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The Commander, US Strategic Command (US STRATCOM) stated in testimony to Congress he would not obey an illegal order to use nuclear weapons. This paper explores international laws and the law of war concepts of proportionality, necessity and distinction as they apply to nuclear weapons. It also looks at US nuclear weapon policy and the deterrence implications of US STRATCOM's statements.

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Mr. President, You Can't Launch Nukes In Here; This Is The War Room!

Keith E. Patton



The United States military has always operated under the policy of civilian control. The head of each military department is a civilian, serving under a civilian Secretary of Defense, nominated by an elected civilian President and confirmed by an elected civilian Senate. This has resulted in tension when civilian orders do not seem to be in accord with military options and advice. In one of the most public and dramatic cases, General Douglas MacArthur was relieved of command during the Korean War for failing to follow the orders of President Truman.

On November 18th, 2017, General John Hyten, head of the United States Strategic Command (STRATCOM), stated to a panel at the Halifax International Security Forum that he would not obey an illegal Presidential order to use nuclear weapons.¹ This seems an obvious and benign statement. Of course, an illegal order should not be obeyed. But what constitutes an illegal order to use a weapon of mass destruction (WMD)? Can a nuclear weapon be used against an opponent preemptively? A weaker adversary? How do the statements of a senior military commander impact nuclear policy and deterrence? This paper explores the laws of war as they relate to nuclear weapons, United States nuclear weapon policy, and how the comments of a senior nuclear weapons officer can impact deterrence and policy.

The laws of war do not limit nuclear weapons more than other weapons, but US policy stated by leaders can do so. While this paper will show there is nothing illegal about nuclear weapons per se, they do present challenges for legal use. Nuclear weapons, by their nature, inflict damage over a much larger area than conventional weapons. They can produce a varying amount of fallout, radioactive as well as political. There is a fine and poorly understood balance of deterrence, the need to have weapons that can be legally used, perceived political will to use them, and allaying fears that they will be used in any but the worst possible circumstances.

Legality and Weapons of Mass Destruction (WMD)

"The United States has long shared the view that the law of armed conflict governs the use of nuclear weapons - just as it governs the use of conventional weapons." (United States of America, CR 95134, p. 85

What legal standards apply to the use of a WMD? There are two sources of international law: treaties and customary international law. The Chemical Weapons Convention (CWC) is a treaty which bans chemical weapons. Similarly, there is a Biological Weapons Convention (BWC) banning biological weapons. There is not, however, a treaty banning nuclear

weapons. Customary international law is a set of international obligations arising from state practice and opinio juris, a legal opinion.² In 1996, the International Court of Justice (ICJ) issued an advisory opinion on the legality of the use of nuclear weapons. Its ruling considered the Geneva Conventions, the UN charter, and numerous treaties and international agreements. By a vote of eleven to three, it concluded there was no customary or conventional international law prohibiting the use of nuclear weapons.³ The court unanimously found that nuclear weapon use would have to meet both Article 2, paragraph 4 and Article 51 of the United Nations Charter to be lawful.⁴ Article 2:4 requires members to refrain from the threat or use of force against other states.⁵ Article 51 allows member states to act in self-defense.⁶

Self-defense does not limit a nation (or person) to just respond to an attack. Customary international law allows a preemptive action to thwart an imminent attack that "if it takes place, could have catastrophic consequences for the victim state or afford the attacking state a significant military advantage." This is known as the Caroline test, after the Caroline incident of 1837 when British forces acted preemptively to sink the vessel Caroline in US waters to prevent its support of an insurrection in Canada. Since the United States was failing to act to prevent Caroline's actions, the British preempted the action, killing one and sending the burning vessel hurtling over Niagara Falls.

If one perceives a threat of WMD use from another nation (catastrophic consequences) or a major conventional attack that would temporarily cripple bases (significant advantage) or put tens of thousands of civilians at risk, a nation can use the Caroline test to justify acting preemptively to forestall the threat. The precedent of the Caroline incident, in which the British acted against non-state actors (insurrectionists) operating from the territory of a state unwilling or unable to restrain them (the United States) is particularly germane when the US considers

preemptive acts against terrorists operating in lawless regions or states that are unfriendly to the US.

