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The Law of Neutrality and the Threat or Use of Nuclear Weapons:

Application of a Traditional Law to a Non-Traditional Weapon

The Court finds that as in the case of the principles of humanitarian law applicable in armed conflict, international law leaves no doubt that the principle of neutrality, whatever its content, which is of a fundamental character similar to that of the humanitarian principles and rules, is applicable (subject to the relevant provisions of the United Nations Charter), to all international armed conflict, whatever type of weapons might be used.¹

As is clear from the International Court of Justice's Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons ("ICJ Opinion"), it is accepted that the international humanitarian law of armed conflict, in particular the law of neutrality, applies to the threat or use of nuclear weapons. However, as is illustrated in the above quote, the ICJ Opinion went no further than to acknowledge the law of neutrality's relevance to the use or threat of nuclear weapons and left the

¹ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8, 1996), ¶89, at 261 [hereinafter ICJ Opinion].

scope and extent of its application unanswered.² Nuclear weapons present a unique and modern problem for the law of neutrality, which is a long-standing concept meant to protect neutral States' territory, citizens, waters, and airspace from invasion or harm by belligerent parties. Whereas past applications have involved direct bombings or invasions of neutral territory, the main threat posed by nuclear weapons stems from radioactive fallout.

The key questions that this paper will seek to answer are whether radioactive fallout can be considered an instrumentality of war, and, if so, does the threat or use of nuclear weapons necessarily violate the law of neutrality? I propose that due to the unavoidable, deadly, and enduring effects of radioactive fallout, it is an instrumentality of war and that nuclear weapons *per se* violate the law of neutrality because of their uncontrollability.

This paper will begin with the historical development and sources of the law of neutrality and then outline the current statements of the law, including the United States position as stated in various military manuals. It then will move on to past applications of the law of neutrality. It will then argue that

² ICJ Opinion, *supra* note 1, ¶90 at 261 ("Although the applicability of the principles and rules of humanitarian law and of the principle of neutrality to nuclear weapons is hardly disputed, the conclusions to be drawn from this applicability are, on the other hand, controversial").

radioactive fallout from nuclear weapons is an instrumentality of war. Next, this paper will analyze the ICJ Opinion, including individual opinions, written submissions, and oral arguments. The following section will provide a brief review of the United States' Nuclear Posture Review Report and analysis of the current composition of world nuclear arsenals.

I. INTRODUCTION TO THE LAW OF NEUTRALITY

Neutrality is a status under international law for States not party to an armed conflict,³ which confers rights and duties on both the neutral and belligerent States.⁴ In particular, the neutral State has the right to remain separate from the conflict and not to be harmed, but also the duty to remain impartial and refrain from participating.⁵ This paper will focus on the rights of neutral States in terms of protection against the effects of nuclear weapons instead of the obligations imposed on neutral States to maintain their neutral status. These latter duties are crucial in deciding whether a State is to be afforded the protections of a neutral, but this paper's analysis paper will assume that the neutral State has complied with its duties of non-participation and impartiality.

³ Michael Bothe, *The Law of Neutrality*, in THE HANDBOOK OF HUMANITARIAN LAW IN ARMED CONFLICTS 485, 485 (Dieter Fleck ed., 1995).

⁴ *Id.* at 485.

⁵ *Id.* at 485.

II. HISTORICAL DEVELOPMENT AND SOURCES OF THE LAW OF NEUTRALITY

The law of neutrality has developed as part of the customary law of war, whose foundations can be traced to the Bible.⁶ During the Middle Ages, humane customs of war evolved from the law of chivalry.⁷ However, it was not until the middle of the nineteenth century that these customary laws of war were stated explicitly and codified.⁸ The first instance regarding neutrals was in 1854, when Russia and the United States signed an agreement on the rights of neutrals at sea.⁹ One year later, the United States and the Kingdom of the Two Sicilies entered into an identical agreement.¹⁰ In 1856, several European nations signed the Declaration of Paris, which banned privateering, exempted specific goods from capture at sea, and laid out rules

⁶ NATIONAL SECURITY Law 321 (John Norton Moore & Robert F. Turner eds., 2d ed. 1995) (noting that the Old Testament contains instances where victors would kill all foes, regardless of age or sex. However, they state that centuries of continuous warfare inevitably led to the development of mutually beneficial norms in how war was conducted, including enslaving captured soldiers, sparing children to be raised as warriors for the victors, and keeping women alive to breed more slaves and warriors).

⁷ *Id.* at 321.

⁸ *Id.* at 323 (one major exception was Article XXIV of the 1785 Treaty of Amity and Commerce between the King of Prussia and the United States of America, which created rules on the treatment of prisoners of war between the two nations. This treaty was subsequently renewed twice and continued in effect between Prussia's successor (Germany) and the United States during World War I).

⁹ *Id.* at 323.

¹⁰ *Id.* at 323.

for naval blockades.¹¹ The 1856 Declaration of Paris expressly refers to the “neutral flag” and “neutral goods,” but only in the context of protection from seizure at sea.

Over the next half-century, numerous treaties and conventions dealing with the humanitarian aspect of the law of war were signed.¹² The purpose of these agreements was to provide for increased protection for victims of war and prohibit the use of certain weapons, such as exploding bullets.¹³ Significantly for this discussion, the preamble to the 1899 Hague II Convention, known as the “Martens” Clause, was adopted.¹⁴ It states that:

Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations

¹¹ *Id.* at 323. The text of the Declaration of Paris, Apr. 16, 1856 is as follows:

1. Privateering is, and remains, abolished;
2. The neutral flag covers enemy's goods, with the exception of contraband of war;
3. Neutral goods, with the exception of contraband of war, are not liable to capture under enemy's flag;
4. Blockades, in order to be binding, must be effective, that is to say, maintained by a force sufficient really to prevent access to the coast of the enemy. *Id.* at 323.

