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Nuclear Weapons and Compliance with International Humanitarian Law and the Nuclear Non-Proliferation Treaty

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SYMPOSIUM

NUCLEAR WEAPONS AND INTERNATIONAL LAW: A NUCLEAR NONPROLIFERATION REGIME FOR THE 21ST CENTURY

NUCLEAR WEAPONS AND COMPLIANCE WITH INTERNATIONAL HUMANITARIAN LAW AND THE NUCLEAR NON-PROLIFERATION TREATY

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INTRODUCTION

Law is a means of controlling, directing, and constraining potential actions. If law as an institution is to have international relevance, it must apply to critical issues. The survival of humanity depends on how threats posed by nuclear weapons are addressed. Science, in the service of excessive military means of pursuing peace and security, has placed civilization at risk. Law has a duty to control this risk.

At the Security Council Summit of September 24, 2009, the former President of Costa Rica, Óscar Arias Sánchez, a Nobel Peace Laureate, described the current historical moment: "While we sleep, death is awake. Death keeps watch from the warehouses that store more than 23,000 nuclear warheads, like 23,000 eyes open and waiting for a moment of carelessness."

These devices are possessed by the five permanent members of the United Nations ("UN") Security Council—China, France, Russia, the United Kingdom, and the United States—which are also members of the Nuclear Nonproliferation Treaty ("NPT"), and by India, Israel, Pakistan, and probably North Korea.² The United States alone has over 5000 nuclear weapons in its deployed stockpile and an additional 4000 stored in an assembled state.³ Russia has over 4500 in its deployed stockpile and also over 7000 stored in an assembled state.⁴ The global

^{1.} U.N. SCOR, 64th Sess., 6191st mtg., at 4, U.N. Doc. S/PV.6191 (Sept. 24, 2009).

^{2.} Status of World Nuclear Forces, FED'N OF AM. SCIENTISTS, http://www.fas.org/programs/ssp/nuclearweapons/nukestatus.html (last updated May 26, 2010).

^{3.} See Hans M. Kristensen, United States Discloses Size of Nuclear Weapons Stockpile, FED'N OF AM. SCIENTISTS STRATEGIC SECURITY BLOG (May 3, 2010), http://www.fas.org/blog/ssp/2010/05/stockpilenumber.php.

^{4.} Robert S. Norris & Hans M. Kristensen, *Russian Nuclear Forces*, 2010, BULL. OF ATOMIC SCIENTISTS, Jan./Feb. 2010, at 74, 74.

stockpile of deployed weapons, however frightening, can be quantified with a credibly high degree of accuracy.⁵ But the destructive magnitude of a bomb dwarfs imagination. A one-megaton device is approximately eighty times the destructive capacity of the relatively small bomb that leveled Hiroshima. To get an idea of this destructive capacity, Ambassador Thomas Graham suggests imagining a train with TNT stretching from Los Angeles to New York.⁶ The Soviet Union produced a fifty-megaton bomb in the 1960s, an equivalent of 5000 Hiroshimas.⁷ It is scant solace that most deployed weapons are only in the range of several hundred kilotons, since a 300 kiloton weapon represents twenty-three Hiroshimas.⁸

Former CIA Director Stansfield Turner described the actual effects of one bomb:

The fireball created by a nuclear explosion will be much hotter than the surface of the sun for fractions of a second and will radiate light and heat, as do all objects of very high temperature. Because the fireball is so hot and close to the earth, it will deliver enormous amounts of heat and light to the terrain surrounding the detonation point, and it will be hundreds or thousands of times brighter than the sun at noon. If the fireball is created by the detonation of a 1-MT (megaton) nuclear weapon, for example, within roughly eight- to nine-tenths of a second[,] each section of its surface will be radiating about three times as much heat and light as a comparable area of the sun itself. The intense flash of light and heat from the explosion of a 550-KT weapon can carbonize exposed skin and cause clothing to ignite. At a range of three miles, for instance, surfaces would fulminate and recoil as they emanate flames, and even particles of sand would explode like pieces of popcorn from the rapid heating of the fireball. At three and a half miles, where the blast pressure would be about 5 psi, the fireball could ignite clothing on people, curtains and upholstery in homes and

^{5.} Hans M. Kristensen & Alicia Goldberg, Status of Nuclear Weapons States and Their Nuclear Capabilities, FED'N OF AM. SCIENTISTS, (March 2008), http://www.fas.org/nuke/guide/summary.htm.

^{6.} Ambassador Thomas Graham, Jr., Common Sense on Weapons of Mass Destruction 10 (2004).

^{7.} Proliferation of Nuclear Weapons, Nuclear Threat Initiative, http://www.nti.org/f_wmd411/f1a4_1.html (last updated Aug. 2010).

^{8.} *Id*

offices, and rubber tires on cars. At four miles, it could blister aluminum surfaces, and at six to seven miles it could still set fire to dry leaves and grass. This flash of incredibly intense, nuclear-driven sunlight could simultaneously set an uncountable number of fires over an area of close to 100 square miles.⁹

Experts suggest that a regional nuclear exchange—for example, between India and Pakistan—would have a devastating impact on the planet's climate, causing a global famine that could kill one billion people. This cold scientific data does not give as powerful a testimony as the simple eye-witness accounts recorded by Charles Pelligrino in *The Last Train from Hiroshima*, as he describes the so-called "[a]nt-walking alligators" as survivors who "were now eyeless and faceless—with their heads transformed into blackened alligator hides displaying red holes, indicating mouths. He continues, "The alligator people did not scream. Their mouths could not form the sounds. The noise they made was worse than screaming. They uttered a continuous murmur—like locusts on a midsummer night. One man, staggering on charred stumps of legs, was carrying a dead baby upside down." dead of the property of the stagger of the property of t

Can the use of weapons that have such horrific effects on humans and the environment be compatible with the dictates of human conscience and with international humanitarian law ("IHL")? For even in war, law and its rule cannot be ignored if we are to remain civilized. The current readiness to use nuclear weapons¹³ places us all under a cloud that could burst and within

^{9.} STANSFIELD TURNER, CAGING THE NUCLEAR GENIE: AN AMERICAN CHALLENGE FOR GLOBAL SECURITY 127–28 (1997).

^{10.} See Steven Starr, Op-Ed, The Climatic Consequences of Nuclear War, BULL. OF ATOMIC SCIENTISTS, Mar. 12, 2010, available at http://www.thebulletin.org/web-edition/op-eds/the-climatic-consequences-of-nuclear-war (citing Alan Robock & Owen Brian Toon, Local Nuclear War, Global Suffering, SCI. Am., Jan. 2010, at 74, 79).

^{11.} Charles Pellegrino, The Last Train from Hiroshima: The Survivors Look Back 178 (2010).

^{12.} *Id*.

^{13.} Charles J. Moxley, Jr. sets forth the existential reality of the preparedness exercised ostensibly to bring us peace and security:

Train military personnel to use nuclear weapons; conduct regular exercises reinforcing the training; put the weapons and controls in the hands of the military personnel; provide them with contingency plans as to the circumstances in which they are to use the weapons; instill them with a sense of mission as to the lawful and significant purposes of such weapons in

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a few hours end everything we value. If law is to have any significance, it must meaningfully constrain this danger.

With this precept in mind, when the International Court of Justice ("ICJ"), in its landmark 1996 Nuclear Weapons advisory opinion, addressed the legality of the threat or use of nuclear weapons, it affirmed the application of IHL to nuclear weapons.¹⁴ When parties to the NPT met in May 2010, they unanimously reaffirmed "the need for all States at all times to comply with including applicable international law, international humanitarian law."15 This politically powerful commitment was obtained through arduous negotiations.¹⁶ There is a pressing need to promptly set forth exactly what the requirements are to bring the current policies of nuclear weapons states into compliance with IHL and the NPT.

upholding the national defense and honor; make them part of an elite corps; have them stand at the ready for decades at a time waiting for the call; instill firm military discipline; make the weapons a publicly advertised centerpiece of the nation's military strategy; locate the weapons so as to leave them vulnerable to preemptive attack; villainize the enemy as godless and evil or as a rogue and terrorist nation; convey to military personnel that the weapons will be a major target of enemy attack and that it may be necessary to use them quickly before they can be destroyed; warn the enemy that, in the event of attack, the weapons may or will be used; inculcate in military personnel the notion of intra-war deterrence whereby nuclear weapons may need to be used following an enemy attack to deter further escalating attacks, give the military insufficient alternate conventional capacity to defeat the enemy attack; cut numerous nuclear weapons bearing units and control centers off from each other and from contact with higher authorities; create a situation of hopelessness where the whole society is about to be destroyed, at least unless these weapons can be gotten off fast to destroy and restrain the enemy; give the President and other upper level command authorities only an imperfect understanding of the options and repercussions and accord them only 5 to 10 minutes, or even a matter of seconds, to decide, against the background of SIOP [Single Integrated Operating Plan] based computer and other plans decades in the making and ostensibly reflecting a broad historical consensus as to approach—do any number of these things, and the stage is set for the actual use of the nuclear weapons.

CHARLES J. MOXLEY, JR., Nuclear Weapons and International Law in the Post Cold War World 535-36 (2000).

^{14.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, $\P\P$ 42, 86 (July 8).

^{15. 2010} Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, May 3–28, 2010, *Final Document*, pts. 1, 19, U.N. Doc. NPT/CONF.2010/50 (Vol. I) (2010) [hereinafter *Final Document*].

^{16.} See generally Rebecca Johnson, Assessing the 2010 NPT Review Conference, BULL. OF ATOMIC SCIENTISTS, Jan./Feb. 2010, at 1.

This Article addresses the requirements of IHL and the NPT and applies those requirements to contemporary state practice. It discusses IHL in Part I and the NPT in Part II. The result, the Article concludes, is that such practice falls far short of the legal requirements. In short, review of the matter reveals that the use of nuclear weapons would violate IHL and that the threat of such use, including under the policy of nuclear deterrence, similarly violates such law. Analysis further reveals that the nuclear weapon states' existing obligation to bring their policies into compliance with IHL is reinforced by the NPT disarmament obligation as spelled out by the 2010 NPT Review Conference, in particular by its declaration of the need to comply with IHL. The most fundamental implication of the incompatibility of the threat or use of nuclear weapons with IHL is the energetic and expeditious fulfillment of the NPT obligation to achieve the global elimination of nuclear weapons through good-faith negotiations.

I. INTERNATIONAL HUMANITARIAN LAW¹⁷

This Part first sets forth the substance of the requirements of IHL applicable to nuclear weapons and then applies such requirements to contemporary state practice. Accordingly, Section B starts with a discussion of the key rules of distinction, proportionality, and necessity and the corollary rule of controllability, as well as international law on reprisals and on individual responsibility. Section C then addresses the application of this body of law to the use and threat of use of nuclear weapons, and Section D discusses the US arguments for how some uses of nuclear weapons could be lawful under international law. Before delving into the law, however, Section A sets forth a further discussion of the applicable facts.

^{17.} Portions of this Part are adapted from CHARLES J. MOXLEY, JR., NUCLEAR WEAPONS AND INTERNATIONAL LAW IN THE POST COLD WAR WORLD (2000) and from Charles J. Moxley, Jr., The Sword in the Mirror—The Lawfulness of North Korea's Use and Threat of Use of Nuclear Weapons Based on the United States' Legitimization of Nuclear Weapons, 27 FORDHAM INT'L L.J. 1379 (2003). The material has been updated since the earlier works to include the most recent military manuals.

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A. Nuclear Weapons Facts Relevant to the Application of International Humanitarian Law

Obviously the law has to be applied to the facts. The facts about nuclear weapons are now widely familiar. The ICJ, in its *Nuclear Weapons* advisory opinion, defined the "unique characteristics" of nuclear weapons:

[The Court]...notes that nuclear weapons are explosive devices whose energy results from the fusion or fission of the atom. By its very nature, that process, in nuclear weapons as they exist today, releases not only immense quantities of heat and energy, but also powerful and prolonged radiation. According to the material before the Court, the first two causes of damage are vastly more powerful than the damage caused by other weapons, while the phenomenon of radiation is said to be peculiar to nuclear weapons. These characteristics render the nuclear weapon potentially catastrophic. The destructive power of nuclear weapons cannot be contained in either space or time. They have the potential to destroy all civilization and the entire ecosystem of the planet.

The radiation released by a nuclear explosion would affect health, agriculture, natural resources and demography over a very wide area. Further, the use of nuclear weapons would be a serious danger to future generations. Ionizing radiation has the potential to damage the future environment, food and marine ecosystem, and to cause genetic defects and illness in future generations.

In consequence . . . it is imperative for the Court to take account of the unique characteristics of nuclear weapons, and in particular their destructive capacity, their capacity to cause untold human suffering, and their ability to cause damage to generations to come. ¹⁸

Other judges in their individual decisions in the ICJ's *Nuclear Weapons* case elaborated on the effects of nuclear weapons. Judge Weeramantry noted the danger of nuclear winter, whereby fires from exploded nuclear weapons could release hundreds of millions of tons of soot in the atmosphere, causing huge clouds and debris, blotting out the sun and

destroying agriculture.¹⁹ He noted that radiation from nuclear weapons is not containable in space or time and is unique as a source of "continuing danger to human health, even long after its use," given that the half-lives of the by-products of a nuclear explosion last thousands of years.²⁰ Judge Weeramantry also noted the electromagnetic pulse as a further effect of the use of nuclear weapons, stating that this very sudden and intensive burst of energy throws all electronic devices, including communications lines such as nuclear command and control centers, out of action.²¹

Judge Koroma noted, with respect to the atomic attacks on Hiroshima and Nagasaki:

Over 320,000 people who survived but were affected by radiation still suffer from various malignant tumours caused by radiation, including leukaemia, thyroid cancer, breast cancer, lung cancer, gastric cancer, cataracts and a variety of other after-effects. More than half a century after the disaster, they are still said to be undergoing medical examinations and treatment.²²

Quoting former Secretary General of the United Nations Javier Pérez de Cuéllar, Judge Shahabuddeen stated:

The world's stockpile of nuclear weapons today is equivalent to 16 billion tons of TNT. As against this, the entire devastation of the Second World War was caused by the expenditure of no more than 3 million tons of munitions. In other words, we possess a destructive capacity of more than 5,000 times what caused 40 to 50 million deaths not too long ago. It should suffice to kill every man, woman and child 10 times over.²³

^{19.} *Id.* at 456 (Weeramantry, J., dissenting). In his dissenting opinion in *Legality of the Use by a State of Nuclear Weapons in an Armed Conflict*, Judge Koroma stated that "in a conflict involving the use of a single nuclear weapon, such a weapon could have the destructive power of a million times that of the largest conventional weapon." Advisory Opinion, 1996 I.C.J. 68, 173 (July 8).

^{20.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, at 451 (Weeramantry, J., dissenting).

^{21.} Id . at 467–68 (Weeramantry, J., dissenting) (citing DICTIONNAIRE ENCYCLOPEDIQUE D'ELECTRONIQUE).

^{22.} Id. at 567 (Koroma, J., dissenting).

^{23.} *Id.* at 382 (Shahabuddeen, J., dissenting) (quoting Javier Pérez de Cuéllar, Sec'y-Gen. of the U.N, Statement at the University of Pennsylvania (Mar. 24, 1983), *in* 6 DISARMAMENT, no. 1, at 91).

As to the radiation effects of nuclear weapons, Judge Shahabuddeen stated:

To classify these effects as being merely a byproduct is not to the point; they can be just as extensive as, if not more so than, those immediately produced by blast and heat. They cause unspeakable sickness followed by painful death, affect the genetic code, damage the unborn, and can render the earth uninhabitable. These extended effects may not have military value for the user, but this does not lessen their gravity or the fact that they result from the use of nuclear weapons. This being the case, it is not relevant for present purposes to consider whether the injury produced is a byproduct or secondary effect of such use.

Nor is it always a case of the effects being immediately inflicted but manifesting their consequences in later ailments; nuclear fall-out may exert an impact on people long after the explosion, causing fresh injury to them in the course of time, including injury to future generations. The weapon continues to strike for years after the initial blow, thus presenting the disturbing and unique portrait of war being waged by a present generation on future ones—on future ones with which its successors could well be at peace.²⁴

Judge Shahabuddeen further noted the extreme and indiscriminate effects of nuclear weapons:

The preamble to the 1967 Treaty of Tlatelolco, Additional Protocol II of which was signed and ratified by the five [nuclear weapons states], declared that the Parties were convinced

That the incalculable destructive power of nuclear weapons has made it imperative that the legal prohibition of war should be strictly observed in practice if the survival of civilization and of mankind itself is to be assured.

That nuclear weapons, whose terrible effects are suffered, indiscriminately and inexorably, by military forces and civilian population alike, constitute, through the persistence of the radioactivity they release, an attack on the integrity of the human species and ultimately may even render the whole earth uninhabitable.²⁵

With such facts in mind, this Part next looks at the law.

B. Scope of International Humanitarian Law

There is a robust body of conventional and customary international law governing the use and threat of use of nuclear weapons. This body of law is recognized by states throughout the world, including the United States and other nuclear weapons states, and its principles have been explicitly articulated by the International Court of Justice. This is the body of international law known variously as IHL, the law of armed conflict, the law of war, and *jus in bello*, terms that are generally synonymous.²⁶ This centuries-old body of law applies to the use of all weapons, including nuclear weapons. There are also numerous conventions, including the Nuclear Non-Proliferation Treaty²⁷ ("NPT"), that apply specifically to nuclear weapons.

At the broadest level, IHL not only establishes limits on the use and threat of use of weapons, including nuclear weapons, but establishes and defines war crimes, crimes against the peace, and crimes against humanity (international crimes for which individuals are subject to criminal sanctions, including the death penalty).

Of central importance, this body of law regulates threats as well as overt actions, making it unlawful for states—and individuals acting on behalf of states—to threaten actions that are contrary to IHL. This becomes of central significance to the policy of nuclear deterrence, which is founded on the threat to use nuclear weapons. IHL also includes vigorous provisions governing the potential exposure to criminal prosecution of individuals in the armed services, in government, and in industry who act on behalf of or in conjunction with states in matters involving weapons, including nuclear weapons.

^{25.} *Id.* at 384 (Shahabuddeen, J., dissenting) (quoting Treaty for the Prohibition of Nuclear Weapons in Latin America, Feb. 14, 1967, 634 U.N.T.S. 326, 328) [hereinafter Treaty of Tlatelolco].

^{26.} See id. at 256.

 $^{27.\} Treaty$ on the Non-Proliferation of Nuclear Weapons, July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161.

This Article's statement of the applicable law, to take it out of contention, is largely based on statements of such law by the United States, including US statements of the law in its arguments to the ICJ in the *Nuclear Weapons* advisory opinion and in the US military manuals used for training US forces, planning and conducting military operations, and evaluating the performance of US personnel for legal purposes. These statements of the applicable law, subject to certain exceptions discussed below, accurately and fairly state the rules of IHL applicable to the use and threat of use of nuclear weapons. Also considered are the written memoranda and oral presentations of the three other declared nuclear weapons states that participated in the *Nuclear Weapons* case—France²⁹, Russia³⁰, and the United

28. See JUDGE ADVOCATE GENERAL'S DEPT., U.S. DEP'T OF THE AIR FORCE, AIR FORCE OPERATIONS AND THE LAW (2d ed. 2009) [hereinafter AIR FORCE, OPERATIONS AND THE LAW]; U.S. DEP'T OF THE AIR FORCE, DOCTRINE DOC. No. 2-1.9, TARGETING (2006) [hereinafter Air Force, Targeting]; U.S. Dep't of the Air Force, Doctrine DOC. No. 2-12, NUCLEAR OPERATIONS (2009) [hereinafter Air Force, NUCLEAR OPERATIONS]; U.S. DEP'T OF THE AIR FORCE, THE MILITARY COMMANDER AND THE LAW (2009) [hereinafter Air Force, Military Commander and the Law]; U.S. Dep't of the ARMY, FIELD MANUAL NO. FM27-10, THE LAW OF LAND WARFARE (1956) (with Change No. 1 (July 15, 1976)) [hereinafter ARMY, LAW OF LAND WARFARE]; U.S. DEP'T OF THE ARMY, MANUAL NO. FM100-30, NUCLEAR OPERATIONS (1996); INT'L & OPERATIONAL LAW DEP'T, U.S. ARMY JUDGE ADVOCATE GEN.'S LEGAL CTR. & SCH., LAW OF WAR DESKBOOK (2010) [hereinafter ARMY, LAW OF WAR DESKBOOK]; INT'L & OPERATIONAL LAW DEP'T, U.S. ARMY JUDGE ADVOCATE GEN.'S LEGAL CTR. AND SCH., OPERATIONAL LAW HANDBOOK (2010) [hereinafter ARMY, OPERATIONAL LAW HANDBOOK]; U.S. DEP'T OF THE NAVY, NAVAL WAR PUB. NO. 1-14M, THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS (2007) [hereinafter NAVAL COMMANDER'S HANDBOOK] (this manual is issued by the U.S. Naval War College and applies to the Coast Guard, Navy, and Marines); U.S. DEP'T OF THE NAVY, ANNOTATED SUPPLEMENT TO THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATION (1997) [hereinafter NAVAL COMMANDER'S HANDBOOK 1997 SUPPLEMENT]. Some earlier editions of US military manuals and manuals that are no longer in effect still contain statements of international law of continuing significance. See, e.g., JOINT CHIEFS OF STAFF, JOINT PUB. NO. 3-12, DOCTRINE FOR JOINT NUCLEAR OPERATIONS (1995); JOINT CHIEFS OF STAFF, JOINT PUB. NO. 3-12.1, DOCTRINE FOR JOINT THEATER NUCLEAR OPERATIONS, chs. 2, 25-26, 30 (1996) [hereinafter JOINT THEATER NUCLEAR OPERATIONS]; U.S. DEP'T OF THE AIR FORCE, PAMPHLET NO. 110-34, COMMANDER'S HANDBOOK ON THE LAW OF ARMED CONFLICT (1980) [hereinafter AIR FORCE, COMMANDER'S HANDBOOK]; U.S. DEP'T OF THE AIR FORCE, PAMPHLET NO. 110-31, INTERNATIONAL LAW—THE CONDUCT OF ARMED CONFLICT AND AIR OPERATIONS (1976) [hereinafter AIR FORCE, MANUAL ON INTERNATIONAL LAW]; U.S. DEP'T OF THE NAVY, ANNOTATED SUPPLEMENT TO THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS (1987) [hereinafter NAVAL COMMANDER'S HANDBOOK 1989 SUPPLEMENT].

29. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of the French Republic (June 20, 1995), available

Kingdom³¹ (China did not participate)—the written and oral presentations of Iran,³² and the written presentations of India³³ and North Korea³⁴ (Pakistan and Israel did not participate).³⁵ Based upon review of such materials, the statements of IHL by such states, to the extent the matter was addressed, were generally consistent with the statements of such law by the United States, as reflected herein, with the exception that France remained silent on the application of IHL, contending instead

at http://www.icj-cij.org/docket/files/95/8701.pdf; Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 38–67 (Nov. 1, 1995, 10 a.m.), available at http://www.icj-cij.org/docket/files/95/5927.pdf; Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 18–27 (Nov. 2, 1995, 10 a.m.), available at http://www.icj-cij.org/docket/files/95/5929.pdf.