Preemption is specifically considered in the 2006 National Security Strategy, which stated "The United States will, if necessary, act preemptively in exercising our inherent right of self-defense" under a section devoted to WMD.⁸ Israel used the theory of preemption and military necessity to strike Iraq's Osirik reactor in 1981, although it was condemned by the UN as not being the preemption of an imminent threat.⁹ The US used the theory of preemption to justify the invasion of Iraq, seeking to preempt Iraqi WMD efforts and the risk of them being supplied to terrorists.

While nuclear weapons may not be covered by specific laws of war or treaties, the laws of armed conflict that apply to all warfare still apply. This was acknowledged by Retired General Kehler, a former STRATCOM commander, who stated a few days before General Hyten's speech that the "legal principles of military necessity, distinction, and proportionality also apply to nuclear plans, operations, and decisions." ¹⁰

Military Necessity:

Military Necessity: "the principle that justifies the use of all measures needed to defeat the enemy as quickly and efficiently as possible that are not prohibited by the law of war... *Military necessity* also justifies certain incidental harms that inevitably result from the actions it justifies. The extent to which *military necessity* justifies such harms is addressed by the principle of *proportionality*." – US Department of Defense, Law of War Manual, pg 52

Military necessity is enshrined in US military doctrine and customary international law. It is a concept that accepts that military force is necessary in war and any force that is not otherwise prohibited by laws and treaties (e.g. CWC and BWC) is legitimate. For example, while the actions of Israel and the United States against Iraq were conventional attacks, nuclear

weapon use would not violate the concept of military necessity per se. The military necessity achieved would have to be proportional to the incidental harms inflicted.

As discussed in the previous section, no customary international laws or treaties prohibit the use of nuclear weapons. Necessity is in the judgement of the beholder, and the President is the final authority on the use of US military force, especially weapons of a militarily and politically strategic nature.

Proportionality:

"Proportionality generally weighs the justification for acting against the expected harms to determine whether the latter are disproportionate in comparison to the former. In war, incidental damage to the civilian population and civilian objects is unfortunate and tragic, but inevitable." – US Department of Defense, Law of War Manual, pg 61

Proportionality is based on weighing harm vs military necessity. When using military force, the violent death or destruction of the military target is justified under necessity.

Proportionality looks at collateral effects. Proportionality does not mean matching or only slightly exceeding the force threatened, or used, against the state. In other words, it does not mean you cannot bring a gun to a knife fight. Using a large bomb, delivered by a bomber to destroy a truck filled with enemy combatants that are armed with rifles may seem disproportionate in the cost, scale, and power of violence inflicted, but is still permitted under laws of war. Proportionality would limit the attack if the truck was surrounded by civilians.

Using the large bomb would kill a large number of civilians, disproportional to the military effect of eliminating a single truck load of combatants armed with rifles. Replace the truck with a mobile missile launcher with a WMD payload, and the calculus of proportionality changes. The military objective is to prevent the use of the adversary's WMD. Failure to do so could put large numbers of friendly forces and civilians at risk. A large bomb that destroys the launch

vehicle with its WMD payload along with, regrettably, the nearby civilians could be considered proportional to the necessity of preventing its use against friendly military forces or civilians.

