THE INTERNATIONAL LEGAL RIGHT TO USE ARMED FORCE IN ANTICIPATORY DEFENSE: THE IRANIAN NUCLEAR THREAT TO ISRAEL AS A CASE STUDY

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ABSTRACT

This dissertation will examine the international legal right of a state to use force in anticipatory defense against a threatened attack before the attack occurs, and will do so using as a case study the contemporary security issue of the existential threat posed to Israel by the Islamic Republic of Iran's pursuit of a nuclear weapons capability. Part 1 of the dissertation will discuss the origins of the right of anticipatory defense against a threat of imminent attack and will show how the classical writers on international law incorporated the right of anticipatory defense into the emerging law of nations. Part 1 will then demonstrate that the formulation of the international legal right of anticipatory defense by U.S. Secretary of State Daniel Webster during the 1837 *Caroline* incident became a permissive rule of customary international law, and that Article 51 of the United Nations (UN) Charter was not intended to and did not eliminate this pre-UN Charter customary international law right of states to use force in anticipatory defense to repel a threat of imminent armed attack.

Parts 2 and 3 of the dissertation will then examine whether the customary international law requirement that a threat of attack must involve a high degree of temporal imminence in order to justify anticipatory defensive action by a state is adequate to address contemporary security threats. To examine this question, Part 2 of the dissertation will discuss as a case study the facts regarding the existential threat posed to Israel by a nuclear-armed Iran. Part 3 of the dissertation will then argue that the customary international law requirement of a high degree of temporal imminence to justify anticipatory defensive action by states is not adequate to address the Iranian

nuclear threat to Israel. Finally, after examining alternate approaches offered by states and legal scholars regarding the strict temporal imminence requirement for anticipatory defense, I will propose in Part 3 of the dissertation a new multi-part test to guide states in determining whether a threat of armed attack is imminent.

DEDICATION

I dedicate this dissertation to my wife, Janet Russell Donovan, whose love and support were absolutely essential to my ability to complete this work. She is the wind beneath my wings;

to my three daughters, Katharine, Jacqueline, and Bridget, whose hard work, integrity, and compassion for others make the world a better place. They are my hope for the future;

and to the people of the State of Israel and the Jewish people throughout the world:

Oseh shalom bim'romav. Hu ya'aseh shalom aleinu. V'al kol Yisrael. V'imru, imru amein.

He who makes peace in His high places, may He bring peace upon us. And upon all Israel. And let us all say Amen.

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CHAPTER I. INTRODUCTION

Visitors to the Israeli Air Force (IAF) Headquarters in Tel Aviv, Israel report seeing a poster entitled, "IAF Eagles Over Auschwitz" which depicts three Israeli F-15 aircraft flying above the gate of Birkenau, the former Nazi death camp adjacent to Auschwitz. The poster celebrates the impromptu flyover in 2003 of a Polish-Israeli commemoration of Holocaust victims, by three Israeli F-15s that were in Poland for an unrelated air show. The decision to conduct an unscheduled flyover of the concentration camp ceremony was made by then-Brigadier General and future Israeli Air Force Chief of Staff Amir Eshel, who piloted one of the F-15s, and during the flyover he and his two wingmen each carried with them in their cockpits the names of all the Jews known to have perished at the Auschwitz-Birkenau complex on that day 60 years earlier. As they flew low over the commemoration ceremony, Brigadier General Eshel recited a solemn pledge: "We the pilots of the Israeli Air Force flying in the skies above the camp of horrors, arose from the ashes of the millions of victims and shoulder their silent cries, salute their courage, and promise to be the shield of the Jewish people and the nation of Israel "3

More than fifteen years later, General Eshel's oath, on behalf of the Israeli Air Force, to be the shield of the Jewish people and the nation of Israel against another genocidal assault should be taken very seriously, as senior Israeli political and military leaders consider the possibility of attacking Iran's nuclear facilities in order to prevent

¹ DANA H. ALLIN & STEVEN SIMON, THE SIXTH CRISIS: IRAN, ISRAEL, AMERICA AND THE RUMORS OF WAR 45 (2010) [hereinafter ALLIN].

² *Id*. at 45-46.

³ *Id*. at 46.

Iran from obtaining a nuclear weapons capability. Iran's past record of failure to suspend its uranium enrichment activities and heavy water-related projects as directed by the United Nations Security Council⁵, as well as its past failure to provide the International Atomic Energy Agency (IAEA) with sufficient access and information to enable the IAEA to provide credible assurance about the absence of undeclared nuclear material and activities in Iran and/or to exclude the existence of possible military dimensions to Iran's nuclear program⁶, have led to significant concerns that, "... in the coming years ... a fearful Israel will conclude that it is cornered, with no choice but to launch a preventive war aimed at crippling Tehran's nuclear infrastructure and thereby removing- or at least forestalling- what most Israelis consider a threat to the Jewish state's very existence."⁷ Israel's fear of a nuclear weapons-capable Iran is not unreasonable given that the Islamic Republic of Iran is a theocracy that often puffs itself up as the "avatar of Islamic radicalism"; that funnels money and weapons to terrorist organizations like Hezbollah and Hamas for the purpose of attacking Israel; and whose most senior leaders regularly call for the destruction of Israel, describing Israel as a "cancerous tumor" that must be "removed from the region". 8 Israel thus believes that if Iran acquires nuclear weapons, such weapons could be used to serve an "annihilationist agenda" against the Jewish state⁹, and because even a single Iranian nuclear strike on Tel Aviv and/or Haifa "would raise major questions about Israel's future existence", Israel views Iranian acquisition of

⁴ ALLIN, supra note 1, at 46.

⁵ Int'l Atomic Energy Agency [IAEA], *Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran*, IAEA Doc. GOV/2013/6 (February 21, 2013) [hereinafter GOV/2013/6]; S.C. Res. 1737, U.N. Doc. S/RES/1737 (December 27, 2006).

⁶ GOV/2013/6, *supra* note 5, at paras. 62, 65-66.

⁷ ALLIN, *supra* note 1, at 4.

⁸ *Id*.

⁹ *Id*.

nuclear weapons as an existential threat.¹⁰ As Israeli Prime Minister Benjamin Netanyahu advised the United Nations General Assembly on September 27, 2012, "[n]othing could imperil our common future more than the arming of Iran with nuclear weapons."¹¹

Since Israel clearly considers the acquisition of nuclear weapons by Iran as an intolerable threat to Israel's survival as a Jewish state and society, "... the Israeli government could decide, much as it did in 1981 with respect to Iraq and [in] 2007 against Syria, to attack Iran's nuclear installations." In 1981, the Israeli Air Force destroyed the Osirak nuclear reactor in Iraq, to "loud condemnation and quiet international relief", and in 2007, the Israeli Air Force destroyed a nascent nuclear facility in Syria, after which "even the Syrians kept quiet." However, the prospect of an Israeli military strike on Iran's known nuclear facilities, which are generally large, carefully concealed, dispersed around the country (see Appendix A), and most likely include redundant sites and underground facilities. And are profound issues regarding the international law governing the use of force in international relations, also known as the *jus ad bellum*. In particular, it raises the issue of whether it is lawful under the *jus ad bellum* for a state to use force unilaterally in self-defense *before* it has been subjected to an armed attack.

¹⁰ ANTHONY H. CORDESMAN & ADAM C. SEITZ, IRANIAN WEAPONS OF MASS DESTRUCTION: THE BIRTH OF A REGIONAL NUCLEAR ARMS RACE? 289 (2009) [hereinafter CORDESMAN & SEITZ].

¹¹ Benjamin Netanyahu, Prime Minister of Israel, Remarks at the United Nations General Assembly (September 27, 2012) [hereinafter Netanyahu 2012 Speech], http://www.nationaljournal.com/nationalsecurity/full-text-benjamin-netanyahu-speech-at-the-united-nations-general-assembly-20120927.

¹² ALLIN, *supra* note 1, at 46.

¹³ *Id*. at 4.

¹⁴ CORDESMAN & SEITZ, *supra* note 10, at 289-291; Whitney Raas & Austin Long, *Osirak Redux? Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities*, 31 International Security 7, 11 (Spring 2007) [hereinafter Raas].

The issue of whether and when it is lawful for a state to use force unilaterally in self-defense before it suffers an armed attack is one of the most intensely debated issues in the jus ad bellum. 15 Although some states and legal scholars assert that customary international law has long recognized the right of states to use force unilaterally in selfdefense when such action is necessary to avert a threat of attack that is "instant, overwhelming, leaving no choice of means and no moment for deliberation", a formulation that U.S. Secretary of State Daniel Webster articulated in 19th century diplomatic correspondence with Great Britain to resolve a dispute over a British attack on the U.S. steamboat Caroline¹⁶, others assert that the Caroline incident did not establish such a right in customary international law. 17 States and legal scholars are also divided over how to interpret the authentic English language text of Article 51 of the United Nations (UN) Charter, which states that nothing in the Charter shall impair the "inherent right" of self-defense "if an armed attack occurs" against a UN member state 18, with some asserting that the words "inherent right" of self-defense in Article 51 preserved the pre-UN Charter customary international law right of states to use force unilaterally in self-defense against an imminent threat of armed attack, and others asserting that the words "if an armed attack occurs" in Article 51 were intended to limit the right of states

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¹⁵ Ashley S. Deeks, *Taming the Doctrine of Preemption*, *in* THE OXFORD HANDBOOK ON THE USE OF FORCE IN INTERNATIONAL LAW 661, 678 (Marc Weller ed., 2015).

