⁶¹

United States Armed Forces with respect to which such report was submitted (or required to be submitted), unless the Congress

(1) has declared war or has enacted a specific authorization for such use of United States Armed Forces,

(2) has extended by law such sixty-day period, or

(3) is physically unable to meet as a result of an armed attack upon the United States. Such sixty-day period shall be extended for not more than an additional thirty days if the President determines and certifies to the Congress in writing that unavoidable military necessity respecting the safety of United States Armed Forces requires the continued use of such armed forces in the course of bringing about a prompt removal of such forces.

¹⁵⁴ See Rademaker, *supra* note 145.

¹⁵⁵ *Raines v. Byrd*, 521 U.S. 811 (1997).

¹⁵⁶ Line Item Veto Act of 1996, 2 U.S.C. §§ 691–692 (1996).

¹⁵⁷ *Raines*, 521 U.S. at 821.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 830.

¹⁶⁰ *Campbell v. Clinton*, 52 F.Supp.2d 34, 35 (D.D.C. 1999), *aff'd* 203 F.2d 19 (D.C. Cir. 2000).

¹⁶¹ *Id.* at 39–40.

The District Court, relying on *Raines v. Byrd*,¹⁶² held that

the courts will apply *Raines* and *Coleman* rigorously and will find standing only in the clearest cases of vote nullification and genuine impasse between the political branches. Under the circumstances presented in this case, the Court cannot conclude that plaintiffs have standing to bring this action, and the case therefore will be dismissed.¹⁶³

Similarly, on appeal, the D.C. Circuit Court again relied on *Raines v. Byrd*, stating that “[t]he question whether congressmen have standing in federal court to challenge the lawfulness of actions of the executive was answered, at least in part, in the Supreme Court’s recent decision in *Raines v. Byrd*.”¹⁶⁴ The Court went on to affirm the District Court’s holding and deny the appeal.¹⁶⁵

As Professor Geoff Corn has argued, the decision in *Raines* “confirms a consistent course followed by the judiciary when asked to adjudicate the legality of presidential decisions to engage the United States Armed Forces in hostilities: focus on whether such a challenge presents a truly ripe issue.”¹⁶⁶ Corn goes on to argue that “[a] challenge will only be cognizable if Congress manifests express opposition to such action. Thus, the legality of war making is not based on a theory of unilateral presidential war power, but on a theory of cooperative policy making by the two branches of government who share this awesome authority.”¹⁶⁷

These decisions fit nicely into Justice Jackson’s framework in his now-famous concurrence in the *Youngstown Sheet & Tube Co. v. Sawyer*.¹⁶⁸ In a situation such as that contemplated by Section 5 where the Congress has taken no action, the President can “only rely on his own independent powers.”¹⁶⁹ Further, “congressional inertia, indifference or quiescence may sometimes, at

¹⁶² *Id.* at 40 (stating “[t]he legal landscape with respect to legislative standing was altered dramatically by the Supreme Court in its first Line Item Veto decision, *Raines v. Byrd*, 521 U.S. 811, 138 L. Ed. 2d 849, 117 S. Ct. 2312 (1997). Virtually all of this Circuit’s prior jurisprudence on legislative standing now may be ignored, and the separation of powers considerations previously evaluated under the rubric of ripeness or equitable or remedial discretion now are subsumed in the standing analysis.”).

¹⁶³ *Id.* at 45.

¹⁶⁴ *Campbell v. Clinton*, 203 F.3d 19, 20 (D.C. Cir. 2000) (citations omitted).

¹⁶⁵ *Id.* at 19.

¹⁶⁶ Geoffrey S. Corn, *Campbell v. Clinton: The “Implied Consent” Theory of Presidential War Power is Again Validated*, 161 MIL. L. REV. 202, 214 (1999).

¹⁶⁷ *Id.* at 214–15.

¹⁶⁸ *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 635–37 (1952).

¹⁶⁹ *Id.* at 637.

least as a practical matter, enable, if not invite, measures on independent presidential responsibility.”¹⁷⁰

In other words, the “practice of the President relying on the implied support of Congress, Congress allowing the President to take war-making initiatives and manifesting its consent through less than express authorization, and courts declining to intervene so long as such support was evident”¹⁷¹ appears to take any bite out of Section 5. As long as Congress does not take action, the President is unlikely to have a Court intervene for non-compliance with the withdrawal requirements of the WPR.

2. Section 4

Because Section 5 of the WPR is now assumed by most constitutional scholars to be unconstitutional, the real power in the WPR is left to Section 4. This section lays out the triggers for the application of the Resolution. The section states:

SEC. 4. (a) In the absence of a declaration of war, in any case in which United States Armed Forces are introduced—

(1) into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances;

(2) into the territory, airspace or waters of a foreign nation, while equipped for combat, except for deployments which relate solely to supply, replacement, repair, or training of such forces; or

(3) in numbers which substantially enlarge United States Armed Forces equipped for combat already located in a foreign nation;

the president shall submit within 48 hours to the Speaker of the House of Representatives and to the President pro tempore of the Senate a report, in writing, setting forth—

(A) the circumstances necessitating the introduction of United States Armed Forces;

(B) the constitutional and legislative authority under which such introduction took place; and

(C) the estimated scope and duration of the hostilities or involvement.

¹⁷⁰ *Id.*

¹⁷¹ Geoffrey S. Corn, *Clinton, Kosovo, and the Final Destruction of the War Powers Resolution*, 42 WM. & MARY L. REV. 1149, 1190 (2001).

(b) The President shall provide such other information as the Congress may request in the fulfillment of its constitutional responsibilities with respect to committing the Nation to war and to the use of United States Armed Forces abroad

(c) Whenever United States Armed Forces are introduced into hostilities or into any situation described in subsection (a) of this section, the President shall, so long as such armed forces continue to be engaged in such hostilities or situation, report to the Congress periodically on the status of such hostilities or situation as well as on the scope and duration of such hostilities or situation, but in no event shall he report to the Congress less often than once every six months.¹⁷²

This section sets up two threshold queries when determining whether the WPR has been triggered: whether there is an introduction of armed forces; and whether that introduction is into current or imminent “hostilities,” enters the geographic space of another state while equipped for combat, or substantially enlarges current deployments.¹⁷³ These two queries will be discussed next.

a. Armed Forces

Because the involvement of the armed forces is a trigger for the WPR, it is important to determine what “armed forces” means in U.S. domestic law in order to analyze the application of the statute to potential future armed conflicts and the ability of the WPR in its present form to effectively accomplish the will of Congress with respect to their view of separation of powers and the use of force.

Within the WPR itself, there is a provision that provides examples of what Congress was targeting with the WPR. In 50 U.S.C. § 1547(c), the statute states:

For purposes of this chapter, the term “introduction of United States Armed Forces” includes the assignment of members of such armed forces to command, coordinate, participate in the movement of, or accompany the regular or irregular military forces of any foreign country or government when such military forces are engaged, or there exists an imminent threat that such forces will become engaged, in hostilities.¹⁷⁴

¹⁷² War Powers Resolution, 50 U.S.C. § 1543 (2012).

¹⁷³ *Id.*

¹⁷⁴ *Id.* § 1547(c).

In defining the term “armed forces”¹⁷⁵ for the purposes of the WPR, the statute refers to “members of such armed forces,” seemingly making clear that the assumption in the drafting was the involvement of actual personnel. As a result, in Congressional usage, the use of the term armed forces has often been substituted with by reference to putting “boots on the ground,” meaning members of the armed forces being placed in the area of operations and at risk from operations.

This usage is supported by the discussion of the WPR within Congress. For example, while arguing in support of the Bill, Representative Annunzio stated:

We must create a situation, in law, where Americans can know that their sons will be sent into hostilities which are clearly understood and clearly accepted, and that unless that action has the approval of Congress, it should not continue until it becomes, like the Vietnam war, the longest war ever fought in our history, for a purpose still not clearly understood, and against an enemy still not clearly defined.¹⁷⁶

This reference to “sons” shows that the chief concern at the time was the sending actual troops into harm’s way, not just military materials.

Representative Matsunaga who also supported the passage of the WPR, stated: “First, it specifies that the President should consult in every possible instance with congressional leaders before committing American troops to hostilities.”¹⁷⁷ The use of the word “troops” instead of “Armed Forces” seems to be a clear indication that he was concerned about actual people in combat and not just military materials.

These sentiments are also reflected by Representative Reid who argued that “[T]his bill does provide a new mechanism whereby Congress and, indeed, any Member of Congress can bring to a vote a preferential motion to end hostilities where U.S. troops have been committed.”¹⁷⁸ As with Representative Matsunaga, the use of the word troops here indicates that the placing of actual

¹⁷⁵ The term “armed forces” is defined in 10 U.S.C. § 101a(4): “The term ‘armed forces’ means the Army, Navy, Air Force, Marine Corps, and Coast Guard.” While this is an important narrowing of the term, it is not extremely helpful for the purposes of this analysis as it does not make a differentiation between personnel and equipment. Many future technologies will not involve personnel in the same way current technologies do, but be much more separated by time and distance.