¹² *Id.* at 325 (e.g., Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field (1864), 1874 Declaration of Brussels, 1868 Declaration of St. Petersburg Renouncing the Use, in Time of War, of Certain Explosive Projectiles, 1899 Hague II Convention).

¹³ *Id.* at 325.

¹⁴ *Id.* at 325.

adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity, and the requirements of the public conscience.¹⁵

The objective of the Martens Clause is to subject any use of a weapon not covered by a convention or treaty to the principles of international law.¹⁶ This is an important provision for the analysis of the legality of the threat or use of nuclear weapons because of the scarcity of law specifically geared to nuclear weapons. Thus, even without specific laws or conventions directly applicable to nuclear weapons, the threat or use of such weapons is subject to the principles of international law, including the law of neutrality.

In 1907, the Hague Peace Conference took place, at which ten conventions on the law of war were signed.¹⁷ The two relevant conventions are Convention No. V Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land and Convention No. XIII Concerning the Rights and Duties of Neutral

¹⁵ *Id.* at 325 (quoting Hague Convention (II) with Respect to the Laws and Customs of War on Land, Preamble (1899) available at <http://www.icrc.org/ihl.nsf/FULL/150?OpenDocument>).

¹⁶ CHARLES J. MOXLEY, JR., NUCLEAR WEAPONS AND INTERNATIONAL LAW IN THE POST COLD WAR WORLD 86 (2000).

¹⁷ NATIONAL SECURITY LAW, *supra* note 6, at 326.

Powers in Naval War.¹⁸ Article 1 of Convention V states that "the territory of neutral Powers is *inviolable*" (emphasis added).¹⁹ Furthermore, Article 16 extends the protection granted to neutral States to nationals of that State.²⁰ Thus, the 1907 Hague Convention V creates, by its plain language, an absolute protection for the territory and citizens of a neutral State. Some sources believe that this language creates an implicit ban on collateral damage reaching a neutral State's territory.²¹ However, as this paper subsequently will discuss, this plain meaning has been interpreted by some States not to be an absolute ban on harmful effects extending to neutral territory or neutral nationals.²²

Article 1 of Convention XIII Concerning the Rights and Duties of Neutral Powers in Naval War states that "Belligerents are bound to respect the sovereign rights of neutral Powers and

¹⁸ *Id.* at 326.

¹⁹ Hague Convention (V) respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land, Art. 1 (1907) (available at <http://www.icrc.org/ihl.nsf/FULL/200?OpenDocument>).

²⁰ *Id.* at art. 16 ("[t]he nationals of a State which is not taking part in the war are considered as neutrals").

²¹ Bothe, *supra* note 3, at 495 ("The inviolability of neutral territory also means that the neutral States must not be affected by collateral effects of hostilities. The parties to the conflict have no right to cause damage to neutral territory through hostilities themselves. Therefore, there is no rule of admissible collateral damage to the detriment of the neutral State").

²² Public Sitting, ICJ Opinion, at 76 (Nov. 15, 1995) (available at <http://www.icj-cij.org/docket/files/95/5947.pdf>).

to abstain, in neutral territory or neutral waters, from any act which would, if knowingly permitted by any Power, constitute a violation of neutrality.”²³ Article 2 declares that: “any act of hostility...committed by belligerent war-ships in the territorial waters of a neutral Power, constitutes a violation of neutrality and is strictly forbidden.”²⁴ Although the scope and purpose of Convention XIII are not as directly relevant as Convention V to the threat or use of nuclear weapons, it supports the overall theme of the 1907 Hague Conventions for strong protection of neutral States.

After the 1907 Hague Conventions, the next step in outlining the duties and rights of neutral States was the 1949 Geneva Conventions.²⁵ Convention I for the Amelioration for the Condition of the Wounded and Sick in Armed Forces in the Field focused on duties imposed on neutral States relating to injured personnel of belligerent States, who are received or interned on the neutral State territory.²⁶ Convention II for the Amelioration

²³ Hague Convention (XIII) Concerning the Rights and Duties of Neutral Powers in Naval War, Art. 1 (1907) (available at <http://www.icrc.org/ihl.nsf/FULL/240?OpenDocument>) .

²⁴ *Id.* at art. 2.

²⁵ Bothe, *supra* note 3, at 487.

²⁶ Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, Art. 4 (1949) (available at <http://www.icrc.org/ihl.nsf/FULL/365?OpenDocument>) (“Neutral Powers shall apply by analogy the provisions of the present Convention to the wounded and sick, and to members of the medical personnel and to chaplains of the armed forces of

for the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea placed identical duties on neutral States as Convention I, but for sea warfare.²⁷

Convention III Relative to the Treatment of Prisoners of War provided a framework to be followed by neutral and belligerent States for the treatment of prisoners of war.²⁸ Convention IV Relative to the Protection of Civilian Persons in Time of War provided that the provisions of the convention cover nationals of a neutral State in the territory of a belligerent State, with which the neutral State does not have diplomatic representation.²⁹

the Parties to the conflict, received or interned in their territory, as well as to dead persons found".

²⁷ Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, Art. 5 (1949) (available at <http://www.icrc.org/ihl.nsf/FULL/370?OpenDocument>).

²⁸ Geneva Convention (III) Relative to the Treatment of Prisoners of War (1949) (available at <http://www.icrc.org/ihl.nsf/FULL/375?OpenDocument>).

²⁹ Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War, Art. 4, Art. 11 (1949) (available at <http://www.icrc.org/ihl.nsf/FULL/380?OpenDocument>) ("Nationals of a neutral State who find themselves in the territory of a belligerent State, and nationals of a co-belligerent State, shall not be regarded as protected persons while the State of which they are nationals has normal diplomatic representation in the State in whose hands they are." and "The provisions of this Article shall extend and be adapted to cases of nationals of a neutral State who are in occupied territory or who find themselves in the territory of a belligerent State in which the State of which they are nationals has not normal diplomatic representation").