¹⁶ Terry D. Gill, *The Temporal Dimension of Self-Defense: Anticipation, Pre-Emption, Prevention, and Immediacy, in* INTERNATIONAL LAW AND ARMED CONFLICT: EXPLORING THE FAULTLINES 114 (Michael N. Schmitt & Jelena Pejic eds. 2007) ("[S]elf-defense is a right, grounded in . . . customary law, which allows some degree of anticipatory action to counter a clear and manifest threat of attack . . . within the confines of the well-known and widely accepted 1837 *Caroline* incident criteria . . . ".).

¹⁷ YORAM DINSTEIN, WAR, AGGRESSION AND SELF-DEFENCE 225 (6th ed. 2017) ("It is frequently asserted that the concept of anticipatory self-defence goes back to the 1837 *Caroline* incident. But reliance on that incident . . . is misplaced. There was nothing anticipatory about the British action against the *Caroline* . . . "

^{.&}quot;.). ¹⁸ U.N. Charter, art. 51.

to use force in self-defense to situations in which an armed attack was ongoing or had already occurred. Additionally, some states and legal scholars that support the continued existence of an international legal right for states to use force to avert a threatened imminent attack before it occurs contend that the strict standard of temporal imminence articulated during the 19th century *Caroline* incident is unrealistic legal guidance for states that are facing contemporary threats such as weapons of mass destruction, terrorism, and cyber armed attacks. On

This dissertation will examine the international legal right of a state to use force in anticipatory defense against a threatened attack before the attack occurs, and will do so using as a case study the contemporary security issue of the existential threat posed to Israel by the Islamic Republic of Iran's pursuit of a nuclear weapons capability. Part 1 of the dissertation will discuss the origins of the right of anticipatory defense against a threat of imminent attack in medieval canon law, natural law, and municipal law and will show how the classical writers on international law incorporated the right of anticipatory defense into the emerging law of nations. Part 1 will then discuss the right of anticipatory defense during the late 18th to mid-20th centuries, including the formulation by U.S. Secretary of State Daniel Webster during the *Caroline* incident which asserted that to be lawful, anticipatory action by a state in self-defense must meet the elements of necessity, strict temporal imminence, and proportionality. Part 1 will conclude by demonstrating that Webster's formulation of the international legal right of anticipatory defense during the *Caroline* incident became a permissive rule of customary international law through

¹⁹ Deeks, *supra* note 15, at 663-666; CHRISTIAN HENDERSON, THE USE OF FORCE AND INTERNATIONAL LAW 274, 277-279 (2018).

²⁰ Deeks, *supra* note 15, at 666-669; HENDERSON, *supra* note 19, at 297.

state practice and through its adoption in the Nuremberg Tribunal's judgment and the UN General Assembly's unanimous affirmation of the legal principles set forth in the Nuremberg judgment, and that Article 51 of the UN Charter was not intended to and did not eliminate this pre-UN Charter customary international law right of states to use force in anticipatory defense to repel a threat of imminent armed attack.

Having demonstrated in Part 1 of the dissertation the continued existence in customary international law of the right of individual states to use force in anticipatory defense against threats of imminent attack in accordance with the Caroline criteria, Parts 2 and 3 of the dissertation will examine whether the customary international law requirement that a threat of attack must involve a high degree of temporal imminence in order to justify anticipatory defensive action by a state is adequate to address contemporary security threats such as weapons of mass destruction, terrorism, and cyber armed attacks. To examine this question, Part 2 of the dissertation will discuss as a case study the facts regarding the existential threat posed to Israel by the Islamic Republic of Iran, a state that sponsors international terrorist organizations dedicated to Israel's destruction and that has actively sought to develop a nuclear weapons capability. Part 3 of the dissertation will then argue that the customary international law requirement of a high degree of temporal imminence to justify anticipatory defensive action by states is not adequate to address the Iranian nuclear threat to Israel, because Israel cannot afford to allow the threat of Iranian use of nuclear weapons against it to become temporally imminent, and Israel certainly cannot afford to wait for an actual Iranian armed attack with nuclear weapons to occur. After examining alternate approaches offered by states

and legal scholars regarding the temporal imminence requirement for anticipatory defense, I will propose in Part 3 a new multi-part test to guide state decision-making in determining whether a threat of attack is imminent. I will conclude the dissertation with some brief recommendations on how to obviate the need for Israel to conduct military strikes in anticipatory defense against Iran's nuclear facilities, since any such strikes would have potentially devastating consequences for the region and perhaps the world.

Before proceeding with Part 1 of the dissertation, I acknowledge the need to clarify the terminology that I will use regarding the international legal right of a state to use force unilaterally to avert a threatened armed attack before it occurs, because as Professor Ashley Deeks, Professor Tom Ruys, and other legal scholars have rightly noted, states and scholars "use a variety of poorly defined terms to discuss acts of self-defense in advance of an attack." For example, some states and scholars use the term "anticipatory self-defense" as a catch-all description for any use of force in self-defense that precedes an actual armed attack, while others use "anticipatory self-defense" to refer to the use of force by a state to avert a temporally imminent armed attack. In contrast, some states and scholars use the term "preventive self-defense" as the catch-all description for any use of force in self-defense that precedes an armed attack, while others use "preventive self-defense" to describe the use of force by a state to prevent a potential but non-imminent or non-proximate threat from materializing. Accordingly, as

²¹ Deeks, *supra* note 15, at 661; TOM RUYS, ARMED ATTACK AND ARTICLE 51 OF THE UN CHARTER: EVOLUTIONS IN CUSTOMARY INTERNATIONAL LAW AND PRACTICE 251-254. See also Christopher Greenwood, *International Law and the Pre-Emptive Use of Force: Afghanistan, Al-Qaida, and Iraq*, 4 SAN DIEGO J. INT'L L. 7, 9 (2003) (describing terminological confusion).

²² Deeks, supra note 15, at 662; RUYS, supra note 21, at 252.

²³ HENDERSON, *supra* note 19, at 275; RUYS, *supra* note 21, at 252.

used in this dissertation the terms "anticipatory defense" and/or "anticipatory self-defense" mean the use of force by a state in self-defense against a specific, imminent armed attack by a state or a non-state actor. Under the self-defense criteria articulated by U.S. Secretary of State Webster to resolve the *Caroline* incident, a high degree of temporal imminence of a threatened attack is required to justify the use of force by a state in anticipatory defense, although the issue of the precise degree of temporal imminence required will be discussed further in Part 3 of the dissertation. The terms "pre-emptive defense", "preventive defense", "pre-emptive self-defense", and/or "preventive self-defense", when used in this dissertation, mean the use of force by a state against a potential, non-imminent threat which has not yet fully materialized in order to keep that threat from materializing sometime in the future.

PART 1: THE INTERNATIONAL LEGAL RIGHT TO USE ARMED FORCE IN ANTICIPATORY DEFENSE

CHAPTER II. PART 1: HISTORICAL NOTIONS OF
ANTICIPATORY DEFENSE: MEDIEVAL CANON LAW, NATURAL
LAW, AND MUNICIPAL LAW

The concept of self-defense has been described as, "... one of those vague and irreproachable abstractions like Justice, Truth, and Honor, which few attempt to define, let alone challenge." It is also claimed that self-defense constitutes a feature of any legal order one of the self-defense "... is an absolute right, in as much as no law can disregard it." The International Military Tribunal for the Far East at Tokyo similarly stated that "... [a]ny law, international or municipal, which prohibits recourse to force, is necessarily limited by the right of self-defense." Indeed, the right of self-defense that exists today in international law, which includes the right to use anticipatory defensive force to repel a threat of an imminent armed attack, is an ancient right with a "long and interesting history" that traces back at least as far as the Middle Ages. The right to use anticipatory defensive force to repel an imminent attack was specifically discussed by medieval canon law and natural law jurists and scholars,

²⁴ M. A. Weightman, *Self-Defense in International Law*, 37 VA. L. REV. 1095 (1951).

²⁵ JAN ARNO HESSBRUEGGE, HUMAN RIGHTS AND PERSONAL SELF-DEFENSE IN INTERNATIONAL LAW 17 (2017).

²⁶ HESSBRUEGGE, *supra* note 25, at 17 *citing* HERSCH LAUTERPACHT, THE FUNCTION OF LAW IN THE INTERNATIONAL COMMUNITY 188 (2011) [re-issue of the first edition from 1933].

²⁷ HESSBRUEGGE, *supra* note 25, at 17 *citing* In re Hirota and Others [International Military Tribunal for the Far East], Judgment, Nov. 12, 1948, *reprinted in* 22 THE TOKYO WAR CRIMES TRIAL 48, 494 (John Pritchard & Sonia M. Zaide, eds., 1981).

²⁸ Weightman, *supra* note 24, at 1095.

and it was eventually incorporated into the municipal law of individual or personal selfdefense in virtually all the world's major legal systems.