Proportionality also includes other factors besides civilian casualties. Damage to the environment or a holy site, or destruction of a dam which then causes flooding, are all examples in which the collateral harm inflicted to achieve a military objective could be disproportionate to the military gains. Destroying the village to save it is not proportional. The scale of destruction even a small nuclear weapon would cause could mean structures miles away from the military target could be affected, except in the most remote cases. Additionally, some of the massive amounts of energy released by a nuclear weapon is in the form of radiation. Weapons detonated close to the ground, so that the fireball contacts it, throw up a massive amount of debris that passes through the radioactive fireball and "falls out" later downwind of the detonation. This is a significant distinction between a nuclear weapon and conventional explosives. The radiation effects could be prolonged and damage the environment, rendering an area uninhabitable for years or even decades to come. The ICJ and International Committee of the Red Cross (ICRC) (in its "Nuclear Weapons and International Law") both considered the environmental impact of nuclear weapons as key to judgments on its proportionality. 11 However, neither found that the use of a nuclear weapon would violate proportionality per se. Their findings simply questioned what military objective would be proportional to the widespread damage caused. A potential answer is an isolated or another WMD target.

In dealing with a WMD target, destruction of the WMD would be a primary concern.

The intense heat of a nuclear detonation could burn away the chemicals, rendering them relatively safe. A clean nuclear weapon, detonated as an airburst, would prevent militarily significant fallout. Using a US WMD to prevent the use of an adversary's WMD would be

proportional since it prevents its use against one's own forces or civilians. Targeting a WMD facility could also avoid disproportionate damage to civilian population centers if it was isolated. Iran's most important nuclear reactor is 10 miles from a large city, and its uranium enrichment facility is 20 miles from a holy site. North Korea's main reactor is 50 miles from its capital. If these sites are struck, even a nuclear weapon could be used without any damage to nearby cities.. 14

WMD might not be the only targets where a nuclear weapon would still be proportional despite its large area of effect and potential for fallout. North Korean artillery, hardened in bunkers and arrayed within range of Seoul, holds a massive civilian population at risk. Should a conflict occur, US and ROK conventional attacks would eventually silence those guns, but many civilians would die and Seoul's economic viability severely damaged before that occurred. US nuclear weapons could be employed to destroy those artillery emplacements far faster. The military necessity of rapidly destroying those hardened targets to protect the civilians of Seoul would have to be weighed against the radioactive fallout the required ground bursting nuclear weapons would produce. Based on prevailing winds as well as numbers and types of nuclear weapons used, the radioactive danger area and likely casualties could be predicted and weighted against the predicted savings in civilian lives compared to the time needed to take out the NK artillery by conventional means. For proportionality, the results can justify the means.

^I There would also be political fallout to such an act, but this will be discussed later in the paper

Distinction:

"Distinction may be understood as encompassing two sets of reinforcing duties. Parties to a conflict must apply a framework of legal classes for persons and objects by: (1) discriminating in conducting attacks against the enemy; and (2) distinguishing a party's own persons and objects." – US Department of Defense, Law of War Manual, pg 62

Distinction requires military force not to be applied indiscriminately nor directed against protected targets, such as civilians, military chaplains or medical personnel. Additionally, it encourages parties to a conflict to advertise the identity/location of protected cases of personnel/facilities so that the opponent can exercise distinction and not attack them. An example of this would be the internationally recognized symbol of a red cross on white background identifying a protected medical facility, vehicle, or person. Distinction works with necessity in establishing the legitimacy of a target of military force. If a headquarters is the target of bombardment, it is accepted that medical and religious personnel, or a medical facility that is part of the complex, may be impacted. Similarly, a warship can be attacked even though it has a sick bay and chapel aboard. Distinction may cause planners to choose more precise weapons or ones with a smaller area of effect, but if the objective is a military necessary and the best available method of force is used, the principle of distinction does not prohibit the attack.

Distinction also requires a military force to refrain from using civilian or other protected classes as shields from attack. It is because of the principle of distinction that soldiers cannot conduct operations from inside a holy site or hospital, or purposefully surround themselves with civilians such as a school's children. Doing so violates the laws of armed conflict and allows

^{II} To use the symbol to disguise a combatant or someone otherwise not covered by the protection is considered perfidy and a war crime.

targeting of the belligerents despite their presence at an otherwise protected site. However, proportionality would still apply (the killing of the innocent human shields would have to be weighed against the military necessity of killing the combatants)

While the wide area of effect of nuclear weapons would seem to make distinction impossible, it is the military target and the proportionality that matters. A nuclear weapon might be able to destroy multiple targets such as hardened artillery positions. Medical or religious facilities might be part of that complex, or downwind of it (and vulnerable to fallout), but if the military objective was the artillery, there was a necessity to destroy it, and the nuclear weapon presented the best option available to meet the necessity, the principle of distinction would not prevent the attack. Distinction would apply if the target was a medical facility, unless the facility lost its distinction by also being a biological weapon facility, or being used for other directly military purposes.