- 30. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of the Russian Federation (June 19, 1995), available at http://www.icj-cij.org/docket/files/95/8796.pdf; Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 39–50 (Nov. 10, 1995, 10 a.m.), available at http://www.icj-cij.org/docket/files/95/5939.pdf [hereinafter ICJ Hearing, Nov. 10, 1995].
- 31. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of the United Kingdom (June 16, 1995), available at http://www.icj-cij.org/docket/files/95/8802.pdf [hereinafter Written Statement of the Government of the United Kingdom]; Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 20–54 (Nov. 15, 1995, 10 a.m.), available at http://www.icj-cij.org/docket/files/95/5947.pdf [hereinafter ICJ Hearing, Nov. 15, 1995].
- 32. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of the Islamic Republic of Iran (June 19, 1995), available at http://www.icj-cij.org/docket/files/95/8678.pdf; Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 16–41(Nov. 6, 1995, 10 a.m.), available at http://www.icj-cij.org/docket/files/95/5933.pdf.
- 33. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of India (June 20, 1995), available at http://www.icj-cij.org/docket/files/95/8688.pdf.
- 34. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the Government of the Democratic People's Republic of Korea (May 18, 1995), available at http://www.icj-cij.org/docket/files/95/8668.pdf.
- 35. There were actually two cases referred to the ICJ for an advisory opinion as to the lawfulness of the use and threat of use of nuclear weapons: one referred by the World Health Organization ("WHO") in 1993 and the other by the United Nations General Assembly in 1995. The ICJ ultimately found that the WHO did not to have standing to assert such a claim but proceeded to hear the case presented by the General Assembly. While legal arguments were presented to the ICJ on international law issues in both cases, this Article focuses on the papers submitted in connection with the General Assembly case, since those statements were more complete and substantive than those presented in connection with the WHO referral.

that use of nuclear weapons in self-defense is permissible absent an express prohibition.³⁶

Some of the legal requirements may come as a surprise even to leading public policy and nuclear weapons experts. The law governing the use and threat of use of nuclear weapons has been largely overlooked. Analyses of nuclear weapons issues by governmental and private experts across the political spectrum routinely fail to take into consideration the requirements of international law. A current example is the fact that the Obama Administration's wide-ranging efforts to address nuclear weapons issues have been presented on the basis of policy and security considerations, with little or no acknowledgement of the requirements of international law.

Against this backdrop, the affirmation by states party to the NPT at the 2010 Review Conference, regarding nuclear disarmament, that there is a "need for all States at all times to comply with applicable international law, including international humanitarian law," was the inspiration for this Article. That unambiguous commitment should usher in a new era in which the requirements of IHL define the creation, deployment, use, and threat of use of nuclear weapons. In fact, it is the authors' contention that this body of law renders the use and threat of use of nuclear weapons unlawful and compels immediate progress to obtain the elimination of the weapons.

C. Main Corpus of International Humanitarian Law

The ICJ in its *Nuclear Weapons* advisory opinion stated that this "body of legal prescriptions," the "laws and customs of war," are largely set forth in "one single complex system" known as "international humanitarian law," a body of customary rules—many of which have been codified in the "Hague Law" and the

^{36.} See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 6 (Nov. 1, 1995), available at http://www.icj-cij.org/docket/files/95/5927.pdf (stating that the use of nuclear weapons is "authorized in the event of the exercise of the inherent right of individual or collective self-defence"); John Burroughs, Humanitarian Consequences, Humanitarian Law: An Advance in Banning Use of Nuclear Weapons, NPT NEWS IN REV., June 1, 2010, at 8, available at http://www.reachingcriticalwill.org/legal/npt/NIR2010/No21.pdf.

^{37.} Final Document, supra note 15, at 19.

^{38.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, \P 77 (July 8).

"Geneva Law."39 The court noted that the Hague Law consists of codifications undertaken in The Hague (including the Conventions of 1899 and 1907) that were based partly upon the St. Petersburg Declaration of 1868 and the results of the Brussels Conference of 1874.40 This Hague Law, particularly the Regulations Respecting the Laws and Customs of War on Land ("Hague Regulations"), "fixed the rights and duties of belligerents in their conduct of operations and limited the choice of methods and means of injuring the enemy in an international armed conflict."41 The Geneva Law, consisting of codifications undertaken in Geneva (the Conventions of 1864, 1906, 1929, and 1949), protect "the victims of war" and aim "to provide safeguards for disabled armed forces personnel and persons not taking part in the hostilities."42 The more recent provisions of the Additional Protocols I and II of 1977 to the Geneva Conventions regulating the conduct of hostilities "give expression and attest to the unity and complexity" of IHL.43

D. Applicability of International Humanitarian Law to Nuclear Weapons

The United States recognizes that the use of nuclear weapons is subject to IHL, including the rules of distinction/discrimination, proportionality, and necessity, and the corollary requirement of controllability.⁴⁴

^{39.} Id. ¶ 75.

^{40.} Id.

^{41.} *Id*.

Id.

^{43.} *Id.* (citing Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, June 8, 1977, 1125 U.N.T.S. 3 [hereinafter Additional Protocol I]; Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts, June 8, 1977, 1125 U.N.T.S. 609 [hereinafter Additional Protocol II]). For related explanatory materials, see MICHAEL BOTHE ET AL., NEW RULES FOR VICTIMS OF ARMED CONFLICTS: COMMENTARY ON THE TWO 1977 PROTOCOLS ADDITIONAL TO THE GENEVA CONVENTIONS OF 1949, at 312, 317 (1982).

^{44.} See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Written Statement of the United States, 2, 7–47, (June 20, 1995), available at http://www.icj-cij.org/docket/files/95/8700.pdf [hereinafter US ICJ Written Statement] (prepared by Conrad K. Harper, Michael J. Matheson, Bruce C. Rashkow, and John H. McNeill on behalf of the United States); see also NAVAL COMMANDER'S HANDBOOK, supra note 28, § 10.1–10.2.1; AIR FORCE, NUCLEAR OPERATIONS, supra note 28, at 8; ARMY, LAW OF LAND WARFARE, supra note 28, at 18 (stating that, in the absence

The 2007 Commander's Handbook on the Law of Naval Operations ("Naval Commander's Handbook") states that the use of nuclear weapons "against enemy combatants and other military objectives" is subject to the following principles:

[T]he right of the parties to the conflict to adopt means of injuring the enemy is not unlimited; it is prohibited to launch attacks against the civilian population as such; and distinction must be made at all times between combatants and civilians to the effect that the latter be spared as much as possible. 45

The Air Force's 2009 manual *Nuclear Operations* recognizes that the use of nuclear weapons is subject to the principles of the law of war generally.⁴⁶ The manual states, "Under international law, the use of a nuclear weapon is based on the same targeting rules applicable to the use of any other lawful weapon, i.e., the counterbalancing principles of military necessity, proportionality, distinction and unnecessary suffering."⁴⁷

The Air Force, in its 2006 manual *Targeting*, states that the following questions are helpful in determining whether the use of a weapon complies with the applicable rules: (1) "Is this target a valid 'military objective'?"; (2) "Will the use of a particular weapon used to strike a target cause unnecessary suffering?"; (3) "Does the military advantage to be gained from striking a target outweigh the anticipated incidental civilian loss of life and property if this target is struck?"; (4) "Have we distinguished between combatants and noncombatants; have we distinguished between military objectives and protected property or places?" 48

The Army, in its earlier manual *International Law*, stated that the provisions of international conventional and customary law that "may control the use of nuclear weapons" include: (l) Article 23(a) of the Hague Regulations prohibiting poisons and poisoned weapons; (2) the Geneva Protocol of 1925, which prohibits the use not only of poisonous and other gases but also

of a customary rule of law or international convention restricting the employment of atomic weapons, the use of such weapons cannot be deemed unlawful, although the manual appears to recognize the subjugation of the use of such weapons to the principles of moderation and necessity); *infra* Part I.F.d.

^{45.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 10.2.1.

^{46.} AIR FORCE, NUCLEAR OPERATIONS, *supra* note 28, at 8.

^{47.} Id.

^{48.} AIR FORCE, TARGETING, supra note 28, at 89–90.

of "analogous liquids, materials or devices"; (3) Article 23(c) of the Hague Regulations, which prohibits weapons calculated to cause unnecessary suffering; and (4) the 1868 Declaration of St. Petersburg, which lists as contrary to humanity those weapons that "needlessly aggravate the sufferings of disabled men or render their death inevitable."⁴⁹

In its written statement to the ICJ in the *Nuclear Weapons* advisory opinion, the United States stated, "[T]he legality of use [of nuclear weapons] depends on the conformity of the particular use with the rules applicable to such weapons."⁵⁰ The memorandum goes on to say that this would depend on "the characteristics of the particular weapon used and its effects, the military requirements for the destruction of the target in question and the magnitude of the risk to civilians."⁵¹

E. Summary of the Main Rules of International Humanitarian Law Applicable to Nuclear Weapons

The following is a summary of key rules of IHL applicable to nuclear and other weapons.

The *rule of distinction/discrimination* prohibits the use of a weapon that cannot discriminate in its effects between military targets and noncombatant persons and objects. It is unlawful to use weapons whose effects are incapable of being controlled and therefore cannot be directed against a military target. If the state cannot maintain such control over the weapon, it cannot ensure

^{49.} U.S. DEP'T OF THE ARMY, PAMPHLET NO. 27-161-2, 2 INTERNATIONAL LAW (1962), quoted in ELLIOTT L. MEYROWITZ, PROHIBITION OF NUCLEAR WEAPONS: THE RELEVANCE OF INTERNATIONAL LAW 31 (1990). This manual appears to have been superseded, as it no longer shows up on lists of current manuals. See, e.g., Listing of United States Army Field Manuals, http://www.enlisted.info/field-manuals (last visited Feb. 15, 2011). The authors are not aware of any reason to believe that the requirements of the Hague Regulations Article 23(a) and (c), the Geneva Protocol of 1925, or the 1868 Declaration of St. Petersburg, insofar as applicable to nuclear weapons, have changed in any way since the issuance of the Army's manual INTERNATIONAL LAW.

^{50.} See US ICJ Written Statement, supra note 44 at 2, 8–14 (citing THE LAW OF LAND WARFARE, supra note 28, at 4 ¶ 40(a)); Request by the World Health Organization for an Advisory Opinion on the Question of the Legality under International Law and the World Health Organization Constitution of the Use of Nuclear Weapons by a State in War or Other Armed Conflict, Advisory Opinion, Written Statement of the United States, 2, 16–21, (June 10, 1994), available at http://www.icj-cij.org/docket/files/93/8770.pdf.

^{51.} US ICJ Written Statement, supra note 44 at 2.

that such use will comply with the rule of discrimination and may not lawfully use the weapon.

The *rule of proportionality* prohibits the use of a weapon whose potential collateral effects upon noncombatant persons or objects would likely be disproportionate to the value of the military advantage anticipated by the attack. The rule of proportionality requires that a state using a weapon be able to control the effects of the weapon. If the state cannot control such effects, it cannot ensure that the collateral effects of the attack will be proportional to the anticipated military advantage.

The *rule of necessity* provides that a state may only use such a level of force as is necessary to achieve the military objective of the particular strike. Any additional level of force is unlawful.

The *corollary rule of controllability* provides that a state may not use a weapon if its effects cannot be controlled because, in such circumstances, it would be unable to believe that the particular use of the weapon would comply with the rules of distinction, proportionality, or necessity.

International *law on reprisals* provides, at a minimum, that a state may not engage in even limited violations of the law of armed conflict in response to an adversary's violation of such law, unless such acts of reprisal would meet requirements of necessity and proportionality and be solely intended to compel the adversary to adhere to the law of armed conflict. The reprisal must be necessary to achieve that purpose and proportionate to the violation against which it is directed. These requirements of necessity and proportionality for a lawful reprisal are analogous to the requirements of necessity and proportionality (discussed immediately below) for the lawful exercise of the right of self-defense.

A state's *right of self-defense* is subject to requirements of necessity and proportionality under customary international law and the Charter of the United Nations. A state's use of force in the exercise of self-defense is also subject to the requirements of IHL, including the requirements of distinction, proportionality and necessity, and the corollary requirement of controllability.

International law as to *individual and command liability* provides that military, government, and even private industrial personnel are subject to criminal conviction for violation of the law of armed conflict if they knowingly or recklessly participate in

or have supervisory responsibility over violators of the law of armed conflict. Such potential criminal liability of commanders extends not only to what the commanders knew but also to what they "should have known" concerning the violation of law.

F. Discussion of the Rules of International Law Applicable to Nuclear Weapons

1. Rule of Distinction/Discrimination

The *rule of distinction/discrimination* prohibits the use of a weapon whose effects cannot distinguish between combatant and noncombatant persons and objects.

The United States recognizes this rule. The Army, in its 2010 *Law of War Deskbook*, describes distinction as "the grandfather of all principles," stating that the rule requires that "[p]arties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives."⁵²

The Army's 2010 *Operational Law Handbook* defines "indiscriminate" as

not directed against a military objective; employs a method or means of delivery that cannot be directed at a specific military objective; or may be expected to cause incidental loss of civilian life or injury to civilian objects (including the environment), which would be excessive in relation to the concrete and direct military advantage gained.⁵³

The *Operational Law Handbook* also states, "Distinction requires parties to a conflict to engage only in military operations the *effects* of which distinguish between the civilian population (or individual civilians not taking part in the hostilities), and combatant forces, directing the application of force solely against the latter."⁵⁴ It is explicit that the requirement of distinction applies to the *effects* of the weapon being used. This becomes

^{52.} ARMY, LAW OF WAR DESKBOOK, supra note 28, at 139.

^{53.} ARMY, OPERATIONAL LAW HANDBOOK, *supra* note 28, at 350 n.81 (citing Protocol II to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Excessively Injurious or Have Indiscriminate Effects, art. 3, Oct. 10, 1980, 19 I.L.M. 1523).

^{54.} Id. at 12 (emphasis added).

important when considering the radiation effects of nuclear weapons.

The Navy, in its Naval Commanders Handbook, states, "It is a fundamental tenet of the law of armed conflict that the right of nations engaged in armed conflict to choose methods or means of warfare is not unlimited."55 Additionally, "weapons, which by their nature are incapable of being directed specifically against objectives, and therefore...put civilians noncombatants at equivalent risk, are forbidden due to their indiscriminate effect."56 The handbook states further, "The principle of distinction is concerned with distinguishing combatants from civilians and military objects from civilian objects so as to minimize damage to civilians and civilian objects."57 Commanders have two duties under the principle of distinction: they must "distinguish their forces from the civilian population" and "distinguish valid military objectives from civilians or civilian objects before attacking."58

Noting that the rule of distinction encompasses the effects of the weapons being used, the *Naval Commander's Handbook* highlights three types of attacks that the rule outlaws: (1) "attacks that are not directed at a specific military objective"; (2) "attacks that employ a method or means of combat that cannot be directed at a specific military objective"; and (3) "attacks that employ a method or means of combat, *the effects of which cannot be limited as required by the law of armed conflict.*" ⁵⁹

The Air Force, in its 2009 manual *The Military Commander* and the Law, similarly states that the principle of distinction "imposes a requirement to distinguish... between military objectives and civilian objects.... An attacker must not intentionally attack civilians or employ methods or means (weapons or tactics) that would cause excessive collateral civilian

^{55.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 9.1.

^{56.} *Id*.

^{57.} *Id.* § 5.3.2. Combatants are "persons engaged in hostilities during an armed conflict." *Id.* § 5.4.1. Noncombatants "are those members of the armed forces who do not take direct part in hostilities because of their status as medical personnel and chaplains." *Id.* § 5.4.2. "A civilian is a person who is not a combatant or noncombatant." *Id.* § 5.4.3.

^{58.} Id. § 5.3.2.

^{59.} Id. (emphasis added).

casualties."⁶⁰ The rule of distinction "prohibits 'indiscriminate attacks.'"⁶¹

2. Rule of Proportionality

The rule of proportionality prohibits the use of a weapon whose potential collateral effects upon noncombatant persons or objects would likely be disproportionate to the value of the military advantage anticipated by the attack.

The United States recognizes this rule. The Air Force, in its manual *The Military Commander and the Law*, describes the rule of proportionality as involving a balancing test in which "damages and casualties must be consistent with mission accomplishment," and "civilian losses must be proportionate to the military advantages sought."62 The manual further states, "Those who plan military operations must take into consideration the extent of civilian destruction and probable casualties that will result and, to the extent consistent with the necessities of the military situation, seek to avoid or minimize such casualties and destruction."63 The Air Force's 2009 manual Air Force Operations and the Law states that the rule of proportionality "may be viewed as a fulcrum for balancing military necessity and unnecessary suffering."64 Echoing the language in the Additional Protocol I to the 1949 Geneva Convention, the Air Force, in its manual Targeting, states that proportionality "requires [that] anticipated loss of civilian life and damage to civilian property incidental to attack is not excessive in relation to the concrete and direct military advantage expected from striking the target."65

The Navy, in the *Naval Commander's Handbook*, states that a commander is required "to conduct a balancing test to determine if the incidental injury, including death to civilians and damage to civilian objects, is excessive in relation to the

^{60.} AIR FORCE, MILITARY COMMANDER AND THE LAW, supra note 28, at 630.

^{61.} AIR FORCE, TARGETING, supra note 28, at 90.

 $^{62.\;}$ AIR Force, Military Commander and the Law, supra note 28, at $631.\;$

^{63.} *Id*.

^{64.} AIR FORCE, OPERATIONS AND THE LAW, *supra* note 31, at 19.

^{65.} AIR FORCE, TARGETING, *supra* note 31, at 89; *see also* ARMY, LAW OF WAR DESKBOOK, *supra* note 31, at 140.

concrete and direct military advantage expected to be gained."⁶⁶ It further states that weapons that by their design cause unnecessary suffering or superfluous injury are "prohibited because the degree of pain or injury, or the certainty of death they produce is needlessly or clearly disproportionate to the military advantage to be gained by their use."⁶⁷

In an observation that is helpful in distinguishing the focus of various interrelated principles, the *Naval Commander's Handbook* states:

The principle of proportionality is directly linked to the principle of distinction. While distinction is concerned with focusing the scope and means of attack so as to cause the least amount of damage to protected persons and property, proportionality is concerned with weighing the military advantage one expects to gain against the unavoidable and incidental loss to civilians and civilian property that will result from the attack.⁶⁸

The United States, in its memorandum to the ICJ in the *Nuclear Weapons* advisory opinion, defined the proportionality requirement in terms of the likely effects and associated risks:

Whether an attack with nuclear weapons would be disproportionate depends entirely on the circumstances, including the nature of the enemy threat, the importance of destroying the objective, the character, size and likely effects of the device, and the magnitude of the risk to civilians. Nuclear weapons are not inherently disproportionate.⁶⁹

3. Rule of Necessity

The rule of necessity provides that a state may only use such a level of force as is "necessary" or "imperatively necessary" to achieve the military objective of the particular strike. Any additional level of force is unlawful.

^{66.} NAVAL COMMANDER'S HANDBOOK, *supra* note 28, § 5.3.3; *see also* JOINT CHIEFS OF STAFF, JOINT PUB. NO. 3-60, JOINT TARGETING E-1 (2007) [hereinafter JOINT CHIEFS, JOINT TARGETING] ("The principle of proportionality requires that commanders weigh the anticipated loss of civilian life and damage to civilian property reasonably expected to result from military operations with the advantages expected to be gained.").

^{67.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 9.1.1.

^{68.} Id. § 5.3.3.

^{69.} US ICJ Written Statement, supra note 44, at 23.

The United States recognizes this rule. The Air Force, in its 2009 manual *Air Force Operations and the Law*, characterizes the limitations of military necessity both as customary international law and as ratified in the Hague Convention, which forbids a belligerent "to destroy or seize the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war." Referencing the Hague Convention's preamble, the manual states:

Military necessity does not authorize all acts in war that are not expressly prohibited. Codification of the law of war into specific prohibitions to anticipate every situation is neither possible nor desirable. As a result, commanders and others responsible for making decisions must make those decisions in a manner consistent with the spirit and intent of the law of war.⁷¹

The manual further states:

The principle of avoiding the employment of arms, projectiles, or material of a nature to cause unnecessary suffering, also referred to as superfluous injury, is codified in Article 23 of the Annex to Hague IV, which especially forbids employment of "arms, projectiles or material calculated to cause unnecessary suffering..." and the destruction or seizure of "the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war."

Additional Protocol I, in article 35, states in paragraph 2: "It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering."⁷²

The manual emphasizes that the rule of necessity involves a balancing test:

In determining whether a means or method of warfare causes unnecessary suffering, a balancing test is applied between lawful force dictated by military necessity to achieve a military objective and the injury or damage that may be

^{70.} AIR FORCE OPERATIONS AND THE LAW, *supra* note 28, at 14 (citing Convention (IV) Respecting the Laws and Customs of War and Its Annex: Regulations Concerning the Laws and Customs of War on Land art. 23(g), Oct. 18, 1907, 36 Stat. 2277).

^{71.} *Id.* at 14–15 (citing Convention (IV) Respecting the Laws and Customer of War, and Its Annex: Regulations Concerning the Laws and Customs of War on Land, art. 23(g), *supra* note 70).

^{72.} Id. at 15; see also Army, Operational Law Handbook, supra note 28, at 12.

considered superfluous to achievement of the stated or intended objective. Unnecessary suffering is used in an objective rather than subjective sense. That is, the measurement is not that of the victim affected by the means, but rather in the sense of the design of a particular weapon or in the employment of weapons.⁷³

The Air Force, in *International Law—The Conduct of Armed Conflict and Air Operations* ("Manual on International Law"), discusses the importance of Hague IV and the Hague Regulations by quoting the International Military Tribunal at Nuremberg: "[B]y 1939, these rules laid down in the Convention were recognized by all civilized nations, and were regarded as being declaratory of the laws and customs of war."⁷⁴ The manual further notes that "all of the major war criminals, including Herman Goering, the Air Minister, were convicted, among other crimes, of the devastation of towns not justified by military necessity in violation of the law of war."⁷⁵

The Army's *Operational Law Handbook* states that "[t]he principle of military necessity is explicitly codified in Article 23, paragraph (g) of the Annex to Hague IV, which forbids a belligerent 'to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war.'"⁷⁶

The *Naval Commander's Handbook* states the law of war's purpose "is to ensure that the violence of hostilities is directed toward the enemy's war efforts and is not used to cause unnecessary human misery and physical destruction." Even though "[t]he principle of military necessity recognizes that force resulting in death and destruction will have to be applied to achieve military objectives, . . . its goal is to limit suffering and destruction to that which is necessary to achieve a valid military objective." ⁷⁸

^{73.} Id. at 15-16.

^{74.} AIR FORCE, MANUAL ON INTERNATIONAL LAW, *supra* note 28, at 5-15 n.3 (quoting 22 Trial of German Major War Criminals: Proceedings of the International Military Tribunal Sitting at Nuremberg, Germany 1, 496 (1946)). This manual is no longer in effect. Its point about the Nuremberg Court's enforcement of the rule of necessity remains compelling, however.

^{75.} AIR FORCE, MANUAL ON INTERNATIONAL LAW, supra note 28, at 5–6.

^{76.} ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 10.

^{77.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 5.3.1.

^{78.} Id. § 5.3.1.