Following the 1949 Geneva Conventions I-IV, in 1977 Additional Protocol I to the 1949 Geneva Conventions Relating to the Protection of Victims of International Armed Conflicts was adopted.³⁰ Additional Protocol I further codified the duties of a neutral State during Armed Conflict, but added new language that expands the reach of the imposed duties.³¹ Instead of referring only to neutral States, as did the 1907 Hague Conventions and the 1949 Geneva Conventions, Additional Protocol I included "other States not Parties to the Conflict."³² Article 19's title is "Neutral and other States not Parties to the Conflict" and its text stated that Neutral and other States not Parties to the conflict shall apply the relevant provisions of this Protocol to persons protected by this Part who may be received or interned within their territory, and to any dead of the Parties to that conflict whom they may find."³³

This new language is significant because there has been no further codification of the law of neutrality since the 1907 Hague Conventions, in particular on the rights of a neutral State against effects of armed conflict on their territory and

³⁰ Additional Protocol (I) Relating to the Protection of Victims of International Armed Conflicts (1977) (available at <http://www.icrc.org/ihl.nsf/FULL/470?OpenDocument>).

³¹ *Id.*

³² *Id.* at art. 19.

³³ *Id.* at art. 19.

nationals.³⁴ The question thus arises whether the inclusion in Additional Protocol I of “other States not Parties to the Conflict” extends not only to the imposition of specific duties, but also to the protection afforded to neutral States (i.e., whether the territory of States not party to the conflict is inviolable under the 1907 Hague Convention V). The distinction made in Additional Protocol I between neutral States and States not parties to the conflict, combined with the fact that both are considered under a single law of neutrality, has been the source of much confusion.³⁵ Such ambiguities have led to calls for an updated codification of the law of neutrality.³⁶

A. Traditional Neutrality v. “Non-Belligerent” Neutrality

Absent additional codification, the interpretation of the applicability of the law of neutrality to traditional neutral States and those States not party to the conflict has differed. Schindler argued that the inviolability of a neutral State’s territory guaranteed by Article 1 of the 1907 Hague Convention V extended to States not party to an armed conflict through

³⁴ Bothe, *supra* note 3, at 487 (“There has, however, been no comprehensive codification of the law of neutrality since the Hague Conventions of 1907”).

³⁵ Dietrich Schindler, *Transformations in the Law of Neutrality Since 1945*, in HUMANITARIAN LAW OF ARMED CONFLICT CHALLENGES AHEAD 367, 385 (Astrid J.M. Delissen & Gerard J. Tanja eds., 1991).

³⁶ See, Bothe, *supra* note 3, at 487 (“The need for a new codification is urgent”). See, also, Schindler, *supra* note 35, at 385 (“A new codification of the law of neutrality will have to take into account the distinction between the two sets of norms”).

Article 2(4) of the U.N. Charter.³⁷ Article 2(4) states that:

"[a]ll Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations."³⁸ Schindler claimed that Article 2(4) "has transformed the right of neutrals to inviolability of their territory into a right of all States."³⁹

However, Bothe noted the misguided use of 'non-belligerent' status as an attempt to avoid the duties of non-participation and impartiality imposed on a neutral State.⁴⁰ For example, before the United States entered World War II, it declared itself a 'non-belligerent,' knowing that its support of Great Britain was inconsistent with the duties imposed by being a neutral State.⁴¹ However, as the author made clear, the status of 'non-belligerent' has not been recognized by international law to provide any special rights similar to those of a neutral State.⁴² Nonetheless, Bothe recognized that the U.N. Charter has

³⁷ Schindler, *supra* note 35, at 378.

³⁸ U.N. Charter art. 2, para. 4.

³⁹ Schindler, *supra* note 35, at 378.

⁴⁰ Bothe, *supra* note 3, at 486.

⁴¹ *Id.* at 486.

⁴² *Id.* at 486 ("Although there are a number of cases of declared or undeclared non-belligerency, there is no sufficiently uniform general practice which would justify the conclusion that non-belligerency has become a notion recognized by customary international law").

modified the law of neutrality and that use of the term "other States not party to the conflict" can trigger application of certain provisions to non-participating States.⁴³

The analysis of which rights and duties apply only to neutral States in the traditional sense and those which cover States not party to a conflict can only be solved by new codifications of the law of neutrality. However, it is possible to conclude that the combined effect of Article 1 of the 1907 Hague Convention V and Article 2(4) of the U.N. Charter is that neutral States and States not party to an armed conflict enjoy the right of inviolability of their territory and of protection of their nationals.

III. BEGINNING OF NEUTRAL STATUS: DEFINITION OF AN "ARMED CONFLICT"

The initiation of an armed conflict between two other States activates the status of neutrality for a neutral or State not party to the armed conflict.⁴⁴ Inevitably, this leads to the question of what constitutes an armed conflict. The International Committee of the Red Cross issued an Opinion Paper in March 2008, which sought to define an armed conflict.⁴⁵ In its

⁴³ *Id.* at 486-87.

⁴⁴ Bothe, *supra* note 3, at 490.

⁴⁵ Int'l Comm. of the Red Cross, *How is the Term "Armed Conflict" Defined in International Humanitarian Law?*, Opinion Paper (Mar. 2008) ([available at](#)

opinion, the ICRC cited to the International Criminal Tribunal for the former Yugoslavia (ICTY), which stated, "an armed conflict exists whenever there is a resort to armed forces between States."⁴⁶ The ICRC noted that other international bodies have accepted this definition.⁴⁷ Although there have been many attempts to define armed conflict and what level of activity constitutes one, for the purposes of this paper, it is unquestionable that the use of a nuclear weapon would be considered an armed conflict. Thus, the use of a nuclear weapon creates an armed conflict, which in turn triggers the status of neutrality and implicates the rights and duties associated with it.