¹⁷⁶ 119 CONG. REC. H6231, H6281 (daily ed. July 18, 1973) (statement of Rep. Annunzio). Mr. Annunzio, also emphasized Congress’ important role in determining if “this Nation should involve itself in major hostilities, committing large numbers of troops and large quantities of our national treasure.” *Id.* at H6280.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at H6278.

military members on the ground, or “boots on the ground,” was the prevailing thought.

Members of the Senate were equally clear on this issue. Senator Griffin, speaking of an amendment he proposed, stated, “[f]inally, provision is made in the amendment so that any cessation of funding of operations would not imperil the safety of the Armed Forces.”¹⁷⁹ This appears to be a reference focused on military personnel as opposed to materiel.

Additionally in a conversation on the record between Senator Johnston and Senator Javits, Senator Johnston voiced some concern about whether the language of the bill, which he said “speaks of introducing our troops in hostilities,” would actually cover the actions in Vietnam, where “our troops were originally sent there to guard an Air Force base.”¹⁸⁰ Senator Javits replied that there was imminent danger of hostilities when the troops were sent to guard the Air Force Base and then the following exchange took place:

Senator Johnston: “Then the term ‘introducing hostilities’ means introducing troops into the country if hostilities are taking place?”

Senator Javits: “That is exactly right.”

Senator Johnston: “And where they are not employed initially for hostilities?”

Senator Javits: “That is precisely right.”¹⁸¹

The focus on sending “troops” into hostilities in the conversation regardless of the status of the “hostilities” highlights that the Senators involved believed that “troops” were the real concern meant to be covered by the statute, rather than material or non-personnel items.

Two more examples are useful. Senator Tunney who spoke in support of the bill stated, “This is not to deny that many situations might require an American military presence. It is to stress that the methods selected by recent American Presidents for introducing and maintaining American troops in hostilities indicate that defects exist in the process by which war-making decisions are made.”¹⁸² Similarly, Senator Huddleston who was a co-sponsor of the WPR, in arguing the constitutional basis for the statute, said

¹⁷⁹ 119 CONG. REC. 14159, 14208 (daily ed. July 20, 1973).

¹⁸⁰ *Id.* at 14208.

¹⁸¹ *Id.* at 14209.

¹⁸² *Id.* at 14215.

The basis for legislative power in the committing of troops to hostilities abroad rests in article I, section 8 of the Constitution which authorizes Congress to provide for the common defense, to declare war, to raise and support—for up to 2 years at a time—the Army and Navy, to make rules to regulate and govern the military forces . . .¹⁸³

These references to “troops” is a clear indication that the focus of the WPR was actual soldiers, sailors, airmen, and marines—not their equipment, military materiel, or other property. “Armed forces” was meant to mean people from the very beginning.¹⁸⁴

Recent operations have confirmed the continuing reliance by the Executive on “boots on the ground” as the trigger for WPR constraints. In response to a question directly about the application of the WPR to the 2011 military operations in Libya, President Obama stated,

I spoke to the American people about what we would do. I said there would be no troops on the ground . . . We have done exactly what I said we would do. We have not put any boots on the ground . . . But do I think that our actions in any way violate the War Powers Resolution? The answer is ‘no.’ So I don’t even have to get to the constitutional question.”¹⁸⁵

In response to President Obama’s reading of the WPR, Minority Leader of the House of Representative, Nancy Pelosi agreed. “The limited nature of this

¹⁸³ *Id.* at S14216 (statement of Sen. Huddleston).

¹⁸⁴ Two potential arguments against this interpretation are the following: First, Congress indicated in other documents, such as a 1966 treaty with the Republic of Korea, that it could distinguish between “United States Armed Forces” and “members of the United States Armed Forces.” Facilities and Areas and the Status of United States Armed Forces in Korea, U.S.-S. Kor., July 9, 1966, 17 U.S.T. 1677 (defining “members of the United States armed forces” as an independent phrase than United States armed forces itself for purposes of the treaty). Indeed, the WPR itself includes the assignment of “members of such armed forces” to command and accompany the military forces of other countries within the Act’s definition of the phrase “introduction of United States Armed Forces.” War Powers Resolution, 50 U.S.C. § 1547(c) (2012). Thus, if Congress wanted the President to be restricted by the WPR only when actual members of the United States Armed Forces were introduced into another country, it could, and should, have said so. Second, Congress’ intent in enacting the WPR was not merely to prevent the President from unilaterally placing members of the United States Armed Forces into harm’s way. This is evident from the fact that the WPR does not require written reports from the President for some deployments that are not aimed at starting hostilities. *See id.* §1543(a)(2). Consequently, the full text of the WPR appears to be aimed at forbidding the President from circumventing Congress’ constitutional right to declare war. This aim would certainly be consistent with a broader interpretation of the phrase “introduction of United States Armed Forces” than one that requires boots on the ground. Despite these potential arguments, the weight of evidence seems to clearly indicate that Congress was intending to protect actual military personnel when it passed the WPR.

¹⁸⁵ CNS News, *Obama Won’t Answer If War Powers Resolution Is Constitutional*, YOUTUBE (June 29, 2011), <https://www.youtube.com/watch?v=uXwDkPu0IpU>.

engagement allows the president to go forward. I'm satisfied that the president has the authority he needs to go ahead. If we had boots on the ground . . . then that's a different story."¹⁸⁶

Even more recently, in response to the deployment of 130 troops to Iraq in the face of advancing ISIS forces, Secretary of Defense Chuck Hagel "stressed that the latest deployment 'is not a combat-boots-on-the-ground operation.'"¹⁸⁷ This continuing reliance on whether there are "boots on the ground" when classifying a conflict for domestic law purposes reinforces the original understanding of the WPR as this being a trigger for the application of the statute. As will be discussed in Part III, the future technologies discussed above will allow the President to engage in significant uses of military power with almost no chance of triggering the statute.

b. Hostilities

The first potential way of meeting the second trigger for the WPR is "hostilities." By introducing armed forces into hostilities, the full WPR is effectuated. However, what defines hostilities is not clear,¹⁸⁸ especially in light of new technologies.

In the 1973 debates over the WPR, the principal sponsor, Senator Jacob K. Javits, was asked at a House of Representatives hearing whether the term 'hostilities' was problematic because of "the susceptibility of it to different interpretations," making this "a very fuzzy area."¹⁸⁹ Senator Javits acknowledged the vagueness of the term but suggested that it was a necessary feature of the legislation: "There is no question about that, but that decision would be for the President to make. No one is trying to denude the President of authority."¹⁹⁰

This approach of looking to the Executive Branch for a definition of "hostilities" has continued since the WPR's passage, causing one scholar to

¹⁸⁶ Mike Lillis, *Pelosi backs Obama on Libya*, THE HILL, June 16, 2011, available at <http://thehill.com/homenews/house/166843-pelosi-backs-obama-on-libya>.

¹⁸⁷ Patrick Goodenough, "Not a Combat-Boots-on-the-Ground Operation," Says Hagel, *Announcing 130 More Troops to Iraq*, CNSNEWS, (Aug. 12, 2014, 10:16 PM), <http://cnsnews.com/news/article/patrick-goodenough/not-combat-boots-ground-operation-says-hagel-announcing-130-more>.

¹⁸⁸ James Nathan, *Salvaging the War Powers Resolution*, 23 PRESIDENTIAL STUD. Q. 235, 244–46 (1993); James Nathan, *Revising the War Powers Act*, 17 ARMED FORCES & SOC'Y 513, 522–23 (1991).

¹⁸⁹ *War Powers: Hearings Before the Subcomm. on National Security Policy and Scientific Developments of the H. Comm. on Foreign Affairs*, 93d Cong. 22 (1973) (statement of Peirre S. du Pont IX).

¹⁹⁰ *Id.*

argue that “[f]rom the beginning, it appears that Congress has largely left the determination of ‘hostilities’ to executive practice.”¹⁹¹ As evidence of this practice, two years after the passage of the WPR, Congress sought clarification from the Executive Branch as to the meaning of the term “hostilities.”¹⁹² Monroe Leigh, Legal Adviser of the Department of State, and Martin Hoffman, Defense Department General Counsel, answered that the Executive Branch understood the term “to mean a situation in which units of the U.S. Armed Forces are actively engaged in exchanges of fire with opposing units of hostile forces.”¹⁹³

The House Report of the WPR stated that “[t]he word hostilities was substituted for the phrase armed conflict during the subcommittee drafting process because it was considered to be somewhat broader in scope,” but the Executive Branch argues that neither the legislation nor its drafting history provides any more clarity to its meaning.¹⁹⁴ In recent hearings before Congress, Department of State Legal Adviser Harold Koh acknowledged that “hostilities” is an inherently ambiguous legal standard and stated that in his opinion:

[T]he legislative history of the resolution makes clear there was no fixed view on exactly what the term “hostilities” would encompass. Members of Congress understood that the term was vague, but specifically declined to give it more concrete meaning, in part to avoid unduly hampering future Presidents by making the resolution a “one size fits all” straitjacket that would operate mechanically, without regard to particular circumstances.¹⁹⁵

As further explained by Mr. Koh, recent Administrations have established four factors that help determine on a case-by-case basis whether “hostilities”

¹⁹¹ Allison Arnold, *Cyber Hostilities and the War Powers Resolution*, 217 MIL. L. REV. 174, 184 (2013). Congress has passed legislation since the WPR that defines “hostilities.” Military Commissions Act, 10 U.S.C. § 948(a)(9) (2006) & Military Commissions Act, 10 U.S.C. § 948a(9) (2009) defines “hostilities” as “any conflict subject to the laws of war.” However, this definition appears in the Military Commissions Act and is designed to establish jurisdiction for the purposes of individual criminal liability and does not seem in any sense to be applicable to the application of the WPR. However, as will be discussed in Part IV, such a definition would be useful in adding strength to the WPR as a Congressional restraint on the President.