To that end, the rule of necessity "prohibits the use of any kind or degree of force not required for the partial or complete submission of the enemy with a minimum expenditure of time, life and physical resources." The handbook further states:

While the principle does recognize that some amount of collateral damage and incidental injury to civilians and civilian objects may occur in an attack upon a legitimate military objective, it does not excuse the wanton destruction of life and property disproportionate to the military advantage to be gained from the attack.⁸⁰

The United States has also at times defined the necessity test as based on whether the excessive effects were intentionally designed into the weapon. The *Naval Commander's Handbook* states that weapons that by their design cause unnecessary suffering or superfluous injury are "prohibited because the degree of pain or injury, or the certainty of death they produce is needlessly or clearly disproportionate to the military advantage to be gained by their use."81

In its presentation to the ICJ in the *Nuclear Weapons* advisory opinion, the United States similarly stated:

[The prohibition against unnecessary suffering] was intended to preclude weapons designed to increase the injury or suffering of the persons attacked beyond that necessary to accomplish the military objective. It does not prohibit weapons that may cause great injury or suffering if the use of the weapon is necessary to accomplish the military mission. For example, it does not prohibit the use of antitank munitions which must penetrate armor by kinetic-energy or incendiary effects, even though this may well cause severe and painful burn injuries to the tank crew. By the same token, it does not prohibit the use of nuclear weapons,

^{79.} *Id.*; *see* MYERS S. MCDOUGAL & FLORENTINO P. FELICIANO, LAW AND MINIMUM WORLD PUBLIC ORDER 525 (1961) ("A particular combat operation, comprising the application of a certain amount of violence, can be appraised as necessary or unnecessary only in relation to the attainment of a specified objective."); Statement of General Dwight D. Eisenhower (Dec. 29, 1943), *reprinted in* RONALD SCHAFFER, WINGS OF JUDGMENT: AMERICAN BOMBING IN WORLD WAR II 50–51 (1985) ("Nothing can stand against the argument of military necessity. . . . But the phrase 'military necessity' is sometimes used where it would be more truthful to speak of military convenience or even of personal convenience.").

^{80.} NAVAL COMMANDER'S HANDBOOK, *supra* note 28, § 6.2.6.4.2.

^{81.} Id. § 9.1.1.

even though such weapons can produce severe and painful injuries. 82

John McNeill, one of the lawyers for the United States, made essentially this same argument to the court: "The unnecessary suffering principle prohibits the use of weapons designed specifically to increase the suffering of persons attacked beyond that necessary to accomplish a particular military objective." 83

4. Corollary Requirement of Controllability

The United States, in its military manuals and arguments to the ICJ, has recognized that these rules of distinction, proportionality, and necessity make it unlawful for a state to use weapons whose effects it cannot control.

Uncontrollability under the Rule of Distinction/Discrimination

The Joint Chiefs of Staff, in their manual *Joint Targeting* state, "Attackers are required to only use those means and methods of attack that are discriminate in effect and can be controlled, as well as take precautions to minimize collateral injury to civilians and protected objects or locations." To achieve this, "the principle of distinction (discrimination) requires both attacker and defender to distinguish between combatants and noncombatants, as well as between military objectives and protected property, locations, or objects."

The Air Force, in its manual *The Military Commander and the Law*, gives "[w]eapons incapable of being controlled" as examples of "indiscriminate weapons." ⁸⁶

The *Naval Commander's Handbook* defines the rule of distinction as prohibiting the use of a weapon "that cannot be directed at a specific military objective" and whose effects "cannot be limited as required by the law of armed conflict." It states, "Weapons, which by their nature are incapable of being

^{82.} US ICJ Written Statement, *supra* note 44, at 28 (citing ARMY LAW OF LAND WARFARE, *supra* note 28, at 18).

^{83.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 72.

^{84.} JOINT CHIEFS, JOINT TARGETING, *supra* note 66, at E-2.

^{85.} Id.

^{86.} AIR FORCE, MILITARY COMMANDER AND THE LAW, supra note 28, at 632.

^{87.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 5.3.2.

directed specifically against military objectives, and therefore that put civilians and noncombatant at equal risk, are forbidden due to their indiscriminate effects." The handbook highlights three types of attacks that are outlawed by the principle of discrimination: (1) "attacks that are not directed at a specific military objective"; (2) "attacks that employ a method or means of combat that cannot be directed at a specific military objective"; and (3) "attacks that employ a method or means of combat, the effects of which cannot be limited as required by the law of armed conflict." 89

Moreover, the *effects* of the weapon must be capable of being directed. The *Naval Commander's Handbook* states:

Weapons that are incapable of being directed at a military objective are forbidden as being indiscriminate in their effect. Drifting armed contact mines and long-range unguided missiles (such as the German V-1 and V-2 rockets of World War II) fall into this category. A weapon is not indiscriminate simply because it may cause incidental or collateral civilian casualties, provided such casualties are not foreseeably excessive in light of the anticipated military advantage to be gained. An artillery round that is capable of being directed with a reasonable degree of accuracy at a military target is not an indiscriminate weapon simply because it may miss its mark or inflict collateral damage. Conversely, uncontrolled balloon-borne bombs, such as those released by the Japanese against the west coast of the United States and Canada in World War II, lack that capability of direction and are, therefore, unlawful.⁹⁰

The Army, in its *Operational Law Handbook*, sets forth a similar rule, highlighting that *effects* of military operations that cannot be controlled violate the rule of distinction: "Distinction requires parties to a conflict to engage only in military operations the effects of which distinguish between the civilian population (or individual civilians not taking part in the hostilities), and combatant forces, directing the application of force solely against the latter."91

^{88.} Id. § 9.1.

^{89.} Id. § 5.3.2.

^{90.} Id. § 9.1.2.

^{91.} ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 12 (emphasis added).

The Air Force, in *Air Force Operations and the Law*, highlights as an example of an indiscriminate use of nuclear weapons a situation in which the attacking nation employs them to destroy a satellite, noting that such use "would cause indiscriminate damage to all satellites and would likely violate the law of armed conflict principle of distinction." The Air Force's manual *The Military Commander and the Law* similarly recognizes that indiscriminate weapons include "biological and bacteriological weapons," "weapons incapable of being controlled," and "chemical weapons."

The requirement of controllability was codified with respect to indiscriminate attacks in the 1977 Protocol I to the Geneva Conventions. Article 51 ("Protection of the Civilian Population") reads:

Indiscriminate attacks are prohibited. Indiscriminate attacks

- (a) those which are not directed at a specific military objective;
- (b) those which employ a method or means of combat which cannot be directed at a specific military objective;
- (c) those which employ a method or means of combat the effects of which cannot be limited as required by the Protocol;

and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction. 94

b. Uncontrollability under the Rule of Proportionality

So also, a nuclear weapons strike cannot comply with the requirement of proportionality if the potential effects are not subject to control and limitation. Without such control, the user cannot have a reasonable basis to believe that it can limit the effects to those that are proportional to the military value of the target.

^{92.} AIR FORCE, OPERATIONS AND THE LAW, supra note 28, at 89.

^{93.} AIR FORCE, MILITARY COMMANDER AND THE LAW, supra note 28, at 632.

^{94.} Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflict (Protocol I), June 8, 1977, 1125 U.N.T.S. 90.

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c. Uncontrollability under the Rule of Necessity

The *Naval Commander's Handbook* states that the rule of necessity, in combination with the rule of distinction, prohibits

attacks that employ a method or means of combat that cannot be directed at a specific military objective (e.g., declaring an entire city a single military objective and attacking it by bombardment when there are actually several distinct military objectives throughout the city that could be targeted separately), or attacks that employ a method or means of combat, the effects of which cannot be limited as required by the law of armed conflict (e.g., bombing an entire large city when the object of attack is a small enemy garrison in the city).⁹⁵

The Air Force, in its manual *Air Force Operations and the Law*, states that military necessity acknowledges that attacks can only be made against targets that are valid military objectives—"attacks may not be indiscriminate." ⁹⁶

5. Reprisals

May a state respond with an unlawful use of force to an adversary's unlawful use of force? That is the question posed by the notion of reprisals. The United States recognizes that, to be lawful, reprisals must, at a minimum, be proportional to the prior unlawful act and must be limited to that which is necessary to get the adversary to comply with the law of armed conflict.

The Navy, in the *Naval Commander's Handbook*, defines reprisals:

A belligerent reprisal is an enforcement measure under the law of armed conflict consisting of an act that would otherwise be unlawful but which is justified as a response to the previous unlawful acts of an enemy. The sole purpose of a reprisal is to induce the enemy to cease its illegal activity and to comply with the law of armed conflict in the future. Reprisals may be taken against enemy armed forces, enemy civilians other than those in occupied territory, and enemy property.⁹⁷

^{95.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 5.3.2

^{96.} AIR FORCE, OPERATIONS AND THE LAW, *supra* note 28, at 248.

^{97.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 6.2.4.

The handbook emphasizes that a reprisal, inter alia, "must only be used as a last resort when other enforcement measures have failed or would be of no avail," "must be proportional to the original violation," and "must be to cause the enemy to cease its unlawful activity." Reprisals "must respond to illegal acts of warfare," and "[a]nticipatory reprisal is not authorized." 99

The Army, in its *Law of War Deskbook*, defines a reprisal "as an otherwise illegal act done in response to a prior illegal act by the enemy." The deskbook states that the "purpose of a reprisal is to get the enemy to adhere to the law of war." To be authorized, reprisals must: (1) be "[t]imely"; (2) be "[r]esponsive to that enemy's act that violated the law of war"; (3) "[f]ollow an unsatisfied demand to cease and desist"; and (4) be "[p]roportionate to the previous illegal act." The Army's *Operational Law Handbook* states, "Reprisals are conduct which otherwise would be unlawful, resorted to by one belligerent against enemy personnel or property in response to acts of warfare committed by the other belligerent in violation of the [law of war], for the sole purpose of enforcing future compliance with the [law of war]." To the sole purpose of enforcing future compliance with the [law of war]."

Air Force Operations and the Law states, "Reprisals are not intended to be a form of retaliation, but rather a means of inducing an enemy to cease violating the law of armed conflict." ¹⁰⁴ In discussing the *tu quoque* defense, ¹⁰⁵ the manual analogizes it to the reprisal doctrine in that "this defense argues that breaches of the law of armed conflict by the enemy legitimize similar breaches by an opposing belligerent in response to, or in retaliation for, such violations." ¹⁰⁶ Referencing the Nazi's employment of this argument in the *High Command* case, the manual states that this line of defense was rejected and "that under general principles of law, an accused can not

^{98.} Id. § 6.2.4.1.

^{99.} Id.

^{100.} ARMY, LAW OF WAR DESKBOOK, supra note 28, at 159.

^{101.} Id.

^{102.} Id. at 160.

^{103.} ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 24.

^{104.} AIR FORCE, OPERATIONS AND THE LAW, supra note 28, at 44.

^{105.} *Id.* at 59. "Latin for 'you, too,' this defense puts forth the argument that breaches of the law of armed conflict by the enemy justify similar breaches by an opposing belligerent." *Id.*

^{106.} Id.

exculpate himself from a crime by showing that another has committed a similar crime" and cites *Prosecutor v. Kupreškić* for the proposition that "there was no support either in State practice or in the opinions of publicists for the *tu quoque* defense." ¹⁰⁷

The United States has generally recognized that the doctrine of reprisals is a dangerous one subject to abuse and likely to be counterproductive. Thus the United States, as a matter of policy, is very cautious about reprisals and reluctant to engage in them. The Air Force, in its former *Manual on International Law*, states that "[m]ost attempted uses of reprisals" in past conflicts were unjustified, either because they were undertaken for an improper reason or were disproportionate. ¹⁰⁸ The manual notes that reprisal "will usually have an adverse impact on the attitudes of governments not participating in the conflict" and "may only strengthen enemy morale and will to resist." ¹⁰⁹

The Navy, in an earlier edition of its *Naval Commander's Handbook*, similarly states that "[m]any attempted uses of reprisals in past conflicts have been unjustified either because the reprisals were not undertaken to deter violations by an adversary or were disproportionate to the preceding unlawful conduct." That same handbook further states, "Although reprisals are lawful when [the stated prerequisites] are met, there is always the risk that such reprisals will trigger counter-reprisals by the enemy. The United States has historically been reluctant to resort to reprisal for just this reason."

The Air Force, in its former *Commander's Handbook*, similarly stated, "In most twentieth century conflicts, the United States has, as a matter of national policy, chosen not to carry out reprisals against the enemy, both because of the potential for escalation and because it is generally in our national interest to follow the law even if the enemy does not." The handbook

^{107.} Id. at 59-60.

^{108.} See AIR FORCE, MANUAL ON INTERNATIONAL LAW, supra note 28, at 10-5.

^{09.} Id

^{110.} Naval Commander's Handbook 1989 Supplement, supra note 28, at 6-25 n.46.

^{111.} Id

^{112.} AIR FORCE, COMMANDER'S HANDBOOK, supra note 28, at 8-1.

stated that "as a practical matter, reprisals are often subject to abuse and merely result in escalation of a conflict."113

6. War Crimes

The Army's Law of Land Warfare defines "war crime" as "the technical expression for a violation of the law of war by any person or persons, military or civilian," and declares that "[e]very violation of the law of war is a war crime." 114 The manual also states that war crimes under international law are made up of (1) crimes against peace; (2) crimes against humanity; and (3) war crimes.¹¹⁵

The Air Force's Air Force Operations and the Law describes the broad scope of war crimes:

A war crime is an act or omission that contravenes an obligation under international law relating to the conduct of armed conflict. The law of armed conflict encompasses all international law applicable to the conduct of hostilities that is binding on a country or its individual citizens, including treaties and international agreements to which that country is a party, as well as customary international law. 116

It also quotes the Nuremberg Charter's definition of "war crimes" (violations of the laws or customs of war):

Such violations shall include, but not be limited to, murder, ill-treatment, or deportation to slave labor or for any other purpose of civilian population of or in occupied territory, murder or ill-treatment of prisoners of war or persons on the seas, killing of hostages, plunder of public or private property, wanton destruction of cities, towns or villages, or devastation not justified by military necessity. 117

The Air Force manual notes the definition of "crimes against the peace" set forth in the Charter of the International Military Tribunal at Nuremberg ("Nuremberg Charter") as "planning, preparation, initiation, or waging of a war of aggression, or a war in violation of international treaties,

^{113.} Id.

^{114.} ARMY, LAW OF LAND WARFARE, supra note 28, at 117.

^{116.} AIR FORCE, OPERATIONS AND THE LAW, *supra* note 28, at 37.

^{117.} Id. at 38.

agreements, or assurances, or participation in a common plan or conspiracy for the accomplishment of any of the foregoing."¹¹⁸

The manual further notes that the Nuremberg Charter's definition of "crimes against humanity" is "[a] collective category of major inhumane acts committed against any (internal or alien) civilian population before or during the war." The Nuremberg Charter defined "crimes against humanity" as

murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war, or persecutions on political, racial, or religious grounds in execution of or in connection with any crime within the jurisdiction of the Tribunal, whether or not in violation of the domestic law of the country where perpetuated. 120

The *Naval Commander's Handbook* states that violations of the laws of armed conflict are war crimes, and that "[s]tates are obligated under international law to punish their own nationals, whether members of the armed services or civilians, who commit war crimes."¹²¹

The Navy, in the 1997 edition of the Annotated Supplement to the Commander's Handbook on the Law of Naval Operations, noting that there is "certain difficulty in distinguishing war crimes from crimes against humanity," summarized judgments of various tribunals that have tried individuals for crimes against humanity as follows:

- 1. Certain acts constitute both war crimes and crimes against humanity and may be tried under either charge.
- 2. Generally, crimes against humanity are offenses against the human rights of individuals, carried on in a widespread and systematic manner. Thus, isolated offenses have not been considered as crimes against humanity, and courts have

^{118.} Id.

^{119.} *Id.* The Rome Statute defines a "crime against humanity" as murder, extermination, and other inhumane acts of a similar character, when committed as part of a widespread or systematic attack directed against any civilian population. Rome Statute of the International Criminal Court art. 7, July 17, 1998, 2187 U.N.T.S. 3. This is the modern version of the crime against humanity prosecuted at Nuremberg. Crimes against humanity can be committed in time of peace and in time of war.

^{120.} Agreement for the Prosecution and Punishment of the Major War Criminals of the European Axis art. 6(c), Aug. 8, 1945, 59 Stat. 1544, 82 U.N.T.S. 279.

^{121.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 6.2.6.

usually insisted upon proof that the acts alleged to be crimes against humanity resulted from systematic governmental action.

- 3. The possible victims of crimes against humanity constitute a wider class than those who are capable of being made the objects of war crimes and may include the nationals of the State committing the offense as well as stateless persons.
- 4. Acts constituting crimes against humanity must be committed in execution of, or in connection with, crimes against peace, or war crimes.¹²²

7. Individual Responsibility for War Crimes

Both the state and the individuals associated with it, including its governmental, military, and industrial leadership, are potentially subject to criminal liability for the commission of war crimes. As the Nuremberg proceedings exemplified, individuals, not states, are potentially put in prison or executed. States can, and historically have been, subject to damages and reparations, but, in contemporary international law, the focus of war crimes trials is on the responsible individuals. Individual responsibility encompasses the individual's own actions and a commander's responsibility for the actions under the commander's command.

a. Individual Responsibility for One's Own Actions

The United States recognizes the personal responsibility of individual military personnel for violations of the law of armed conflict—and that this responsibility extends to governmental officials, including heads of state.

The Navy states in its *Naval Commander's Handbook* that "[a]ll members of the naval service have a duty to comply with the law of armed conflict and, to the utmost of their ability and authority, to prevent violations by others. They also have an

^{122.} NAVAL COMMANDER'S HANDBOOK 1997 SUPPLEMENT, supra note 28, at 6-22.

^{123.} See IAN BROWNLIE, INTERNATIONAL LAW AND THE USE OF FORCE BY STATES 150–71 (1963); Mark Allan Gray, The International Crime of Ecocide, 26 CAL. W. INT'L L.J. 215, 265 (1996); Matthew Lippman, Crimes against Humanity, 17 B.C. THIRD WORLD L.J. 171, 171 (1997).

^{124.} See generally Brownlie, supra note 123, at 133–49; Telford Taylor, Nuremberg and Vietnam: An American Tragedy 82–88 (1970).

affirmative obligation to report promptly violations of which they become aware."¹²⁵

The Air Force, in *Air Force Operations and the Law*, emphasizes the responsibility of government as well as military personnel and the legal insufficiency of a defense of superior orders to exculpate an individual from responsibility for violations of international law:

Any person who commits an act which constitutes a crime under international law is responsible for such crime and may be punished. The fact that the law of the perpetrator's country does not impose a penalty for an act which constitutes a crime under international law does not relieve the person who committed the act from responsibility under international law. Moreover, the fact that a person who committed an act which constitutes a crime under international law acted as a Head of State or other governmental official does not relieve him or her from responsibility under international law. Finally, the fact that a person acted pursuant to the order of his or her government or of a superior does not relieve him or her from responsibility for acts that violate international law. ¹²⁶

The Air Force's earlier *Manual on International Law* states that mens rea, or a guilty mind, at the level of purposeful behavior or intention or at least gross negligence, is required for individual, as opposed to state, criminal responsibility.¹²⁷ The manual quotes Spaight's statement of the rule:

In international law as in municipal law intention to break the law—mens rea—or negligence so gross as to be the equivalent of criminal intent is the essence of the offence. A bombing pilot cannot be arraigned for an error of judgment....[I]t must be one which he or his superiors either knew to be wrong or which was, in se, so palpably and unmistakably a wrongful act that only gross negligence or

^{125.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 6.1.4.

^{126.} AIR FORCE, OPERATIONS AND THE LAW, supra note 28, at 51.

^{127.} AIR FORCE, MANUAL ON INTERNATIONAL LAW, *supra* note 28, at 15-2, 15-8 n.13 (citing J.M. SPAIGHT, AIR POWER AND WAR RIGHTS 48 (1924)). This manual appears to no longer be in effect. Although the more recent manuals do not appear to have covered this issue of mens rea, the authors are not aware of any reason to believe that the law in this area has changed.

deliberate blindness could explain their being unaware of its wrongfulness. 128

The Army states in its *Law of War Deskbook* that "[i]t is a grave breach of [Additional Protocol] I to launch an attack that a commander *knows* will cause excessive incidental damage in relation to the military advantage gained. The requirement is for a commander to act *reasonably*." 129

b. Command Responsibility

As for command liability, a commander is potentially responsible for violations of the law of war by subordinates. The Air Force manual *Air Force Operations and the Law* states, "Under the doctrine of command responsibility, commanders may be held liable for the criminal acts of their subordinates or other persons subject to their control, even if the commander did not personally participate in the underlying offenses." ¹³⁰

Command responsibility extends to information that the commander should have known; the commander is responsible if he "knew, had reason to know, or should have known, that a subordinate was about to commit such acts or had done so and who failed to take the necessary and reasonable measures to prevent such acts or to punish the perpetrators thereof."¹³¹ This has obvious implications with respect to contemporary knowledge as to the effects of nuclear weapons.

The Air Force manual adds:

Responsibility may also arise if the commander has actual knowledge, or should have known, on the basis of reports received by him or through other means that troops or persons subject to the commander's control are about to commit or have committed a war crime, and he or she fails to take the necessary and reasonable steps to ensure compliance with the law of armed conflict or to punish violators thereof.¹³²

^{128.} Id.

^{129.} ARMY, LAW OF WAR DESKBOOK, supra note 28, at 140 (emphasis in original).

^{130.} AIR FORCE, OPERATIONS AND THE LAW, *supra* note 28, at 52.

^{131.} Id. at 52 n.177.

^{132.} Id. at 53.

The *Naval Commander's Handbook* emphasizes this same demanding "should have known" standard, adding that a commander

cannot delegate his accountability for the conduct of the forces he commands. Under the law of armed conflict, a commander may be held criminally responsible for ordering the commission of a war crime [and] be held responsible for the acts of subordinates when the commander knew, or should have known, that subordinates under his control were going to commit or had committed violations of the law of armed conflict and he failed to exercise properly his command authority or failed otherwise to take reasonable measures to discover and correct violations that may occur.¹³³

The handbook explains that receipt of an unlawful order does not immunize a commander from responsibility for a war crime: "Under both international and U.S. law, an order to commit an obviously criminal act, such as wanton killing or torture of a prisoner, is an *unlawful* order and will not relieve a subordinate of his responsibility to comply with the law of armed conflict." This handbook states:

Only if the unlawfulness of an order is not known by the individual, and he could not reasonably be expected under the circumstances to recognize the order is unlawful, will the defense of obedience to an order protect a subordinate from the consequences of violating the law of armed conflict.¹³⁵

Additionally, the 1949 Geneva Conventions "place duties on States to search for persons alleged to have committed grave breaches, bring them to trial, and punish them if guilty." This handbook notes that "[w]ar crimes trials numbered in the thousands were held after World War II." ¹³⁷

The Army recognizes a similar rule with regards to subordinate liability. It states in its 2010 *Operational Law Handbook* that

^{133.} NAVAL COMMANDER'S HANDBOOK, supra note 28, § 6.1.3.

^{134.} Id. § 6.1.4.

^{135.} Id.

^{136.} Id. § 6.2.6.

^{137.} Id. § 6.2.6.1.