A. Anticipatory Defense in Medieval Canon Law

Medieval canon lawyers, including the eminent 12th century jurist Gratian, discussed self-defense as "a mode of defensive force". ²⁹ Self-defense was considered to be one of the two legitimate aims for which Christians might wage war (the other aim being to punish wrongdoing), and in his canon law work known as the *Decretum*, a portion of which is devoted to war and coercion (part II, *causa* 23), Gratian noted that the point of all soldiering is "either to resist injury or to carry out vengeance". ³⁰ Gratian did not expressly discuss in the *Decretum* whether injury could legitimately be resisted even before it had been inflicted, but this topic was taken up by one of Gratian's commentators in the gloss *Qui repellere possunt*, which broke new ground when it discussed self-defense as a special kind of action that could be undertaken by individuals and polities alike. ³¹

The gloss on Gratian's *Decretum* asserted that force could be employed in self-defense if two key conditions were met: the use of defensive force must occur in the heat of the moment, and the defender must limit himself to using only as much force as is necessary to ward off the attack.³² The condition that defensive force must be used in the heat of the moment is what today's legal scholars refer to as "imminence", and in discussing imminence, the gloss distinguished between defense of persons and defense of

²⁹ Gregory M. Reichberg, *Preventive War in Classical Just War Theory*, 9 J. HIST. INT'L L. 5, 7 (2007).

³⁰ Id

³¹ *Id*.

³² *Id*. at 8.

Approximately 50 years later (circa 1240), the medieval canon lawyer Raymond of Penafort also discussed the requirements for anticipatory defensive action against a threat of imminent attack.³⁷ Adhering closely to the teaching found in the gloss *Qui repellere possunt*, Raymond observed that although some people say restrictively that "no one ought to repel force unless it has [first] been applied", it is justifiable to use force in anticipation of the actual attack, and a defender is even permitted "to kill an ambusher and one who intends to kill . . . if there is no other way to counter the threat of the

³³ Reichberg, *supra* note 29, at 8.

³⁴ Id

³⁵ Id

³⁶ Id. citing Decretum gloss Qui repellere possunt, in DECRETUM DIVI GRATIANI UNA CUM GLOSSIS & THEMATIBUS PRUDENTUM & DOCTORUM SUFFRAGIO COMPROBATIS (Lyon, 1554), English translation in GREGORY M. REICHBERG, ET. AL., THE ETHICS OF WAR: CLASSIC AND CONTEMPORARY READINGS 109-111 (2006).

Reichberg, *supra* note 29, at 9.

ambusher."³⁸ Raymond emphasized that self-defense was to be exercised against threats that were in some measure ongoing:

"[I]f someone after [suffering] an act of violence strikes back, and does it immediately, that is, when he sees the other ready to strike again, he is in no way liable, but if he strikes back while the other does not want to hit him again, this is impermissible, because this is not to fend off an injury but is for revenge, which is prohibited for everyone . . . ".39

Raymond thus explained that the condition of imminence was meant to distinguish between the use of force to counter an attack or threat of imminent attack, i.e. for legitimate defensive purposes, and the use of force that had punishment or revenge as its primary goal, which in his view was prohibited. Additionally, Raymond's requirement that anticipatory defensive action against an ambusher is only justified if there is "no other way to counter the threat of the ambusher" articulates the contemporary legal requirement that self-defense must be necessary, because "no other mode of recourse (e.g., by seeking protection from one's superior- prince or judge- who would ordinarily be entrusted with protecting the innocent from violations of the law) lies open to the defender."

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³⁸ Reichberg, *supra* note 29, at 9 *citing* RAYMUNDUS DE PENAFORT, SUMMA DE POENITENTIA, ET MATRIMONIO, CUM GLOSSIS IOANNIS DE FRIBURGO, Part II, Sec. 18 (Rome 1603), English translation *in* GREGORY M. REICHBERG, ET. AL., THE ETHICS OF WAR: CLASSIC AND CONTEMPORARY READINGS 140 (2006).

³⁹ Reichberg, *supra* note 29, at 9.

⁴⁰ Id.

⁴¹ *Id*.

The *Decretum* gloss *Qui repellere possunt* and the work of Raymond of Penafort demonstrate that the right of self-defense, including the right of anticipatory defensive action against a real threat of armed attack, was recognized in medieval canon law, provided that such actions remained within the bounds of imminence and necessity and were only for defensive purposes. ⁴² As the next section will demonstrate, these legal concepts were also recognized by natural law jurists and scholars during the Middle Ages, and they were ultimately incorporated into the municipal law of individual or personal self-defense in virtually all of the world's major legal systems.

B. Anticipatory Defense in Natural Law and Municipal Law

Thomas Aquinas (1224-1275) established a four-fold classification of law that was "followed without question by medieval publicists". Eternal law was the expression of the reason of God, and Divine law stemmed from Eternal law but could be known only via revelation from God. Natural law was that part of Eternal law that humans inferred through their own rational powers, and Human law was the application by human beings of the principles of Natural law to worldly affairs. Aquinas regarded self-defense as part of Natural law, and he reasoned that any lethal act of self-defense may have two effects: the saving of one's own life and the slaying of the aggressor. Since the defender's intention is not to slay but to save his own life, and since every human being naturally seeks to survive, Aquinas found that self-defense was lawful. However, the defender must "not exceed the limits of blameless violence", but use "only necessary violence"

⁴² Reichberg, *supra* note 29, at 9.

⁴³ Weightman, *supra* note 24, at 1096.

⁴⁴ Id. citing THOMAS AQUINAS, II SUMMA THEOLOGICA c. 1 (Benziger Bros. 1916).

⁴⁵ HESSBRUEGGE, *supra* note 25, at 33 *citing* THOMAS AQUINAS, II SUMMA THEOLOGICA 67 (English Dominican Province trans., Benziger Bros. 1947).

and repel force "with moderation". ⁴⁶ Aquinas also believed that the use of force in self-defense was justified in the case of a risk so immediate that it "does not allow enough time to be able to have recourse to a superior". ⁴⁷

Giovanni da Legnano (1320-1383), a prominent 14th century Italian jurist and legal scholar, also took the view that self-defense "proceeds from natural law". ⁴⁸ He considered the right to self-defense to be an inalienable part of human nature, so much so that "not even a master could forbid his slave from exercising that right". ⁴⁹ However, he insisted that justifiable self-defense had clear limits, both regarding the time window and the means used for self-defense. In particular, da Legnano held that striking first in anticipatory self-defense was only permissible once the assailant was "bold and ready to strike". ⁵⁰

A natural law concept of self-defense also began to be reflected in municipal law during the Middle Ages. For example, in 1532 the German Emperor Charles V promulgated the *Constitutio Criminalis Carolina*, the first codification of criminal law claiming application to the entire German empire.⁵¹ It established "rightful self-defense" as a justification even for killing another person, and it notably permitted self-defense to be exercised against both imminent and ongoing attacks where retreat was not an

⁴⁶ HESSBRUEGGE, *supra* note 25, at 33 *citing* THOMAS AQUINAS, II SUMMA THEOLOGICA 67 (English Dominican Province trans., Benziger Bros. 1947).

⁵¹ HESSBRUEGGE, supra note 25, at 34-35.

⁴⁷ THOMAS AQUINAS, TREATISE ON LAW 61 (Richard J. Regan ed. & trans., Hackett Publ'g Co. 2000) (1272).

⁴⁸ HESSBRUEGGE, *supra* note 25, at 36 *citing* GIOVANNI DA LEGNANO, DE BELLO, DE REPRESALIIS ET DE DUELLO 278, 287, 300-304 (J.K. Brierly trans., Thomas Erskine Holland ed., 1917).

⁴⁹ HESSBRUEGGE, *supra* note 25, at 36 *citing* GIOVANNI DA LEGNANO, DE BELLO, DE REPRESALIIS ET DE DUELLO 278, 287, 300-304 (J.K. Brierly trans., Thomas Erskine Holland ed., 1917).

⁵⁰ HESSBRUEGGE, *supra* note 25, at 36 *citing* GIOVANNI DA LEGNANO, DE BELLO, DE REPRESALIIS ET DE DUELLO 278, 287, 300-304 (J.K. Brierly trans., Thomas Erskine Holland ed., 1917).

option.⁵² In the same year, 1532, the English Parliament passed a law that classified the killing of robbers and other assailants "lying in wait" on the highways as justifiable homicide⁵³, thereby recognizing self-defense as a legal justification to repel attacks and threats of imminent attack by those "lying in wait". Prior to 1532, English law had not recognized self-defense as a justification, especially not for lethal force; instead, it had relied on the principle of *se defendendo*, according to which a person who retreated from attack as far as he could before resorting to deadly force would receive a pardon from the King and not be executed.⁵⁴ However, the defender still forfeited his goods to the English Crown as a sanction for the taking of life.⁵⁵

Following the enactment of the 1532 statute by the English Parliament, the principle of *se defendendo* gradually gave way to the general recognition of self-defense as a full criminal defense under the English common law, which was well established by the late 16th or early 17th century. When Sir William Blackstone published his commentaries on English law in 1769, he recognized lethal self-defense to be justifiable homicide, and famously stated that self-defense ". . . is justly called the primary law of nature, for it is not, neither can it be in fact, taken away by the law of society." By 1791, self-defense as a legal justification was also introduced into French law through the revolutionary Penal Code, which was drafted under the influence of the followers of French

⁵² HESSBRUEGGE, *supra* note 25, at 35.