¹⁹² *Libya and War Powers: Hearing Before the Comm. on Foreign Relations*, 112th Cong. 13–14 (2011) [hereinafter *Libya Hearing*] (prepared statement of Hon. Harold Koh, Legal Advisor, U.S. Department of State, Washington, DC).

¹⁹³ *Id.*; see also Arnold, *supra* note 191, at 184.

¹⁹⁴ H.R. Rep. No. 93-287, at 2351 (1973).

¹⁹⁵ *Id.*

exist.¹⁹⁶ These four factors are “whether the mission is limited, whether the risk of escalation is limited, whether the exposure is limited, and whether the choice of military means is narrowly constrained.”¹⁹⁷ It was an analysis of these four factors that allowed President Obama to determine the WPR was not implicated in the 2011 coalition military operations against Libya because the action involved only “intermittent military engagements” which would not require the withdrawal of forces under the WPR.¹⁹⁸ Mr. Koh added that the U.S. military actions in Libya were “well within the scope of the kinds of activity that in the past have not been deemed to be hostilities for purposes of the War Powers Resolution.”¹⁹⁹

Not all members of Congress agreed with President Obama’s interpretation of the term. Congressman John Boehner argued that the actions in Libya were clearly hostilities.

You know, the White House says there are no hostilities taking place,” said U.S. House Speaker John Boehner, a Republican. “Yet we’ve got drone attacks underway. They’re spending \$10 million a day, part of an effort to drop bombs on Gadhafi’s compounds. It just doesn’t pass the straight-face test in my view, that we’re not in the midst of hostilities.”²⁰⁰

Others took a similar view. Representative Brad Sherman argued that the WPR was “the law of the land” and that “if the president deploys forces, he’s got to seek Congressional authorization or begin pulling out after 60 days. Too many presidents have simply ignored the law . . . [w]hen you’re flying Air Force bombers over enemy territory, you are engaged in combat.”²⁰¹

In addition to members of Congress, some of the most notable War Powers academics also thought the military operations in Libya may qualify under the statute. Professor Robert Chesney argued that when compared with other

¹⁹⁶ *Id.* at 21.

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 14, 16.

¹⁹⁹ *Id.* at 21. See also MARIAH ZEISBERG, WAR POWERS: THE POLITICS OF CONSTITUTIONAL AUTHORITY 1-3 (2013); Charlie Savage & Mark Landler, *White House Defends Continuing U.S. Role in Libya Operation*, N.Y. TIMES, June 16, 2011, at A16 (adding that the “limited nature of this particular mission [in Libya] is not the kind of ‘hostilities’ envisioned by the War Powers Resolution”).

²⁰⁰ Angie Drobnic Holan & Louis Jacobson, *Are U.S. Actions in Libya Subject to the War Powers Resolution? A Review of the Evidence*, POLITIFACT.COM (June 22, 2011, 11:38 AM), <http://www.politifact.com/truth-o-meter/article/2011/jun/22/are-us-actions-libya-subject-war-powers-resolution/>.

²⁰¹ *Id.*

historical actions and Executive and Legislative responses, the operations in Libya could be considered hostilities.²⁰²

Despite objections, the President pressed ahead with military operations and, as noted above, continues to do so in more current operations such as in Iraq.²⁰³ In fact, as one scholar has recently written, “Truman, Ford, Kennedy, Johnson, Nixon, Reagan, George H.W. Bush, Clinton and Obama all claimed the power to initiate hostilities without congressional authorization.”²⁰⁴ President Obama’s decision to follow the four factors as defining criteria for the WPR allowed considerable freedom of activity. A similar decision by future presidents will have significant impacts on the future application of the WPR to conflicts involving emerging technologies.

3. *Geographic Space*

The other possibility from the second part of the WPR trigger is the introduction of armed forces “equipped for combat” into the “territory, airspace or waters of a foreign nation.”²⁰⁵

The House of Representatives Report on the WPR provides some insight into Congress’ intent in using this language. According to the Report, Congress intended the WPR to apply to

the initial commitment of troops in situations in which there is no actual fighting but some risk, however small, of the forces being involved in hostilities. A report would be required any time combat military forces were sent to another nation to alter or preserve the existing political status quo or to make the U.S. presence felt. Thus, for example, the dispatch of Marines to Thailand in 1962 and the quarantine of Cuba in the same year would have required Presidential reports. Reports would not be required for routine port supply calls, emergency aid measures, normal training exercises, and other noncombat military activities.²⁰⁶

²⁰² Robert Chesney, *White House Clarifies Position on Libya and the WPR: US Forces Not Engaged in “Hostilities”*, LAWFARE (June 15, 2011, 3:46 PM), <http://www.lawfareblog.com/2011/06/white-house-clarifies-position-on-libya-and-the-wpr-us-forces-not-engaged-in-hostilities/>.

²⁰³ See Kristina Wong, *Iraq Clock Ticks for Obama*, THE HILL (Aug. 19, 2014, 6:00 AM), <http://thehill.com/policy/defense/215451-obama-tiptoeing-around-war-powers-limits>.

²⁰⁴ MARIAH ZEISBERG, WAR POWERS: THE POLITICS OF CONSTITUTIONAL AUTHORITY 7 (2013).

²⁰⁵ H.R. REP. NO. 93-287, at 2352 (1973).

²⁰⁶ *Id.*

This particular aspect of the WPR trigger has not seemed to be decisive in WPR discussions. There have certainly been situations where this language would have seemed to apply—such as Kosovo and Libya—but it has not been dispositive in bringing the Executive Branch to accept the applicability of the WPR and comply with the notification procedures. This language will be even less consequential with respect to future military operations involving advanced technologies because of its tie to the definition of armed forces, as will be discussed below.

4. *Substantial Enlargement*

The House Report again sheds some light on what Congress intended with this WPR trigger. According to the Report, the word “substantially” was meant to be a “flexible criterion.”²⁰⁷ The Report provides some examples of when this trigger would be met:

A 100-percent increase in numbers of Marine guards at an embassy—say from 5 to 10—clearly would not be an occasion for a report. A thousand additional men sent to Europe under present circumstances does not significantly enlarge the total U.S. troop strength of about 300,000 already there. However, the dispatch of 1,000 men to Guantanamo Bay, Cuba, which now has a complement of 4,000 would mean an increase of 25 percent, which is substantial. Under this circumstance, President Kennedy would have been required to report to Congress in 1962 when he raised the number of U.S. military advisers in Vietnam from 700 to 16,000.²⁰⁸

As with the language concerning geographic borders, this language has also not been argued in past military operations and is unlikely to have much effect in future operations, again because of its tie to the definition of “armed forces.” A substantial enlargement would require an initial use of armed forces.

III. INEFFECTIVENESS OF THE WPR

Recall the earlier discussion of Congress’s purpose in passing the WPR.²⁰⁹ At the time, Congress felt disenfranchised in their constitutional role in war-making.²¹⁰ In the wake of the Vietnam War, Congress felt that successive

²⁰⁷ *Id.*

²⁰⁸ *Id.*

²⁰⁹ *See supra* Part II.A.

²¹⁰ *See* Judah A. Druck, *Droning On: The War Powers Resolution and the Numbing Effect of Technology-Driven Warfare*, 98 CORNELL L. REV. 209, 213 (2012).

Presidents from both political parties had ignored the Constitutional design of shared national security powers with respect to using military force.²¹¹ Congress passed the WPR to force the President to acknowledge that Congress also had a role in the use of the military and to add some definition to what that role was, with an emphasis on consultation.²¹² Given the likely unconstitutionality of Section Five after *Raines v. Byrd* and subsequent Court decisions, the fourth section's requirements on reporting become the primary methodology for Congress to ensure consultation.

Considering the discussion in the previous Part that highlighted issues with the WPR, this Part will now analyze the future weapon systems discussed in Part I in light of the issues with the WPR to conclude that the WPR will be ineffective in controlling the use of these advanced technologies by the President as currently understood and applied.

A. *Armed Forces*

As discussed above, the term “armed forces” has generally been understood to mean members of the United States military.²¹³ The often-used phrase of “boots on the ground” would be even more restrictive and not include many operations, such as typical Navy and Air Force operations where no U.S. personnel are utilized in a way that they might come into physical contact with an opposing force. As mentioned above, Senator Boehner didn't seem to take the view that the Air Force and Navy were excluded.²¹⁴ Under either interpretation, the use of advanced technologies calls into question the effectiveness of the WPR in accomplishing Congress's goal of forcing the President to consult before engaging in activities that might lead to hostilities. Several examples will adequately illustrate this point.