Necessity, Proportionality, and Distinction:

How do necessity, proportionality, and distinction combine to apply to the legality of using a nuclear weapon? As noted by the ICJ and IRC, nuclear weapons by themselves do not violate these principles. The selection of target and the specifics of the situation to determine proportionality matter, not the weapon. Nuclear options can be (and probably are for many targets) preplanned, so the targets have already been identified, modeling conducted, and optimum weapons selected to achieve the desired military effect while minimizing disproportionate damage. If the President was selecting from a list of nuclear options, he is determining the necessity weighed against options already vetted for collateral damage (distinction and proportionality), and presumably against conventional options as well. If the President is faced with the belief the adversary is about to use WMD, gain a significant

advantage, or otherwise kill large numbers of US or allied citizens, and the surest method to prevent or forestall it is a US nuclear strike, he is also judging proportionality. The decision maker is responsible for making this determination, with the advice of staff.

If using a nuclear weapon in response to a state adversary's use of WMD, the moral dilemmas are reduced. If utilizing a nuclear weapon preemptively against WMD, the President does have to grapple with the cognitive dissonance of a super power using a nuclear weapon to disarm another state, especially if it is perceived as being much weaker (Iran, North Korea). The use of a WMD to prevent the use of a WMD seems hypocritical, and a great power using its most powerful weapon against a small power may be judged disproportional in the court of public opinion. Admiral Ellis, a former head of STRATCOM, described the dilemma in 2002: "If you can find that time-critical, key terrorist target or that [WMD] stockpile, and you have minutes rather than hours or days to deal with it, how do you reach out and negate that threat to our nation half a world away?" ¹⁵ Then, as now, there is no sure way of dealing with a threat in that time without resorting to using a nuclear weapon, or waiting longer and dealing with the consequences of delay. If the President is faced with a situation in which he believes many will die, but can choose to sacrifice US citizens or act preemptively and counter with a nuclear weapon, risking the deaths of many foreign civilians, which option is he or she realistically going to choose?

The United States has approached this dilemma with a twofold approach: the prompt global strike program and efforts to create more "useable" nuclear weapons. Prompt global strike has focused on how to rapidly employ conventional weapons at global ranges against time-sensitive targets. If the target is a North Korean missile being prepared for launch, or a terrorist leader located but likely to vanish again, an air strike or cruise missile attack may take too long

to plan and arrive at the target. Hypersonic weapons or conventional warheads for intercontinental ballistic missiles (ICBM) or submarine launched ballistic missiles (SLBM) were considered and some tests conducted. However, no system was ever fielded. One concern was the strategic implications of an ICBM or SLBM launch. Such weapons would be indistinguishable from their nuclear-armed variants until detonation. Additionally, with a limited quantity of weapons available against critical targets that might move or require exquisite accuracy to destroy, the probability of success was questionable.

The United States has pursued the second option: nuclear weapons that are less devastating. The Draft Doctrine for Joint Nuclear Operations envisioned smaller yield bunker buster nukes to be used against hardened and buried targets. These weapons, like the B61 Mod 11 and 12, were envisioned as nuclear weapons that could burrow into the earth, more efficiently couple the blast to the earth to destroy a deep bunker, or incinerate all its WMD contents with far less collateral fallout than the previous large yield surface burst weapons, and far faster and more reliably than conventional bunker busters. In the draft Nuclear Weapons Posture Review (NPR) The Trump Administration appears to be moving ahead with plans to create a smaller yield nuclear weapon for use by SSBNs.. Effective but low yield warheads, delivered at intercontinental ranges, with very short flight times relative to aircraft or cruise missiles, solve the prompt global strike problem against a target of military necessity. The small warheads also mitigate concerns over proportionality and distinction.