[c]ommanders are legally responsible for war crimes committed by their subordinates when any of three circumstances applies:

- a. The commander ordered the commission of the act;
- b. The commander knew of the act, either before or during its commission, and did nothing to prevent or stop it; or
- c. The commander should have known, "through reports received by him or through other means, that troops or other persons subject to his control [were] about to commit or [had] committed a war crime and he fail[ed] to take the necessary and reasonable steps to insure compliance with the LOW or to punish violators thereof." 138

The Air Force, in its earlier *Manual on International Law*, notes that the prosecutions for crimes against peace and against humanity following World War II were primarily "against the principal political, military and industrial leaders responsible for the initiation of the war and related inhumane policies." The manual states, "a soldier who merely performs his military duty cannot be said to have *waged* the war... [O] nly the government, and those authorities who carry out governmental functions and are instrumental in formulating policy, *wage* the war." Another former Air Force Manual, *Commander's Handbook*, states that the two international military tribunals following World War II punished "former cabinet ministers, and others of similar rank" in the Axis powers, for planning and waging aggressive war. 141

G. Purposes of International Humanitarian Law

The question invariably arises as to whether IHL is a serious body of law that is more than merely aspirational and can be expected to be observed. The numerous war crimes trials, particularly the Nuremberg trials, which have entered into the modern consciousness, would seem an adequate answer to this question.

^{138.} ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 35 (quoting ARMY, LAW OF LAND WARFARE, supra note 28, ¶ 501).

^{139.} See AIR FORCE, MANUAL ON INTERNATIONAL LAW, supra note 28, at 15-5.

^{140.} \it{Id} . at 15-9 n.23 (citing 11 Marjorie M. Whiteman, Digest of International Law, 993–94 (1963)) (emphasis in original).

^{141.} AIR FORCE, COMMANDER'S HANDBOOK, supra note 28, at 1-2.

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However, it is significant—and interesting—to note that the United States, in its military manuals, broadly acknowledges the propitious purposes of this body of law, both in terms of enhancing a state's application of its combat operations without unnecessary expenditures of force and in terms of fulfilling what has long been regarded as a fundamental purpose of war: restoring a favorable peace. The United States also recognizes the basic humanitarian objective of this body of law designed to protect one's own military personnel and objects and to limit the effects of military operations.

Thus, the Army's Operational Law Handbook states:

- A. The fundamental purposes of the [law of war] are humanitarian and functional in nature. The humanitarian purposes include:
- 1. Protecting both combatants and noncombatants from unnecessary suffering;
- 2. Safeguarding persons who fall into the hands of the enemy; and
- 3. Facilitating the restoration of peace.
- B. The functional purposes include:
- 1. Ensuring good order and discipline;
- 2. Fighting in a disciplined manner consistent with national values; and
- 3. Maintaining domestic and international public support. 142

The Air Force, in *The Military Commander and the Law*, notes the following purposes of this body of law:

- —Limit the effects of the conflict (reduce damages and casualties)
- Protect combatants and noncombatants from unnecessary suffering
- —Safeguard fundamental rights of combatants and noncombatants
- —Prevent the conflict from becoming worse
- —Make it easier to restore peace when the conflict is over. 143

^{142.} ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 10.

^{143.} AIR FORCE, MILITARY COMMANDER AND THE LAW, supra note 28, at 628.

The Army's *Law of War Deskbook* emphasizes the serious nature of this body of law, making it clear that it goes beyond the aspirational:

Law exists to either prevent conduct or control conduct. These characteristics permeate the law of war, as exemplified by its two prongs: *Jus ad Bellum* serves to regulate the conduct of going to war, while *Jus in Bello* serves to regulate or control conduct within war.

Validity. Although critics of the regulation of warfare cite historic examples of violations of evolving laws of war, history provides the greatest evidence of the validity of this body of law.

History shows that in the vast majority of instances, the law of war works. Despite the fact that the rules are often violated or ignored, it is clear that mankind is better off with than without them. Mankind has always sought to limit the effect of conflict on combatants and has come to regard war not as a state of anarchy justifying infliction of unlimited suffering, but as an unfortunate reality which must be governed by some rule of law. This point is illustrated in Article 22 of the Hague Regulations: "the right of belligerents to adopt means of injuring the enemy is not unlimited." This rule does not lose its binding force in a case of necessity.

Regulating the conduct of warfare is ironically essential to the preservation of a civilized world. General MacArthur exemplified this notion when he confirmed the death sentence for Japanese General Yamashita, writing: "The soldier, be he friend or foe, is charged with the protection of the weak and unarmed. It is the very essence and reason of his being. When he violates this sacred trust, he not only profanes his entire cult but threatens the fabric of international society.¹⁴⁴

The Navy, in its 1997 Annotated Supplement to the Commander's Handbook on the Law of Naval Operations, similarly emphasizes the self-serving nature of this body of law to the United States and other states in combat:

As long as war occurs, the law of armed conflict remains an essential body of international law. During such strife, the law of armed conflict provides common ground of rationality between enemies. This body of law corresponds to the mutual interests of belligerents during conflict and constitutes a bridge for a new understanding after the end of the conflict. The law of armed conflict is intended to preclude purposeless, unnecessary destruction of life and property and to ensure that violence is used only to defeat the enemy's military forces. The law of armed conflict inhibits warfare from needlessly affecting persons or things of little military value. By preventing needless cruelty, the bitterness and hatred arising from armed conflict is lessened, and thus it is easier to restore an enduring peace. The legal and military experts who attempted to codify the laws of war more than a hundred years ago reflected this when they declared that the final object of an armed conflict is the "reestablishment of good relations and a more solid and lasting peace between the belligerent States."145

The Air Force, in its earlier *Manual on International Law*, quotes the Chairman of the Joint Chiefs of Staff:

The Armed Forces of the United States have benefited from, and highly value, the humanitarianism encompassed by the laws of war. Many are alive today only because of the mutual restraint imposed by these rules, notwithstanding the fact that the rules have been applied imperfectly. ¹⁴⁶

The severe limits implicit in these concepts as to the nature of war and the purpose of the law of armed conflict were portrayed most forcefully by the United States Military Tribunal in the *Krupp* trial:

It is an essence of war that one or the other side must lose and the experienced generals and statesmen knew this when they drafted the rules and customs of land warfare. In short, these rules and customs of warfare are designed specifically for all phases of war. They comprise the law for such emergency. To claim that they can be wantonly—and at the sole discretion of any one belligerent—disregarded when he considers his own situation to be critical, means nothing

^{145.} NAVAL COMMANDER'S HANDBOOK 1997 SUPPLEMENT, *supra* note 28, at 5-3 n.5.

^{146.} MOXLEY, *supra* note 13, at 769 (citing AIR FORCE, MANUAL ON INTERNATIONAL LAW, *supra* note 28, at 1-9. (quoting Press Release, U.S. Dep't of Defense, Address by Gen. George S. Brown, News Release No. 479-74 (Oct. 1, 1974)).

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more or less than to abrogate the laws and customs of war entirely. 147

H. Application of International Humanitarian Law to the Use of Nuclear Weapons

What is the result of the application of these rules of IHL to nuclear weapons? The ICJ, in its 1996 *Nuclear Weapons* advisory opinion, provided a broad framework for the application of the rules of IHL to nuclear weapons, but left certain questions open. The court basically said that the use of nuclear weapons is subject to IHL and would generally be unlawful under such law, but found itself unable to decide whether the use of low-yield nuclear weapons and the use of nuclear weapons in extreme circumstances of self-defense could or could not potentially comply with such law. The court did not decide such matters either way, but rather concluded that it did not have sufficient facts or law to decide them.

This Section will review the ICJ's treatment of these matters and provide an analysis as to the application of IHL to the use of nuclear weapons, including with reference to the issues the ICJ did not reach: the lawfulness or not of the use of low-yield nuclear weapons, and the use of nuclear weapons in extreme circumstances of self-defense.

1. The ICJ's Application of IHL to Nuclear Weapons

The ICJ emphasized the wide scope of humanitarian law:

The cardinal principles contained in the texts constituting the fabric of humanitarian law are the following. The first is aimed at the protection of the civilian population and civilian objects and establishes the distinction between combatants and non-combatants; States must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets. According to the second principle, it is prohibited to cause unnecessary suffering to combatants: it is accordingly prohibited to use weapons causing them such harm or uselessly aggravating their suffering. In application of that second principle, States do

^{147.} NAVAL COMMANDER'S HANDBOOK 1989 SUPPLEMENT, *supra* note 28, at 5-6 (quoting The Krupp Trial, 10 L. REP. TRIALS WAR CRIM. 69, 139 (1949)).

not have unlimited freedom of choice of means in the weapons they use.

The Court would likewise refer, in relation to these principles, to the Martens Clause, which was first included in the Hague Convention II with Respect to the Laws and Customs of War on Land of 1899 and which has proved to be an effective means of addressing the rapid evolution of military technology. A modern version of that clause is to be found in Article 1, paragraph 2, of Additional Protocol I of 1977, which reads as follows:

In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.

In conformity with the aforementioned principles, humanitarian law, at a very early stage, prohibited certain types of weapons either because of their indiscriminate effect on combatants and civilians or because of the unnecessary suffering caused to combatants, that is to say, a harm greater than that unavoidable to achieve legitimate military objectives. If an envisaged use of weapons would not meet the requirements of humanitarian law, a threat to engage in such use would also be contrary to that law.¹⁴⁸

The ICJ went on to find the use of nuclear weapons "scarcely reconcilable" with IHL:

[T]he principles and rules of law applicable in armed conflict—at the heart of which is the overriding consideration of humanity—make the conduct of armed hostilities subject to a number of strict requirements. Thus, methods and means of warfare, which would preclude any distinction between civilian and military targets, or which would result in unnecessary suffering to combatants, are prohibited. In view of the unique characteristics of nuclear weapons, to which the Court has referred above, the use of such weapons in fact seems scarcely reconcilable with respect for such requirements.¹⁴⁹

^{148.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, \P 78 (July 8).

^{149.} *Id.* ¶ 95.

The ICJ further stated:

A threat or use of nuclear weapons should...be compatible with the requirements of the international law applicable in armed conflict, particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and other undertakings which expressly deal with nuclear weapons.¹⁵⁰

The court concluded that the threat or use of nuclear weapons

would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law;

However in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake.¹⁵¹

Referring to the contrasting contentions presented, the court concluded that it did not have the necessary facts to determine the likely effects of the limited use of low-yield nuclear weapons or of escalation. It first addressed the contentions of the United Kingdom:

The reality . . . is that nuclear weapons might be used in a wide variety of circumstances with very different results in terms of likely civilian casualties. In some cases, such as the use of a low yield nuclear weapon against warships on the High Seas or troops in sparsely populated areas, it is possible to envisage a nuclear attack which caused comparatively few civilian casualties. It is by no means the case that every use of nuclear weapons against a military objective would inevitably cause very great collateral civilian casualties. ¹⁵²

The court then summarized the diametrically opposite contentions of certain other states:

[R]ecourse to nuclear weapons could never be compatible with the principles and rules of humanitarian law and is

^{150.} $Id. \ \ 105(2)D.$

^{151.} Id. ¶ 105(2)E; see also id. ¶ 97.

^{152.} Id. \P 91 (quoting Written Statement of the Government of the United Kingdom, supra note 31, \P 3.70).

therefore prohibited. In the event of their use, nuclear weapons would in all circumstances be unable to draw any distinction between the civilian population and combatants, or between civilian objects and military objectives, and their effects, largely uncontrollable, could not be restricted, either in time or in space, to lawful military targets. Such weapons would kill and destroy in a necessarily indiscriminate manner, on account of the blast, heat and radiation occasioned by the nuclear explosion and the effects induced; and the number of casualties which would ensue would be enormous. The use of nuclear weapons would therefore be prohibited in any circumstance, notwithstanding the absence of any explicit conventional prohibition. ¹⁵³

While finding itself unable to resolve these competing factual contentions, the court did conclude that the proponents of the lawfulness of the use of nuclear weapons had failed to substantiate their position as to the possibility of limited use, without escalation, of low-yield nuclear weapons or even of the potential utility of such use if it were possible:

[N]one of the States advocating the legality of the use of nuclear weapons under certain circumstances, including the "clean" use of smaller, low yield, tactical nuclear weapons, has indicated what, supposing such limited use were feasible, would be the precise circumstances justifying such use; nor whether such limited use would not tend to escalate into the all-out use of high yield nuclear weapons. This being so, the Court does not consider that it has a sufficient basis for a determination of the validity of this view.¹⁵⁴

The court noted at the outset of its opinion that, ostensibly based on the advisory nature of its task, it did not intend to descend into the minute details of the facts:

The Court does not consider that, in giving an advisory opinion in the present case, it would necessarily have to write "scenarios", to study various types of nuclear weapons and to evaluate highly complex and controversial technological, strategic and scientific information. The Court will simply address the issues arising in all their aspects by applying the legal rules relevant to the situation. ¹⁵⁵

^{153.} *Id.* ¶ 92.

^{154.} Id. ¶ 94.

^{155.} Id. ¶ 15.

Similarly, in discussing proportionality, the court stated that it did "not find it necessary to embark upon the quantification" of risk factors surrounding the use of nuclear weapons and did not "need to enquire into the question whether tactical nuclear weapons exist which are sufficiently precise to limit those risks." ¹⁵⁶

As to the limits on a state's right of self-defense, the court, after noting that a state's exercise of the right of self-defense must comply, inter alia, with the principle of proportionality, specifically stated that a "use of force that is proportionate under the law of self-defence, must, in order to be lawful, also meet the requirements of the law applicable in armed conflict which comprise in particular the principles and rules of humanitarian law." ¹⁵⁷

The court also quoted the statement on this point by the United Kingdom, a proponent of the potential lawfulness of the use of nuclear weapons: "Assuming that a State's use of nuclear weapons meets the requirements of self-defence, it must then be considered whether it conforms to the fundamental principles of the law of armed conflict regulating the conduct of hostilities." The court further emphasized in the final paragraph of its decision that the various grounds set forth in the 'decision were to be read in the light of one another. 159

The court also noted that under the UN Charter, the threat or use of force is prohibited except in individual or collective self-defense in response to armed attack or in instances of military enforcement measures undertaken by the Security Council, 160 and stated that under customary international law the right of self-defense is subject to the conditions of necessity and

^{156.} Id. ¶ 43.

^{157.} $Id. \ \P \ 42.$

^{158.} Id. ¶ 91 (quoting Written Statement of the Government of the United Kingdom, supra note 31, ¶ 3.44).

^{159.} The court stated

that its reply to the question put to it by the General Assembly rests on the totality of the legal grounds set forth by the Court above (paragraphs 20 to 103), each of which is to be read in the light of the others. Some of these grounds are not such as to form the object of formal conclusions in the final paragraph of the Opinion; they nevertheless retain, in the view of the Court, all of their importance.

Id. ¶ 104.

^{160.} See id. \P 38 (citing U.N. Charter art. 51).

proportionality. The court quoted its decision in *Military and Paramilitary Activities in and against Nicaragua*: "[T]here is a 'specific rule whereby self-defence would warrant only measures which are proportional to the armed attack and necessary to respond to it, a rule well established in customary international law.'"¹⁶¹

2. The Unlawfulness of the Use of Nuclear Weapons

As noted, the ICJ found the threat and use of nuclear weapons generally unlawful under IHL, but did not reach the question of such threat and use in extreme circumstances of self-defense and where "low-yield" nuclear weapons are concerned. This Section addresses those questions left open by the court.

Applying the foregoing legal requirements of IHL to the known facts regarding nuclear weapons, including such facts as stated by various judges of the ICJ, it seems evident that nuclear weapons cannot be used consistently with IHL.

Most centrally, the effects of nuclear weapons, including radiation, are inherently uncontrollable. They are not subject to the control of the state using them or of any force on earth. Even the blast, heat, and electromagnetic impulse effects of nuclear weapons are beyond human control. As the ICJ observed, "The destructive power of nuclear weapons cannot be contained in either space or time." Because their effects are uncontrollable, nuclear weapons cannot be used in such a way as to limit their effects to those permitted under the rules of distinction, proportionality, and necessity. Under the statements of the law by the United States' own military, this makes the use of these weapons unlawful.

Even the effects of so-called mini-nukes, 163 are spread unpredictably and potentially at great distances in space and

^{161.} Id. ¶ 41 (quoting Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.), 1986 I.C.J. 14, ¶ 176 (June 27)).

^{162.} *Id*. ¶ 35.

^{163.} While there is no definitive definition of a low-yield nuclear weapon or of a mini-nuke, it is notable that the Joint Chiefs of Staff, in their earlier manual DOCTRINE FOR JOINT THEATER NUCLEAR OPERATIONS, define the various levels of nuclear weapons: very low (less than 1 kiloton); low (1 to 10 kilotons); medium (10 to 50 kilotons); high (50 to 500 kilotons); and very high (over 500 kilotons). JOINT THEATER NUCLEAR OPERATIONS, *supra* note 28, at GL-3. This manual, however, does not seem to still be in effect. The current manuals do not appear to cover this point. The authors are not

aware of any reason these definitions would change. As a frame of reference, the nuclear weapons exploded in Hiroshima and Nagasaki were approximately fifteen and twenty-one kilotons respectively. JOHN MALIK, LOS ALAMOS NATIONAL LABORATORY, REPORT LA-8819, THE YIELDS OF THE HIROSHIMA AND NAGASAKI NUCLEAR EXPLOSIONS 1 (1985). When the US Congress in 1994 banned research and development of low-yield nuclear weapons, it defined such weapons as ones with yields of less than five kilotons—tactical weapons with virtually no strategic value. *See* National Defense Authorization Act for Fiscal Year 1994, Pub. L. No. 103-160, § 3136, *repealed by* National Defense Authorization Act for Fiscal Year 2004, Pub. L. No. 108-136.

Describing the rationale for the legislation, Congressman Spratt stated, "The United States has wisely decided to retire our tactical nuclear weapons." 139 Cong. Rec. H7083, (daily ed. Sept. 28, 1993) (statement of Rep. Spratt). The Congressman further stated, "A 5-kiloton yield nuclear weapon is a very small nuclear weapon that is surely tactical; it has virtually no strategic value." *Id.*

The statute defining low-yield nuclear weapons, as indicated above, has been repealed (albeit for reasons unrelated to the definition of low-yield nuclear weapons). To the best of the authors' knowledge, no alternate definition of a low-yield nuclear weapon has been enacted by the Congress.

Based on this definition of five kilotons or less, the United States currently has two types of nonstrategic nuclear weapons with low-yield capabilities. *See* Robert S. Norris & Hans M. Kristensen, *Nuclear Notebook: U.S. Nuclear Forces 2010*, BULL. OF ATOMIC SCIENTISTS, May/June 2010, at 57, 58. One of these weapons is the sea-launched, land-attack Tomahawk (TLAM/N) cruise missile equipped with W80-0 warheads, of which the United States has 100. *See id.* The other is the non-strategic B61 gravity bomb, of which the United States has 400. *See id.* In addition, the United States has several strategic bombers that could be used to deliver low-yield weapons. *See id.*

During the Bush Administration, the United States sought to expand the role of these low-yield, tactical nuclear weapons. See U.S. DEP'T OF DEFENSE, NUCLEAR POSTURE REVIEW (2002), available at http://www.defense.gov/news/Jan2002/d20020109npr.pdf. The Obama Administration, however, has reversed this trend as the 2010 Nuclear Posture Review "recommends that the nuclear version of the TLAM be retired. Designed for deployment on select attack submarines, the TLAM/N is now stored at the SSBN bases in Washington and Georgia." Norris & Kristensen, supra.

Low-yield nuclear weapons have uncertain effects and remain extremely destructive. For example,

detonating a low-yield nuclear weapon in or even near a city could cause much collateral damage. By one estimate, a 5-kiloton weapon detonated near and upwind from Damascus, Syria, at a depth of 30 feet would cause 230,000 fatalities and another 280,000 casualties within two years. Use of a low yield earth penetrator against the bunkers thought to house Saddam Hussein in Baghdad, a city of nearly 5 million people, could have caused casualties on a similar scale.

JONATHAN MEDALIA, CONG. RESEARCH SERV., RL 32130, NUCLEAR WEAPON INITIATIVES: LOW-YIELD R&D, ADVANCED CONCEPTS, EARTH PENETRATORS, TEST READINESS 22–23 (2004) (citing 149 Cong. Rec. S6666 (daily ed. May 20, 2003) (statement of Sen. Kennedy)).

Further, regardless of its size, the use of a low-yield nuclear weapon crosses the nuclear threshold, and

[t]he State at the receiving end of such a nuclear response would not know that the response is a limited or tactical one involving a small weapon and it is not credible to posit that it will also be careful to respond in kind, that is, with time. In addition, the use of nuclear weapons by a state would not likely be in a vacuum, but rather would carry the risk of leading to nuclear counterstrikes and escalation, thereby increasing the effects of their use.

By definition, a weapon whose effects cannot be controlled is indiscriminate and violates the rule of distinction, the "grandfather of all principles." ¹⁶⁴ Such a weapon is also unable to satisfy the requirement of proportionality, which mandates that a state using a weapon be able to control its effects. ¹⁶⁵ If the state cannot control such effects, it cannot ensure that the collateral effects of the attack will be proportional to the anticipated military advantage.

A weapon whose effects cannot be limited similarly cannot satisfy the requirement of necessity. If a state cannot control the effects of a weapon, it cannot ensure that the level of force it would be using with that weapon would be limited to that necessary to achieve the particular military objective.

Accordingly, the inherent uncontrollability of nuclear weapons, even low-yield nuclear weapons, renders them unlawful under IHL. This seems to be the end of the matter. The application of the established principles of international law to the essentially incontrovertible effects of nuclear weapons renders the use of such weapons unlawful.

The United States, as understood by the authors, has interposed essentially ten arguments for why some uses of nuclear weapons could be lawful under international law:

- 1. *Controllability*: The United States argues that the effects of some nuclear weapons are controllable.
- 2. Radiation as an inherent effect of nuclear weapons: The United States argues that the radiation effects of nuclear weapons does not violate the rule of necessity because radiation is an inherent effect of nuclear weapons, not an effect added to cause extra injury to its victims.

a small weapon. The door would be opened and the threshold crossed for an all-out nuclear war.

Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J 226, 325 (July 8) (Weeramantry, J. dissenting).

^{164.} See supra notes 52–61, 84–94 and accompanying text; see also ARMY, LAW OF WAR DESKBOOK, supra note 28, at 139.

^{165.} See supra notes 62-69 and accompanying text.

- 3. Radiation as a secondary byproduct of nuclear weapons: The United States argues that radiation does not matter as a nuclear weapons effect because it is not an intended effect of nuclear weapons, but rather merely a byproduct.
- 4. Use of low-yield nuclear weapons in remote areas: The United States argues that it cannot be said that nuclear weapons necessarily have impermissible effects under international law because some such weapons could be used selectively in remote areas where the collateral effects would be minor.
- 5. Use of nuclear weapons in reprisal for another state's unlawful use of such weapons: The United States argues that, even if it would be unlawful to use nuclear weapons in the first instance, a state could properly use them in reprisal to respond to another state's use of such weapons.
- 6. Need for evaluation of the use of nuclear weapons on a case-by-case basis: The United States argues that no categorical judgments can be made as to the lawfulness or not of the use of nuclear weapons, but rather that each potential use has to be evaluated on its individual merits.
- 7. No prohibition of the use of nuclear weapons unless the United States agrees to such a prohibition: The United States argues that, because international law is of a voluntary nature, there can be no prohibition of the use of nuclear weapons unless the United States (or, presumably, every other nuclear state) agrees explicitly to such a prohibition.
- 8. Lawfulness of the threat of use of all nuclear weapons in the United States arsenal if the use of any nuclear weapon in that arsenal is lawful: The United States impliedly argues that its policy of deterrence with respect to its entire arsenal of nuclear weapons is lawful as long as the use of any weapon in that arsenal could potentially be lawful.
- 9. The characterization that the ICJ found the use of nuclear weapons to be lawful: The United States at times characterizes the ICJ decision in the Nuclear Weapons advisory opinion as upholding the lawfulness of the use and threat of use of nuclear weapons; and
- 10. The implicit argument that nuclear weapons may be used in extreme circumstances of self-defense. The United States seems implicitly to have adopted the position that nuclear weapons could lawfully be used in extreme circumstances of self-defense.