1. *Drones*

The use of drones obviously raises issues with respect to the composition of “armed forces” within the WPR. Any remotely piloted drone would by definition be a situation where the operator was not on the ground where the weapon's effects were to occur. In the military operations against terrorists, the

²¹¹ See Edwin B. Firmage, *The War Power of Congress and Revision of the War Powers Resolution*, 17 J. CONTEMP. L. 237, 237 (1991).

²¹² See Druck, *supra* note 210, at 213–14.

²¹³ See *supra* Part II.C.2.a.

²¹⁴ See *supra* Part II.C.2.b.

President has claimed authority to use drones based on Congressional action in passing the Authorization to Use Military Force (AUMF)²¹⁵ but it is unclear whether the President believes he must have authority to use drones in other situations, even armed drones. There does not appear to be any statement by the Executive Branch that the use of armed drones involves the introduction of armed forces under the WPR. Prior reports that the President has filed “consistent with” the WPR reporting requirements have not included reports on drone usage.

Additionally, the President’s determination that the limited use of Air Force personnel during the military operations in Libya did not trigger his reporting requirements under the WPR²¹⁶ make it seem clear that the use of armed drones would certainly not do so either. In Libya, aircrews were actually entering Libyan airspace.²¹⁷ The use of armed drones would not only not involve “boots on the ground” but would not even involve “boots in the air.” As long as the introduction of armed forces is equated to “boots on the ground,” the use of armed drones will not meet that trigger.

Alternatively, one could argue that the WPR language is sufficient to include the employment of drones. Drones certainly can mimic troops in many ways. They can enter into foreign nations; they can be flown to those nations in large numbers; and they can add to the number of drones that are already in that nation and that are equipped for combat. Indeed, the use of the word “repair”²¹⁸ in the WPR could be understood to imply that the phrase “United States Armed Forces” encompasses materials used by the Armed Forces and not just human members of the Armed Forces. However, the practice of past and current Presidents has been to treat drones as if they were not “armed forces” for WPR reporting purposes.

As technology increases and drones become smaller (eventually microscopic when combined with advances in nanotechnology), and more lethal, with longer loiter capabilities, and are created in great masses, they will present a very capable weapons and reconnaissance platform. Such a capability will be a very effective asset to use in military operations and will undoubtedly be so.

²¹⁵ See Milena Sterio, *The United States’ Use of Drones in the War on Terror: The (Il)legality of Targeted Killings Under International Law*, 45 CASE W. RES. J. INT’L L. 197, 198 (2012).

²¹⁶ Savage & Landler, *supra* note 199.

²¹⁷ *Libya Hearing*, *supra* note 192, at 24.

²¹⁸ 50 U.S.C. § 1543(a)(2) (2006).

For example, assume that an insurgent group rises in a country that is an ally to the United States and threatens to overthrow the government and establish a government that is not friendly to the U.S. The allied government seeks military assistance from the President, who determines that sending a fleet of 100 unmanned armed drones to quickly and decisively engage the insurgent group would be an effective military option. Pilots located in Nevada would fly the drones, and an airport in a neighboring country would launch and maintain them. No U.S. persons would actually be deployed to the allied country where the insurgency is occurring. Under the current pattern of analysis, such action will not trigger the WPR, despite the significant destructive effect the drones would cause.

2. *Cyber Operations*

Further, consider the use of cyber technologies. These advanced weapons can be initiated far from any battlefield and in a place remote from the intended victim of the action. As already discussed, one of their greatest appeals is their effectiveness without putting those using them in harm's way.²¹⁹ Because of this, the nature of cyber operations have caused at least one cyber scholar to speculate that there should be a "duty to hack" because of the bloodless nature, both to the attacker and the victim, of cyber operations.²²⁰

The example of the recent STUXNET malware is instructive. STUXNET appears to have been a well planned and highly effective cyber operation which resulted in the physical destruction of almost 1,000 centrifuges used in the nuclear enrichment process.²²¹ It is alleged to have been the work of the U.S. and Israel.²²² However, no member of the military ever stepped foot in Iran or even flew over Iran in connection with the operation so far as the world knows.²²³ In other words, the U.S., assuming the U.S. was involved, was able

²¹⁹ See also Blake & Imburgia, *supra* note 25, at 183.

²²⁰ See Duncan B. Hollis, *Re-Thinking the Boundaries of Law in Cyberspace: A Duty to Hack?*, in *CYBERWARE: LAW & ETHICS FOR VIRTUAL CONFLICTS* (J. Ohlin et al. eds., forthcoming Mar. 2015).

²²¹ See David E. Sanger, *Obama Order Sped Up Wave of Cyberattacks Against Iran*, N.Y. TIMES (June 1, 2012), <http://www.nytimes.com/2012/06/01/world/middleeast/obama-ordered-wave-of-cyberattacks-against-iran>.

²²² William J. Broad, John Markoff & David E. Sanger, *Israeli Test on Worm Called Crucial in Iran Nuclear Delay*, N.Y. TIMES (Jan. 15, 2011), at A1.

²²³ See Robert Lee, *The History of Stuxnet: Key Takeaways for Cyber Decision Makers*, AFCEA INTERNATIONAL, <http://www.afcea.org/committees/cyber/> (follow "Robert Lee-The History of Stuxnet" hyperlink) (last visited Nov. 10, 2014).

to accomplish a priority national security goal that would have required significant military assets if done through some other, more kinetic, means.

Presumably, if the President had decided to use kinetic operations, surely the specter of the WPR would have been raised. If an attack by Air Force assets or a mission for some special operations unit, similar to the one that killed Osama Bin Laden,²²⁴ had been used similar effects may have occurred. But, because the entire operation was done through cyber means, it appears that neither the President, nor Congress felt that the WPR was implicated. There were no “boots on the ground,” and the operative United States assets were presumably far from the territory of Iran and likely operating within the territory of the United States or one of its allies.

This apparent perception that the President can conduct a significant military action that would otherwise involve the WPR but does not, because it was accomplished through the use of cyber means, should serve as a warning to Congress. If the President feels comfortable executing STUXNET without consultation, it would be hard to envision a category of cyber actions that would cause the President to think he should notify Congress.

As Arnold points out, Congress has engaged to some degree on the issue of cyber activities by passing the National Defense Authorization Act.²²⁵ The 2012 National Defense Authorization Act contained a provision that authorized cyber activities, subject to the War Powers Resolution.²²⁶ Of course, being “subject to” the WPR does not mean it applies. It simply means that *when* it applies, the Executive Branch will comply with its requirements.²²⁷ In its Cyberspace Policy Report, the DoD responded to the question by the Senate: “[w]hat constitutes use of force in cyberspace for the purpose of complying

²²⁴ Peter Bergen, *Who Really Killed bin Laden?*, CNN (Mar. 27, 2013, 6:46 PM), www.cnn.com/2013/03/26/world/bergen-who-killed-bin-laden/.

²²⁵ Arnold, *supra* note 191, at 176.

²²⁶ National Defense Authorization Act of 2012, Pub. L. No. 112-81, § 954, 125 Stat. 1298, 1551 (2011) which states:

Congress affirms that the Department of Defense has the capability, and upon direction by the President may conduct offensive operations in cyberspace to defend our Nation, Allies and interests, subject to—

- (1) the policy principles and legal regimes that the Department follows for kinetic capabilities, including the law of armed conflict; and
- (2) the War Powers Resolution (50 U.S.C. 1541).

²²⁷ See Arnold, *supra* note 191, at 177.

with the War Powers Act.”²²⁸ The answer demonstrates the elusive nature of categorization of these future weapons.

The requirements of the War Powers Resolution apply to “the introduction of United States Armed Forces into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances, and to the continued use of such forces in hostilities or in such situations.”

Cyber operations might not include the introduction of armed forces personnel into the area of hostilities. Cyber operations may, however, be a component of larger operations that could trigger notification and reporting in accordance with the War Powers Resolution. The Department will continue to assess each of its actions in cyberspace to determine when the requirements of the War Powers Resolution may apply to those actions.²²⁹

The DoD’s assessment of each of its cyber actions will no doubt occur given the Executive Branch’s understanding of the WPR discussed above. Such an assessment is unlikely to prove much of a constraint on presidential actions, as the threshold for triggering the WPR is so high.

3. *Other Emerging Technologies*

Other advanced weapon systems, such as those involving nanotechnology and genomics, are similar to those discussed above. In each of these cases, there will certainly be human involvement in the design, creation, and utilization of these weapons, but all of this will take place far from any battlefield and from the area where the effects of the weapon are designed to take place. There will be no “boots on the ground.”

Even in the case of robots and autonomous weapons, it is unclear how the “boots on the ground” standard will apply. To the extent that “boots on the ground” refers to putting American lives at risk, the President would have a clear argument that these should be treated similar to drones, and not be considered as crossing that threshold.

²²⁸ U.S. DEP’T OF DEF. CYBERSPACE POLICY REPORT: A REPORT TO CONGRESS PURSUANT TO THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2011 9 (2011), available at http://www.defense.gov/home/features/2011/0411_cyberstrategy/docs/NDAA%20Section%20934%20Report_For%20webpage.pdf.