⁵³ Id.; Josef L. Kunz, *Individual and Collective Self-Defense in Article 51 of the Charter of the United Nations*, 41 AM. J. INT'L L. 872, 876 n. 17 (1947).

⁵⁴ HESSBRUEGGE, *supra* note 25, at 35; Kunz, *supra* note 53, at 876 n. 17.

⁵⁵ Id.

⁵⁶ HESSBRUEGGE, *supra* note 25, at 35.

⁵⁷ *Id. citing* WILLIAM BLACKSTONE, 3 COMMENTARIES ON THE LAWS OF ENGLAND 4 (Clarendon Press: Oxford 1769).

Enlightenment thinkers such as Montesquieu, who believed that all citizens have a natural right of self-defense, including defense against "sudden attacks, where they would be killed if they waited for the assistance of the law."

In 1934, the French legal scholar Emile Giraud, Professor of Law at the University of Rennes, published an extensive study of provisions relating to self-defense in the municipal law criminal codes of the world's "civilized nations". ⁵⁹ He asserted that all major legal systems agree that legitimate self-defense has as its object the evasion of an injury by replying to violence with violence, and that violence against the person may give rise to legitimate self-defense. ⁶⁰ Professor Giraud also asserted that in all major legal systems, self-defense must be "necessary", in that the danger must be real and present and there must be no available alternative to the use of force. Additionally, Professor Giraud found that all major legal systems recognize that an attack need not be consummated to give rise to legitimate self-defense: it need only be imminent. ⁶¹ Finally, Professor Giraud observed that in all major legal systems, action taken to repel an attack or threat of imminent attack must be in proportion to the danger and must cease when the danger ceases. ⁶²

Similar conclusions were reached by Professor Jan Arno Hessbruegge, Research
Fellow at the University Institute of European Studies in Turin, Italy, in his 2017 study of

⁵⁸ HESSBRUEGGE, *supra* note 25, at 35-36, 39.

⁵⁹ Weightman, *supra* note 24, at 1097 *citing* Emile Giraud, *La Theorie de la Legitime Defense*, 49 ACADEMIE DE DROIT INTERNATIONAL, RECUEIL DES COURS 691-860 (1934-III).

⁶⁰ *Id*.

⁶¹ Id

⁶² Weightman, *supra* note 24, at 1097 *citing* Emile Giraud, *La Theorie de la Legitime Defense*, 49 ACADEMIE DE DROIT INTERNATIONAL, RECUEIL DES COURS 691-860 (1934-III).

personal self-defense in international law. 63 He observed that self-defense is recognized in all of the world's major legal systems, and that comparative law studies analyzing contemporary municipal law provisions in different regions of the world "do not identify a single domestic legal order that does not recognize self-defense."64 In addition to the Christian and European concepts of self-defense that, as discussed earlier in this chapter, trace their roots back at least to the Middle Ages, Professor Hessbruegger notes that selfdefense, including anticipatory defense against threats of imminent attack, is recognized in both Jewish and Islamic law. ⁶⁵ For example, in the Torah the Book of Exodus asserts that a homeowner may, in self-defense, strike down and if necessary kill a thief who breaks into his home, even before the thief has committed any violence, based on the expectation that the thief is likely to use deadly force against the homeowner protecting his property. 66 The Jewish religious and legal tradition thus recognizes a right of selfdefense that extends even to the taking of human life, as an exception to the commandment that one should not kill.⁶⁷ Islamic law also recognizes self-defense as the natural right of every human being, based in part upon the following verses from The Holy Quran: "Fight in Allah's cause those who fight you, but do not transgress limits; for Allah loves not transgressors . . . and make not your own hands contribute to [your]

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⁶³ HESSBRUEGGE, *supra* note 25, at 63-67.

⁶⁴ *Id.* at 58-59; See also MYRES MCDOUGAL & FLORENTINO FELICIANO, THE INTERNATIONAL LAW OF WAR: TRANSNATIONAL COERCION AND WORLD PUBLIC ORDER 128 n. 21 (1994) [hereinafter MCDOUGAL & FELICIANO] ("It is made clear in Jenks, *The Common Law of Mankind* 139-143 (1958) not only that all major legal systems recognize self-defense, but also that such systems exhibit an impressive uniformity with regard to the appropriate limiting principles. Dr. Jenks made reference to the common law, Canadian, French, German, Italian, Islamic, Hindu, Jewish, Chinese, Japanese, African, and Soviet systems.").

⁶⁵ HESSBRUEGGE, *supra* note 25, at 31-32, 40-41.

⁶⁶ Id. at 31-32 citing Exodus 22:2; Louis Rene Beres, After the SCUD Attacks: Israel, 'Palestine', and Anticipatory Self-Defense, 6 EMORY INT'L L. REV. 71, 76 n. 14 (1992).

⁶⁷ HESSBRUEGGE, *supra* note 25, at 32.

destruction."⁶⁸ Professor Hessbruegge states that based on this Quranic exhortation not to contribute to one's own destruction, almost all schools of interpretation in Islamic law consider it a duty to defend oneself from attack, even if doing so means killing the assailant.⁶⁹ However, since the Quran also prohibits "transgressing limits", Islamic law holds that self-defense must only be exercised against an imminent or ongoing attack, must not exceed the level of violence necessary to ward off the aggressor, and must be proportional to the acts of the assailant.⁷⁰

Professor Hessbruegge concludes his assessment of the requirements of personal self-defense across municipal legal orders by asserting that all of the world's major legal systems agree on the same basic elements of legitimate self-defense: the response to an unlawful attack against a protected interest (life, physical integrity, physical liberty, and/or property) must be necessary, immediate, and proportional. In particular, Professor Hessbruegge notes that with regard to the element of immediacy or imminence, the world's major legal systems all generally require that self-defense is exercised only against an ongoing or immediately imminent attack, and that this requirement of a close temporal connection between attack and defensive response is intended to safeguard as much as possible the state's sovereign monopoly on the use of force. However, despite the virtually uniform municipal law requirement that self-defense is permissible only against imminent or ongoing attacks, Professor Hessbruegge observes that exceptions to

⁶⁸ HESSBRUEGGE, *supra* note 25, at 40 *citing* THE HOLY QURAN 2:190, 2:195 (Abdullah Yusuf Ali trans., Islamic Book Trust, 2007).

⁶⁹ *Id*.

⁷⁰ Id

⁷¹ HESSBRUEGGE, *supra* note 25, at 63.

⁷² Id

the imminence requirement have been proposed for cases of recurrent attacks in which the victim cannot effectively respond at the time of the attack, i.e., domestic violence cases in which a woman kills her habitually and severely abusive partner in his sleep.⁷³ Professor Hessbruegge notes that in practice, such municipal law cases tend to be resolved through expert testimony regarding the abused person's state of mind, rather than by expanding the scope of self-defense, and almost no municipal legal systems allow self-defense to be exercised against threats that will materialize only later in the future.⁷⁴

This chapter has demonstrated that the right of self-defense, including the right to use anticipatory defensive force to repel a threat of an imminent armed attack, is an ancient right that traces back at least as far as the Middle Ages. The right to use anticipatory defensive force to repel an imminent attack was specifically discussed by medieval canon law and natural law jurists and scholars, and it was eventually incorporated into the municipal law of individual or personal self-defense in all of the world's major legal systems. In the next chapter, I will discuss how the classical jurists and scholars who initially developed what we now know as international law relied on these same concepts of self-defense, including anticipatory defense, as they attempted to develop a nascent law of nations.

⁷³ HESSBRUEGGE, *supra* note 25, at 63.

⁷⁴ Id.; See also Ashley D. Brosius, Note, An Iowa Law in Need of Imminent Change: Redefining the Temporal Proximity of Force to Account for Victims of Intimate Partner Violence Who Kill in Non-Confrontational Self-Defense, 100 IOWA L. REV. 775, 790-793 (2015) (Noting in the context of a woman's defensive use of deadly force against an alleged abuser that while some U.S. jurisdictions continue to define "imminent" danger as temporally immediate, others have adopted a somewhat more relaxed definition of "imminent" as something that is "likely to occur in the future given all relevant facts and circumstances.").

CHAPTER III. PART 1: ANTICIPATORY DEFENSE IN CLASSICAL WRITINGS ON INTERNATIONAL LAW

In parallel with the development of the law of individual or personal self-defense and its incorporation into municipal law, European legal scholars during the 16th to the 18th centuries began developing a new body of law known as the law of nations, which we now call international law. 75 Applying Thomas Aquinas' four-fold classification of law⁷⁶, these European legal scholars considered that like municipal law, the law of nations was derived from natural law, and was also part of human law since it represented man's application of natural law principles to worldly affairs. 77 Since the right of selfdefense, including the right of anticipatory defensive action against a threat of imminent attack, was by this time well established in municipal law, these early scholars of international law leaned heavily upon the municipal law concepts of self-defense in order to extrapolate rules they believed should be applicable to relations between sovereigns. ⁷⁸ In particular, they attempted to distinguish between just and unjust wars and to provide guidance to sovereigns on when resort to defensive war was legally justified. This chapter will discuss the works of four classical European writers on international law- Francisco de Vitoria, Alberico Gentili, Hugo Grotius, and Emer de Vattel- and will demonstrate that all four supported a legal right of defensive use of armed force by sovereigns, including a right to use force in anticipatory defense against an imminent threat of attack.