US Nuclear Weapon Policy

It is unsurprising that the United States interpretation of the laws of armed conflict allows for nuclear weapon use, and builds weapons that meet its perceived national security requirements. The concept behind the United States 1st Offset Strategy was to use nuclear

weapons to defeat a Soviet conventional invasion of Europe. ¹⁸ In this case, the use of nuclear weapons to defeat a Soviet invasion was considered proportional to the risk of Europe falling under communist domination, which then put the entire US economy and way of life at risk. The current United States Nuclear Posture Review (NPR) also specifically reserves "the right to employ nuclear weapons to deter CBW [Chemical and Biological Weapons] attack on the United States and its allies and partners." ¹⁹ Note that it specifically uses the word "employ" in reference to nuclear weapons to "deter" CBW attack. Deterrent actions are taken to dissuade an adversary before it acts, not employed to retaliate.

The Obama administration NPR does make an allowance, however, that "the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the [Non-Proliferation of Nuclear Weapons Treaty] NPT and in compliance with their nuclear non-proliferation obligations"...²⁰ This promise does not cover potential US adversaries since they either already possess nuclear weapons (Russia and China), are countries the US accuses of violating the NPT (Iran), or have withdrawn (North Korea). Promising not to use nuclear weapons against non-nuclear, treaty compliant states isn't much of a reassurance...²¹

Deterrence Implications:

Generals Hyten and Cartwright are not the first US generals to publicly call into question when or if the US can use nuclear weapons. General Charles Horner, a former NORAD commander, stated: "I'm saying that I have nuclear weapons, and you're North Korea and you have a nuclear weapon. You can use yours. I can't use mine. What am I going to use it on? What are nuclear weapons good for? Busting cities. What President of the United States is going to take out Pyongyang?".²² This statement points directly back to the implication that the US

cannot use its nuclear arsenal against a weaker nation, lest it appear to violate proportionality and go against world opinion.

On the world policy stage, these statements can impact how credibly adversaries see the US nuclear arsenal. Deterrence is in the mind of the adversary. If it is perceived that United States military commanders feel the weapons are unusable, even if WMD are employed against the United States or its allies, and commanders may refuse orders to use them, then they lose the deterrence value they are claimed to possess. If they have no deterrent value, and the United States is unwilling to use them if other deterrence fails, then they are a colossal waste of resources. As one nuclear strategist notes: "Any senior official who diminishes in any way the perception that the U.S. might use nuclear weapons effectively denuclearizes us." Thus, comments from both retired and active senior officers can be seen as undermining the very deterrence the US counts on to prevent WMD use. The development of smaller yield, more "useable" nuclear weapons, is an attempt to mitigate that perception. If the US develops such weapons as requested in President Trump's draft NPR, then deterrence may be strengthened.

Conclusion:

The decision to employ a nuclear weapon, especially preemptively, is probably the most critical, historic and difficult decision a President would have to make. Memoirs and accounts from the Cold War indicate US Presidents and Soviet Leaders quailed at the thought. After the end of the Cold War, the risk of a nuclear war or the need for nuclear weapons seemed to fade. The commanders responsible for them shifted from hawkish cold warriors to ones who questioned if they would ever be used. In retrospect, this may have undermined the very concept of deterrence their predecessors had worked so hard to maintain. Russia, meanwhile, included nuclear weapons in its openly published doctrine, using as measure of effectiveness "the

capability of the Navy to damage an enemy's fleet at a level not lower than critical with the use of non-strategic nuclear weapons." ²⁴ By drawing the line at non-strategic nuclear weapons, tactical nuclear weapons are left as options.