To the best of the authors' knowledge, these arguments represent the totality of the bases upon which the United States has explicitly or even implicitly justified the potential use of nuclear weapons under international law. Based on the authors' analysis, these purported bases of legality are unfounded and are next evaluated one by one.

a. Controllability

The United States, in its defense before the ICJ of the potential lawfulness of some uses of nuclear weapons, did not contest the requirement of controllability under international law. Its defense, instead, was that the effects of some nuclear weapons, particularly low-yield nuclear weapons, are controllable and that, therefore, such weapons may lawfully be used. The United States made no defense before the ICJ of the lawfulness of the use of higher-yield nuclear weapons, the type that typifies its nuclear arsenal. It did not even defend the lawfulness of the use of multiple low-yield weapons or of low-yield nuclear weapons in populated areas. Its defense was, in fact, exceedingly narrow, limited to the defense of a small portion of its nuclear arsenal. Its

John H. McNeill, the US Senior Deputy General Counsel, Department of Defense, argued the US position to the ICJ:

The argument that international law prohibits, in all cases, the use of nuclear weapons appears to be premised on the incorrect assumption that every use of every type of nuclear weapon will necessarily share certain characteristics which contravene the law of armed conflict. Specifically, it appears to be assumed that any use of nuclear weapons would inevitably escalate into a massive strategic nuclear exchange, resulting automatically in the deliberate destruction of the population centers of opposing sides.

. . .

Nuclear weapons, as is true of conventional weapons, can be used in a variety of ways: they can be deployed to achieve a wide range of military objectives of varying degrees of significance; they can be targeted in ways that either increase or decrease resulting incidental civilian injury or collateral damage; and their use may be lawful or not depending upon

whether and to what extent such use was prompted by another belligerent's conduct and the nature of such conduct.¹⁶⁸

McNeill disputed the argument that nuclear weapons are indiscriminate in their effects: "This argument is simply contrary to fact. Modern nuclear weapon delivery systems are, indeed, capable of precisely engaging discrete military objectives." ¹⁶⁹

McNeill further disputed the assumptions made by the World Health Organization ("WHO") in its 1987 study on the effects of nuclear weapons. He argued to the ICJ that the "four scenarios" depicted by the WHO were "highly selective" in that they addressed "civilian casualties expected to result from nuclear attacks involving significant numbers of large urban area targets or a substantial number of military targets." Reflecting what he contended to be potentially lawful uses of nuclear weapons, he stated, "But no reference is made in the report to the effects to be expected from other plausible scenarios, such as a small number of accurate attacks by low-yield weapons against an equally small number of military targets in non-urban areas." ¹⁷¹

Referring to "other plausible [low-end use] scenarios," McNeill argued that such plausibility "follows from a fact noted in the WHO Report by Professor Rotblat, namely, that 'remarkable improvements' in the performance of nuclear weapons in recent years have resulted in their 'much greater accuracy,'" and that such scenarios "would not necessarily raise issues of proportionality or discrimination." ¹⁷³

Addressing the subject of the many studies indicating that impermissible levels of damage would result from the use of nuclear weapons, McNeill objected that any given study "rests on static assumptions" as to factors such as "the yield of a weapon, the technology that occasions how much radiation the weapon may release, where, in relation to the earth's surface it will be

^{168.} Id. at 68-69.

^{169.} Id. at 70.

^{170.} Id. at 71.

^{171.} Id.

^{172.} *Id.* (quoting World Health Organization, Effects of Nuclear War on Health and Health Services (2d ed. 1987)).

^{173.} *Id*.

detonated, and the military objective at which it would be targeted."174

In its memorandum to the ICJ, the United States similarly argued that, through the technological expertise of "modern weapon designers," it is now able to control the effects of nuclear weapons—specifically, "to tailor the effects of a nuclear weapon to deal with various types of military objectives":

It has been argued that nuclear weapons are unlawful because they cannot be directed at a military objective. This argument ignores the ability of modern delivery systems to target specific military objectives with nuclear weapons, and the ability of modern weapon designers to tailor the effects of a nuclear weapon to deal with various types of military objectives. Since nuclear weapons can be directed at a military objective, they can be used in a discriminate manner and are not inherently indiscriminate. 175

Beyond arguing that the effects of any particular use of a nuclear would depend on the particular circumstances, the United States minimized the differences between the effects of nuclear and conventional weapons. McNeill stated to the court:

It is true that the use of nuclear weapons would have an adverse collateral effect on human health and both the natural and physical environment. But so too can the use of conventional weapons. Obviously, World Wars I and II, as well as the 1990–1991 conflict resulting from Iraq's invasion of Kuwait, dramatically demonstrated that conventional war can inflict terrible collateral damage to the environment. The fact is that armed conflict of any kind can cause widespread, sustained destruction; the Court need not examine scientific evidence to take judicial notice of this evident truth.¹⁷⁶

These arguments by the United States asserting the controllability of the effects of low-yield nuclear weapons and generally minimizing the effects of nuclear weapons do not withstand analysis. These were merely assertions. The United States presented no evidence to the court that it could control the effects of its nuclear weapons or limit their effects to those

^{174.} Id.

^{175.} US ICJ Written Statement, supra note 44, at 23.

^{176.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 70–71.

permissible within the rules of distinction, proportionality, or necessity.¹⁷⁷ For the reasons discussed above, it does not seem possible that the United States could satisfy these legal requirements. The radiation and other effects of nuclear weapons simply are not subject to such control or limitation. To the best of the authors' knowledge, neither the United States nor any other nuclear weapons state is able to exert such control or impose the limits of law on the effects of nuclear weapons.

In short, based on the statements of the requirement of controllability by the United States,¹⁷⁸ the uncontrollability of the effects of nuclear weapons means that the use of such weapons would be unlawful under the rules of distinction, proportionality, and necessity.¹⁷⁹ Based on the statement of the rule of distinction by the United States,¹⁸⁰ the use of nuclear weapons cannot comport with the rule of distinction because the effects of nuclear weapons cannot discriminate between belligerent and non-belligerent persons and objects. Based on the statements of the rules of proportionality¹⁸¹ and necessity¹⁸² by the United States, a state using nuclear weapons could not assure that the effects would be limited to those permitted by those rules.

In addition, the rule of necessity requires that the strike appear likely to yield a concrete military benefit.¹⁸³ A strike that is likely to boomerang due to escalation or dispersion of radioactive particles, in a net detriment to the acting state, would not satisfy the necessity test.

Notwithstanding the United States' arguments to the court, the US military has itself recognized the uncontrollability of the effects of nuclear weapons. A publication prepared under the direction of the Chairman of the Joint Chiefs of Staff addressed the controllability question explicitly: "[T]here can be no assurances that a conflict involving weapons of mass destruction could be controllable or would be of short duration. Nor are

^{177.} See supra notes 52-96 and accompanying text.

^{178.} See supra notes 88-101 and accompanying text.

^{179.} See supra notes 88-101 and accompanying text.

^{180.} See supra notes 84-94 and accompanying text.

^{181.} See supra notes 62-69 and accompanying text.

^{182.} See supra Part I.F.c.

^{183.} See, e.g., AIR FORCE, TARGETING, supra note 28, at 89; ARMY, OPERATIONAL LAW HANDBOOK, supra note 28, at 350 n.81; see also ARMY, LAW OF WAR DESKBOOK, supra note 28, at 142.

negotiations opportunities and the capacity for enduring control over military forces clear."¹⁸⁴

As referenced above in the statement by Judge Shahabuddeen in the *Nuclear Weapons* advisory opinion, ¹⁸⁵ the United States, by ratifying the Treaty of Tlatelolco, subscribed to the statement that the "terrible effects" of nuclear weapons "are suffered, indiscriminately and inexorably, by military forces and civilian population alike," and "through the persistence of the radioactivity they release, an attack on the integrity of the human species and ultimately may even render the whole earth uninhabitable." ¹⁸⁶

The Army, in its manual *Nuclear Operations*, emphasizes the inherent unpredictability of the effects of nuclear weapons and of the risk of escalation: "The potential employment of nuclear weapons at theater level, when combined with the means and resolve to use them, makes the prospects of conflict more dangerous and the outcome more difficult to predict." ¹⁸⁷

The US Joint Chief of Staff's prior *Joint Nuclear Operations* manual recognizes that "the use of nuclear weapons represents a significant escalation from conventional warfare," a factor that highlights the uncontrollability of nuclear weapons effects. ¹⁸⁸ The manual states, "The fundamental differences between a potential nuclear war and previous military conflicts involve the speed, scope, and degree of destruction inherent in nuclear weapons employment, as well as the uncertainty of negotiating opportunities and enduring control over military forces." ¹⁸⁹ It goes on to say, "The immediate and prolonged effects of [weapons of mass destruction]—including blast, thermal radiation, prompt (gamma and neutron) and residual radiation—pose unprecedented physical and psychological problems for combat forces and noncombatant populations

^{184.} JOINT CHIEFS OF STAFF, JOINT PUB. NO. 3-12, DOCTRINE FOR JOINT NUCLEAR OPERATIONS I-6–I-7 (1995).

^{185.} See supra note 25 and accompanying text.

^{186.} Treaty of Tlatelolco, *supra* note 25, at 328 (quoted in Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 384 (July 8) (Shahabuddeen, J., dissenting)).

^{187.} U.S. DEP'T OF THE ARMY, MANUAL NO. FM100-30, NUCLEAR OPERATIONS 3-14 (1996).

^{188.} JOINT CHIEFS OF STAFF, *supra* note 184, at II-1.

^{189.} Id. at I-6 (emphasis omitted).

alike."¹⁹⁰ The Joint Chiefs of Staff, in *Joint Theater Nuclear Operations*, also notes, "Since nuclear weapons have greater destructive potential, in many instances they may be inappropriate."¹⁹¹

Thus, it seems evident that the effects of nuclear weapons, including the radiation effects, are uncontrollable and have been recognized as such by responsible representatives of the US military and government. On this basis alone, the use of nuclear weapons, even relatively low-yield nuclear weapons, is precluded by IHL.

b. Radiation as an Inherent Effect of Nuclear Weapons

The United States' second argument in support of the lawfulness of the use of nuclear weapons is that, because radiation is an inherent effect of nuclear weapons, not an effect added to cause extra injury to its victims, the radiation effects of nuclear weapons do not cause nuclear weapons to violate the rule of necessity. The United States articulated this position in its argument to the ICJ: that the rule of necessity only precludes "weapons designed to increase the injury or suffering of the persons attacked beyond that necessary to accomplish the military objective" or "weapons designed specifically to increase the suffering of persons attacked beyond that necessary to accomplish a particular military objective." ¹⁹³

This restriction on the scope of the requirement of necessity seems inconsistent with the traditional formulation of this rule as precluding all levels of destruction not necessary under the circumstances. Such a gloss would emasculate the rule and provide for a virtually limitless range of unnecessary uses of weapons. It certainly is the case that the addition of an element to the design of a weapon to cause necessary injury (such as adding glass to a bullet or designing the bullet to fracture when it enters the body) would cause the use of the weapon to violate the rule of necessity, but there does not appear to be any basis for

^{190.} Id., at II-7.

^{191.} JOINT THEATER NUCLEAR OPERATIONS, supra note 28, at v-vi.

^{192.} US ICJ Written Statement, supra note 44, at 28–29 (citing ARMY, LAW OF LAND WARFARE, supra note 28, at 18, ¶ 34).

^{193.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 72.

^{194.} See supra notes 71-83 and accompanying text.

the assertion that the effect of the weapon causing the unnecessary injury does not count in the legal analysis unless it was intentionally built into the weapon.

The only source the United States cited in its brief to the ICJ in support of this limitation was a US Army field manual, 195 which notes regarding the employment of arms causing unnecessary injury that

[i]t is especially forbidden . . . to employ arms, projectiles, or material calculated to cause unnecessary suffering.

Interpretation. What weapons cause "unnecessary injury" can only be determined in light of the practice of States in refraining from the use of a given weapon because it is believed to have that effect. The prohibition certainly does not extend to the use of explosives contained in artillery projectiles, mines, rockets, or hand grenades. Usage has, however, established the illegality of the use of lances with barbed heads, irregular-shaped bullets, and projectiles filled with glass, the use of any substance on bullets that would tend unnecessarily to inflame a wound inflicted by them, and the scoring of the surface or the filing off of the ends of the hard cases of bullets. 196

The Navy, in its earlier *Annotated Supplement to the Naval Commander's Handbook*, similarly suggested this limitation on the rule of necessity:

Customary international law prohibits the use of weapons calculated to cause unnecessary suffering; the rule is declared in the Hague Regulations, article 23(e), and now confirmed in Additional Protocol I, article 35(2), which prohibits the employment of weapons, projectiles and materials and methods of warfare of a nature such as would cause superfluous injury or unnecessary suffering. However, these humanitarian considerations are offset by a due regard for the military interests at stake. The Declaration of St. Petersburg 1868 . . . contrasts the two: on the one hand, the only legitimate object during a war is to weaken the military forces of the enemy. On the other, this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable. Nuclear weapons can be selectively directed

^{195.} See US ICI Written Statement, supra note 44, at 22.

^{196.} ARMY, LAW OF LAND WARFARE, supra note 28, at 18 (citation omitted).

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against military targets. In the context of this balance, it is not clear the use of nuclear weapons necessarily violates international law. 197

However, the actual formulation of this rule in the referenced Hague Regulations Article 23(e) and Additional Protocol 1 Article 35(2) does not contain this gloss on the rule. Article 23(e) of the Hague Regulations makes it unlawful "[t]o employ arms, projectiles, or material of a nature to cause superfluous injury." Article 35(2) of Additional Protocol I provides, "It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering." In each instance, the reference is to the "nature" of the weapon or method of warfare, not to whether the objectionable effects of the weapons or method were intentionally designed for or added—or even whether those effects were the result of separate "calculation."

Accordingly, the United States' gloss on the rule of necessity postulating that, to be unlawful, the excessive effects must have been specifically sought in designing a weapons seems unsupported by the language of the rule and contrary to its purpose. Surely, whether the putatively unnecessary effects were intentionally added or are an inherent characteristic of the weapon or method of warfare is irrelevant to the objective of avoiding unnecessary effects.

Judge Weeramantry's dissent in the *Nuclear Weapons* case discussed at length the contention of the United States and other nuclear weapons states that they are able to use low-yield nuclear weapons in a way that keeps their effects within legal limits:

Reference has already been made to the contention, by those asserting legality of use, that the inherent dangers of nuclear weapons can be minimized by resort to "small" or "clean" or "low yield" or "tactical" nuclear weapons. This factor has an important bearing upon the legal question before the Court, and it is necessary therefore to examine in

^{197.} NAVAL COMMANDER'S HANDBOOK 1989 SUPPLEMENT, supra note 28, at 10-2.

^{198.} Convention (II) with Respect to the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land art. 23(e), July 29, 1899, 32 Stat. 1803.

^{199.} Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I) art. 35(2), June 8, 1977, 1125 U.N.T.S. 21.

some detail the acceptability of the contention that limited weapons remove the objections based upon the destructiveness of nuclear weapons.

The following are some factors to be taken into account in considering this question:

- (i) no material has been placed before the Court demonstrating that there is in existence a nuclear weapon which does not emit radiation, does not have a deleterious effect upon the environment, and does not have adverse health effects upon this and succeeding generations. If there were indeed a weapon which does not have any of the singular qualities outlined earlier in this Opinion, it has not been explained why a conventional weapon would not be adequate for the purpose for which such a weapon is used. We can only deal with nuclear weapons as we know them.
- (ii) the practicality of small nuclear weapons has been contested by high military and scientific authority.
- (iii) reference has been made . . . , in the context of self-defence, to the political difficulties, stated by former American Secretaries of State, Robert McNamara and Dr. Kissinger, of keeping a response within the ambit of what has been described as a limited or minimal response. The assumption of escalation control seems unrealistic in the context of nuclear attack.
- (iv) with the use of even "small" or "tactical" or "battlefield" nuclear weapons, one crosses the nuclear threshold. The state at the receiving end of such a nuclear response would not know that the response is a limited or tactical one involving a small weapon and it is not credible to posit that it will also be careful to respond in kind, i.e., with a small weapon. The door would be opened and the threshold crossed for an all-out nuclear war.

The scenario here under consideration is that of a limited nuclear response to a nuclear attack. Since, as stated above:

- (a) the "controlled response" is unrealistic; and
- (b) a "controlled response" by the nuclear power making the first attack to the "controlled response" to its first strike is even more unrealistic, the scenario we are considering is one of all-out nuclear war, thus rendering the use of the controlled weapon illegitimate.

The assumption of a voluntary "brake" on the recipient's full-scale use of nuclear weapons is, as observed earlier in this Opinion, highly fanciful and speculative. Such fanciful speculations provide a very unsafe assumption on which to base the future of humanity.

- (v) As was pointed out by one of the States appearing before the Court: "it would be academic and unreal for any analysis to seek to demonstrate that the use of a single nuclear weapon in particular circumstances could be consistent with principles of humanity. The reality is that if nuclear weapons ever were used, this would be overwhelmingly likely to trigger a nuclear war."
- (vi) in the event of some power readying a nuclear weapon for a strike, it may be argued that a pre-emptive strike is necessary for self-defence. However, if such a pre-emptive strike is to be made with a "small" nuclear weapon which by definition has no greater blast, heat or radiation than a conventional weapon, the question would again arise why a nuclear weapon should be used when a conventional weapon would serve the same purpose.
- (vii) the factor of accident must always be considered. Nuclear weapons have never been tried out on the battlefield. Their potential for limiting damage is untested and is as yet the subject of theoretical assurances of limitation. Having regard to the possibility of human error in highly scientific operations—even to the extent of the accidental explosion of a space rocket with all its passengers aboard—one can never be sure that some error or accident in construction may deprive the weapon of its so-called "limited" quality. Indeed, apart from fine gradations regarding the size of the weapon to be used, the very use of any nuclear weapons under the stress of urgency is an area fraught with much potential for accident. The UNIDIR study, just mentioned, emphasizes the "very high risks of escalation once a confrontation starts."
- (viii) there is some doubt regarding the "smallness" of tactical nuclear weapons, and no precise details regarding these have been placed before the Court by any of the nuclear powers. Malaysia, on the other hand, has referred the Court to a United States law forbidding "research and development which could lead to the production . . . of a low-yield nuclear weapon," which is defined as having a yield of less than 5 kilotons (Hiroshima and Nagasaki were 15 and

12 kilotons, respectively). Weapons of this firepower may, in the absence of evidence to the contrary, be presumed to be fraught with all the dangers attendant on nuclear weapons, as outlined earlier in this Opinion.

- (ix) It is claimed a weapon could be used which could be precisely aimed at a specific target. However, recent experience in the Gulf War has shown that even the most sophisticated or "small" weapons do not always strike their intended target with precision. If there should be such error in the case of nuclear weaponry, the consequence would be of the gravest order.
- (x) Having regard to WHO estimates of deaths ranging from one million to one billion in the event of a nuclear war which could well be triggered off by the use of the smallest nuclear weapon, one can only endorse the sentiment which Egypt placed before us when it observed that, having regard to such a level of casualties: "even with the greatest miniaturization, such speculative margins of risk are totally abhorrent to the general principles of humanitarian law."
- (xi) Taking the analogy of chemical or bacteriological weapons, no one would argue that because a small amount of such weapons will cause a comparatively small amount of harm, therefore chemical or bacteriological weapons are not illegal, seeing that they can be used in controllable quantities. If, likewise, nuclear weapons are generally illegal, there could not be an exception for "small weapons." If nuclear weapons are intrinsically unlawful, they cannot be rendered lawful by being used in small quantities or in smaller versions. Likewise, if a state should be attacked with chemical or bacteriological weapons, it seems absurd to argue that it has the right to respond with small quantities of such weapons. The fundamental reason that all such weapons are not permissible, even in self-defence, for the simple reason that their effects go beyond the needs of war, is common to all these weapons.²⁰⁰

c. Radiation as a Secondary Effect of Nuclear Weapons

The United States seems to argue that if it chooses to use a nuclear weapon, it would be doing so for the blast and heat

^{200.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J 226, 324–27 (July 8) (Weeramantry, J. dissenting) (internal citations omitted).

effects—and that the ongoing and outwardly spreading radiation effects would not have been the focus of its intent in using the weapon; hence the use would not to be unlawful. This is a variant of the immediately preceding US defense of the lawfulness of the use of nuclear weapons.

The United States makes this argument under several guises. Most centrally, as seen above in the discussion of the controllability point, the United States argues that it can deliver its missiles carrying nuclear weapons to their targets with great accuracy, so that, impliedly, the radiation effects should not matter. Similarly, in its discussion of the prohibition of the use of poisons, it argues that poisons are prohibited, but that it is acceptable under international law to use other weapons—such as nuclear weapons—that have poisons (here, radiation) as a side effect. The United States contends that, because the delivery of the poisons is accompanied by other effects (here, blast and heat) that putatively are permissible, the overall use of the weapon is acceptable.

The following are examples of the United States' articulation of these positions in statements to the ICJ:

This argument is simply contrary to fact. Modern nuclear weapon delivery systems are, indeed, capable of precisely engaging discrete military objectives.²⁰¹

. . .

It has been argued that nuclear weapons are unlawful because they cannot be directed at a military objective. This argument ignores the ability of modern delivery systems to target specific military objectives with nuclear weapons, and the ability of modern weapons designers to tailor the effects of a nuclear weapon to deal with various types of military objectives. Since nuclear weapons can be directed at a military objective, they can be used in a discriminate manner and are not inherently indiscriminate.²⁰²

. .

[The prohibition of the use of poison weapons] was established with particular reference to projectiles that carry poison into the body of the victim. It was not intended to

^{201.} ICJ Hearing, Nov. 15, 1995, supra note 31, at 70.

^{202.} US ICJ Written Statement, *supra* note 44, at 23 (citing ARMY, LAW OF LAND WARFARE, *supra* note 28, at 5).

apply, and has not been applied, to weapons that are designed to injure or cause destruction by other means, even though they also may create toxic byproducts.

For example, the prohibition on poison weapons does not prohibit conventional explosives or incendiaries, even though they may produce dangerous fumes. By the same token, it does not prohibit nuclear weapons, which are designed to injure or cause destruction by means other than poisoning the victim, even though nuclear explosions may also create toxic radioactive byproducts.²⁰³

The United States made essentially the same argument to the ICJ with respect to the application of the 1925 Geneva Protocol's prohibition of the use in war of asphyxiating or poisonous gases, liquids, materials and devices, contending, without citation of authority, that the protocol was "not intended" to cover weapons that kill other than by the inhalation or other absorption into the body of poisonous gases or analogous substances²⁰⁴ and that the prohibition of the use of poison weapons in the 1907 Hague Convention was only intended to cover the situation of projectiles that carry poison into the body of the victim.²⁰⁵

The United States further argued that the limitations on the scope of these agreements are reflected in the fact that they do not prohibit conventional explosives or incendiaries, even though such weapons "may produce dangerous fumes":

This prohibition was intended to apply to weapons that are designed to kill or injure by the inhalation or other absorption into the body of poisonous gases or analogous substances.