⁷⁵ Weightman, *supra* note 24, at 1096, 1098; HESSBRUEGGE, *supra* note 25, at 36.

⁷⁶ See notes 43-45, *supra* and accompanying text.

⁷⁷ Weightman, *supra* note 24, at 1096.

⁷⁸ *Id.*; HESSBRUEGGE, *supra* note 25, at 36.

A. Francisco de Vitoria (1492-1546)

Francisco de Vitoria was an early Spanish scholar of international law, whose 1539 publication De Iure Belli (The Law of War) was one of the first full-fledged treatises on the law of war. ⁷⁹ In *De Iure Belli*, Vitoria made a sharp distinction between the different causes or "grounds" of a just war. For example, Vitoria considered a war that was waged to repel an unjustified armed attack to be a defensive war, and engagement in defensive war would not require the permission of the highest authority in the realm since anyone, even a private individual, could resort to defensive force under circumstances of "necessity". 80 However, Vitoria placed several limitations on what could be done in the name of defense, particularly when a defensive war was carried out at the initiative of a lower level official or a private individual. First, Vitoria asserted that a defensive war could only be resorted to in the absence of other viable options, especially if time constraints precluded contacting one's superior or the superior was unable to respond quickly to the threat. 81 Second, Vitoria asserted that defensive war had to be exercised "in the heat of the moment", that is, contemporaneously with the unjustified enemy attack or just before it, if the enemy's attack was imminent. 82 Finally, Vitoria asserted that a defensive war must be carried out in strict observance of proportionality, and that a person or group acting in self-defense was prohibited from seeking redress for past harms or punishing wrongdoers. 83 Vitoria considered that war aims of obtaining redress and/or

⁷⁹ Reichberg, *supra* note 29, at 12.

⁸⁰ *Id. citing* FRANCISCO DE VITORIA, POLITICAL WRITINGS 295-327 (Jeremy Lawrance trans., Anthony Pagden, ed. 1991) [hereinafter Lawrance & Pagden].

⁸² Reichberg, *supra* note 29, at 12.

⁸³ *Id*. at 12-13.

punishing wrongdoers constituted "offensive war", and that the prosecution of offensive war was exclusively the prerogative of the prince as the supreme authority in the land.⁸⁴

Vitoria thus asserted that sovereigns have a legal right to use defensive armed force to repel an unjustified attack, including a right to take anticipatory defensive action against the threat of an imminent attack. His views are consistent with those of the medieval canon lawyers, in that Vitoria "repeated their admonitions of not exceeding the bounds of immediacy, necessity, and proportionality". 85 In contrast, when discussing the separate concept of offensive war, Vitoria explained that when conducting a just war, a prince "may do everything . . . which is necessary to secure peace and security from attack", which means not only repelling the attack at the point that it occurs, but also carrying out preventive measures such as "demolishing the enemy's castles or setting up garrisons in his territory" if that is necessary to deter further attacks. 86 To be clear, however, Vitoria's views regarding preventive measures were framed within the context of a just war that was either already underway or just completed, and the preventive measures he describes are actions that might be legitimately taken *post bellum* to deter further attacks. 87 Vitoria was not advocating a doctrine of preventive war to protect the sovereign from the threat of some unspecified future harm.⁸⁸

⁸⁴ Reichberg, *supra* note 29, at 13.

⁸⁵ Id

⁸⁶ Id. at 14 citing Lawrance & Pagden, supra note 80, at 300, 305.

⁸⁷ Reichberg, *supra* note 29, at 15.

⁸⁸ Id

B. Alberico Gentili (1552-1608)

The Italian lawyer and jurist Alberico Gentili, who served as a Professor of Law at Oxford, was one of the first legal scholars in the Christian West to endorse the concept of preventive war. ⁸⁹ Gentili viewed armed conflict as a contest between co-equal belligerents who, due to their sovereign status, each enjoyed a similar capacity to wage war, regardless of the cause that had prompted the conflict. ⁹⁰ Gentili believed that while theoretically it was possible to determine the difference between just and unjust causes of war, the fact that both belligerents were equally sovereign meant that as a practical matter, it usually remained doubtful which of the opposing sides had the just cause. ⁹¹ Awareness of this practical difficulty induced Gentili to argue that war may be waged justly on both sides. ⁹²

Recognition of the uncertainty surrounding decision-making in situations of conflict was a key factor that led Gentili to advocate in favor of preventive war. ⁹³ In his treatise *De Iure Belli Libri Tres*, (*Three Books on the Law of War*) at Book I, Chapter XIV, Gentili discussed "defense on grounds of expediency", and argued that under conditions of uncertainty it is justifiable to "make war through fear that we may ourselves be attacked . . . we ought not to wait for violence to be offered us, if it is safer to meet it halfway . . . Therefore . . . those who desire to live without danger ought to meet

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⁸⁹ Reichberg, *supra* note 29, at 15.

⁹⁰ *Id*. at 16.

⁹¹ Reichberg, *supra* note 29, at 16.

۶² Id.

⁹³ Id.

impending evils and anticipate them."⁹⁴ Gentili further stated that "[o]ne ought not to delay . . . if one may at once strike at the root of the growing plant and check the attempts of an adversary who is meditating evil."⁹⁵ Gentili asserted that it is "lawful for me to attack a man who is making ready to attack me", and expressed concern regarding a situation in which another polity, which one has reason to fear may become an adversary, has acquired a capability by which it might do future harm:

"No one ought to expose himself to danger. No one ought to wait to be struck, unless he is a fool. One ought to provide not only against an offense which is being committed, but also against one which may possibly be committed. Force must be repelled and kept aloof by force. Therefore one should not wait for it to come; for in this waiting there are undoubted disadvantages . . . [I]t is better to provide that men should not acquire too great power, than to be obliged to seek a remedy later, when they have already become too powerful."

Gentili stated that the fear of possible future harm that justifies resort to preventive war must be based upon a reasonable assessment of the risks, stating that a "just cause for fear is demanded; suspicion is not enough". However, since there is "more than one justifiable cause for fear", and "no general rule can be laid down with regard to the matter", Gentili argued that "we should oppose powerful and ambitious chiefs. For they

⁹⁴ Reichberg, *supra* note 29, at 16; ALBERICO GENTILI, DE IURE BELLI LIBRI TRES [Bk. I, Ch. XIV], Translation of the Edition of 1612 (John C. Rolfe trans., 1933), p. 61 [hereinafter Rolfe].

⁹⁵ Reichberg, supra note 29, at 17; Rolfe, supra note 94, at 61.

⁹⁶ Reichberg, supra note 29, at 17; Rolfe, supra note 94, at 62, 65.

⁹⁷ Reichberg, *supra* note 29, at 17; Rolfe, *supra* note 94, at 62.

are content with no bounds, and end by attacking the fortunes of all." Gentili concludes Book I, Chapter XIV of *De Iure Belli Libri Tres* by stating that his intent has been to assert the justice of defending one's polity not only against "dangers that are already meditated and prepared", but also and especially against "those which are not meditated but are probable and possible." Overall, while Gentili's advocacy of preventive war against more remote, non-imminent threats is much broader than the legal concept of self-defense that existed in medieval canon law, natural law, and municipal law at that time, there is no doubt that Gentili would also agree that sovereigns may lawfully resort to defensive armed force against armed attacks and threats of imminent armed attack.

C. Hugo Grotius (1583-1645)

Hugo Grotius was a Dutch jurist who is considered by some legal scholars to be the "father of international law". ¹⁰⁰ In his monumental work *De Jure Belli Ac Pacis* (*On the Law of War and Peace*), written in 1625, Grotius asserted that self-defense was a lawful justification for both "private war" (conflict between private individuals) and "public war" (conflict between sovereigns), and that in both situations the right of self-defense extended to defense against an actual armed attack or to defense against "an injury not yet inflicted, which menaces either person or property." ¹⁰¹ Focusing initially on the conditions of private war, Grotius stated that in order to justify the use of force in self-defense, the danger must be "immediate and imminent in point of time", such that if an

⁹⁸ Reichberg, *supra* note 29, at 18; Rolfe, *supra* note 94, at 64.

⁹⁹ Reichberg, *supra* note 29, at 18; Rolfe, *supra* note 94, at 66.

¹⁰⁰ Weightman, supra note 24, at 1099.