IV: HISTORICAL APPLICATIONS OF THE LAW OF NEUTRALITY

A. Nuremberg Military Tribunal

The Nuremberg Tribunal punished Nazi leaders for war crimes committed during World War II.⁴⁸ In the indictment for charges of crimes against peace, the Tribunal relied on numerous statements by the Nazi leaders exhibiting a disregard for the neutrality of

<http://www.icrc.org/eng/assets/files/other/opinion-paper-armed-conflict.pdf>).

⁴⁶ *Id.* at 2 (quoting the ICTY in *Prosecutor v. Tadic*, Case No. IT-94-1-A, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, ¶70 (Int'l Crim. Trib. for the Former Yugoslavia Oct. 2, 1995)).

⁴⁷ *Id.* at 2.

⁴⁸ NATIONAL SECURITY LAW, *supra* note 6, at 406.

several nations.⁴⁹ For example, when discussing the crimes against Belgium, the Netherlands, and Luxembourg, the Tribunal recited Hitler's statement that "[d]eclarations of neutrality must be ignored."⁵⁰ Hitler also is quoted as saying, "[b]reach of the neutrality of Belgium and Holland is meaningless."⁵¹ This blatant disregard for the rights conferred on neutral States formed part of the Tribunal's basis for finding the defendants guilty.

B. United States Bombings of Switzerland in World War II

During World War II the United States inadvertently bombed the neutral State of Switzerland on multiple occasions, which resulted in the United States paying Switzerland about \$20 million in reparations after World War II.⁵² The bombings were not found to be purposeful, rather they were the result of bad weather, equipment failures, incompetence, or excess zeal.⁵³ Despite the lack of malice intent, strict application of the law of neutrality necessitated that the U.S. pay reparations for the mistaken attacks on Switzerland's territory and nationals. This

⁴⁹ Nuremberg Military Tribunal, *Indictment* (available at http://www.loc.gov/rr/frd/Military_Law/pdf/NT_Indictments.pdf).

⁵⁰ *Id.* at 11-12.

⁵¹ *Id.* at 13.

⁵² Jonathan E. Helmreich, *The Diplomacy of Apology: U.S. Bombings of Switzerland During World War II*, AIR UNIVERSITY REVIEW (May-June 1977) (available at <http://www.airpower.au.af.mil/airchronicles/aureview/1977/may-jun/helmreich.html>).

⁵³ *Id.*

strict application is consistent with the plain language of Article 1 of the 1907 Hague Convention V, which states that neutral territory is inviolable. By logical extension the radioactive fallout or blast effects of a nuclear weapon, which carry over into the territory of a neutral State or adversely affect its nationals, violate the law of neutrality, even if these deleterious effects were caused by bad weather, incompetence, or equipment malfunctions.

Opponents of the application of the law of neutrality to radioactive fallout from nuclear weapons argue that it is collateral damage and that no cases have held a State liable for collateral damage to a neutral State from legal military action taken within the territory of a belligerent State.⁵⁴ It is true that, to the best of the author's knowledge, there has not been a case holding a belligerent State liable for collateral damage to a neutral,⁵⁵ but many sources have argued that the plain wording of Article I of the 1907 Hague Convention V implicitly protects a neutral State from any adverse effects.⁵⁶ Furthermore, the lack of cases holding belligerent States liable for

⁵⁴ See, Written Statement of the Government of the United States of America, ICJ Opinion, at 31-32 (June 20, 1995) (available at <http://www.icj-cij.org/docket/files/95/8700.pdf>).

⁵⁵ But See, Bothe, *supra* note 3, at 406 n. 54 (The author stated that reparations were paid to Switzerland for collateral damage caused by an attack on a German town during WWII. However, the author cites the source as an unpublished report).

⁵⁶ See, e.g., *infra* note 21 and accompanying text.

collateral damage to a neutral State can be attributed to the unique characteristics of nuclear weapons, including radiation, the spread of which is unpredictable and potentially lethal.⁵⁷

V. UNITED STATES VIEWS ON THE LAW OF NEUTRALITY

The United States Commanders Handbook on Naval Operations states:

As a general rule of international law, all acts of hostility in neutral territory, including neutral lands, neutral waters, and neutral airspace, are prohibited.⁵⁸

Furthermore, the Army Land Warfare Manual states that the law of neutrality "prohibits any unauthorized entry into the territory of a neutral State, its territorial waters, or the airspace over such areas by troops or *instrumentalities of war*"⁵⁹ (emphasis added). According to the U.S. view, the threshold question of whether a situation is governed by the law of neutrality is whether the unauthorized entry is by an instrumentality of war. More specifically, the relevant question for nuclear weapons is whether the resulting radioactive fallout is an instrumentality of war.

⁵⁷ ICJ Opinion, *supra* note 1, 375, at 387-89 (Shahabuddeen, J., dissenting).

⁵⁸ THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS, at 7-2 (July 2007).

⁵⁹ ARMY LAND WARFARE MANUAL, at sec. 513(b) (July 18, 1956).

A. Radioactive Fallout of a Nuclear Weapon is an Instrumentality of War

Although not determinative, it is informative to look to the Army's Combat-Related Special Compensation program, which awards additional compensation to wounded soldiers.⁶⁰ A veteran is entitled to receive benefits under this program for injuries acquired "through an instrumentality of war."⁶¹ An instrumentality of war is defined as a "vehicle, vessel, or device designated primarily for Military Service" and may include "such instrumentalities not designated primarily for Military Service if use of, or occurrence involving, such instrumentality subjects the individual to a hazard peculiar to Military Service."⁶² Furthermore, the disability can result from "injury or sickness caused by fumes, gases, or explosion or military ordinance, vehicles, or material."⁶³ Significantly, radiation exposure is expressly mentioned as the basis for a possible claim of disability.⁶⁴ According to the plain language

⁶⁰ 10 U.S.C. §1413a.

⁶¹ *Combat-Related Special Compensation Program Guidance*, at 6 (Jan. 2004) (available at http://militarypay.defense.gov/benefits/docs/CRSC_Guidance_104.pdf).

⁶² *Id.* at Attachment 1-1.