This prohibition was not intended to apply, and has not been applied, to weapons that are designed to kill or injure by other means, even though they may create asphyxiating or poisonous byproducts. Once again, the Protocol does not prohibit conventional explosives or incendiary weapons,

^{203.} *Id.* at 23–24 (citing Convention (IV) Respecting the Laws and Customs of War, and Its Annex: Regulations Concerning the Laws and Customs of War on Land art. 23(a), Oct. 18, 1907, 36 Stat. 2277).

^{204.} See id. at 24–25 (citing F. Kalshoven, Arms, Armaments and International Law, 191 RECUEIL DES COURS: COLLECTED COURSES OF THE HAGUE ACAD. OF INT'L L. 183, 283–84 (1985)).

^{205.} See id. at 24.

even though they may produce as phyxiating or poisonous byproducts, and it likewise does not prohibit nuclear weapons. $^{206}\,$

The Navy, in an 1989 edition of the Annotated Supplement to the Naval Commander's Handbook on the Law of Naval Operations, elaborated on the US position:

Poison Gas Analogy. It has been contended that nuclear radiation is sufficiently comparable to a poison gas to justify extending the 1925 Gas Protocol's prohibition to include the use of nuclear weapons. However, this ignores the explosive, heat and blast effects of a nuclear burst, and disregards the fact that fall-out is a by-product which is not the main or most characteristic feature of the weapon. The same riposte is available to meet an argument that the use of nuclear weapons would violate the prohibition on the use of poisoned weapons, set out in article 23(a) of the Hague Regulations.²⁰⁷

Thus, the US position seems to be that the explosive, heat, and blast effects of a nuclear weapon are the primary effects and radiation is only an incidental "by-product," which is not "the main or most characteristic feature" of the weapon; this secondary nature of radiation eliminates or diminishes its legal significance as an effect of the use of nuclear weapons.

The authors are not aware of a legal basis for this putative rule that secondary effects of weapons, such as radiation, do not count in the legal analysis. Such a limitation on IHL would defeat its purpose. Certainly the "dangerous fumes" produced by conventional explosives or incendiaries are not factually or legally comparable to radiation from nuclear weapons, which is carried forward on a virtually unlimited basis in space and time.

While the ICJ concluded that the various conventions banning the use of poisons in warfare were not understood, in the practice of states, as referring to nuclear weapons,²⁰⁸ it

^{206.} *Id.* at 24–25 (citing Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 571, 94 L.N.T.S. 65; Kalshoven, *supra* note 204 at 284).

^{207.} NAVAL COMMANDER'S HANDBOOK 1989 SUPPLEMENT, supra note 28, at 10-2.

^{208.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, ¶¶ 54–55 (July 8) (referencing Second Hague Declaration of 29 July 1899; Regulations Respecting the Laws and Customs of War on Land Annexed to the Hague Convention IV of 18 October 1907, Article 23 (a); and Geneva Protocol of 17 June

provided no support for the proposition that the radiation effects of nuclear weapons are irrelevant under IHL.

d. Use of Low-Yield Nuclear Weapons in Remote Areas

As discussed above, the United States' primary defense of the lawfulness of nuclear weapons before the ICJ was based on the premise that the United States has low-yield nuclear weapons, the effects of which it can control, with the United States postulating what it characterized as "plausible scenarios, such as a small number of accurate attacks by low-yield weapons against an equally small number of military targets in nonurban areas.²⁰⁹

While, as noted above,²¹⁰ the United States did not define in its presentations to the ICJ what it meant by "low-yield" nuclear weapons, the term at the time was defined in the Joint Chiefs of Staff's manual *Doctrine for Joint Theater Nuclear Operations*: very low (less than 1 kiloton); low (1 kiloton to 10 kilotons); medium (over 10 kilotons to 50 kilotons); high (over 50 kilotons to 500 kilotons); and very high (over 500 kilotons).²¹¹

The US argument in this regard seems to lack substantial merit. While the United States maintains some low-yield nuclear weapons, the US arsenal is made up predominately of high-yield nuclear weapons.²¹² In addition, as discussed above, even the low-yield nuclear weapons are unlawful under IHL, inter alia, because their effects are uncontrollable.²¹³

Use of low-yield nuclear weapons would also appear potentially to be precluded under international law because virtually any military objectives for which such weapons might be used could also be addressed by conventional weapons; the rules of necessity and proportionality prohibit the use of nuclear weapons if the military objective could be achieved through conventional weapons.²¹⁴

In addition, this argument by the United States ignores the likely effects of counter-strike and escalation, effects which have

^{1925).}

^{209.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 71.

^{210.} See supra notes 170-75 and accompanying text.

^{211.} JOINT THEATER NUCLEAR OPERATIONS, *supra* note 28, at GL-3.

^{212.} See Norris & Kristensen, supra note 163, at 57.

^{213.} See supra note 165 and accompanying text.

^{214.} See supra notes 62-83 and accompanying text.

to be included in the legal analysis. Theoretical scenarios of ideal-condition strikes with no collateral effects or resultant escalation are not a realistic basis upon which to conduct the legal analysis or establish legal norms.

The US argument raises questions about whether the production, deployment, and other policies regarding nuclear weapons are based on exceptional circumstances, extraordinary events in which a nuclear weapon might theoretically be used in compliance with law, or on real-world circumstances as to likely use. ²¹⁵

e. Use of Nuclear Weapons in Reprisal for Another State's Unlawful First Use

The United States took the position before the ICJ that it would potentially be lawful to use nuclear weapons in reprisal even if it were unlawful to use them in the first instance:

Even if it were to be concluded—as we clearly have not—that the use of nuclear weapons would necessarily be unlawful, the customary law of reprisal permits a belligerent to respond to another party's violation of the law of armed conflict by itself resorting to what otherwise would be unlawful conduct.²¹⁶

Acknowledging that reprisals must be taken with intent to cause the enemy to cease violations of the law of armed conflict and after all other means of securing compliance have been exhausted, and that they must be proportionate to the violations, the United States, in its memorandum to the ICJ, took the position that the legality of reprisals must be determined on a case-by-case basis.²¹⁷

^{215.} Comparable arguments were made in support of the lawfulness of cluster munitions. For example, the contention was made that such munitions are better suited to attacking a machine gun nest on top of a dam than an explosive that might damage the dam, jeopardizing downstream civilians. *See* JOHN BORRIE, UNNACEPTABLE HARM: A HISTORY OF HOW THE TREATY TO BAN CLUSTER MUNITIONS WAS WON 331 (2009). In view of the broad range of cases in which use of cluster munitions causes indiscriminate and long-lasting harm, such arguments were rejected by the states that negotiated the convention banning the munitions. Convention on Cluster Munitions, Dec. 3, 2008, 48 I.L.M. 357.

^{216.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 75.

^{217.} See US ICJ Written Statement, supra note 44, at 30; see also ICJ Hearing, Nov. 15, 1995, supra note 31, at 72.

The United States further dismissed as inapplicable to nuclear weapons, and as new provisions not assimilated into customary law, the provisions of Additional Protocol I containing prohibitions on reprisals against specific types of persons or objects, including, the civilian population or individual civilians, civilian objects, cultural objects and places of worship, objects indispensable to the survival of the civilian population, the natural environment, and works and installations containing dangerous forces.²¹⁸

The Navy, in an earlier edition of its *Naval Commander's Handbook*, hedged the issue, saying that targeting enemy civilians in reprisal was "lawful[]" and "legitimate" but "not appropriate":

Reprisals may lawfully be taken against enemy individuals who have not yet fallen into the hands of the forces making the reprisals. While the United States has always considered that civilian persons are not appropriate objects of attack in reprisal, members of the enemy civilian population are still legitimate objects of reprisals. However, since they are excluded from this category by the 1977 Protocol I Additional to the 1949 Geneva Conventions, for nations party thereto, enemy civilians and the enemy civilian population are prohibited objects of reprisal by their armed forces. The United States has found this new prohibition to be militarily unacceptable.²¹⁹

It seems highly unlikely that a state considering the use of nuclear weapons in reprisal for an adversary's use of nuclear weapons would—or would even be able to—comply with the legal requirements for reprisals. Almost inevitably, the use of nuclear weapons in reprisal to respond to a prior unlawful use of nuclear weapons by the adversary would be excessive and would likely lead to escalation and an expansion of the scope of the violence.

The above-referenced requirements that reprisals be both necessary to make the adversary comply with the law and proportionate to the offending violation would appear to make nuclear reprisals unlawful because the effects of nuclear weapons

^{218.} See US ICJ Written Statement, supra note 44, at 31 (referencing Additional Protocol I, supra note 43, arts. 51(6), 52(1), 53(c), 54(4), 55(2), 56(4)).

^{219.} NAVAL COMMANDER'S HANDBOOK 1989 SUPPLEMENT, supra note 28, at 6-18 n.33 (1989).

are uncontrollable—and hence cannot be limited or constrained within such requirements. ²²⁰ Consider the potential effects of the second use in reprisal: the sheer destructiveness of the nuclear weapon(s) used; the electromagnetic and radiation effects; the long-term effects of radioactive fallout; and the risks of hitting the wrong target, precipitating escalation to higher levels of nuclear warfare, precipitating the enemy's or even one's own further preemptive strikes, and precipitating chemical or biological weapons use. Any one of these effects would likely exceed the level of action necessary to convince the other side to constrain itself to lawful warfare and would be so provocative as to cause the opposite effect, precipitating total violence. Taken together, these effects would appear to be of a radically different nature and order than that contemplated by the law of reprisal. ²²¹

Given the uncontrollability of such effects, how could a state considering a nuclear reprisal reasonably believe that it could limit the strike to that necessary to induce the adversary to follow the law in the future? Without such a reasonable belief, how could the state be said to intend the reprisal to be within the legal limits?

And is it not clear, given all that is known of the practicalities of nuclear strategy, that the purported use of nuclear weapons in reprisal would almost inevitably be designed to punish the enemy and, in the case of a substantial nuclear adversary, to use one's own nuclear assets before they could be preemptively struck by the adversary and to attempt to preemptively strike the adversary's nuclear assets (many of which would likely be "co-located" with civilian targets) before they could be used? Even assuming adequate command and control, crucial decisions would have to be made within a very short time and would likely be dictated largely by existing war plans contemplating nuclear weapons use. The notion of a second strike as limited to the legitimate objectives of reprisal seems oxymoronic.

Thus, the very idea of a state's nuclear strike in reprisal against an adversary's first strike in reprisal is unrealistic, given the real purposes the state would have in conducting the second strike. The result is that the second strike would be subject to all

^{220.} See supra Part I.F.5, I.H.2.a, and accompanying text.

^{221.} See supra Part I.B.e and accompanying text.

of the requirements of IHL discussed above, including the requirements of discrimination, proportionality, necessity, and controllability.

The very premise of the attempted justification of the second use as a reprisal (the assumption that the first strike was unlawful for failure to comply with such rules as those of necessity, proportionality, distinction, and the corollary requirement of controllability), portends the unlawfulness of the second use in reprisal. Just as the likely effects of the first use were impermissibly excessive and far reaching under the referenced rules of IHL, so too would be the likely effects of the second under the requirements of IHL for reprisals.

It must be recognized that the second use in reprisal would likely carry greater risks of impermissible effects than the first. Specifically, even assuming that the adversary's first use could have been conducted in such a limited fashion as not to threaten impermissible effects, the second use—constituting a mutual willingness to engage in nuclear war and the heightened likelihood of precipitating major escalation—would involve the risk of even more severe and uncontrollable effects.

While one can conjure up reprisals comparable to the limited strikes at remote sea or desert targets that were the focus of the US defense of nuclear weapons before the ICJ, such legalistic exercises are unrealistic in the real world context of the types of circumstances in which these weapons might be used and their potential effects, and cannot reasonably serve as the basis for the evaluation of lawfulness.

Even if one hypothesizes a lawful nuclear reprisal using a low-yield nuclear weapons in a remote area to convince the adversary to step back from the precipice of nuclear mutual destruction, does such a theoretical exercise serve to justify the lawfulness of huge nuclear arsenals such as those of the United States, made up predominately of nuclear weapons with yields of between 100 and over 400 kilotons?

It is also clear that a nuclear reprisal could not satisfy the prerequisite of being necessary if the reprising state could achieve the objective with conventional weapons. For the United States, given its conventional weapons capabilities, this would be a hard test to meet in many circumstances, particularly in

connection with an armed conflict against a smaller nuclear weapons state possessing a limited number of such weapons.

The ICJ, in the *Nuclear Weapons* advisory opinion, did not express a conclusion about reprisals:

Certain States asserted that the use of nuclear weapons in the conduct of reprisals would be lawful. The Court does not have to examine, in this context, the question of armed reprisals in time of peace, which are considered to be unlawful. Nor does it have to pronounce on the question of belligerent reprisals save to observe that in any case any right of recourse to such reprisals would, like self-defence, be governed *inter alia* by the principle of proportionality.²²²

However, as noted above, the court did conclude that states "must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets." ²²³

The ICJ also did not express a conclusion on the issue of the applicability of Additional Protocol I to nuclear weapons, except to note that, to the extent that that Protocol merely codified pre-existing customary law, said customary law remained in effect:

Nor is there any need for the Court to elaborate on the question of the applicability of Additional Protocol 1 of 1977 to nuclear weapons. It need only observe that while, at the Diplomatic Conference of 1974–1977, there was no substantive debate on the nuclear issue and no specific solution concerning this question was put forward, Additional Protocol 1 in no way replaced the general customary rules applicable to all means and methods of combat including nuclear weapons. In particular, the Court recalls that all States are bound by those rules in Additional Protocol 1 which, when adopted, were merely the expression of the pre-existing customary law, such as the Martens Clause, reaffirmed in the first article of Additional Protocol 1. The fact that certain types of weapons were not specifically dealt with by the 1974–1977 Conference does not permit the drawing of any legal conclusions relating to the substantive issues which the use of such weapons would raise.²²⁴

^{222.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, \P 46 (July 8).

^{223.} Id. ¶ 78.

^{224.} *Id.* ¶ 84.

The International Committee of the Red Cross ("ICRC"), in a recent study *Customary International Humanitarian Law*, concluded that while state practice may not yet have led to a customary rule specifically prohibiting reprisals against civilians, there appears to be at least a trend in favor of prohibiting such reprisals:

Because of existing contrary practice, albeit very limited, it is difficult to conclude that there has yet crystallised a customary rule specifically prohibiting reprisals against civilians during the conduct of hostilities. Nevertheless, it is also difficult to assert that a right to resort to such reprisals continues to exist on the strength of the practice of only a limited number of States, some of which is also ambiguous. Hence, there appears, at a minimum, to exist a trend in favour of prohibiting such reprisals. The International Criminal Tribunal for the Former Yugoslavia, in its review of the indictment in the Martić case in 1996 and in its judgment in the Kupreškić case in 2000, found that there was such a prohibition already in existence, based largely on the imperatives of humanity or public conscience. These are important indications, consistent with a substantial body of practice now condemning or outlawing such reprisals.²²⁵

The ICRC's sense that there is, at a minimum, a trend in favor of prohibiting reprisals against civilians is supported by the ICJ's finding in the *Nuclear Weapons* advisory opinion that states "must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets." Also supporting this conclusion is the recognition by the US military that reprisals against civilians are "not appropriate." 227

Mexico's Ambassador Sergio González Gálvez addressed the ICJ on this point in the *Nuclear Weapons* advisory opinion: "Torture is not a permissible response to torture. Nor is mass rape acceptable retaliation to mass rape. Just as unacceptable is

^{225.} I Jean-Marie Henckaerts & Louise Doswald-Beck, Int'l Comm. of the Red Cross, Customary Humanitarian International Law, 523 (2009) (citations omitted).

^{226.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, \P 78.

^{227.} NAVAL COMMANDER'S HANDBOOK, supra note 28, at 6-18 n.33.

retaliatory deterrence—'You have burnt my city, I will burn yours.'"228

Professor Eric David, on behalf of Solomon Islands, stated before the ICI in the *Nuclear Weapons* advisory opinion:

If the dispatch of a nuclear weapon causes a million deaths, retaliation with another nuclear weapon which will also cause a million deaths will perhaps protect the sovereignty of the state suffering the first strike, and will perhaps satisfy the victim's desire for revenge, but it will not satisfy humanitarian law, which will have been breached not once but twice, and two wrongs do not make a right.²²⁹

One can speculate that the United States has refused to ratify Protocol I and has resisted the contemporary prohibition of reprisals against civilians in an effort to strengthen the perceived efficacy of its policy of nuclear deterrence. Yet the question must be faced as to whether the price—the continuation of the hair-trigger nuclear world and the inevitable resultant proliferation—is worth the putative benefit.

f. Need for Evaluation of the Use of Nuclear Weapons on a Case-by-Case Basis

The United States' overriding position is that the lawfulness of the use of nuclear weapons cannot be determined categorically or in the abstract, but must be made on an ad hoc basis. This position is not tenable. From the United States' own statements of the matter, the reality is that the time within which the United States would have to decide whether to use nuclear weapons under crisis conditions would be too short, realistically, to allow sufficient time to weigh the legalities of the matter. As a result, the position that the matter is to be evaluated on an ad hoc basis in practical terms means that the legalities would not be considered.

For example, the Joint Chiefs, in their earlier *Doctrine for Joint Nuclear Operations*, emphasized the extremely short periods

^{228.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 51 (Nov. 3, 1995, 10 a.m.), *available at* http://www.icj-cij.org/docket/files/95/5931.pdf.

^{229.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Verbatim Record, 49 (Nov. 14, 1995, 10:35 a.m.), *available at* http://www.icjcij.org/docket/files/95/5943.pdf (authors' translation).

of time—often matters of minutes or even seconds—that would be available for crucial decision making in nuclear confrontations: "Very short timelines impact decisions that must be made. In a matter of *seconds for the defense*, and *minutes for the offense*, critical decisions must be made in concert with discussions with NCA." The same document also noted the need for decisive strikes, once the decision to go nuclear has been made:

Some targets must be struck quickly once a decision to employ nuclear weapons has been made. Just as important is the requirement to promptly strike high-priority, timesensitive targets that emerge after the conflict begins. Because force employment requirements may evolve at irregular intervals, some surviving nuclear weapons must be capable of striking these targets within the brief time available. Responsiveness (measured as the interval between the decision to strike a specific target and detonation of a weapon over that target) is critical to ensure engaging some emerging targets.²³¹

In their earlier manual *Doctrine for Joint Theater Nuclear Operations*, the Joint Chiefs further emphasized the potential time constraints and the need for quick ad hoc judgments as to targeting:

Because preplanned theater nuclear options do not exist for every scenario, [commanders in chief] must have a capability to plan and execute nuclear options for nuclear forces generated on short notice during crisis and emergency situations. During crisis action planning, geographic combatant commanders evaluate their theater situation and propose courses of action or initiate a request for nuclear support.²³²

Against this background, the US position that the lawfulness of the use of nuclear weapons must be made on an ad hoc basis according to the circumstances of each contemplated use is problematic from a practical perspective and unsupportable as a matter of law. With only minutes (or even hours) to make these huge decisions involving many pragmatic considerations, ad hoc

^{230.} JOINT CHIEFS OF STAFF, supra note 184, at III-8 (emphasis added).

^{231.} *Id.* at II-3–4 (emphasis omitted).

^{232.} Joint Theater Nuclear Operations, supra note 28, at III-10 (emphasis omitted).

legal evaluation would likely amount to little or no legal evaluation. The result is the virtual abnegation of IHL, in effect putting nuclear weapons and the policy of deterrence largely outside the realm of law.

But it does not—and should not—have to be this way. The effects of nuclear weapons are already clear. The excessive and unnecessary nature of such effects can be evaluated now on a categorical basis from which the unlawfulness of their use becomes apparent.

g. No General Prohibition of Nuclear Weapons unless the United States Agrees to Such a Prohibition

The United States argued before the ICJ that there is no conventional or customary rule outlawing the use of nuclear weapons because the United States has not consented to such a rule—and that, accordingly, the lawfulness of each potential use of nuclear weapons must be evaluated on a case-by-case basis. Conrad K. Harper, Legal Advisor of the United States Department of State, told the court that its "starting point in examining the merits" should be "the fundamental principle of international law that restrictions on States cannot be presumed, but must be established by conventional law specifically accepted by them, or in customary law established by the conduct of the community of nations."²³³

Michael J. Matheson, the Deputy Legal Advisor to the US Department of State, in his presentation to the court, made the same point: restrictions upon states must "be found in conventional law specifically accepted by States, or in customary law generally accepted as such by the community of nations." Matheson relied upon the court's statement in the *Nicaragua* case that "in international law there are no rules, other than such rules as may be accepted by the State concerned, by treaty or otherwise, whereby the level of armaments of a sovereign State can be limited." ²³⁵

This US position on this point, as presented to the ICJ, overlooks the existence of other sources of international law,

^{233.} ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 57.

^{234.} Id. at 60.

^{235.} *Id.* (quoting Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.), 1986 I.C.J. 14, \P 269 (June 27)).

including general principles of law. Moreover, it ignores the fact that the United States, as evidenced by the numerous references to US military documents in this Article, recognizes that the broad rules of the law of armed conflict—such as the rules of distinction, proportionality and necessity and the corollary requirement of controllability—apply to any application of force, including nuclear weapons.²³⁶

Once the applicability of such rules is acknowledged, the United States is bound by their application regardless of whether it agrees with the particular application. Neither the consensual basis of international law nor the principle of sovereignty limits the application of established rules of law. If the use of nuclear weapons is per se unlawful under those principles, the United States and other nuclear weapons states are subject to such unlawfulness fully as much as if they had signed a convention or purposefully joined in the formation of custom to that effect.

The Air Force, in its prior *Manual on International Law*, stated that the use of a weapon may be unlawful based not only on "expressed prohibitions contained in specific rules of custom and convention," but also on "those prohibitions laid down in the general principles of the law of war." The manual noted that the International Military Tribunal at Nuremberg in the *Major War Criminals* case found that international law is contained not only in treaties and custom but also in the "general principles of justice applied by jurists and practiced by military courts." Similarly, in discussing how the lawfulness of new weapons and methods of warfare is determined, the manual stated that such determination is made based on international treaty or custom, upon "analogy to weapons or methods previously determined to be lawful or unlawful," and upon the

^{236.} The United States has recognized these rules as arising under customary and treaty law and general principles of law. *See supra* notes 44–96 and accompanying text. In its arguments before the ICJ, the United States acknowledged that scientific evidence could justify a total prohibition of nuclear weapons if it demonstrated the unlawfulness of all such uses: "[S]cientific evidence could only justify a total prohibition on the use of nuclear weapons if such evidence covers the full range of variables and circumstances that might be involved in such uses." ICJ Hearing, Nov. 15, 1995, *supra* note 31, at 71.

^{237.} AIR FORCE, MANUAL ON INTERNATIONAL LAW, *supra* note 28, at 6-1, 6-9 & n.3 While this manual no longer appears to be in effect, the authors are not aware of any reason to believe that the law relating to the development of international law has changed.