The Trump administration may be attempting to re-energize deterrence by putting nuclear options back in the light. Trump is quoted as having asked, "If we have them, why can't we use them?", although the quote has been denied. 25 This quote is one of several that set off a media firestorm over the US President's authority to employ nuclear weapons, which in turn led to General Kehler's congressional testimony and General Hyten's declaration that since the laws of armed conflict apply to nuclear weapons, an illegal order would not be obeyed. Such statements are true, but also seem intended more to calm a domestic political audience concerned with the new President than reinforcing the principle of deterrence. Policy and leadership interact at multiple levels, and not always in mutually supportive ways. Nuclear weapon use is governed by the laws of armed conflict, but those rules do not prevent or prohibit their use in retaliation for an attack, or preemptively to forestall one. Statements designed to allay concerns at the domestic level, however, can undermine deterrence at an international level.

Bibliography

- Arkin, William. "Not Just A Last Resort?" *Washington Post* 15 May 2005. 2 January 2018. http://www.washingtonpost.com/wp-dyn/content/article/2005/05/14/AR2005051400071.html.
- Associated Press. "General heading Strategic Command says illegal nuclear launch order can be refused." 18 November 2017. *NBC News*. 13 December 2017. https://www.nbcnews.com/news/us-news/general-heading-strategic-command-says-illegal-nuclear-launch-order-can-n822186.
- Bush, George. "2006 National Security Strategy." 2006. 25 December 2017. https://georgewbush-whitehouse.archives.gov/nsc/nss/2006/sectionV.html.
- David Kretzmer. "The Inherent Right to Self Defense and Proportionality in Jus Ad Bellum." *The European Journal of International Law* 24.1 (2013): 235-282. 24 December 2017. http://ejil.org/pdfs/24/1/2380.pdf>.
- Grier, Peter. "The First Offset." *Air Force Magazine* (2016): 56-60. 15 December 2017. http://www.airforcemag.com/MagazineArchive/Magazine%20Documents/2016/June%202016/0616offset.pdf.
- Grossman, Elaine. "A Former Niclear Commnader Not Wild About Using Nukes." *Global Security Newswire* 28 May 2008. http://www.nti.org/gsn/article/a-former-nuclear-commander-not-wild-about-nukes/.
- International Comitee for the Red Cross. "Nuclear Weapons and International Humanitarian Law." 2013. 5 January 2018. https://www.icrc.org/eng/assets/files/2013/4132-4-nuclear-weapons-ihl-2013.pdf.
- International Committee of the Red Cross. *Additional Protocols to the Geneva Conventions of 12 August 1949.* 1 March 1994.
- International Court of Justice. *Legality of the threat or use of nuclear weapons*. 8 July 1996. 13 December 2017. http://www.icj-cij.org/files/case-related/95/095-19960708-ADV-01-00-EN.pdf.
- Kehler, GEN (ret) C. Robert. Interview. Senate Foreign Relations Committee. 14 November 2017. 13 December 2017. https://www.foreign.senate.gov/imo/media/doc/111417_Kehler_Testimony.pdf.
- MSN. "US to loosen nuclear weapons constraints and develop more 'usable' warheads." 9 January 2018. 10 January 2018. https://www.msn.com/en-us/news/us/us-to-loosen-nuclear-weapons-constraints-and-develop-more-usable-warheads/ar-BBIbyLL?ocid=sf>.

- Neidig, Harper. *Scarborough: Trump asked adviser why US can't use nuclear weapons*. 3 August 2016. 14 January 2018. http://thehill.com/blogs/ballot-box/presidential-races/290217-scarborough-trump-asked-about-adviser-about-using-nuclear.
- Nichols, Thomas M. No Use. Philidelphia: University of Pensylvania Press, 2014.
- O'Connell, Mary Ellen. "The Myth of Preemptive Self-Defense." 2002. 25 December 2017. https://www.nyccriminallawyer.com/wp-content/uploads/2014/07/oconnell.pdf>.
- Putin, Vladamir. Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030. Trans. Anna Davis. US Naval War College / Russia Maritime Studies Institute, 2017.
- Shaw, Malcolm N. International Law 80. Cambridge: Cornel Law School, 2003.
- The United Nations. "Charter of the United Nations." 1945. 24 December 2017. http://www.un.org/en/charter-united-nations/index.html.
- U.S. Department of Defense. *Law of War Manual*. 2015. 6 January 2018. http://archive.defense.gov/pubs/Law-of-War-Manual-June-2015.pdf>.
- —. "Nuclear Posture Review ." 2010. 2 January 2018. https://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