⁶³ *Id.* at Attachment 1-1.

⁶⁴ *Id.* at 6 ("Thus, disabilities rated by the VA on the basis of POW status, exposure to radiation, mustard gas or lewisite, Agent Orange, and those disabilities associated with Persian Gulf service that are presumed by the VA to be service-connected shall be presumed by the Military Department to be combat-

of the guidelines for determining eligibility for enrollment in the Army's Combat-Related Special Compensation program, radiation is an instrumentality of war.

Opponents of labeling radioactive fallout from a nuclear weapon an instrumentality of war argue that it is a collateral effect of the use of such a weapon.⁶⁵ However, to accept this line of reasoning would be to accept a legal fiction. Use of nuclear weapon by definition will result in radiation. Radiation is an inevitable and unique characteristic of nuclear weapons and cannot be disregarded as a "byproduct" or "incidental effect." The devastating and inevitable effects of radiation exposure are evidenced by the testimony of Mr. Takashi Hiraoka,

related absent documentary information that the disability was incurred under circumstances that were not combat-related").

⁶⁵ See, Written Statement of the Government of the United States of America, *supra* note 54, at 24 ("...even though nuclear explosions may also create radioactive byproducts." (U.S. arguing against the application of the prohibition of poison weapons to nuclear weapons)). See, also, *id.* at 31 ("We are aware of no case in which a belligerent has been held responsible for collateral damage to neutral territory for lawful acts of war committed outside that territory"). See, also, Statement of the Government of the United Kingdom, ICJ Opinion, at 58 (June 16, 1995) (" Whether the use of nuclear weapons would deposit radioactive fall-out on the territory of neutral States would, however, depend upon the type of weapon used and the location at which it was used"). See, also, *id.* at 58 ("...Hague Convention No V was designed to protect the territory of neutral States against incursions by belligerent forces or the deliberate bombardment of targets located in that territory, not to guarantee neutral States against the incidental effects of hostilities").

Mayor of Hiroshima City at the time of the ICJ's Advisory Opinion, and Mr. Iccho Itoh, Mayor of Nagasaki City.⁶⁶

Mr. Hiraoka testified that within one kilometer of the hypocenter almost everyone died, and that soon thereafter all survivors within that area had died.⁶⁷ Within six months after the blast approximately 140,000 of Hiroshima's pre-blast population of 350,000 were dead.⁶⁸ Mr. Hiraoka emphasized the unique character of nuclear weapons in describing what became known as "A-bomb disease," stating that "[a]bove all, we must focus on the fact that the human misery caused by the atomic bomb is different from that caused by conventional weapons."⁶⁹ He describes the "acute effects" on survivors who worked to help others as "fever, diarrhea, hemorrhaging, and extreme fatigue" leading to many abrupt deaths.⁷⁰ Acute effects were characterized as those manifesting within four months of the bombing, but Mr. Hiraoka also discussed the later effects appearing five to six years after the bombing:

Characteristic late effects were keloids (excessive growth of scar tissue over healed burns), cataracts, leukemia, thyroid cancer, breast cancer, lung cancer

⁶⁶ Public Sitting, ICJ Opinion (Nov. 7, 1995) (available at <http://www.icj-cij.org/docket/files/95/5935.pdf>).

⁶⁷ *Id.* at 24.

⁶⁸ *Id.* at 25.

⁶⁹ *Id.* at 25.

⁷⁰ *Id.* at 25-26.

and other cancers. Those exposed in their mothers' womb were often born with microcephalia, a syndrome involving mental retardation and incomplete growth⁷¹

His testimony also stated that approximately 330,000 people were still suffering some 50 years after the bombings and that research has shown that survivors are more susceptible to cancers than the general population.⁷²

Mr. Itoh testified that all people exposed to large doses of radiation within one minute of the explosion died within two weeks.⁷³ In addition, the radioactive fallout scattered by the wind caused long-term and widespread radioactive contamination, which led to increased rates of cancer.⁷⁴ Mr. Itoh also referred to the long-term effects on Bikini Island, which was the site of nuclear tests.⁷⁵ The Bikini Atoll was host to 16 nuclear tests with the most recent one in 1958 and all of which took place over the lagoon.⁷⁶ In 1997 the International Atomic Energy Agency was asked to produce a report on the conditions of the islands, in which it ultimately concluded that 40 years after the last test the islands were still not suitable for permanent

⁷¹ *Id.* at 26.

⁷² *Id.* at 27.

⁷³ *Id.* at 36.

⁷⁴ *Id.* at 36.

⁷⁵ *Id.* at 37.

⁷⁶ Int'l Atomic Energy Agency [IAEA], *Conditions at Bikini Atoll and the Prospects of Resettlement* (last visited Nov. 28, 2011) (available at <http://www-ns.iaea.org/appraisals/bikini-atoll.asp>).

resettlement because of remaining levels of radiation affecting the locally grown food.⁷⁷

B. Effects of Radiation

The effects on humans from various doses of radiation further support the conclusion that radioactive fallout is an instrumentality of war. For low doses (100-400 rads), humans typically will experience nausea, vomiting, and diarrhea symptoms, but death is a possibility.⁷⁸ For moderate doses (400-1000 rads), nausea, vomiting, and diarrhea symptoms will occur and death is a probability within four to five weeks.⁷⁹ This level of exposure can destroy bone marrow and disrupt blood cell production, which results in higher likelihoods of infection.⁸⁰ At high doses (1000-4000 rads), humans experience severe bone marrow and vascular damage, terminal infection, and death within ten days.⁸¹ Exposure over 4000 rads will lead to death within 48 hours.⁸²

The U.S. Army's own recognition of radiation as an instrumentality of war that can provide the basis for a claim of special compensation by veterans combined with its well

⁷⁷ *Id.*

⁷⁸ Project of the Nuclear Age Peace Foundation, *Weapons Basics* (last visited Oct. 30, 2011) (available at <http://www.nuclearfiles.org/menu/key-issues/nuclear-weapons/basics/weapons-basics.htm>).