Reichberg, *supra* note 29, at 19-20; HUGO GROTIUS, DE JURE BELLI AC PACIS LIBRI TRES [Bk. II, Ch. I], Translation of the 1646 Edition (Francis W. Kelsey trans., 1925), p. 172 [hereinafter Kelsey].

assailant "seizes weapons in such a way that his intent to kill is manifest" then it is lawful to forestall the crime by using anticipatory defensive force. However, Grotius argued that anticipatory defensive action is only justified in situations in which the risk of harm is truly immediate, and that "those who accept fear of any sort as justifying anticipatory slaying are themselves greatly deceived, and deceive others." Grotius explained that:

"[I]f a man is not planning an immediate attack, but it has been ascertained that he has formed a plot, or is preparing an ambuscade, or that he is putting poison in our way, or that he is making ready a false accusation and false evidence, and is corrupting the judicial procedure, I maintain that he cannot lawfully be killed, either if the danger can in any other way be avoided, or if it is not altogether certain that the danger cannot otherwise be avoided. Generally, in fact, the delay that will intervene affords opportunity to apply many remedies, to take advantage of many accidental occurrences . . .". 104

Grotius then asserted that although the right to self-defense "applies chiefly, of course, to private war; yet it may be made applicable also to public war, if the difference in conditions be taken into account." By "difference in conditions", Grotius meant the fact that unlike private individuals, public powers have not only the right of self-defense but also the right to exact punishment for wrong actions "commenced but not yet carried through" by other powers. That said, Grotius specifically rejected the preventive war doctrine advocated by Alberico Gentili, finding untenable "the position, which has been

¹⁰² Reichberg, *supra* note 29, at 21; Kelsey, *supra* note 101, at 173.

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¹⁰⁴ Reichberg, supra note 29, at 21; Kelsey, supra note 101, at 174-175.

¹⁰⁵ Kelsey, *supra* note 101, at 184.

¹⁰⁶ Id

maintained by some, that according to the law of nations it is right to take up arms in order to weaken a growing power which, if it becomes too great, may be a source of danger . . . [T]hat the possibility of being attacked confers the right to attack is abhorrent to every principle of equity." ¹⁰⁷ Grotius asserted that simple fear of a neighboring power. without specific evidence of intent by that neighboring power to commit violence, is not a sufficient cause for public war, because "in order that self-defense may be lawful it must be necessary; and it is not necessary unless we are certain, not only regarding the power of our neighbor, but also regarding his intention; the degree of certainty required is that which is accepted in morals." ¹⁰⁸ Grotius disagreed with the view of "those who declare that it is a just cause of war when a neighbor who is restrained by no agreement builds a fortress on his own soil, or some other fortification which may someday cause us harm", and asserted that the proper response to any fears which arise from such actions by a neighbor must be "resort to counter-fortifications on our own land and other similar remedies, but not to force of arms." 109 Grotius thus accepted the legal legitimacy of anticipatory defense in the context of public war, provided that such anticipatory defensive action was manifestly necessary based on clear evidence of an adversary's violent intent.

¹⁰⁷ Reichberg, supra note 29, at 22-23; Kelsey, supra note 101, at 184.

¹⁰⁸ Reichberg, *supra* note 29, at 23-24; HUGO GROTIUS, DE JURE BELLI AC PACIS LIBRI TRES [Bk. II, Ch. XXII], Translation of the 1646 Edition (Francis W. Kelsey trans., 1925), p. 549.

¹⁰⁹ Reichberg, *supra* note 29, at 23-24; HUGO GROTIUS, DE JURE BELLI AC PACIS LIBRI TRES [Bk. II, Ch. XXII], Translation of the 1646 Edition (Francis W. Kelsey trans., 1925), p. 549.

D. Emer de Vattel (1714-1767)

The 18th century Swiss diplomat and legal scholar Emer de Vattel also believed that both individuals and sovereign nations had a legal right of self-defense that included a right to take anticipatory defensive action against a threat of imminent attack. In Book II, Chapter IV of his great work Le Droit des Gens; Ou, Principes de la Loi Naturelle (The Law of Nations or the Principles of Natural Law), written in 1758, Vattel stated that nature gives both individuals and nations a "moral power of acting", i.e., a right, to protect themselves from all injury, including a "right to resist an injurious attempt" through anticipatory defensive action. 110 Vattel reiterated this position in Book III, Chapter III of Le Droit des Gens in which he discussed just causes of war. 111 Vattel asserted that the foundation or cause of every just war is "injury, either already done or threatened", and that a nation is therefore justified in using force when "an injury has been received, or [is] so far threatened as to authorize a prevention of it by arms."¹¹² Vattel further stated that the right of employing force or making war belonged to nations in so far as it was "necessary for their own defense", and Vattel defined this necessity as follows: "Now if anyone attacks a nation . . . that nation has a right to repel the aggressor, and . . . [f]urther, she has a right to prevent . . . intended injury, when she sees herself threatened with it." 113 Vattel clearly believed that both individuals and nations had a right to use defensive force to repel attacks and imminent threats of attack, and he argued that

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¹¹⁰ Reichberg, *supra* note 29, at 25; EMER DE VATTEL, LE DROIT DES GENS; OU, PRINCIPES DE LA LOI NATURELLE, English Translation of the 1758 Edition (Joseph Chitty, Esq., ed. 1872) p. 237-238 [hereinafter Chitty].

¹¹¹ Reichberg, *supra* note 29, at 25; Chitty, *supra* note 110, at 404.

¹¹² Chitty, *supra* note 110, at 404.

¹¹³ Chitty, supra note 110, at 404.

the justification for such defensive action "requires no proof" and that in such cases, self-defense "is not only the right, but the duty of a nation . . . one of her most sacred duties."

Vattel also considered, in Book III, Chapter III of Le Droit des Gens, the question of whether "the aggrandizement of a neighboring power, by whom a nation fears she may one day be crushed" is a legally sufficient reason for "making war against him . . . taking up arms to oppose his aggrandizement, or to weaken him, with the sole view of securing herself from those dangers which the weaker states have almost always reason to apprehend from an overgrown power." Although he observed that predominating powers "seldom fail to molest their neighbors, to oppress them, and even totally subjugate them, whenever an opportunity occurs, and they can do it with impunity", Vattel noted that it was also possible for a state to increase its power or "aggrandizement" through solely lawful means and without violating any duties owed to other nations. 116 Therefore, since war is not justifiable on any other ground "than that of avenging an injury received, or preserving ourselves from one with which we are threatened", Vattel concluded that absent an attack or threat of attack, "it is a sacred principle of the law of nations, that an increase of power cannot, alone and of itself, give any one a right to take up arms in order to oppose it."117 Like Grotius, Vattel thus rejects the legal sufficiency of preventive war against the mere possibility, without clear evidence, that a neighboring state may pose a future threat.

¹¹⁴ Chitty, *supra* note 110, at 407.

¹¹⁵ *Id*. at 410.

¹¹⁶ Id

¹¹⁷ *Id*. at 411.

Finally, Vattel considered how a state may lawfully respond when a neighboring state demonstrates threatening behavior, such as showing proof of "injustice, rapacity, pride, ambition, or an imperious thirst for rule", and/or by making preparations for war during "the midst of a profound peace", such as erecting fortresses, equipping a fleet, assembling a powerful army, and filling arms magazines. ¹¹⁸ In such cases, Vattel asserted that the threatened state must assess both the neighboring state's power and intent, and that the right to respond with anticipatory defensive force is in direct ratio to "the degree of probability and the greatness of the evil threatened." ¹¹⁹ Vattel explained that:

"[O]n occasions where it is impossible or too dangerous to wait for an absolute certainty, we may justly act on a reasonable presumption. If a stranger levels a musket at me in the middle of a forest, I am not yet certain that he intends to kill me: but shall I, in order to be convinced of his design, allow him time to fire? What reasonable casuist will deny me the right to anticipate him? But presumption becomes nearly equivalent to certainty, if the prince who is on the point of rising to an enormous power has already given proofs of imperious pride and insatiable ambition." ¹²⁰

Vattel asserted that a state faced with such threatening behavior had a legal right to approach the threatening state and to seek an explanation for its actions, and, if the threatening state's "sincerity be justly suspected", to request the threatening state to provide security guarantees. Refusal of the threatening state to provide a sufficient explanation and/or to furnish the requested security guarantees "would furnish ample

¹¹⁸ Chitty, *supra* note 110, at 411, 416.

¹¹⁹ *Id*. at 411.

¹²⁰ *Id.* at 412.

¹²¹ *Id*. at 411, 416.

indication of sinister designs" and would provide a legally sufficient basis for the threatened state to prevent those designs by force of arms. ¹²² Vattel's advocacy of the legal sufficiency of anticipatory defensive action against a threat of attack based on the probability and severity of the expected attack, and not simply its temporal imminence, foreshadows the debate among some 21st century legal scholars regarding the definition of imminence in the context of the international law of self-defense.

This chapter has demonstrated that during the 16th to 18th centuries, four classical European writers on international law- Francisco de Vitoria, Alberico Gentili, Hugo Grotius, and Emer de Vattel- supported a legal right of defensive use of armed force by sovereigns, including a right to use force in anticipatory defense against an imminent threat of attack. All four were informed by the law of individual or personal self-defense as it existed in medieval canon law, natural law, and municipal law at the time, and they extrapolated from that law to develop legal guidance on self-defense in the nascent field of international law. In so doing, they recognized that nation states must have an international legal right to defend themselves against violent attacks, as well as a right of anticipatory defense against threats of imminent attack. The next chapter will discuss the international legal right of self-defense, including anticipatory defense, during the period of the late 18th to the mid-20th centuries, and will demonstrate that by the time the United Nations Charter was adopted in 1945, these rights had become part of customary international law.

¹²² Chitty, *supra* note 110, at 411, 416.