²²⁹ *Id.*

For example, assume the same scenario above where an ally is seeking help from the U.S. against an insurgency. As part of the response, the President wants to install autonomous sentry systems to guard several key government sites from potential attack. Though the use of these systems may lead to significant casualties, there would be no U.S. persons in the allied country—no “boots on the ground.” The Executive Branch is unlikely to deem such action as triggering the reporting and consultation requirements of the WPR.

* * * *

Generally then, the current understanding of “armed forces” will not provide limits on the presidential use of power under the WPR with respect to many emerging technologies. Looking to “boots on the ground” as the clarifying paradigm of what the introduction of armed forces means under the statute will not provide Congress with the notification and consultation it desires. In order to continue the validity of the WPR as a notification tool for Presidential actions in future military operations, Congress will need to elucidate a different understanding of the term “armed forces.”

B. *Hostilities*

The Executive Branch’s measure for “hostilities” also favors action by the President without implicating the WPR with respect to future technologies. As stated by Harold Koh, the four determining factors are “whether the mission is limited, whether the risk of escalation is limited, whether the exposure is limited, and whether the choice of military means is narrowly constrained.”²³⁰ Importantly, it appears that the determination of how each military operation fits into these four factors is an Executive Branch determination, not one for Congress.²³¹ It is unlikely that future military operations using the advanced technologies discussed above will be considered “hostilities,” as defined by these four factors, in a way that will meaningfully constrain the President with respect to the WPR.

1. *Drone Operations*

When considered in light of the four hostilities factors, drones become an even more attractive tool for the President when deciding to use lethal military

²³⁰ *Libya Hearing*, *supra* note 192, at 21.

²³¹ *Libya and War Powers: Hearing Before the Comm. on Foreign Relations*, 112th Cong. 21 (2011) (statement of Harold Koh).

force. In the current attack on terrorist targets, every target is considered a unique operation and gets individual approval.²³² It is hard to imagine a more limited mission. Because the current missions in places like Yemen are done with host nation approval,²³³ the risk of escalation is minimal, as more than a decade of drone operations has proven. With no “boots on the ground,” exposure of U.S. personnel is obviously limited and drones present a very tailored choice of means of action. In other words, it appears that judging hostilities by the Executive Branch’s four criteria seems tailor-made for a President who favors drone operations.²³⁴

Indeed, current practice confirms this approach. The President’s on-going use of armed drones against terrorists has never been understood as “hostilities” by the Executive Branch.²³⁵ Congress is often notified in advance or shortly after a drone strike, but the President has never conceded that this information was shared in compliance with the WPR. Again, Executive practice is creating a “gloss”²³⁶ that will be relied on by future Executives.

2. *Cyber Operations*

Allison Arnold has recently published an excellent analysis of whether “cyber hostilities” would trigger the WPR, concluding that “it is unlikely that the executive branch would deem stand-alone offensive military operations in cyberspace as ‘hostilities’ triggering the War Powers Resolution.”²³⁷ Arnold’s conclusions are exactly right.

Similar to drones, a number of significant and serious cyber operations would fall below the threshold of hostilities as described by the four factors.

²³² See Michael Crowley, *Holder: Obama’s New Drone-Strike ‘Playbook’ Has Arrived*, TIME, May 22, 2013, at 1.

²³³ Greg Miller, *Yemeni President Acknowledges Approving U.S. Drone Strikes*, WASH. POST (Sept. 29, 2012), http://www.washingtonpost.com/world/national-security/yemeni-president-acknowledges-approving-us-drone-strikes/2012/09/29/09bec2ae-0a56-11e2-aff-d6c7f20a83bf_story.html.

²³⁴ Charlie Savage and Mark Landler, *White House Defends Continuing U.S. Role in Libya Operation*, N.Y. TIMES, June 15, 2011 at 2 (“The administration’s theory implies that the president can wage a war with drones and all manner of offshore missiles without having to bother with the War Powers Resolution’s time limits.” (quoting Jack Goldsmith)).

²³⁵ See *id.* at 2.

²³⁶ See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 610–11 (1952) (Frankfurter, J., concurring) (“In short, a systematic, unbroken, executive practice, long pursued to the knowledge of the Congress and never before questioned, engaged in by Presidents who have also sworn to uphold the Constitution, making as it were such exercise of power part of the structure of our government, may be treated as a gloss on ‘executive Power’ vested in the President by § 1 of Art. II.”); Corn, *supra* note 11, at 690 n.13.

²³⁷ Arnold, *supra* note 191, at 192.

Perhaps the most contested factor would be the risk of escalation. Many cyber experts have written about the potential for escalation in cyber operations.²³⁸ However, the anonymous nature of the Internet and the difficulties of attribution²³⁹ dramatically temper the risk of escalation.

Once again, the example of the recent STUXNET malware is instructive. Assuming that the United States was involved,²⁴⁰ the President initiated an act which most experts and commentators in the area believe violated the international law prohibition on the use of force and may even have been an armed attack.²⁴¹ As mentioned above, a similar attack on such a scale using kinetic means would seem to trigger the WPR. However, Arnold analyzes STUXNET using the four factors and determines that a military operation even of that scale, done solely by cyber means, would not trigger the WPR.²⁴² Assuming the U.S. was involved in STUXNET, the President seems to agree with Arnold's analysis since neither President Bush nor President Obama notified Congress of the "cyber hostilities."²⁴³

As a practical matter, with respect to the factor of escalation, the anonymity of a cyber attack weighs in favor of such attacks not being hostilities. It was almost two years before computer analysts could attribute the attack to Israel

²³⁸ Eugene Kaspersky, *Space Escalation of Cyber-Warfare is a Call for Action*, available at <http://www.kaspersky.com> (Oct. 16, 2012); MARTIN C. LIBICKI, *CRISIS AND ESCALATION IN CYBERSPACE* (Rand Corporation 2012) available at <http://www.rand.org/pubs/monographs/MG1215.html>; Vincent Manzo, *Deterrence and Escalation in Cross-domain Operations: Where Do Space and Cyberspace fit?* INSTITUTE FOR NATIONAL AND STRATEGIC STUDIES (Dec. 2011), available at http://csis.org/files/media/isis/pubs/111201_manzo_sf272.pdf; U:/Publications/Current/WPR/Sources/Manzo%20-%20INSS.pdf.

²³⁹ Michael Schmitt, *'Below the Threshold' Cyber Operations: The Countermeasures Response Option and International Law*, 54 VA. J. INT'L L. (forthcoming); Jack Beard, *Legal Phantoms in Cyberspace: The Problematic Status of Information as a Weapon and a Target Under International Humanitarian Law*, 47 VAND. J. TRANSNAT'L L. 67 (2014); Susan Brenner, *Cyber-threats and the Limits of Bureaucratic Control*, 14 MINN. J.L. SCI. & TECH. 137 (2013); Bradley Raboin, *Corresponding Evolution: International Law and the Emergence of Cyber Warfare*, J. NAT'L ASS'N L. JUD. 602 (2011); Erik Mudrinich, *Cyber 3.0: The Department of Defense Strategy for Operating in Cyberspace and the Attribution Problem*, 68 A.F. L. REV. 167 (2012); MARTIN C. LIBICKI, *CYBERDETERRENCE AND CYBERWARFARE*, 76-78 (Rand Corporation 2009); Duncan B. Hollis, *An e-SOS for Cyberspace*, 52 HARV. INT'L L.J. 373, 397-401 (2011); Jonathan Soloman, *Cyberdeterrence between Nation-States Plausible Strategy or a Pipe Dream?*, 5 STRATEGIC STUDIES Q. 1, 5-10 (2011); Commander Todd C. Huntley, *Controlling the Use of Force in Cyber Space: The Application of the Law of Armed Conflict During A Time of Fundamental Change in the Nature of Warfare*, 60 NAVAL L. REV. 1, 34-35 (2010).

²⁴⁰ *Iran Blames U.S., Israel for Stuxnet Malware*, CBS NEWS (Apr. 16, 2011), <http://www.cbsnews.com/news/iran-blames-us-israel-for-stuxnet-malware/>.

²⁴¹ See generally THE TALLINN MANUAL, *supra* note 48, at 42-45 (Michael N. Schmitt ed., 2013).

²⁴² See Arnold, *supra* note 191, at 191.

²⁴³ See Ashley Deeks, *The Geography of Cyber Conflict: Through a Glass Darkly*, 89 INT'L L. STUD. 1, 17 (2013).

and/or the U.S. and then without certainty.²⁴⁴ Though Iran called for retribution,²⁴⁵ the passage of time had severely limited Iran's legal options.

3. *Other Emerging Technologies*

The President's application of the four factors for determination of the existence of hostilities is equally unlikely to apply to many potential uses of advanced technologies. For example, the use of robots or autonomous weapons provides little risk to U.S. persons. An anonymous infiltration of nanobots into another nation's steel manufacturing industry to create flawed material is unlikely to result in an escalation of conflict. Establishing a series of autonomous sentry sites as discussed above is a very narrow and limited response to a call for help from an ally and unlikely to result in risk to the United States. These and other potential uses of emerging technologies will not meet the common understanding of hostilities yet are almost certainly the kinds of Executive actions about which Congress is hoping to be notified.