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

documented inevitable, lethal and long term effects makes it clear that radiation is an instrumentality of war. Thus, under the U.S. view on the law of neutrality, radioactive fallout is prohibited from entering neutral territory.

VI. ICJ Advisory Opinion

In 1996 the International Court of Justice issued an advisory opinion on the legality of the threat or use of nuclear weapons at the request of the United Nations.⁸³ The ICJ accepted written submissions from many nations and conducted numerous hearings on the matter, but ultimately found that it had insufficient evidence to make a definitive statement of illegality.

A. Nauru's Written Statement

One country that submitted a statement to the ICJ was Nauru, which is a small island country in the South Pacific. Nauru's written submission contended that the threat or use of nuclear weapons was *per se* illegal under international law.⁸⁴ Nauru's statement of the law of neutrality is that it protects

⁸³ ICJ Opinion, *supra* note 1.

⁸⁴ Memorial of the Government of the Republic of Nauru I, ICJ Opinion, at 35 (Sep. 1944) (available at <http://www.icj-cij.org/docket/files/93/8792.pdf>) ("It will argue that, because of the uniquely deadly nature of nuclear weapons, their use would violate fundamental principles of *jus in bello*, as embodied in both widely ratified treaties and customary international law, including the principles of discrimination, proportionality, necessity, humanity, neutrality, environmental security, and non-use of poison or analogous materials").

not only against trans-border incursions, but also trans-border damage to a neutral State caused by a belligerent State's use of a nuclear weapon.⁸⁵ Having concluded that the law of neutrality protects against trans-border effects of nuclear weapons, Nauru relied on their uncontrollable effects to find that their use would be *per se* unlawful.⁸⁶

In support of its position that the effects of nuclear weapons are inherently uncontrollable, Nauru cited a study by Lindop and Rotblat.⁸⁷ In their study, Lindop and Rotblat cited several types of harmful radiation, which result from the use of a nuclear bomb, including external radiation (radioactive cloud passing overhead), internal radiation (inhalation of radioactive particles in the air), external irradiation (gamma-rays from radioactive substances on the ground), and internal irradiation (eating or drinking milk from animals, which had ingested radioactive material, or drinking contaminated water).⁸⁸ As is evident from the nature of these various sources of radioactive contamination following the use of a nuclear weapon, the blast's effects are inherently uncontrollable as they depend on unpredictable atmospheric conditions.

⁸⁵ *Id.* at 35.

⁸⁶ *Id.* at 35 ("In this sense, nuclear weapons, given their uncontrollable effects, are neutrality-violating weapons *par excellence*").

⁸⁷ *Id.* at 35.

⁸⁸ *Id.* at 35.

In further support of its position, Nauru detailed the potential radiation spread from different sized weapons, as estimated by Lindop and Rotblat. For a 1-megaton explosion, the authors estimated that at a distance of 100 kilometers, 3.3 hours after the explosion there would be an accumulated dose of 850 rads, and at a distance of 300 kilometers, 11.7 hours after the explosion the accumulated dose would be 54 rads.⁸⁹ For a 10-megaton explosion, the accumulated dose at 100 kilometers after 2.8 hours would be 4570 rads, and 100 rads at 800 kilometers after 31.9 hours.⁹⁰ For a 1-megaton bomb, the study estimated that there would be a 1,000 square kilometers area affected by an accumulated dose of 1000 rads and, for a 10-megaton bomb, there would be a 12,000 square kilometers area covered by an accumulated dose of 1000 rads.⁹¹

Nauru concluded; "[t]hus, as nuclear weapons are unable to discriminate between combatants and non-combatants, so also are they unable to discriminate between belligerent states and neutrals."⁹²

B. United States Position

The United States, in its written statement to the ICJ, contended that the law of neutrality did not apply to or

⁸⁹ *Id.* at 35.

⁹⁰ *Id.* at 35.

⁹¹ *Id.* at 35-36.

⁹² *Id.* at 35.

prohibit the use of nuclear weapons.⁹³ In so doing, the United States claimed that: "the principle of neutrality is not a broad guarantee to neutral States of immunity from the effects of war, whether economic or environmental."⁹⁴ It argued further that the purpose of the law of neutrality was to protect only against "military invasion or bombardment," stating that it was "aware of no case in which a belligerent has been held responsible for collateral damage to neutral territory for lawful acts of war committed outside that territory."⁹⁵

The second aspect of the United States' argument cautioned against labeling the effects of nuclear weapons uncontrollable. It stated that: "...the assertion that the use of such weapons would inevitably cause severe damage in the territory of neutral States...is incorrect and in any event highly speculative."⁹⁶ Nonetheless, the United States acknowledged that the use of a nuclear weapon could violate the law of neutrality, but concluded that a case-by-case analysis was the proper approach as to their legality.⁹⁷

⁹³ Written Statement of the Government of the United States of America, *supra* note 54, at 31 ("It has been asserted that the rules of neutrality in the law of armed conflict apply to and prohibit the use of nuclear weapons").

⁹⁴ *Id.* at 31.

⁹⁵ *Id.* at 31-32.

⁹⁶ *Id.* at 32.

⁹⁷ *Id.* at 32 ("Like any other weapon, nuclear weapons could be used to violate neutrality, but this in no way means that

The ultimate conclusion of the United States' written statement, as regards the law of neutrality, was that it affords minimal or no protection to a neutral State against collateral damage. Thus, even if radioactive fallout spread to the territory of a neutral State, the use of the nuclear weapon would not violate the law of neutrality. However, in its oral arguments before the ICJ, the United States took a step back from its initial arguments.⁹⁸ The United States, represented by Senior Deputy General Counsel of the Department of Defense, John H. McNeill, stated that: "[T]he principle of neutrality has never been understood to guarantee neutral States absolute immunity from the effects of armed conflict."⁹⁹ As Moxley noted, this shift in argument represented an acknowledgment that "there is protection from the effects of armed conflict, but it is not absolute."¹⁰⁰ However, the reason for the shift is unexplained and the scope of protection afforded by this statement is unclear.