CHAPTER IV. PART 1: ANTICIPATORY DEFENSE IN THE LATE EIGHTEENTH TO MID-TWENTIETH CENTURIES

By the late 18th to the mid-20th centuries, the efforts of the classical writers on international law to develop legal guidance on just and unjust wars based on the canon law, natural law, and municipal law requirements of self-defense were "if not killed, at least badly mangled by the theory of unlimited sovereignty." The Peace of Westphalia in 1648, which had ended the Thirty Years War, gave legal recognition to the theory of territorial sovereignty, and although this theory of sovereignty originally referred to supreme political power within a state, by the 19th century it came to mean the absolute freedom of a state from control by any higher power over its actions. ¹²⁴ In the words of Professor Charles G. Fenwick, "No obligations can be imposed upon [states], by whatever majority of the international community, against their individual wills. Each remains the guardian of its own interests and the ultimate arbiter of its own claims." It follows that the notion of the just war is "emptied of content", because if the state is a law unto itself, then its rights are whatever it chooses to regard as its rights, to include a right to go to war in the national interest. ¹²⁶ As Professor Lauterpacht explained:

"[S]o long as war was a recognized instrument of national policy both for giving effect to existing rights and for changing the law, the justice or otherwise of the causes of

¹²³ Weightman, *supra* note 24, at 1102.

¹²⁴ *Id.* at 1098, 1102.

¹²⁵ *Id.* at 1102-1103; CHARLES G. FENWICK, INTERNATIONAL LAW 45-46 (1924).

¹²⁶ Weightman, *supra* note 24, at 1103, 1105; Joachim von Elbe, *The Evolution of the Concept of Just War in International Law*, 33 AM. J. INT'L L. 665, 684 (1939) ("The majority of writers during the nineteenth and at the beginning of the twentieth century . . . rejected the distinction between just and unjust wars, [and] considered war as an act entirely within the uncontrolled sovereignty of the individual state.").

war was not of legal relevance. The right of war, for whatever purposes, was a prerogative of national sovereignty. Thus conceived, every war was just."¹²⁷

Because of this lack of any legal constraint on the right of sovereign states to resort to war, some legal scholars contend that the international legal right to self-defense also became meaningless. They believe that only when the universal liberty to resort to war was eliminated could the international legal right of self-defense "emerge as a right of signal importance in international law."

Despite these scholarly concerns regarding the logical implications of unlimited sovereignty and the demise of just war theory, states continued to assert and practice the international legal right of self-defense, including the right of anticipatory defense against a threat of imminent attack, during the period of the late 18th to mid-20th centuries.

International legal scholars also continued to justify such actions using self-defense principles such as necessity and imminence, albeit under ostensibly different legal concepts such as "self-preservation" and/or "self-help". For example, Professor John Westlake wrote that he treated self-defense as the application of the right of self-preservation in case of attack or anticipated attack: "A state may defend itself, by preventive means if [it is] in its conscientious judgment necessary, against attack by another state, threat of attack, or preparations or other conduct from which an intention to

129 Kunz, supra note 53, at 876; DINSTEIN, supra note 17, at 203.

 $^{^{127}}$ Weightman, supra note 24, at 1105; H. LAUTERPACHT, 2 OPPENHEIM'S INTERNATIONAL LAW 176-177 (6th ed. 1940).

Weightman, *supra* note 24, at 1105; Kunz, *supra* note 53, at 876 ("The notion of international self-defense depends on the illegality of war."); DINSTEIN, *supra* note 17, at 203 ("[W]hen the freedom to wage war was countenanced without reservation (in the nineteenth and early twentieth centuries) . . . concern with the issue of self-defence was largely a meta-juridical exercise.").

This chapter will discuss the assertions and practice by states of the international legal right of self-defense, including the right of anticipatory defense against a threat of imminent attack, from the late 18th to the mid-20th centuries. It will begin by discussing, as an example of state practice, the recognition in the U.S. Constitution of a U.S. state's responsibility to protect its citizens from invasion or imminent threat of invasion, and will then describe several other examples of state practice regarding the international legal right of anticipatory defense against imminent attack, including the famous *Caroline*

¹³⁰ ELLERY C. STOWELL, INTERNATIONAL LAW, A RESTATEMENT OF PRINCIPLES IN CONFORMITY WITH ACTUAL PRACTICE 113-114 (1931); Barry Feinstein, *Self-Defence and Israel in International Law: A Reappraisal*, 11 ISR. L. REV. 516, 517 (1976).

¹³¹ WILLIAM E. HALL, A TREATISE ON INTERNATIONAL LAW 322, 325 (A. Pearce Higgins, ed., 8th ed. 1924). ¹³² ELLERY C. STOWELL, INTERVENTION IN INTERNATIONAL LAW 402 n. 13 (1921).

incident between the U.S. and Great Britain and the British attack on the Vichy France naval fleet in 1940. The chapter will conclude with a discussion regarding the adoption by the International Military Tribunals at Nuremberg and Tokyo of the self-defense principles articulated in the *Caroline* incident, thereby demonstrating that at the time the United Nations Charter was signed in 1945, the international legal right of self-defense, including the right of anticipatory defense against a threat of imminent attack, was part of customary international law.

Before proceeding with the chapter, however, I am mindful of Professor Sean D. Murphy's admonition that when analyzing the international legal right of anticipatory defense, many international lawyers do not clearly explain the methodology they are employing to determine the state of the law, particularly the extent to which state practice is deemed significant for purposes of interpreting the United Nations Charter or determining the existence of a rule of customary international law. Therefore, I will now provide a brief explanation of my views regarding the formation of customary international law, in order to establish the legal context for my argument, in this chapter and throughout the remainder of this dissertation, that there is a customary international law right for states to use armed force in anticipatory defense against a threat of imminent armed attack.

The Statute of the International Court of Justice (ICJ) defines customary international law as "evidence of a general practice accepted as law". ¹³⁴ This text of the ICJ Statute reflects the view that customary international law is composed of two

¹³³ Sean D. Murphy, *The Doctrine of Preemptive Self-Defense*, 50 VILL. L. REV. 699, 720 (2005).

Statute of the International Court of Justice, art. 38(1)(b), June 26, 1945, 59 Stat. 1055.

elements: a general and consistent practice by states, which is sometimes referred to as the "objective element"; and *opinio juris*, which is an attitude by states (be it acknowledgment as law or consent) that the practice is followed out of a belief that it is legally required or permitted, which is sometimes referred to as the "subjective element". The ICJ has been consistent in stating that both of these elements- state practice and *opinio juris*- must be present in order for a rule of customary international law to develop. 136

With regard to the element of state practice, while some international legal scholars have taken the position that only physical acts or conduct by nations count as state practice 137, I follow the views of Professor Michael Scharf and Professor Michael Akehurst that state practice can come in many forms, including verbal assertions or claims; diplomatic correspondence; positions taken by delegates of states in international organizations and conferences, especially at the United Nations; national legislation, regulations, and judicial decisions; declarations of government policy; and the advice of government legal advisers. State practice thus includes "any act or statement by a state from which views can be inferred about international law" which means that in

Anthea Elizabeth Roberts, *Traditional and Modern Approaches to Customary International Law: A Reconciliation*, 95 AM J. INT'L L. 757 (2001); Michael P. Scharf, *Accelerated Formation of Customary International Law*, 20 ILSA J. INT'L & COMP. L. 305, 311 (2014).

¹³⁶ Scharf, *supra* note 135, at 311; North Sea Continental Shelf (Ger. v. Den, Ger. v. Neth.), Merits, 1969 I.C.J. Rep. 3, 43, Para. 71, 73-74 (Feb. 20) [hereinafter North Sea Continental Shelf] ("State practice . . . should have been both extensive and virtually uniform . . . and should moreover have occurred in such a way as to show a general recognition that a rule of law or legal obligation is involved.").

¹³⁷ ANTHONY D'AMATO, THE CONCEPT OF CUSTOM IN INTERNATIONAL LAW 88 (1971); Roberts, *supra* note 135, at 757.

¹³⁸ Scharf, supra note 135, at 312; Michael Akehurst, Custom as a Source of International Law, 47 BRIT. Y. B. INT'L L. 1, 4-10 (1974).

¹³⁹ Akehurst, *supra* note 138, at 10.

assessing state practice I look to words as well as deeds. 140 It follows that verbal acts by states may count as state practice, *opinio juris*, or possibly both. ¹⁴¹ As for the consistency of state practice required to generate a rule of customary international law, the ICJ stated in the 1986 Nicaragua case that absolutely rigorous conformity with a rule was not required, and that it is sufficient for the establishment of customary international law that state practice should be generally consistent with such rules. ¹⁴² The ICJ also stated in the 1969 North Sea Continental Shelf case that it is particularly important to consider, when assessing the consistency of state practice, the practice of "states whose interests are specially affected". 143 While I acknowledge the concern that in the area of the jus ad bellum, the notion of "specially affected states" should not automatically mean "militarily powerful states" ¹⁴⁴, I nevertheless agree with Professor Scharf that just as the U.S. and the United Kingdom were pioneers in the regime of the continental shelf because their nationals were the first to be actively engaged in offshore oil exploration in areas beyond the territorial sea¹⁴⁵, it is particularly important to assess the practice of those states that are most active in the exercise of the international legal right of self-defense when determining the existence and content of customary law rules in that area of international law.

¹⁴⁰ Scharf, *supra* note 135, at 312.