^{238.} Id. at 1-6.

evaluation of the compliance of such new weapons or methods with established principles of law, such as the rules of necessity, discrimination and proportionality.²³⁹ Furthermore, the practice of states "does not modify" the legal obligation to comply with treaty obligations since such obligations are "contractual in nature."²⁴⁰

The Army's *Law of Land Warfare* states that "[t]he conduct of armed hostilities on land is regulated by the law of land warfare which is both written and unwritten."²⁴¹

The United States recognizes "analogy" as well as "general principles" as sources of the law of armed conflict. The Air Force *Manual on International Law* states:

The law of armed conflict affecting aerial operations is not entirely codified. Therefore, the law applicable to air warfare must be derived from general principles, extrapolated from the law affecting land or sea warfare, or derived from other sources including the practice of states reflected in a wide variety of sources. Yet the US is a party to numerous treaties which affect aerial operations either directly or by analogy.²⁴²

The manual noted that per se unlawfulness is not limited to prohibitions established in treaties or customary law: "[A] new weapon or method of warfare may be illegal, *per se*, if it is restricted by international law including treaty or international custom. The issue is resolved, or attempted to be resolved, by analogy to weapons or methods previously determined to be lawful or unlawful."²⁴³

Based on the foregoing, it seemed clear that the use of nuclear weapons can be per se unlawful regardless of whether there is a treaty or custom establishing such unlawfulness. The authors conclude that the known effects of nuclear weapons, as described above,²⁴⁴ are such that the use of nuclear weapons, even low-yield nuclear weapons, would be unlawful in virtually all circumstances.

^{239.} See id. at 6-7.

^{240.} Id. at 1-15 n.35.

^{241.} ARMY, LAW OF LAND WARFARE, supra note 28, at 3.

^{242.} AIR FORCE, MANUAL ON INTERNATIONAL LAW, supra note 28, at 1-7.

^{243.} Id. at 6-7.

^{244.} See supra notes 18-25 and accompanying text.

h. Lawfulness of the Threat of Use of All Nuclear Weapons in the US Arsenal if the Use of Any Nuclear Weapon in that Arsenal Is Lawful

The US argument that the threat of the use of all nuclear weapons in the US arsenal is lawful if the use of any nuclear weapon in that arsenal is lawful was alluded to in the discussion of the controllability point. It makes no sense and is legally untenable to argue that the threat and use of the state's entire nuclear arsenal is lawful because some of its low-yield weapons could possibly be used within permissible parameters.

That seems, however, to be the US position. As noted above, ²⁴⁵ the United States, in its defense of nuclear weapons before the ICJ, focused on its ability to use low-yield nuclear weapons in a surgical way, limiting collateral effects and complying with international law. Yet the United States continues to maintain an arsenal composed mostly of nuclear weapons with yields of between 100 and over 500 kilotons, to keep those weapons at alert for use, and to threaten their use through the policy of nuclear deterrence. Other nuclear weapons states are doing the same.

i. The Characterization that the ICJ Found the Use of Nuclear Weapons to Be Lawful

Subsequent to the ICJ decision, the US military manuals seem to suggest that the ICJ, in effect, found the use and threat of use of nuclear weapons to be lawful. For example, the Army, in its 2010 Law of War Deskbook, states, "Not prohibited by international law[:] In 1996, the International Court of Justice (ICJ) issued an advisory opinion that '[t]here is in neither customary nor international law any comprehensive and universal prohibition of the threat or use of nuclear weapons." 246

The manual continues:

However, by a split vote, the ICJ also found that "[t]he threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict." The ICJ stated that it could not definitively conclude whether the

^{245.} See supra notes 167–77 and accompanying text.

^{246.} ARMY, LAW OF WAR DESKBOOK, *supra* note 28, at 153 (quoting Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, ¶ 105 (July 8)).

threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of the state would be at stake.²⁴⁷

The Army's 2010 *Operational Law Handbook* contains nearly identical statements.²⁴⁸

While the foregoing language is subject to interpretation, the authors have the impression that the United States has generally interpreted the ICJ decision as giving permission to use nuclear weapons. Yet, as is evident from the discussion above,²⁴⁹ this is an inaccurate characterization of the court's decision and of the United States' broader position as to the applicability of the law of war to nuclear weapons.

Specifically, as discussed above,²⁵⁰ the United States has repeatedly acknowledged that the use of nuclear weapons is subject to the requirements of IHL, including the rules of distinction, necessity, and proportionality, and the corollary rule of controllability.

In addition, it is inaccurate to say that the ICJ found the use of nuclear weapons not to be prohibited under international law. As discussed above,²⁵¹ the court found the use of nuclear weapons to be subject to IHL. It further found that the use of nuclear weapons "seems scarcely reconcilable" with such requirements²⁵² and "would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law."²⁵³ The court then went on to say that

in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake.²⁵⁴

^{247.} Id.

^{248.} ARMY, OPERATIONAL LAW HANDBOOK, *supra* note 28, at 19 (quoting *Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. 226, ¶ 105).

^{249.} See supra notes 52-113, 149-62 and accompanying text.

^{250.} See supra notes 52-113, 149-62 and accompanying text.

^{251.} See supra notes 150-53 and accompanying text.

^{252.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, ¶ 95.

^{253.} Id. ¶ 105.

^{254.} Id.

This is far from finding that the use of nuclear weapons is not prohibited by international law.

j. The Implicit Argument that Nuclear Weapons May Be Used in Extreme Circumstances of Self-Defense

As discussed above, the United States, in its arguments to the ICJ, acknowledged that the use and threat of use of nuclear weapons is subject to IHL.²⁵⁵ Thus, the United States did not take the position before the ICJ that a state's right of self-defense overrides international law. However, the United States, in the 2010 Nuclear Posture Review issued by the Obama Administration, states several times that it would only use nuclear weapons in "extreme circumstances."²⁵⁶

It is not clear if this language was intended to invoke the ICJ's formulation of extreme circumstances of self-defense, but if it was, or if it was intended to suggest that extreme circumstances render use of nuclear weapons more lawful, it must be addressed. The ICJ was explicit that it was not determining that the use of nuclear weapons is lawful in extreme circumstances of self-defense in which the very survival of a state is at stake; it said, quite differently, that it was unable to reach a conclusion on this point.

In addition, while the language of the ICJ decision was unclear at some points, the totality of the ICJ decision, as discussed above, ²⁵⁷ was clear that a state's exercise of its right of self-defense, whether it be in "extreme" or non-extreme self-defense, is subject to IHL. A state's exercise of the right of self-defense must "conform[] to the fundamental principles of the law of armed conflict regulating the conduct of hostilities."

The court noted, for example, that the exercise by a state of the right of self-defense must comply, inter alia, with the principle of proportionality:

The entitlement to resort to self-defence under Article 51 [of the UN Charter] is subject to certain constraints.

^{255.} See supra notes 44-51 and accompanying text.

^{256.} U.S. Dep't of Defense, Nuclear Posture Review Report viii—ix, $16\text{--}17\ (2010).$

^{257.} See supra notes 150-62 and accompanying text.

^{258.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, ¶ 91 (quoting Written Statement of the Government of the United Kingdom, supra note 31, ¶ 3.44).

Some of these constraints are inherent in the very concept of self-defence. Other requirements are specified in Article 51.

The submission of the exercise of the right of self-defence to the conditions of necessity and proportionality is a rule of customary international law. As the Court stated in the case concerning *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America*): there is a "specific rule whereby self-defence would warrant only measures which are proportional to the armed attack and necessary to respond to it, a rule well established in customary international law." This dual condition applies equally to Article 51 of the Charter, whatever the means of force employed.

The proportionality principle may thus not in itself exclude the use of nuclear weapons in self-defence in all circumstances. But at the same time, a use of force that is proportionate under the law of self-defence, must, in order to be lawful, also meet the requirements of the law applicable in armed conflict which comprise in particular the principles and rules of humanitarian law.²⁵⁹

In addition, as discussed above,²⁶⁰ the very purpose of IHL is to address the exigencies of war.

I. Threat and Deterrence

There are cogent reasons to conclude that the use of nuclear weapons would be unlawful under IHL. This has significant implications for the policy of nuclear deterrence followed by the nuclear weapons states.

Specifically, the ICJ concluded in the *Nuclear Weapons* advisory opinion, and the states before the court generally agreed, that it is unlawful under international law for a state to threaten to do that which it would be unlawful to do. The court stated, "If an envisaged use of weapons would not meet the requirements of humanitarian law, a threat to engage in such use would also be contrary to that law."²⁶¹

Then, in its discussion of the status of deterrence under the UN Charter, the court indicated that a threat to perform an act

^{259.} Id. ¶¶ 40–42 (emphasis added) (internal citations omitted).

^{260.} See supra Part I.G.

^{261.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, ¶ 78.

violative of IHL violates not only that law but also the charter. The court said that "[t]he notions of 'threat' and 'use' of force under Article 2, paragraph 4, of the Charter stand together in the sense that if the use of force itself in a given case is illegal—for whatever reason—the threat to use such force will likewise be illegal." ²⁶² "For whatever reason" would incorporate IHL.

The court also said:

Whether [a policy of deterrence] is a "threat" contrary to Article 2, paragraph 4, depends upon whether the particular use of force envisaged would be directed against the territorial integrity or political independence of a State, or against the Purposes of the United Nations or whether, in the event that it were intended as a means of defence, it would necessarily violate the principles of necessity and proportionality.²⁶³

The court had stated earlier in its discussion of proportionality as a condition for the exercise of self-defense (as opposed to proportionality in carrying out a particular military operation) that proportionality requires conformity with IHL.²⁶⁴

The United States, in its written and oral arguments to the ICJ, acknowledged that deterrence would be invalidated if the use of nuclear weapons would be unlawful. Michael J. Matheson, on behalf of the United States, in his oral argument to the court, stated:

[E]ach of the Permanent Members of the Security Council has made an immense commitment of human and material resources to acquire and maintain stocks of nuclear weapons and their delivery systems, and many other States have decided to rely for their security on these nuclear capabilities. If these weapons could not lawfully be used in individual or collective self-defense under any circumstances, there would be no credible threat of such use in response to aggression and deterrent policies would be futile and meaningless. In this sense, it is impossible to separate the policy of deterrence from the legality of the use of the means of deterrence. Accordingly, any affirmation of a general prohibition on the use of nuclear weapons would be directly

^{262.} Id. ¶ 47.

^{263.} Id.

^{264.} Id. ¶ 41.

contrary to one of the fundamental premises of the national security policy of each of these many States.²⁶⁵

This formal statement by the US representatives is a powerful confirmation of the significant point that the lawfulness of the policy of nuclear deterrence depends upon the lawfulness of the underlying use. If nuclear weapons cannot lawfully be used, their use may not be lawfully threatened. As Mr. Matheson put it so memorably, if nuclear weapons could not lawfully be used, "there would be no credible threat of such use in response to aggression and deterrent policies would be futile and meaningless." ²⁶⁶

This limitation on the lawfulness of the policy of deterrence becomes particularly significant in light of the fact discussed above that the United States' defense of the lawfulness of the use of nuclear weapons has been focused upon the defense of the use of low-yield nuclear weapons.²⁶⁷

The importance of clarifying the legal status of nuclear weapons under international law is confirmed by the United States' explicit statement in its memorandum to the ICJ that the United States would not acquire and maintain nuclear weapons and the attendant delivery systems if it were known that the use of the weapons was unlawful:

It is well known that the Permanent Members of the Security Council possess nuclear weapons and have developed and deployed systems for their use in armed conflict. These States would not have borne the expense and effort of acquiring and maintaining these weapons and delivery systems if they believed that the use of nuclear weapons was generally prohibited. On the contrary, the possible use of these weapons is an important factor in the structure of their military establishments, the development of their security doctrines and strategy, and their efforts to prevent aggression and provide an essential element of the exercise of their right of self-defense.²⁶⁸

Given the legal rule that a threat is unlawful if the underlying action would be unlawful, it is evident that there are

^{265.} ICJ Hearing, Nov. 15, 1995, supra note 31, at 62-63.

^{266.} Id. at 63.

^{267.} See supra Part I.H.2.a.

^{268.} US ICJ Written Statement, supra note 44, at 14 (citing U.N. Secretary-General, General and Complete Disarmament: Comprehensive Study on Nuclear Weapons: Rep. of the Secretary-General, ¶¶ 44–81, U.N. Doc. A/45/373 (Sept. 18, 1990)).

serious questions whether the policy of nuclear deterrence followed by nuclear weapons states can withstand analysis. The authors' conclusion that the use of nuclear weapons, even of low-yield nuclear weapons in extreme circumstances of self-defense, would be unlawful under the law of armed conflict suggests that the policy of deterrence is equally unlawful.

II. THE NPT COMMITMENT TO COMPLIANCE WITH INTERNATIONAL HUMANITARIAN LAW

This Article has shown that the United States accepts rules of IHL and accepts that they apply to nuclear weapons. That position is shared by other states with nuclear weapons. As the ICJ noted in its advisory opinion:

None of the statements made before the Court in any way advocated a freedom to use nuclear weapons without regard to humanitarian constraints. Quite the reverse; it has been explicitly stated,

"Restrictions set by the rules applicable to armed conflicts in respect of means and methods of warfare definitely also extend to nuclear weapons" (Russian Federation);

"So far as the customary law of war is concerned, the United Kingdom has always accepted that the use of nuclear weapons is subject to the general principles of the jus in bello" (United Kingdom);

and

"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).²⁶⁹

Moreover, the content of the applicable rules in the main is reasonably clear, though there can be disputes about the details. This is demonstrated by a major study, *Customary Humanitarian International Law*, originally published in 2005 by the ICRC.²⁷⁰ The ICRC has a well-deserved reputation as the guardian of IHL. The study is an authoritative statement of the requirements of

^{269.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, ¶ 86 (quoting ICJ Hearing, Nov. 10, 1995, supra note 30; ICJ Hearing, Nov. 15, 1995, supra note 31). 270. HENCKAERTS & DOSWALD-BECK, supra note 225.

IHL. It identifies IHL rules based upon exhaustive research into state practice and legal opinion as manifested by armed-forces manuals on the law of armed conflict, multilateral treaties, including Protocol I to the Geneva Conventions and the Rome Statute of the International Criminal Court, and other sources. The ICRC formulations are generally consistent with those found in the US sources discussed in Part I of this Article.

Among the general rules identified by the ICRC, most relevant to nuclear weapons are the prohibition of indiscriminate attacks, the requirement of proportionality in attack, the prohibition of means of attack causing unnecessary suffering, and the requirement of due regard for protection and preservation of the natural environment. "Indiscriminate attacks" are defined as those:

(a) which are not directed at a specific military objective; (b) which employ a method or means of combat which cannot be directed at a specific military objective; or (c) which employ a method or means of combat the effects of which cannot be limited as required by international humanitarian law; and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.²⁷¹

"Proportionality in attack" prohibits "launching an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated." The use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited." Due regard for the environment imposes a requirement of proportionality in attack with respect to damage to the environment. The further, "[t]he use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon." Many

^{271.} Id. at 40.

^{272.} Id. at 46.

^{273.} Id. at 237.

^{274.} Id. at 143, 147.

^{275.} *Id.* at 151. While the prohibition of causing widespread, long-term, and severe damage to the natural environment is a rule codified in Additional Protocol I to the

of the numerous specific rules identified by the study, for example those protecting hospitals and cultural property, also are applicable in view of the immense effects of nuclear weapons.

Given that states accept the binding nature of IHL and that IHL is reasonably well defined, what is the significance of the 2010 NPT Review Conference declaration of "the need for all States at all times to comply with applicable international law, including international humanitarian law"? ²⁷⁶

First, NPT parties have now taken on the existing obligation of compliance with IHL with respect to nuclear weapons as an *NPT commitment* for which they are accountable within the NPT review process. That NPT commitment is embedded within the matrix of commitments for implementation of the fundamental NPT Article VI obligation of good-faith negotiation of nuclear disarmament. Second, in subtle but nonetheless important ways, the commitment advances beyond the conclusions of the ICJ advisory opinion and reinforces a rigorous application of IHL. These points are analyzed below and then the policy implications of the commitment are explained.

A. Compliance with IHL as an NPT Commitment

1. Background on the NPT and the 2010 Review Conference

The Nuclear Nonproliferation Treaty entered into force in 1970 and currently has 189 states parties. Three states, all now with nuclear arsenals, never joined the treaty: India, Israel, and Pakistan; a fourth, North Korea, announced its withdrawal in 2003 and is believed to have a few nuclear weapons. Under Articles II and III, member states that had not conducted a nuclear test prior to 1968 are obligated not to acquire nuclear weapons and to accept monitoring of their civilian nuclear programs through safeguards administered by the International Atomic Energy Agency ("IAEA"). Article IV recognizes the right "to develop research, production and use of nuclear energy for

Geneva Conventions, the United States does not accept that it is a customary rule applicable to nuclear weapons. *See id.* at 153–54. The United States is not a party to Additional Protocol I. The United States appears to accept that the requirement of proportionality includes consideration of effects on the environment. *See, e.g.*, ARMY, OPERATIONAL LAW HANDBOOK, *supra* note 28, at 350 n.81.

^{276.} Final Document, supra note 15, at 19.

peaceful purposes" and provides for "the fullest possible exchange of equipment, materials and scientific and technological information" for peaceful uses, notably nuclear reactor powered generation of electricity. Five states that had carried out nuclear tests prior to 1968—China, France, Russia, the United Kingdom, and the United States—are acknowledged by Article IX to have nuclear weapons but are obligated by Article VI to pursue nuclear disarmament. Article VIII provides for the convening of a conference every five years to review the operation of the treaty.

Pursuant to Article X, the 1995 Review and Extension Conference decided to extend the treaty's duration indefinitely. In connection with that decision, the conference adopted procedures to strengthen the review process, "Principles and Objectives on Nuclear Non-Proliferation and Disarmament," ("Principles and Objectives") and a resolution calling for efforts to make the Middle East free of nuclear weapons.²⁷⁷ The Principles and Objectives provide, inter alia, for "systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons," negotiation of the Comprehensive Nuclear-Test-Ban Treaty ("CTBT") by 1996, and commencement of negotiations on a Fissile Materials Cut-off Treaty ("FMCT") banning production of fissile materials for use in nuclear weapons.

The 2000 Review Conference adopted "Thirteen Practical Steps for Disarmament," which built on the "Principles and Objectives." Among the steps are: an unequivocal undertaking to accomplish the total elimination of nuclear arsenals; signatures and ratifications to bring the CTBT into force (its negotiation was concluded in 1996 as promised); negotiating an FMCT; US-Russian bilateral reductions through the Strategic Arms Reduction Treaty ("START") process; application of the principle of irreversibility to arms control and disarmament measures; development of verification capabilities; and diminishing the role of nuclear weapons in security policies.²⁷⁸

^{277.} For the package of decisions adopted in 1995, see 1995 NPT Review and Extension Conference of the Parties to the Treaty on the Nonproliferation of Nuclear Weapons, *Final Document*, pt. 1, annex, U.N. Doc. NPT/CONF.1995/32 (1995) [hereinafter 1995 NPT Review].

^{278.} For the Practical Steps for Disarmament, see 2000 Review Conference of the Parties to the Treaty on the Nonproliferation of Nuclear Weapons, *Final Document*, 14–

Despite the robust development of the NPT regime at the 1995 and 2000 conferences, in the following decade there was widespread concern that it was deteriorating. The nuclear weapon states, particularly the United States, largely failed to implement the Practical Steps for Disarmament. Under the George W. Bush Administration, the United States even rejected some of the commitments made in 2000, notably to ratify the CTBT and to pursue verified US-Russian reductions through the START process. No efforts were made to implement the 1995 Middle East resolution. Nonproliferation restraints appeared to be eroding. North Korea acquired nuclear weapons in defiance of treaty obligations. Much apprehension was aroused by the Iranian program to acquire nuclear fuel production technology, which is inherently also capable of producing materials for nuclear weapons, and Iran's concomitant refusal to follow directives of the IAEA and the Security Council. Especially in the United States, where the September 11 attacks heightened awareness of the risk of terrorist use of nuclear weapons by nonstate actors, attention turned to means of preventing nonstate actor trafficking in and acquisition of nuclear-weaponsrelated material and technology. Under the pressure of those and other factors, the 2005 Review Conference failed to yield an agreed outcome.

Accordingly, in the period preceding the 2010 Review Conference, there was a widely held conviction that the regime should be strengthened by a reaffirmation and elaboration of the bargain underlying the NPT: most states' renunciation of nuclear weapons in return for the negotiation of nuclear disarmament and for support for "peaceful uses" of nuclear energy. This led to an outcome of the Review Conference generally regarded as a success, though not perceived as decisive in and of itself in revitalizing the regime.²⁷⁹ The Final Document of the 2010

^{15,} U.N. Doc. NPT/CONF. 2000/28 (Vol. I, Pt. I) (2000) [hereinafter 2000 NPT Review]. A standalone version, with unofficial headers, is available at http://www.reachingcriticalwill.org/legal/npt/13point.html. For more detail on the 1995 and 2000 conferences, and an account of the failed 2005 Review Conference, see generally Jonathan Granoff, Symposium, *The Nuclear Nonproliferation Treaty and Its 2005 Review Conference: A Legal and Political Analysis*, 39 N.Y.U. J. INT'L. L. & POL. 995 (2007).

^{279.} For an overview of the Final Document, see Beatrice Fihn, Summary of the 2010 NPT Final Outcome Document, NPT NEWS IN REV., June 1, 2010, at 4, available at http://www.reachingcriticalwill.org/legal/npt/NIR2010/No21.pdf.

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Review Conference ("Final Document") includes the following key provisions.

Regarding nonproliferation, the Final encourages states parties to accept enhanced IAEA inspection powers ("Additional Protocol") and to consider establishing multilateral mechanisms to assure supply of fuel for nuclear reactors. It does not specifically address issues of noncompliance raised by the Iranian and other nuclear programs but generally underscores the importance of complying with nonproliferation obligations and addressing all compliance matters by diplomatic means. Regarding peaceful uses of nuclear energy, the Final Document reaffirms the Article IV right to such uses and stresses the need to meet the highest possible standards of nuclear security and safety. Regarding the need for "universality," bringing in states outside the treaty, the Final Document, inter alia, calls for a 2012 conference on the subject of a Middle Eastern zone free of nuclear, chemical, and biological weapons and the appointment of a facilitator to make it happen.

Regarding disarmament, the Final Document reaffirms the Practical Steps on Disarmament ("Practical Steps") adopted by the 2000 Review Conference. Building on the Practical Steps, it specifies that "[a]ll States parties commit to apply the principles of irreversibility, verifiability and transparency in relation to the implementation of their treaty obligations." The Final Document also contains innovative commitments on disarmament, including an affirmation of the need for all states to make special efforts to establish a framework to achieve a world without nuclear weapons coupled with an acknowledgement of the UN Secretary-General's proposal for negotiation of a convention or framework of instruments to that end; a commitment by the nuclear weapon states, inter alia, to "promptly engage" on "rapidly moving" toward the reduction of the overall global stockpile, diminishing the role of nuclear weapons in security policies, and to report on the results of the engagement to the 2014 preparatory meeting for the 2015 review; and the affirmation of the need to comply with IHL.

2. The IHL Commitment in the NPT Context

The IHL provision in the Final Document agreed by the 2010 NPT Review Conference is as follows: "The Conference

expresses its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons and reaffirms the need for all States at all times to comply with applicable international law, including international humanitarian law."²⁸⁰ The context of this provision is important; it comes in a section of the Final Document entitled "Conclusions and recommendations for follow-on actions," and is inserted in Part I of that section, "Nuclear Disarmament," under "Principles and Objectives." The chapeau for Part I reads:

In pursuit of the full, effective and urgent implementation of article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4 (c) of the 1995 decision entitled "Principles and objectives for nuclear non-proliferation and disarmament," and building upon the practical steps agreed to in the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, the Conference agrees on the following action plan on nuclear disarmament which includes concrete steps for the total elimination of nuclear weapons[.]²⁸¹

The agreement set forth in Part I, Nuclear Disarmament, was reached in the context of a proceeding—a review conference—authorized by Article VIII of the NPT "to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised." ²⁸² It was adopted through the strengthened review process, which, the 1995 Review and Extension Conference specified, "should look forward as well as back . . . and identify the areas in which, and the means through which further progress should be sought in the future." ²⁸³

Because it strongly supports the non-use of nuclear weapons, the IHL commitment contributes to the realization of the first preambular provision of the NPT: "Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of

^{280.} Final Document, supra note 15, at 19.