* * * *

Emerging technologies, including those discussed above, will open a wide array of new military options to the President. And the uses of these technologies are under regulated by the current WPR. Because the President's obligation to notify Congress under the WPR is tied to the onset of hostilities, and the employment of these future technologies will not equate to hostilities in most instances, the use of drones, cyber and other emerging technologies will not trigger the Executive's obligation to provide notice to Congress. If this does not meet the intent of Congress in the desire for notification and consultation, it must do something to pull these types of Executive action under the current WPR.

IV. AMENDING THE WPR

Given the clear inadequacies of the WPR, the recognition of the need for revision has been widespread, beginning with the statute's original sponsors.²⁴⁶

²⁴⁴ Ellen Nakashima & Joby Warrick, *Stuxnet was Work of U.S. and Israeli Experts, Officials Say*, WASH. POST (June 2, 2012), http://www.washingtonpost.com/world/national-security/stuxnet-was-work-of-us-and-israeli-experts-officials-say/2012/06/01/gJQAIInEy6U_story.html#.

²⁴⁵ Nicole Perloth & Quentin Hardy, *Bank Hacking Was the Work of Iranians, Official Say*, N.Y. TIMES (Jan. 8, 2013), http://www.nytimes.com/2013/01/09/technology/online-banking-attacks-were-work-of-iran-us-officials-say.html?_r=0.

²⁴⁶ BAKER ET AL., *supra* note 8, at 21.

Time has only deepened that conviction. The sections below look at previously proposed solutions and then advance a new solution to the WPR that will allow it to cover the use of advanced technologies discussed in this article.

A. *Previously Proposed Solutions*

There have been several suggestions of ways to amend the WPR to make it more effective in current operations. Various legislative proposals, Commission Reports and scholarly articles have all recognized the problems with the existing WPR and proposed solutions to problems. These potential solutions will be discussed below. However, despite the merit of many of these proposals, none of them would effectively accomplish Congress's intent of ensuring notification and consultation with respect to the use of emerging technologies in future armed conflicts.

1. *Legislative Proposals*²⁴⁷

Since the passage of the WPR, there has been a consistent call to repeal the legislation²⁴⁸ and “rely on traditional political pressures and the regular system of checks and balances, including impeachment”²⁴⁹ to control Executive actions. On June 7, 1995, the House of Representatives actually voted on a bill to repeal the WPR which failed by a vote of 217 to 201.²⁵⁰ The bill looked like it would pass until forty-four Republicans switched sides and voted against the measure in order to not strengthen the then-democratic President, Bill Clinton.²⁵¹

There have also been a number of legislative attempts to amend the WPR, in light of its acknowledged shortcomings. One of the most significant was a

at <http://millercenter.org/policy/commissions/warpowers/report>.

²⁴⁷ See GRIMMETT, *supra* note 20, at 44–48 (outlining and discussing proposed amendments to the WPR since its inception).

²⁴⁸ For example, in 1988, the Senate Foreign Relations Subcommittee on War Powers held extensive hearings after President Reagan's decision to reflag Kuwaiti tankers in the Persian Gulf. During those hearings, many national security experts and former government employees urged the subcommittee to seek repeal of the WPR. See *The War Power After 200 Years: Congress and the President at a Constitutional Impasse*, Hearings Before the Special Subcommittee on War Powers of the Senate Committee on Foreign Relations, 100th Congress (1989); Biden & Ritch, *supra* note 103, at 370.

²⁴⁹ Fisher & Adler, *supra* note 12, at 1 (arguing that “outright repeal would be less risky than continuing along the present path.”).

²⁵⁰ See GRIMMETT, *supra* note 20, at 2; Fisher & Adler, *supra* note 249, at 15.

²⁵¹ Fisher & Adler, *supra* note 12, at 16.

Use of Force Act proposed by Senator Biden in a 1989 law review article.²⁵² The proposed Act listed a number of circumstances where the President could use force without further authorization from Congress.²⁵³ The proposal would then define the “use of force” as “the introduction of United States Armed Forces into hostilities or situations where imminent involvement in hostilities is clearly indicated by the circumstances.”²⁵⁴ The Act would have also established a consultative group, mandating meetings between certain Members of Congress and various Executive Branch officials, including the President, where discussion would occur but consent would not be required.²⁵⁵

Another attempt at amendment was the War Powers Resolution Amendment of 1988,²⁵⁶ known as the Byrd-Warner amendments, but also supported by Senators Nunn and Mitchell. In explaining his reasoning behind the Bill, Senator Byrd stated that the intent of the amendments was to “change[] the presumption of the current War Powers Resolution, which is that U.S Armed Forces must withdraw from situations of hostilities or imminent hostilities within 60 days unless Congress specifically authorizes their continued presence.”²⁵⁷ No Congressional action was taken on this proposal.²⁵⁸

None of these legislative proposals have passed, nor would they have effectively dealt with emerging technologies. Further, there are no legislative proposals that would have solved the “armed forces” or “hostilities” problem in a way that would have covered future developments in armed conflict.²⁵⁹

²⁵² See Biden & Ritch, *supra* note 103, at 367.

²⁵³ *Id.* at 398–99. Senator Biden, wary of those who would respond by saying this was too excessive a grant of authority to the President, responded by writing that “while generous in scope, this affirmation of authorities would also define and limit what the President can do and what justifications he can properly use.” *Id.*

²⁵⁴ *Id.* at 401.

²⁵⁵ *Id.* at 402–03.

²⁵⁶ “War Powers Resolution Amendments of 1988,” S.J. Res. 323, 100th Cong., 2d. Sess. (1988). Representative Lee Hamilton introduced a companion bill in the House of Representatives, H.R. J. Res. 601, 100th Cong., 2d Sess. (1988).

²⁵⁷ 134 CONG. REC. S6174 (daily ed. May 19, 1988); see Biden & Ritch, *supra* note 103, at 393.

²⁵⁸ See GRIMMETT, *supra* note 20, at 24.

²⁵⁹ See Military Commissions Act, 10 U.S.C. § 948a(9) (2006); Military Commissions Act, 10 U.S.C. § 948a(9) (2009) (though this definition would provide some interesting legal interpretations if applied to the WPR, it was clearly passed specifically to grant jurisdiction for military commissions who are trying members of terrorist groups covered by that statute and was never intended to apply to the WPR).

2. *War Powers Consultation Act of 2009*

Recognizing the ineffective history of the WPR, the University of Virginia's Miller Center of Public Affairs²⁶⁰ invited a number of former government experts on national security, including two former Secretaries of State who served as co-chairs, to "identify a practical solution to help future Executive and Legislative Branch leaders deal with the issue [of war powers]."²⁶¹ The National War Powers Commission Report that was produced by the invitees proposed legislation which the Report calls the War Powers Consultation Act of 2009 (WPCA) and urges Congress to pass the Act and the President to sign it.²⁶² The Act tries to meet the most important needs of both the President and the Congress.²⁶³

The proposed WPCA does a number of things meant to correct existing flaws in the WPR. The WPCA would create a "Joint Congressional Consultation Committee" consisting of some of the key members of Congress²⁶⁴ with whom the President would be "encouraged to consult regularly with."²⁶⁵ It requires the President to consult the Committee only with respect to "deployment of United States armed forces into significant armed conflict"²⁶⁶ which is defined as "(i) any conflict expressly authorized by Congress or (ii) any combat operation by U.S. armed forces lasting more than a

²⁶⁰ THE MILLER CENTER, <http://millercenter.org> (a nonpartisan institute that seeks to expand understanding of the presidency, policy, and political history, providing critical insights for the nation's governance challenges).

²⁶¹ BAKER ET AL., *supra* note 8.

²⁶² *Id.* at 10.

²⁶³ *Id.* at 9. The Report states:

We recognize the Act we propose may not be one that satisfies all Presidents or all Congresses in every circumstance. On the President's side of the ledger, however, the statute generally should be attractive because it involves Congress only in "significant armed conflict," no minor engagements. Moreover, it reverses the presumption that inaction by Congress means that Congress has disapproved of a military campaign and that the President is acting lawlessly if he proceeds with the conflict. On the congressional side of the ledger, the Act gives the Legislative Branch more by way of meaningful consultation and information. It also provides Congress a clear and simple mechanism by which to approve or disapprove a military campaign, and does so in a way that seeks to avoid the constitutional infirmities that plague the War Powers Resolution of 1973. Altogether, the Act works to gives [sic] Congress a seat at the table; it gives the President the benefit of Congress's counsel; and it provides a mechanism for the President and the public to know Congress's views before or as a military campaign begins.

Id.

²⁶⁴ *Id.* at 9–10.

²⁶⁵ *Id.* at 36.

²⁶⁶ *Id.* at 37.

week or expected by the President to last more than a week.”²⁶⁷ The proposed WPCS also reverses the highly contested portion of the WPR which requires the President to remove troops based on Congressional inaction and instead requires Congress to take action by formally approving or disapproving of the President’s decision to deploy troops.²⁶⁸

Despite the quality of the participants in the Commission and the vast experience in Government service upon which they relied, Congress has not chosen to adopt the Report’s recommendations and pass the WPCA. However, Senators McCain and Kaine introduced the WPCA as a bill on the Senate floor on January 16, 2014.²⁶⁹ At the time of writing, it seems very unlikely that the Bill will pass, but this is at least a signal of the quality of the WPCA recommendations.