⁵ Article 2, Paragraph 4 of the UN Charter. http://www.un.org/en/sections/un-charter/chapter-i/

¹ https://www.nbcnews.com/news/us-news/general-heading-strategic-command-says-illegal-nuclear-launch-order-can-n822186

² Malcolm N Shaw. *International Law 80*. Cambridge: Cornel Law School, 2003

³ International Court of Justice. *Legality of the threat or use of nuclear weapons*. 8 July 1996. Acessed:13 December 2017. http://www.icj-cij.org/files/case-related/95/095-19960708-ADV-01-00-EN.pdf p. 44

⁴ Ibid, p. 44

⁶ Article 52 of the UN Charter. http://www.un.org/en/sections/un-charter/chapter-vii/index.html

⁷ David Kretzmer. "The Inherent Right to Self Defense and Proportionality in Jus Ad Bellum." The European Journal of International Law 24.1 (2013): 235-282. Accessed: 24 December 2017. http://ejil.org/pdfs/24/1/2380.pdf p. 247

⁸ George Bush. "2006 National Security Strategy." 2006. Accessed: 25 December 2017. https://georgewbush-whitehouse.archives.gov/nsc/nss/2006/sectionV.html para V.A.

- ⁹ Mary Ellen O'Connell. "The Myth of Preemptive Self-Defense." 2002. Accessed 25 December 2017. https://www.nyccriminallawyer.com/wp-content/uploads/2014/07/oconnell.pdf p. 4
- ¹⁰ https://www.foreign.senate.gov/imo/media/doc/111417_Kehler_Testimony.pdf p.5
- 11 (International Court of Justice) and (International Committee for the Red Cross)
- ¹² Thomas M. Nichols No Use. Philidelphia: University of Pensylvania Press, 2014 p. 138
- ¹³ Ibid, p. 138
- ¹⁴ Author's personal experience with nuclear weapon effects modeling. While significant direct effects could be avoided, the civil panic and political impact would be an entirely different situation.
- William Arkin. "Not Just A Last Resort?" Washington Post 15 May 2005. Accessed: 2 January 2018. http://www.washingtonpost.com/wp-dyn/content/article/2005/05/14/AR2005051400071.html
- ¹⁶ Nichols, p. 68
- MSN. "US to loosen nuclear weapons constraints and develop more 'usable' warheads." 9 January 2018. Accessed: 10 January 2018. https://www.msn.com/en-us/news/us/us-to-loosen-nuclear-weapons-constraints-and-develop-more-usable-warheads/ar-BBIbyLL?ocid=sf
- ¹⁸ Grier, Peter. "The First Offset." *Air Force Magazine* (2016): 56-60. 15 December 2017. http://www.airforcemag.com/MagazineArchive/Magazine%20Documents/2016/June%202016/06160ffset.pdf p. 57
- ¹⁹ U.S. Department of Defense "Nuclear Posture Review ." 2010. Acessed: 2 January 2018.
 https://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf p. viii
- ²⁰ Ibid, p. viii
- ²¹ (Nichols) p. 78
- ²² Quoted in (Nichols), p. 127
- ²³ (Grossman) quoting Col. Tom Ehrhard
- Putin, Vladamir. Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030. Trans. Anna Davis. (US Naval War College / Russia Maritime Studies Institute) 2017. p. 16
- ²⁵ Neidig, Harper. *Scarborough: Trump asked adviser why US can't use nuclear weapons*. 3 August 2016. 14 January 2018. http://thehill.com/blogs/ballot-box/presidential-races/290217-scarborough-trump-asked-about-adviser-about-using-nuclear