^{281.} Id. (emphasis added).

^{282.} Treaty on the Nonproliferation of Nuclear Weapons, *supra* note 27, art. VIII (emphasis added).

^{283.} See 1995 NPT Review, supra note 277, at 8.

peoples...."²⁸⁴ Non-use, and the acknowledgement of legal requirements supporting non-use, also contributes to nuclear disarmament by reinforcing the illegitimacy of nuclear weapons and helping to create an environment of trust in which disarmament negotiations can succeed. It therefore contributes to the realization of preambular provisions on nuclear disarmament and to Article VI.²⁸⁵

This point comes through in the brilliantly phrased commitment adopted by the 2000 Review Conference to a "diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination."286 That commitment and other 2000 Review Conference commitments were reaffirmed by the 2010 Review Conference.²⁸⁷ Further, Action 5 of the action plan on nuclear disarmament contained in the 2010 Final Document calls upon the nuclear weapon states to "promptly engage" to, inter alia, "further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies."288 Understanding of the connection between non-use and disarmament indeed goes back to the origins of the NPT. After the NPT was opened for signature on July 1, 1968, the Soviet Union and the United States placed specific measures before the predecessor to today's Conference on Disarmament, the Eighteen-Nation Committee on Disarmament, where the NPT had been negotiated. Under a

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^{284.} Treaty on the Non-Proliferation of Nuclear Weapons, *supra* note 27, pmbl.

^{285.} Relevant preambular provisions are these: "[d]eclaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament," and

[[]d]esiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control.

Id. Article VI provides: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control." *Id.* art. VI.

^{286. 2000} NPT Review, *supra* note 278, at 15.

^{287.} Final Document, supra note 15, at 19 ("The Conference reaffirms the continued validity of the practical steps agreed to in the Final Document of the 2000 Review Conference.").

^{288.} Id. at 21.

heading taken from Article VI, they proposed an agenda including "the cessation of testing, *the non-use of nuclear weapons*, the cessation of production of fissionable materials for weapons use, the cessation of manufacture of weapons and reduction and subsequent elimination of nuclear stockpiles "²⁸⁹

The action plan on nuclear disarmament and the IHL commitment included within it are not per se legally binding.²⁹⁰ Though it is an "agreement" of a conference of states, it is not accompanied by the procedures for treaties including signature and ratification. But, the action plan was adopted by a review proceeding provided for by the treaty, as part of the strengthened review process agreed to in connection with the 1995 legally binding decision to extend the treaty indefinitely. It represents states parties' collective understanding of the appropriate means for implementation of Article VI. Implementation of actionplan commitments consequently would be strong evidence that states parties are complying with Article VI and the NPT. This point certainly applies to the IHL commitment, due to the close interconnection with the application of IHL to the realization of core purposes of the NPT, prevention of nuclear war, and disarmament. This conclusion is reinforced by the legal principle of good faith.

^{289.} Conference of the Eighteen-Nation Committee on Disarmament, *Final Record of the Three Hundred and Ninetienth Meeting*, Verbatim Record, ¶ 93, Aug. 15, 1968, ENDC/PV. 390 (emphasis added).

^{290.} Nonetheless, at least when commitments made as part of an agreement by a review conference identify means integral to implementation of a treaty obligation, they appear to supply legal criteria for assessment of compliance. See Vienna Convention on the Law of Treaties art. 31(3)(a), May 23 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention] (proividing that "subsequent agreement[s] between the parties regarding the interpretation of the treaty or the application of its provisions" shall be taken into account in interpreting a treaty; Carlton Stoiber, The Evolution of NPT Review Conference Final Documents, 1975–2000, 10 NONPROLIFERATION REV. 126, 127 (2003); Peter Weiss, John Burroughs, & Michael Spies, The Thirteen Practical Steps: Legal or Political?, LAWYERS COMMITTEE ON NUCLEAR POLICY, (May 2005), http://www.lcnp.org/disarmament/npt/ 13stepspaper.htm. Contra Christopher Ford, Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, 14 NONPROLIFERATION REV. 401, 411–13 (2007). The argument that such commitments supply legal criteria for assessment of compliance seems persuasive, for example, with respect to the principles of verification and irreversibility as applied to disarmament pursuant to Article VI agreed by the 2000 and 2010 NPT review conferences. For some commitments, however, alternative means of meeting treaty obligations are possible. Regarding the NPT IHL commitment, determination of its exact legal status in the NPT context is less important because in any case states are legally obligated to comply with IHL independently of the NPT.

3. The Principle of Good Faith

"Good faith is a fundamental principle of international law, without which all international law would collapse," declared Judge Mohammed Bedjaoui, former President of the ICJ.²⁹¹ Good faith "is the guarantor of international stability," Judge Bedjaoui explained, because it allows one state to foresee the behavior of its partner.²⁹² States acting in good faith take into account other states' legitimate expectations.²⁹³ Essentially, good faith means abiding by agreements in a manner true to their purposes and working sincerely and cooperatively, by negotiations or other means, to attain agreed objectives.²⁹⁴

One key aspect of the principle is codified in Article 26 of the Vienna Convention on the Law of Treaties, which provides: "Pacta sunt servanda: Every treaty in force is binding upon the parties to it and must be performed by them in good faith." ²⁹⁵ The ICJ has elucidated the requirement, stating that the "principle of good faith obliges the Parties to apply [a treaty] in a reasonable way and in such a manner that its purpose can be realized." ²⁹⁶ At least where circumstances had rendered implementation of treaty provisions as originally agreed impossible, the court went so far as to say that "it is the purpose of the Treaty, and the intentions of the parties in concluding it, which should prevail over its literal application." ²⁹⁷

A treaty review conference is a collaborative process aimed at assessing achievement of treaty objectives and mapping further action to meet those objectives. When successful, a conference is an instance of states cooperating in good faith to advance agreed objectives. Good faith can subsequently be further demonstrated

^{291.} Judge Mohammed Bedjaoui, Good Faith, International Law, and Elimination of Nuclear Weapons, Keynote Address, 18 (May 1, 2008), available at http://www.lcnp.org/disarmament/2008May01eventBedjaoui.pdf [hereinafter Keynote Address].

^{292.} Id. at 19.

^{293.} Id. at 19-20.

^{294.} See generally JOHN BURROUGHS ET AL., THE IMPERATIVE OF GOOD FAITH: CIVIL SOCIETY PRESENTATION TO THE 2009 PREPARATORY COMMITTEE MEETING FOR THE 2010 NPT REVIEW (2009), available at http://www.reachingcriticalwill.org/legal/npt/prepcom09/ngostatements/GoodFaith.pdf.

^{295.} Vienna Convention, *supra* note 290, art. 26 (emphasis added).

^{296.} Case Concerning the Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 7, ¶ 142 (Sept. 25).

^{297.} Id.

by implementing agreed actions. In the case of the 2010 NPT IHL commitment, good faith mandates that states make sincere efforts to bring their policies into line with the IHL, as discussed below.

B. Policy Implications of the NPT IHL Commitment

1. Analysis of the IHL Commitment

The IHL commitment was negotiated during the May 2010 meeting of the Review Conference. The original version of the provision read: "The Conference expresses its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons, and reaffirms the need for all States to comply with international humanitarian law at all times." In closed negotiations over the provision as first proposed, France reportedly called for its deletion, and the United Kingdom at least expressed doubts about it. In its idiosyncratic argument before the ICJ in 1995, France remained silent on the application of IHL to the use of nuclear weapons, arguing instead that absent an express prohibition, their use is "authorized in the event of the exercise of the inherent right of individual or collective self-defence." ²⁹⁹

As revised and approved by the Conference, the second part of the provision was changed to call for compliance with "applicable international law, including international humanitarian law." Why the reference to "applicable" law? First, because IHL governs methods and means of warfare, the extent of its application in time of peace is controversial. It is also sometimes a matter of dispute as to whether an armed conflict has commenced or ended. Second, the use of the phrase "at all times" could raise the question of whether that phrase should be added elsewhere in the Final Document when it calls for compliance with an NPT obligation. Modification of "at all times" by "applicable law" assuaged these concerns.

^{298. 2010} Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, May 3–28, 2010, Subsidiary Body I: Revised Chairman's Draft Action Plan, 1, U.N. Doc. NPT/CONF.2010/MC.1/SB.1/CRP.1/Rev.1 (2010).

^{299.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, Public Sitting 66 (Nov. 1, 1995, 10 a.m.), *available at* http://www.icj-cij.org/docket/files/95/5927.pdf?PHPSESSID=824406939531fa21a815a5c0a3365dfe.

The reference to "applicable international law" is regrettable because it provides a textual basis for invoking self-defense and reprisal, though this could have been done in any case. And because it provides a textual basis for arguing that IHL is not applicable in time of peace, it cuts against the argument that doctrines generally contemplating use of nuclear weapons—as opposed to signals in specific circumstances of armed conflict—are "threats" contrary to IHL. IHL, however, is not the only basis for challenging the lawfulness of general doctrines of "deterrence"; there is no question that the UN Charter's prohibition of threat or use of force, which the ICJ found potentially applicable to doctrines of "deterrence," is in effect whether or not an armed conflict is underway.

Nonetheless, the provision remains powerful. The reference to the catastrophic humanitarian consequences of "any" use of nuclear weapons directly joined with the call for compliance with law "at all times" supports the position that use of nuclear weapons is unlawful in all circumstances. Importantly, the insistence on compliance with applicable international law "at all times" weighs against any suggestion that IHL bends or wavers depending upon the circumstances of armed conflict. That includes the "extreme circumstance of self-defence in which the very survival of a State is at stake" about which the ICJ could not reach a conclusion; self-defense as invoked by the French; or second use in "reprisal" purportedly aimed at deterring further attacks.

In light of the foregoing, the IHL provision adopted by the Review Conference develops the norm of non-use of nuclear weapons. Indeed, when combined with the *practice* of no-nuse since the US atomic bombings of Japanese cities, the provision strengthens the case for a customary legal obligation categorically prescribing non-use. The welcome US statement in its Nuclear Posture Review is also relevant here: "It is in the U.S. interest and that of all other nations that the nearly 65-year record of nuclear non-use be extended forever." That statement was reinforced later in 2010 when President Obama and Prime Minister Singh

jointly stated their support for "strengthening the six decade-old international norm of non-use of nuclear weapons." 301

The ICJ had rejected the argument that the record demonstrates a customary obligation of nonuse on the ground that doctrines of deterrence show that there is no shared legal opinion that use is illegal.³⁰² However, the ICJ also observed that the

adoption each year by the General Assembly, by a large majority, of resolutions recalling the content of resolution 1653 (XVI), and requesting the member States to conclude a convention prohibiting the use of nuclear weapons in any circumstance, reveals the desire of a very large section of the international community to take, by a specific and express prohibition of the use of nuclear weapons, a significant step forward along the road to complete nuclear disarmament.³⁰³

The court continued: "The emergence, as *lex lata*, of a customary rule specifically prohibiting the use of nuclear weapons as such is hampered by the continuing tensions between the nascent *opinio juris* on the one hand, and the still strong adherence to the practice of deterrence on the other." With the Review Conference statement, the world is moving closer to the day when it can be said that the practice of non-use has become a custom of non-use recognized by law. A declaration signed in 2011 by former ICJ judges and other eminent experts in international law and diplomacy indicates that a prohibition on the use or threatened use of nuclear weapons in all circumstances indeed is crystallizing as a matter of customary law. 305

^{301.} Joint Statement by President Obama and Indian Prime Minister Singh, November 19, 2010, *available at* http://www.whitehouse.gov/the-press-office/2010/11/08/joint-statement-president-obama-and-prime-minister-singh-india.

^{302.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, ¶¶ 66–67 (July 8).

^{303.} Id. ¶ 73.

^{304.} Id.

^{305.} SIMMONS FOUND. & INT'L ASSOC. OF LAWYERS AGAINST NUCLEAR ARMS [IALANA], VANCOUVER DECLARATION: LAW'S IMPERATIVE FOR THE URGENT ACHIEVEMENT OF A NUCLEAR-WEAPON-FREE WORLD (2011), available at http://www.lcnp.org/wcourt/Feb2011VancouverConference/vancouverdeclaration.pdf. Developed by The Simons Foundation and IALANA, its signatories include Christopher G. Weeramantry, former Vice President of the ICJ and current President of IALANA; Mohammed Bedjaoui, who was ICJ President when it handed down its advisory opinion on nuclear weapons; Louise Doswald-Beck, Professor of International Law, Graduate

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2. Implementation of the IHL Commitment

For NPT nuclear weapon states, good faith fulfillment of the commitment to comply with international law, including IHL with respect to nuclear weapons, would be demonstrated in part by visible and conscientious efforts to address the incompatibility of existing doctrines and deployments with the requirements of IHL and to change their policies accordingly.

Implementation of the IHL commitment also demands more expeditious and energetic implementation of the obligation to achieve the global elimination of nuclear weapons through good-faith negotiations. This is the dynamic of what has been called "humanitarian disarmament" as applied to cluster munitions and anti-personnel mines—elimination of inhumane weapons incapable of compliance with IHL³⁰⁶—and was also the logic of the global treaty bans on possession and use of chemical and biological weapons.

The International Committee of the Red Cross has squarely recognized that disarmament is implied by nuclear weapons' incompatibility with IHL and humanitarian values. In an April 2010 statement, ICRC President Jakob Kellenberger said that "the ICRC finds it difficult to envisage how any use of nuclear weapons could be compatible with the rules of international humanitarian law." ³⁰⁷ He added:

The position of the ICRC, as a humanitarian organization, goes — and must go — beyond a purely legal analysis. Nuclear weapons are unique in their destructive

Institute of International and Development Studies, Geneva, and co-author of a major International Committee of the Red Cross study of international humanitarian law (HENCKAERTS & DOSWALD-BECK, *supra* note 225); Ved Nanda, Evans University Professor, Nanda Center for International and Comparative Law, University of Denver Sturm College of Law; Jayantha Dhanapala, former UN Under-Secretary-General for Disarmament Affairs; and Gareth Evans, QC, former Foreign Minister of Australia who served from 2008-2010 as Co-Chair of the International Commission on Nuclear Non-proliferation and Disarmament. A list of signatories is available at http://www.lcnp.org/wcourt/Feb2011VancouverConference/signatories32211.pdf.

306. See KEN BERRY ET AL., MONTEREY INST. OF INT'L STUD., DELEGITIMIZING NUCLEAR WEAPONS: EXAMINING THE VALIDITY OF NUCLEAR DETERRENCE 37–39 (2010), available at http://cns.miis.edu/opapers/pdfs/delegitimizing_nuclear_weapons_may_2010.pdf.

307. Jacob Kellenberger, President of the Int'l Comm. of the Red Cross, Statement: Bringing the Era of Nuclear Weapons to an End (Apr. 20, 2010), available at http://www.icrc.org/eng/resources/documents/statement/nuclear-weapons-statement-200410 (emphasis added).

power, in the unspeakable human suffering they cause, in the impossibility of controlling their effects in pace and time, in the risks of escalation they create, and in the threat they pose to the environment, to future generations, and indeed to the survival of humanity. The ICRC therefore appeals today to all States to ensure that such weapons are never used again, regardless of their views on the legality of such use.

. . .

In the view of the ICRC, preventing the use of nuclear weapons requires fulfilment of existing obligations to pursue negotiations aimed at prohibiting and completely eliminating such weapons through a legally binding international treaty. It also means preventing their proliferation and controlling access to materials and technology that can be used to produce them.³⁰⁸

The ICJ also effectively recognized the implication. The UN General Assembly asked the court about the legality of the threat or use of nuclear weapons. The court, however, determined that an adequate response to the question required interpretation of the NPT Article VI disarmament obligation. The court declared, with all judges concurring, that there is an "obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."³⁰⁹ The court also noted that the "pattern until now has been for weapons of mass destruction to be declared illegal by specific instruments," citing the Biological Weapons Convention and the Chemical Weapons Convention. ³¹⁰

While an in-depth analysis of everything that good faith compliance with the disarmament obligation requires is beyond the scope of this work,³¹¹ it is sufficient to note that good faith would be demonstrated by implementing NPT commitments agreed at the 2000 and 2010 Review Conferences—among them

^{308.} Id. (emphasis added).

^{309.} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, ¶ 105(2)F.

^{310.} *Id.* ¶ 57.

^{311.} For more detail, see, e.g., John Burroughs, *The U.S. Nuclear Posture Review and International Law*, MICH. INT'L LAW., Summer 2010, at 1, 3–6; John Burroughs, *A Global Undertaking: Realizing the Disarmament Promise of the NPT*, MIDDLE POWERS INITIATIVE BRIEFING PAPER, Jan. 21–22, 2010, *available at* http://www.gsinstitute.org/mpi/pubs/Atlanta_Briefing_Paper_2010.pdf.

bringing the test-ban treaty into force, negotiating a treaty banning production of fissile materials for nuclear weapons, and accomplishing verified, irreversible reductions leading to elimination of all nuclear weapons. Good faith also requires refraining from actions undermining the achievement of the disarmament objective.³¹²

Beyond those steps, good faith would be demonstrated by *commencing* negotiations directly aimed at achieving the global elimination of nuclear weapons through a multilateral agreement.³¹³ That is a process called for by a large majority of the world's states in the UN General Assembly³¹⁴ and in NPT review proceedings, but so far refused by the NPT nuclear weapon states except China. Encouragingly, though, in the 2010 NPT action plan on nuclear disarmament, the nuclear weapon states agreed to the following provision which at least recognizes the need for a comprehensive approach:

The Conference calls on all nuclear-weapon states to undertake concrete disarmament efforts and affirms that all States need to make special efforts to establish the necessary framework to achieve and maintain a world without nuclear weapons. The Conference notes the five-point proposal for nuclear disarmament of the Secretary-General of the United Nations, which proposes, inter alia, consideration of negotiations on a nuclear weapons convention or agreement on a framework of separate mutually reinforcing instruments, backed by a strong system of verification.³¹⁵

^{312.} In the NPT context, Judge Bedjaoui explained, good faith proscribes "every initiative the effect of which would be to render impossible the conclusion of the contemplated disarmament treaty" eliminating nuclear weapons globally pursuant to Article VI. Keynote Address, *supra* note 291, at 22. Modernization of nuclear forces and infrastructure by the United States and other states with nuclear arsenals, especially absent serious multilateral efforts at negotiating nuclear disarmament, would seem to fall under this proscription.

^{313.} See IALANA & INT'L HUMAN RIGHTS CLINIC AT HARVARD LAW SCH., GOOD FAITH NEGOTIATIONS LEADING TO THE TOTAL ELIMINATION OF NUCLEAR WEAPONS: REQUEST FOR AN ADVISORY OPINION FROM THE INTERNATIONAL COURT OF JUSTICE 25 (2009), available at http://lcnp.org/disarmament/2009.07.ICJbooklet.pdf [hereinafter GOOD FAITH NEGOTIATIONS].

^{314.} See, e.g., G.A. Res. 64/55, U.N. Doc. A/RES/64/55 (Dec. 2, 2009).

^{315.} Final Document, supra note 15, at 20, I(B)(iii). For Ban Ki-moon's remarks first setting out his proposal for nuclear disarmament, see Ban Ki-Moon, Secretary-General, United Nations, Address to the East-West Institute: The United Nations and Security in a Nuclear-Weapon-Free World (Oct. 24, 2008), available at http://www.un.org/News/Press/docs/2008/sgsm11881.doc.htm.

Once negotiations, of whatever kind, are commenced, they must be *conducted* in good faith. That requires making the negotiations meaningful, showing willingness to compromise, avoiding delay, and generally negotiating with a genuine intent to achieve a positive result.³¹⁶ Indeed, the ICJ held that the disarmament obligation encompasses both conduct and result.³¹⁷ States must not only negotiate with serious efforts to achieve the elimination of nuclear weapons but must actually achieve that result.

It is high time that debate focuses on the best way to achieve the global elimination of nuclear weapons in the most expeditious, thorough, and practical manner. The question now is not whether, but how. The Secretary-General's proposal brings a new clarity to the debate.

CONCLUSION

Weapons are intended to protect that which society values, including morality and law. Because of their indiscriminate effect and overwhelming destructive capacity, nuclear weapons can hardly be reconciled with the most basic values of civilization. It is incoherent to plan for the use of nuclear weapons and even threaten to use them even if the only purpose is allegedly to prevent their use. Such a practice is not only unstable but intrinsically violates the highest values society seeks to protect.

It is not hyperbole to say that the challenge to human civilization presented by nuclear weapons may be the consummate test of the human race's ability to survive. The very existence of nuclear weapons requires that human societies—both the most technologically efficient and affluent of societies and societies still struggling to establish their place in the world—overcome the historical and contemporary human burden of aggression and tribalism. Containing the dangers of such human dynamics is one of the purposes of law.

Pursuing peace and security based on the rule of law is necessary for any just society. International humanitarian law is an existing body of law universally recognized as necessary to

^{316.} See GOOD FAITH NEGOTIATIONS, supra note 313, at 30–31.

^{317.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, \P 99 (July 8).

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limit war and preserve the possibility of a just peace. That law must now be rigorously applied to nuclear weapons. Some are satisfied that, because they imagine there are uses of nuclear weapons that do not violate IHL, the law need not be applied to the main contemplated uses of nuclear weapons. This is akin to making the exception the basis for establishing a norm.

As this Article systematically demonstrates, it is only a cognitively creative exception to real-world practice that can even describe an instance in which the use of a nuclear weapon would not violate IHL. Is it not time that the nations and people of the world demanded that states with nuclear weapons bring their practices into strict compliance with the law? A first step would be a public disclosure of the actual targeting of the weapons and the impacts that uses would have, followed by a rigorous adjustment to eliminate all uses that violate the standards of IHL. Such steps would surely invigorate the security enhancing process of moving rapidly to a nuclear-weapons-free world.

As long as powerful states pursue international peace and security as well as their own national interests through threatening the use of nuclear weapons, and as other less economically and politically developed states seek nuclear weapons as an "equalizer" to hold more powerful states at bay, the specter of the use of these weapons, with potentially apocalyptic results, will remain, threatening the survival of human civilization. Not only is this unacceptably risky, but it is also being done in contravention of that which society is allegedly protecting: civilized values and institutions.

World leaders are increasingly articulating aspirations to obtain the peace and security of a nuclear-weapons-free world. The legal basis of this pursuit is compelling, and there are increasing dangers of proliferation with the spread of nuclear technology. These dynamics make this an opportune moment. The required tools to effectively reign in the hazard—IHL and the verification techniques, law, and institutions used for nuclear arms control and for elimination of other weapons—exist. It is time these tools are used. Lawyers and citizens, states and statesmen, peoples and leaders from countries big and small, must find the wisdom to see that the use and threat of use of nuclear weapons is unlawful under long-established principles of international law and is morally and humanly unacceptable. They

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must act accordingly, renounce policies of possible use of the weapons, and move forward decisively on a program of action to eliminate them.