However, though scholars have also found that the WPCA would represent many improvements to the WPR, it would not avoid the most contentious of WPR issues, the triggering mechanism. As Prof. Corn writes, using the term “significant armed conflict” as the trigger does not solve the problem because it “creates the same inherent risk for one critical reason: it is not tethered to a military operational criterion.”²⁷⁰

Similarly, the proposed WPCA would also be as ineffective as the WPR in regulating future armed conflicts. Its continuing reliance on the term “armed forces” leaves one of the major issues with respect to future technologies unsolved. Further, removing the term “hostilities” and substituting for it the term “significant armed conflict” is equally unhelpful. Not only does the definition of “significant armed conflict” include the term “armed forces,” but “like the failed concept of ‘hostilities[] or . . . situations where imminent involvement in hostilities is clearly indicated by the circumstances,’ the concept of ‘armed conflict’ will almost inevitably be susceptible to interpretive debate.”²⁷¹

²⁶⁷ *Id.* at 10.

²⁶⁸ *Id.* at 47–48.

²⁶⁹ See *Floor Remarks by Senator John McCain Introducing War Powers Consultation Act* (Jan. 16, 2014), <http://www.mccain.senate.gov/public/index.cfm/2014/1/floor-remarks-by-senator-john-mccain-introducing-war-powers-consultation-act> (last visited Oct. 28, 2014).

²⁷⁰ Corn, *supra* note 11, at 713–14 (2010).

²⁷¹ *Id.* at 693–94.

Though the WPCA may have made an improvement on the current debates concerning the WPR, it would not provide a solution to future armed conflicts.²⁷²

3. Rules of Engagement (ROE)

Perhaps the most useful of these proposals is the recommendation by Professor Corn to tie the WPR²⁷³ requirement to notify Congress to the Executive Branch's determination that mission-specific supplemental measures to the Standing Rules of Engagement²⁷⁴ are needed. Corn recognizes the importance of the "trigger" in making the WPR more effective²⁷⁵ and argues that "[I]nking such notification to the authorization of 'mission specific' Rules of Engagement . . . will substantially contribute to the efficacy of the historically validated war-making balance between the President and Congress."²⁷⁶

As Corn explains, when the President takes actions with military forces, other than traditional defense of the United States,²⁷⁷ he normally authorizes the use of force to accomplish specific missions.²⁷⁸ In other words, when the President sends military personnel to attack an enemy, he provides them with ROE that authorize them to use force outside of self-defense to accomplish a mission.²⁷⁹ Such measures may include declaring certain individuals or members of organized groups as "declared hostile forces" who can be attacked on sight.²⁸⁰

²⁷² Chen, *supra* note 38, at 1801.

²⁷³ Corn, *supra* note 11, at 695. Professor Corn actually makes his recommendations in light of the WPCA discussed above. However, his recommendations would be just as effective if amended to the WPR and since the WPCA does not seem likely to be passed by Congress, this article will treat Corn's recommendations as if they were made concerning the WPR.

²⁷⁴ The Standing Rules of Engagement is a document promulgated and maintained by the Chairman of the Joint Chiefs of Staff that "establish fundamental policies and procedures governing the actions to be taken by US commanders and their forces during all military operations and contingencies and routine Military Department functions." Chairman of the Joint Chiefs of Staff, Instruction 3121.01B, STANDING RULES OF ENGAGEMENT FOR U.S. FORCES A-1 (June 13, 2005).

²⁷⁵ Corn, *supra* note 11, at 694-95.

²⁷⁶ *Id.* at 695.

²⁷⁷ *Id.* at 715.

²⁷⁸ *Id.* at 719-23.

²⁷⁹ For a broad discussion on ROE, see Geoffrey S. Corn & Eric Talbot Jensen, *Untying the Gordian Knot: A Proposal for Determining Applicability of the Laws of War to the War on Terror*, 81 TEMP. L. REV. 787, 803-24 (2008).

²⁸⁰ Chairman of the Joint Chiefs of Staff, Instruction 3121.01B, STANDING RULES OF ENGAGEMENT FOR U.S. FORCES A-2 to A-3 (June 13, 2005).

Corn then postulates that the invocation of mission-specific ROE provide a “more effective consultation trigger”²⁸¹ for WPR activation because they “reveal the constitutional demarcation line between responsive uses of military force and proactive uses of such force—a line that has profound constitutional significance. Authorizing employment of the armed forces under such proactive use of force authority implicates the constitutional role of Congress in war-making decisions.”²⁸² According to Corn, Congress’s ambivalent reactions to Presidential uses of force are the reason a more recognizable trigger is necessary.

It is precisely because of [congressional ambivalence] that a meaningful and operationally pragmatic notification trigger is so important. Because any initiation of hostilities beyond the limited scope of responsive/defensive actions will require authorization of supplemental ROE measures, a coextensive congressional notification requirement triggered by ROE approval will provide Congress the opportunity to exercise its constitutional role.²⁸³

Under Corn’s proposal, anytime the President deployed military personnel and gave them mission-specific ROE, the notification and consultation provisions of the WPR would be triggered. It is unlikely that President’s would avoid providing the military with the appropriate ROE simply to avoid the WPR because the risks to military personnel would be too great.

As useful as Professor Corn’s suggestion might be if applied to today’s WPR, it would not sufficiently resolve the problems of emerging technologies. In many instances, those who use cyber tools will be governed by ROE; however, there will certainly be times when they are not. A similar situation likely exists for drones. Because of the special approval process used for armed drone attacks, a formal mission-specific ROE may not be promulgated to govern the use of force, particularly if it is an attempt at an individual target. The use of nanotechnology and drones pose the same problems with respect to ROE. Certainly offensive uses of these weapons will be so highly controlled, at least initially, that reliance on a supplemental mission-specific ROE measure will not be sufficient to accomplish the notification and consultation requirements.

²⁸¹ Corn, *supra* note 11, at 694.

²⁸² *Id.* at 724.

²⁸³ *Id.* at 728.

Perhaps most importantly, the pressure for the President to issue mission accomplishment ROE in order to preserve the lives of military personnel will not exist with non-human weapons such as drones, cyber tools, autonomous weapons, etc. This will allow the President to manipulate the use of ROE in order to prevent the requirement to go to Congress. In other words, in a situation where the President would issue mission-specific ROE such as sending a SEAL team into Pakistan to capture or kill Osama bin Laden, the issuance of mission-specific ROE would be completely unnecessary if the same mission were going to be accomplished by an armed unmanned drone or by a lethal nanobot carrying a genomic identifier.

4. *All Offensive Strikes*

Along with Allison Arnold,²⁸⁴ Julia Chen is among the first to recognize the inadequacies of the WPR in confronting modern technologies. Chen argues that the WPR “can no longer accomplish its intended purpose and should be replaced by new war powers framework legislation.”²⁸⁵ She proposes that the WPR, or WPCA, be amended to cover “all offensive strikes.”²⁸⁶

Chen’s proposal is intended to include all personnel who might be engaged in offensive military operations, not just military personnel,²⁸⁷ as originally proposed by Senator Thomas Eagleton.²⁸⁸ She argues that the Constitution’s grant of Congressional power over letters of marque and reprisal indicate that Congress should use the War Powers framework to control civilian agencies, such as the CIA, that might also involve themselves in armed conflict.²⁸⁹

However, as Chen rightly acknowledges, other statutory authorities regulate the CIA and other intelligence activities conducted by U.S. citizens.²⁹⁰ Additionally, civilian agencies, and even civilians who accompany military forces, have no authority to participate in offensive military actions under the Laws of Armed Conflict (LOAC).²⁹¹ When they do so, they lose their

²⁸⁴ Arnold, *supra* note 191, at 176–77.

²⁸⁵ Chen, *supra* note 38, at 1795.

²⁸⁶ *Id.* at 1802.

²⁸⁷ *Id.* at 1785–88.

²⁸⁸ 119 CONG. REC. 25,079 (1973) (statement of Sen. Thomas F. Eagleton).

²⁸⁹ Chen, *supra* note 38, at 1797.

²⁹⁰ Chen concedes that intelligence activities are currently governed by statutes such as the Intelligence Oversight Act of 1991, 50 U.S.C. § 413 (as amended).

²⁹¹ See generally CORN, ET AL., *supra* note 95, at 131–57 (explaining the status of civilians under the LOAC).

protections²⁹² and may be prosecuted for their war-like acts.²⁹³ When Congress authorizes the President to exercise the nation's war powers, it is not intending to authorize civilian participation in hostilities.²⁹⁴ This is amply illustrated by the fact that in the current fight against terrorist organizations around the world, the AUMF does not relieve the President of making Presidential findings under 50 U.S.C. Sec. 413b(a).²⁹⁵

Additionally, using the term "offensive" would apply nicely to most existing technologies but will not fit as well with future technologies. For example, in the case of a latent attack discussed above,²⁹⁶ the triggering mechanism may be the victim's own actions, such as targeting a certain weapon or platform. Further, many future cyber activities may be created and used as defensive capabilities but have an autonomous strike-back capability that would be defensive in nature but still have impacts against foreign systems. Autonomous weapons systems would have the same characteristics.