One important missing element to the United States perspective on the law of neutrality and its application to the use of nuclear weapons is that it did not provide any sources for its conclusions, such as its claim in its written statement

nuclear weapons are prohibited per se by neutrality principles").

⁹⁸ Public Sitting, *supra* note 22, at 76.

⁹⁹ *Id.* at 76.

¹⁰⁰ Moxley, *supra* note 16, at 147.

that the law of neutrality did not protect neutral States from collateral damage. However, the language of Hague Convention V, Article I, indicates that a neutral State's territory is *inviolable* and is without qualification. Thus, the United States' legal analysis assumed an implicit restriction on this absolute protection, similar to the rule of proportionality,¹⁰¹ which permits collateral damage to a neutral territory to a certain extent. By analogy to the law of neutrality, the rule of proportionality would permit damage to neutral territory, so long as it was not disproportionate to the value of the military objective. However, no statements of the law of neutrality include such a limiting provision and it should not be read into the customary views on the law.

C. ICJ Opinion

It follows from the above-mentioned requirements 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

¹⁰¹ See, Moxley, *supra* note 16, at 39-40 ("The rule of proportionality...prohibits the use of a weapon if its probable effects upon combatant or non-combatant persons or objects would likely be disproportionate to the value of the anticipated military objective").

*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.*¹⁰²

This was the ICJ's ultimate conclusion as to the legality of the threat or use of nuclear weapons. Its final analysis left much to be desired in the way of definitive statements, which reached also into its review of the law of neutrality.

The ICJ's discussion of the law of neutrality began with Nauru's statement of the law, the country which argued for a *per se* illegality rule because of nuclear weapons' uncontrollable effects.¹⁰³ Nauru's statement read: "It is clear, however, that the principle of neutrality applies with equal force to trans-border incursions of armed forces and to the *trans-border damage* caused to a neutral State by the use of a weapon in a belligerent State" (emphasis added).¹⁰⁴ The ICJ cited this approvingly: "The principle so circumscribed is presented as an established part of customary international law."¹⁰⁵ Thus, the ICJ seemed to have implicitly found that collateral damage from the use of a nuclear weapon would violate the law of neutrality.

¹⁰² ICJ Opinion, *supra* note 1, at 266.

¹⁰³ *Id.* ¶88, at 261.

¹⁰⁴ *Id.* ¶88, at 261 (quoting Memorial of the Government of the Republic of Nauru I, *supra* note 84, at 35).

¹⁰⁵ *Id.* ¶88, at 261.

The ICJ continued its analysis with a definitive statement that the law of neutrality applied to all international armed conflict, regardless of the weapon used.¹⁰⁶ However, the ICJ's conclusion as to the ultimate effect of the law of neutrality's applicability to the use of nuclear weapons was unsatisfying. Its final holding on the subject was that: "the conclusions to be drawn from this applicability are, on the other hand, controversial."¹⁰⁷

D. Weeramantry Dissent

Judge Weeramantry dissented from the ICJ's opinion because he felt that the threat or use of nuclear weapons should be *per se* illegal. His conclusion was based primarily on the uncontrollability of the effects of a nuclear weapon, including the "natural, foreseeable and, indeed, inevitable consequence" of damage to a neutral State.¹⁰⁸ In support of his arguments, Judge Weeramantry inserted a figure illustrating the widespread effects of a nuclear weapon compared to other bombs:¹⁰⁹

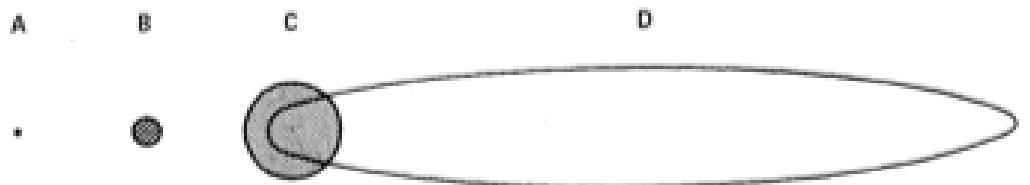
¹⁰⁶ *Id.* ¶88, at 261 ("The Court finds that as in the case of the principles of humanitarian law applicable in armed conflict, international law leaves no doubt that the principle of neutrality, whatever its content, which is of a fundamental character similar to that of the humanitarian principles and rules, is applicable...to all international armed conflict, whatever type of weapons might be used").

¹⁰⁷ *Id.* ¶90, at 261.

¹⁰⁸ ICJ Opinion, *supra* note 1, 429, at 501 (Weeramantry, J., dissenting).

¹⁰⁹ *Id.* at 555.

COMPARISON OF THE EFFECTS OF BOMBS



- A — Lethal area from the blast wave of the blockbusters used in the Second World War.
- B — Lethal area from the blast wave of the Hiroshima bomb.
- C — Lethal area from the blast wave of a 1-Mt bomb.
- D — Lethal area for fallout radiation from a 1-Mt bomb.

As shown by this figure fallout radiation poses the most significant threat to a neutral State because of its uncontrollable and widespread effects. As an example of the uncontrollable and long-lasting effects of radiation, Judge Weeramantry cited the Chernobyl disaster.¹¹⁰ The 1986 accident resulted in an explosion of about a half-kiloton bomb, which is about one twenty-fifth of the relatively small Hiroshima bomb, and only about one seventieth the size of a one-megaton bomb.¹¹¹ In response to the explosion, a 2,826 square kilometers exclusion zone was created, which still exists today, over 25 years later.¹¹² Within the exclusion zone scientists actually have found that the levels of radioactivity have not dropped as

¹¹⁰ *Id.* at 459.

¹¹¹ *Id.* at 459.