Because of these issues, though Chen's proposal would also accomplish the much-needed extension of the WPR over some emerging technologies, it is underinclusive of certain technologies and too expansive in creating a situation where the President would be overregulated in his exercise of Executive authority.

* * * *

Despite the numerous attempts to modify the WPR, it does not appear that any of the existing suggestions are sufficient to ensure the notification and consultation that Congress is seeking from the President, particularly with respect to emerging technologies. The next section will propose an amendment to the WPR that will solve this problem.

²⁹² International Committee of the Red Cross (ICRC), *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I)*, 8 June 1977, 1125 UNTS 3; CORN, ET AL., *supra* note 95, at 168–70.

²⁹³ CORN, ET AL., *supra* note 95, at 468.

²⁹⁴ The drafters of the WPCA recognized this distinction and specifically excluded "covert actions" from its coverage. BAKER, ET AL., *supra* note 8, at 36.

²⁹⁵ Bob Woodward, *CIA Told To Do 'Whatever Necessary' to Kill Bin Laden*, WASH. POST, Oct. 21, 2001, at A1.

²⁹⁶ See *infra* Part I.B.1.

B. *A Proposal for Future Armed Conflicts*

As mentioned throughout this article, the primary weakness of the WPR with respect to future armed conflicts is the inability of the triggering mechanisms to adequately regulate emerging technologies. The limited application to only “armed forces” and the current understanding of “hostilities” is unable to capture the kinds of military actions the President will likely take in the future, leaving Congress without a mechanism to force notification and consultation. Each of these terms must be expanded to accomplish the WPR’s²⁹⁷ stated goal of assisting Congress in playing its constitutional role in war making.

1. *Supplies or Capabilities*

The inadequacy of the term “armed forces” has been discussed at length.²⁹⁸ It is clear that many of the emerging technologies will not involve “boots on the ground” or even in the airspace.²⁹⁹ These technologies will be planned, created, and initiated by humans, but humans will be distant in both time and space from their lethal effects. In order to cover these types of future military operations, the WPR needs to clarify its applicability to these “humanless” means and methods of warfare.

The solution to this dilemma is to add language that includes “capabilities” to the coverage of the WPR. In other words, the language from Section 4(a)³⁰⁰ would be amended from its current form of “In the absence of a declaration of war, in any case in which United States Armed Forces are introduced—”³⁰¹ to read “In the absence of a declaration of war, in any case in which United States Armed Forces *personnel, supplies or capabilities* are introduced *or effectuated*—.”

By adding the proposed language, the statute would be clear as to what elements of the armed forces were governed by the statute. While the current statute is only understood to govern personnel, adding “supplies” and

²⁹⁷ These suggestions apply equally to the WPCA if Congress decides to pass Senator McCain’s proposed legislation. See generally Floor Remarks by Senator John McCain Introducing War Powers Consultation Act (Jan. 16, 2014), <http://www.mccain.senate.gov/public/index.cfm/2014/1/floor-remarks-by-senator-john-mccain-introducing-war-powers-consultation-act> (last visited Oct. 28, 2014).

²⁹⁸ See generally *infra* Part III.A.

²⁹⁹ See generally *infra* Part I.A.

³⁰⁰ War Powers Resolution § 4(a), 50 U.S.C. §§ 1541-1548 (1973). The added language would also be used in the other areas of the WPR where section 4(a)’s language is reproduced.

³⁰¹ *Id.*

“capabilities” would extend the statute to cover the emerging technologies discussed in this paper.

The statute would also need to include the following definitions in order to provide clarity:

Armed Forces Personnel - For purposes of this chapter, the term “Armed Forces Personnel” means personnel who are members of or belong to the armed forces as defined in 10 U.S.C. Sec. 101(a)(4).

Armed Forces Supplies - For purposes of this chapter, the term “Armed Forces Supplies” has the same meaning as 10 U.S.C. Sec. 101(a)(14). It does not include goods and services transferred under Title 22 of the United States Code.

Armed Forces Capabilities - For purposes of this chapter, the term “Armed Forces Capabilities” means any service, process, function, or action that is used, directed, initiated, established, or created by the armed forces (as defined in 10 U.S.C. Sec. 101(a)(4)) that produces or results in an effect or condition designed to accomplish a military objective.

The definition of “Armed Forces Capabilities” is designed to be very inclusive but limited to military capabilities. The President will have many other capabilities that he can choose to use that will not be regulated by this statute but will be regulated elsewhere. It is also specifically designed to include future technologies like those discussed above, and others yet to be developed.

Adding the word “effectuate” to the statute would cover some weapons systems like cyber tools, that might be introduced at one point, but sit dormant until needed in the future. At the future time, when the tool was effectuated and its effects initiated, the President would need to notify Congress.

The amendment of this language triggering the application of the WPR will vastly increase the coverage of the notification responsibility of the President, particularly with respect to emerging technologies.

2. Violation of Sovereignty

The second trigger, that of “hostilities,” would also need to be adapted for future technologies. The Executive Branch’s definition of hostilities has become too narrow over time and the capabilities of emerging technologies

will largely fall outside that definition. The scope of the second trigger needs to have a geographic element as well as a descriptive element. Some actions that will never be significant enough to reach the level of “hostilities,” may still violently offend another nation and lead to armed conflict.

In order to minimize the problems from maximizing the coverage, the current phrase in Section 4(a) of the WPR that states “into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances”³⁰² should be amended to read “into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances, or that violate the sovereignty of a foreign nation.”

The addition of the violation of sovereignty will increase the scope of the WPR to include those areas not currently covered by hostilities. Using cyber tools similar to STUXNET, which do not risk much escalation or present much exposure to U.S. forces, will still be covered if they were used or designed to have effects in the sovereign territory³⁰³ of another nation. A similar analysis would apply to the use of nanotechnology or genomics, bringing these future technologies under the coverage of the WPR.

Using the word “violate” removes consensual activities that do not equate to hostilities. Tying the statute to a violation of sovereignty goes to the heart of what the WPR was meant to accomplish by ensuring the President notifies and consults with Congress before taking actions that might lead to war. In many cases, violations of sovereignty can be considered a “use of force”³⁰⁴ or escalate into a “use of force” under the United Nations Charter paradigm.³⁰⁵ This is particularly true of violations of sovereignty by the military.

³⁰² War Powers Resolution § 4(a)(1).

³⁰³ There has been much discussion on the issue of applying the doctrine of sovereignty to cyber operations. In the author’s opinion, the Tallinn Manual contains the best discussion of the issues. *See generally* THE TALLINN MANUAL, *supra* note 48, at 42–53. *See also* Eric Talbot Jensen, *Cyber Sovereignty: The Way Ahead*, 50 TEX. INT’L L.J. (forthcoming 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2466904.

³⁰⁴ U.N. Charter art. 2, para. 4.

³⁰⁵ The current regime for regulating force by states is found in the United Nations Charter. A complete analysis of this regime is beyond the scope of this paper. Suffice it here to say that Article 2.4 of the Charter states the basic obligation of states: “All Members shall refrain in their international relations 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.” *Id.* There is a vast array of literature on this subject. *See* Albrecht Randelzhofer, *Article 2(4)*, in 1 THE CHARTER OF THE UNITED NATIONS: A COMMENTARY 114–36 (Bruno Simma et al. eds., 3d ed. 2012); Applicable to the topic of this article, several commentators have written about the application of the “use of force” paradigm specifically to cyber operations. *See generally* THE TALLINN MANUAL, *supra* note 48, at 42–53; Matthew C. Waxman, *Cyber-Attacks and the Use of Force: Back*

The statute would not preclude all violations of a state's sovereignty, and the President would still have considerable room to effect foreign relations with other Executive assets. But the use of the military to violate the sovereignty of another state would trigger the WPR requirements.

CONCLUSION

Congress initially passed the WPR because it felt that it was unable, under the practice at the time, to meaningfully engage with the Executive on war-making issues. The recent events in Libya, Syria, and Iraq reinforce the fact that the WPR has not solved this Constitutional issue. Reliance on the triggers of "armed forces" and "hostilities" have not resulted in the notification and consultation Congress was seeking with respect to war-making.

These WPR triggers will be even less effective as emerging technologies develop and are used in future armed conflicts. Cyber tools, unmanned and autonomous weapons and weapons systems, nanotechnology, genomics and a host of other future developments provide effective tools for the President to use as Commander-in-Chief of the armed forces and fall outside the current WPR. The President will be able to utilize these and other future capabilities without triggering the WPR requirements.

Amending the WPR to include supplies and capabilities and to cover actions that violate the sovereignty of a foreign nation will increase the coverage of the WPR and effectuate the intention of Congress to regain their Constitutional role in war-making.

to the Future of Article 2(4), 36 YALE J. INT'L L. 421, 427 (2011); Michael N. Schmitt, *Cyber Operations and the Jus Ad Bellum Revisited*, 56 VILL. L. REV. 569, 587 (2011).