¹¹² Charles Hawley, *A Visit to the Exclusion Zone*, DER SPIEGEL (Apr. 18, 2006) (available at www.spiegel.de/international/0,1518,411285,00.html) .

quickly as anticipated, which "emphasizes the uncertainties associated with radioactive contamination."¹¹³

E. Shahabuddeen Dissent

Judge Shahabuddeen's Dissenting Opinion argued against the United States position that the collateral damage to a neutral State resulting from an otherwise lawful act by a belligerent State would not violate the law of neutrality.¹¹⁴ He conceded that the language of Hague Convention V, Article I, may have been intended originally to protect only against military invasion or bombardment of neutral territory, but only because the development of nuclear weapons had not yet occurred.¹¹⁵ Furthermore, he responded to the argument that there had not been a case where a belligerent State had been liable for collateral damage to a neutral State for lawful acts of war committed outside of that territory by noting that the possibility of nuclear fallout had not long existed and presented unique circumstances.¹¹⁶ For this argument to hold weight, Judge Shahabuddeen stated that: "...[the argument] is decisive of the present case only if it can be shown that there is no responsibility even where substantial effects of acts of

¹¹³ Alexis Madrigal, *Chernobyl Exclusion Zone Radioactive Longer Than Expected*, WIRED Science (Dec. 15, 2009) (available at www.wired.com/wiredscience/2009/12/chernobyl-soil/).

¹¹⁴ Shahabuddeen Dissent, *supra* note 57, at 387-89.

¹¹⁵ *Id.* at 387-89.

¹¹⁶ *Id.* at 388-89.

war carried out elsewhere demonstrably extend to neutral territory.¹¹⁷ Thus, absent cases where neutral States' territory has been damaged by outside acts of war with no responsibility for the belligerent State, the United States' argument has no value. Furthermore, he concluded that it would strip the Hague Convention V of much of its meaning if the effects of radioactive fallout on a neutral States' territory was not a violation of the law of neutrality.¹¹⁸

VII. COMPOSITION OF WORLD NUCLEAR ARSENALS

To provide a frame of reference, the bombs dropped on Hiroshima and Nagasaki were approximately 15 and 12 kilotons, respectively.¹¹⁹ Today, of the approximately 5,030 operational nuclear weapons, almost all of them far exceed the size of the Hiroshima and Nagasaki bombs.¹²⁰ In fact, 4,830 of those operation bombs are strategic weapons, which have a yield of 100 kilotons or greater.¹²¹ That means that approximately 4% of the world's operational nuclear forces are non-strategic, tactical weapons with yields less than 100 kilotons. Naturally, the

¹¹⁷ *Id.* at 388.

¹¹⁸ *Id.* at 389.

¹¹⁹ Moxley, *supra* note 16, at 163.

¹²⁰ Federation of American Scientists, *Status of World Nuclear Forces* (last visited Dec. 19, 2011) (available at <http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html>).

¹²¹ *Id.*

effects of strategic weapons will be more devastating, less predictable, and less controllable.

A. United States Nuclear Posture Review Report

The United States' Nuclear Posture Review Report ("NPR") outlined the country's objectives in the area of nuclear weapons.¹²² Principal among those objectives were maintaining strategic deterrence¹²³ and reducing the role of nuclear weapons in the United States' national security strategy.¹²⁴ Maintenance of its policy of deterrence necessitates that the United States keep strategic weapons operable, i.e., threaten to use the most destructive and uncontrollable weapons in its arsenal.

Furthermore, its goal of reducing the role played by nuclear weapons means that the "United States will continue to strengthen conventional capabilities."¹²⁵ Importantly, increased development of conventional weapons will reduce the role played by the smaller, tactical nuclear weapons. The combined result of maintaining deterrence and increasing conventional capabilities will lead to nuclear arsenals tilted even more in favor of the larger, uncontrollable, and more devastating strategic weapons.

¹²² U.S. Dep't of Defense, *Nuclear Posture Review Report*, at iii (2010).

¹²³ *Id.* at vii ("The fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners").

¹²⁴ *Id.* at iii.

¹²⁵ *Id.* at ix.

Ultimately, the threat or use of these types of nuclear weapons poses a greater likelihood of violation of the law of neutrality, meaning arguments based on the premise that the effects of nuclear weapons are controllable will hold less merit in the years to come.

VIII. CONCLUSION

The definitive statements to be made about the law of neutrality and the threat or use of nuclear weapons, based on the ICJ Opinion, are that it is applicable and it protects against collateral damage. However, the extent and scope of this protection was left unclear. Nonetheless, when considering the strong language of Geneva Convention V, art. 1, without any limiting qualifications, the law of neutrality prohibits any damage to a neutral State's territory. In the view of the United States, the law of neutrality safeguards only against damage caused by instrumentalities of war. Given the country's own recognition that radiation exposure can be considered an instrumentality of war for special compensation programs and the deleterious, wide-ranging, unpredictable, and deadly effects of radioactive fallout, finding that radiation is not an instrumentality of war would be to follow a legal fiction.

The problem presented in the law of neutrality is that the traditional statements arose from the pre-nuclear period, meaning there must be updated statements of the law to clarify

ambiguities, which have arisen with modern technology and warfare. One such important ambiguity is the distinction between a "neutral" State in the traditional sense (inclusive of the heavy burdens conferred by that status) and the more modern concept of "non-belligerent" status. The full extent of the rights and duties of each of these statuses requires codification, but the combined effects of Hague Convention V and U.N. Charter 2(4) grant the right to a "non-belligerent" of inviolability of their territory.

Ultimately, with the composition of nuclear arsenals weighing heavily in favor of larger, strategic weapons, whose effects are far more devastating and uncontrollable than the bombs dropped on Hiroshima and Nagasaki, and the improvement of conventional weapons, any situation envisioned in the ICJ Opinion, where the use of a nuclear weapon would not violate the law of neutrality, is disappearing. Thus, the threat or use of nuclear weapons should be declared *per se* illegal under the law of neutrality.