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¹⁴² Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Merits, 1986 I.C.J. Rep. 14, 98, Para. 186 (June 27) [hereinafter Nicaragua].

¹⁴³ North Sea Continental Shelf, *supra* note 136, at 43, para. 74.

Olivier Corten, *The Controversies Over the Customary Prohibition on the Use of Force: A Methodological Debate*, 16 EUR. J. INT'L L. 803, 820 (2006) ("[L]imiting the analysis to powerful states, and neglecting or even ignoring the position of those in the Third World, has been denounced as a 'hegemonical approach to international relations', with certain states proclaiming themselves to be the sole representatives of the international community. These states can in no way be reduced to those 'whose interests were specially affected' by the customary rule in question.").

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Finally, with regard to the element of *opinio juris*, I concur with Professor Akehurst that a statement by a state about the content of international law should be taken as opinio juris as long as the statement asserts that something "is already a rule of international law". 146 That said, I also concur with Professor Akehurst that in the case of a permissive rule, e.g., that a state is permitted to take anticipatory defensive action against a threat of imminent attack, express statements of opinio juris are not absolutely necessary because a claim that a state is permitted to act in a certain way can be inferred from the fact that a state does act that way. 147 Claims that states are legally entitled to act in a particular way, whether they are made expressly or inferred from the conduct of states, must meet with acquiescence (i.e. lack of protests) from other states whose interests are affected. 148 Similarly, while I agree with Professors Scharf and Akehurst that it is possible for treaties to generate customary international law, I follow Professor Akehurst in asserting that treaties, like all other forms of state practice, must also be accompanied by *opinio juris* (express or implied) in order to create customary international law, and that therefore, whether or not a rule laid down initially in a treaty is subsequently accepted as a rule of customary international law is a question of fact. 149 Additionally, I agree with Professors Scharf and Akehurst that a higher threshold of uniformity, consistency, and quantity of state practice should be required in order to

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¹⁴⁶ Akehurst, *supra* note 138, at 37.

¹⁴⁷ Akehurst, *supra* note 138, at 38.

¹⁴⁸ Id

¹⁴⁹ Scharf, *supra* note 135, at 318; Akehurst, *supra* note 138, at 43-44, 50.

overturn an existing rule of customary international law, as opposed to creating a new rule of customary law in a previously unregulated realm of international relations. ¹⁵⁰

A. Article I, Section 10 of the U.S. Constitution (1788)

The U.S. Constitution, which was signed in 1787 and ratified in 1788, states in Article I, Section 10, "No State shall, without the consent of Congress . . . keep troops, or ships of war in time of peace . . . or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay" (emphasis added). ¹⁵¹ Joseph Story, in his 1833 Commentaries on the Constitution of the United States, explained that this general prohibition on individual U.S. states keeping military forces and/or engaging in war without the consent of the U.S. Congress was included in the Constitution because "[t]he setting on foot of an army or navy by a State in times of peace might . . . provoke the hostilities of foreign bordering nations", and because "the protection of the whole Union is confided to the national arm and the national power, [so] it is not fit that any State should possess military means to overawe the Union, or to endanger the general safety." ¹⁵² The framers of the Constitution recognized, however, that a State may be so situated that it may become indispensable to possess military forces to resist an expected invasion because the "danger may be too imminent for delay", and that in such circumstances a state should have the power to raise troops and even to engage in war for its own safety, even without the consent of Congress. ¹⁵³ The grant in the U.S.

¹⁵⁰ Scharf, *supra* note 135, at 317; Akehurst, *supra* note 138, at 19.

¹⁵¹ U.S. CONST. art. I, sec. 10, cl. 3.

¹⁵² JOSEPH STORY, 2 COMMENTARIES ON THE CONSTITUTION OF THE UNITED STATES 277 [Bk. III, ch. XXXV], (Melville M. Bigelow ed., 5th ed. 1891).

¹⁵³ Id.; Sol Slonim, The U.S. Constitution and Anticipatory Self-Defense Under Article 51 of the UN Charter, 9 INT'L. LAW. 117, 120 (1975).

Constitution to individual U.S. states of the power to use military force to protect their citizens against invasions and threats of imminent invasion is an example of state practice, which demonstrates that the newly-formed U.S. Government recognized an international legal right of self-defense, including a right of anticipatory defense against a threat of imminent attack.

B. Britain's Seizure of the Danish Fleet (1807)

In 1807 Great Britain was at war with Napoleon's France, and Britain became concerned that Denmark, with which Britain was not at war, might be forced to allow France to utilize Denmark's considerable naval fleet. 154 Following the signing by France and Russia of the Treaty of Tilsit in July 1807, Britain received intelligence reports that France and Russia, who were now allied against Britain, intended to compel Denmark, by force if necessary, to join them in the war against Britain. 155 This meant that France would be at liberty to take possession of the Danish naval fleet and use this considerable increase in naval power against Britain, which would have placed France in a "commanding position for attack of the vulnerable parts of Ireland, and for a descent upon the coasts of England and Scotland", and Britain assessed that she did not have sufficient naval forces in home waters at that time to repel such a threat. 156 Britain further assessed that Denmark had no army capable of defeating an attack by the French forces

¹⁵⁴ HALL, *supra* note 131, at 326; STOWELL, *supra* note 132, 409, 410 n. 20.

¹⁵⁵ Id

¹⁵⁶ *Id*.

then massed in the north of Germany, and orders were in fact issued by France for the entry of two corps of its land forces into Denmark.¹⁵⁷

In these dire circumstances, and in an attempt to resolve the threat without resort to war, Great Britain presented Denmark with an ultimatum which demanded that the Danish fleet be turned over to Britain for safekeeping until the war was over, at which time it would be returned intact. This ultimatum, the presentation of which was "supported by a considerable naval and military force", also included an offer to Denmark of "the means of defense against French invasion and a guarantee of the whole Danish possessions", and Britain explained that with regard to the Danish fleet, "we ask deposit- we have not looked for capture; so far from it, the most solemn pledge has been offered to your government, and it is hereby renewed, that, if our demand be acceded to, every ship of the navy of Denmark shall, at the conclusion of a general peace, be restored to her in the same condition and state of equipment as when received under the protection of the British flag." Denmark refused the British ultimatum, and the British then attacked Copenhagen and seized the Danish fleet by force of arms.

Several legal scholars in the late 19th and early 20th centuries who discussed Britain's 1807 seizure of the Danish fleet generally justified Britain's use of force as an exercise of her right of self-preservation. For example, Professor William E. Hall stated that the imminent threat to Britain posed by a French invasion of Denmark and the capture by France of the Danish fleet, which Britain fully expected to occur and knew

¹⁵⁷ HALL, *supra* note 131, at 326; STOWELL, *supra* note 132, at 409, 410 n. 20.

¹⁵⁸ Weightman, *supra* note 24, at 1104.

¹⁵⁹ HALL, *supra* note 131, at 327; STOWELL, *supra* note 132, at 409-410, 410 n. 20.

¹⁶⁰ Id.; Weightman, supra note 24, at 1104.

Denmark was helpless to prevent, was an "emergency . . . which gave good reason for the general line of conduct of the English Government" since the action was necessary for Britain's self-preservation and since the British demands "were also kept within due limits". 161 Professor John Westlake also argued that Britain's seizure of the Danish fleet was a justifiable act of self-preservation, and stated that Britain's action was "similar to that of a belligerent having sure information that his enemy, in order to obtain a strategic advantage, is about to march an army across the territory of a neutral clearly too weak to resist, in which circumstances it would be impossible to deny [that belligerent] the right of anticipating the blow on the neutral territory." ¹⁶² Professor Westlake further stated that in this case, the principle that the legal rights of a state are not be violated without its own fault "is not really infringed, for when a state is unable of itself to prevent a hostile use being made of its territory or its resources, it ought to allow proper measures of selfprotection to be taken by the state against which the hostile action is impending, or else must be deemed to intend that use as the necessary consequence of refusing the permission." However, despite the characterization by these legal scholars of Britain's actions as "self-preservation" or "self-protection", in my view they are actually referring to core elements of the international legal right of self-defense: necessity, imminence, and proportionality. Britain's use of armed force to seize the Danish fleet was based on an imminent threat that France would soon invade Denmark and turn the Danish fleet against Britain, which would have seriously compromised Britain's security; was necessary, due to the fact that Denmark had refused Britain's offer of a defensive alliance

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¹⁶¹ HALL, supra note 131, at 325-327.

¹⁶² STOWELL, *supra* note 132, at 410 n. 20.

¹⁶³ Id

and for safekeeping of the Danish fleet; and was proportional to the threat in that Britain's armed action against Copenhagen ceased once Britain had captured the Danish fleet. Accordingly, Britain's seizure of the Danish fleet in 1807 is an example of state practice, which demonstrates that Britain recognized by her actions the international legal right of self-defense, including a right of anticipatory defense against an imminent threat of armed attack.

C. The *Caroline* Incident (1837)

In 1837 a rebellion against British rule occurred in Upper Canada, the present-day province of Ontario. ¹⁶⁴ The rebellion was short-lived, and when a poorly armed rebel force of a few hundred men failed to take the capital of Toronto in early December 1837, "the back of the rebellion was broken". ¹⁶⁵ However, active sympathy with the rebels occurred at various places within the United States, especially along the Canadian border, and because of this, the rebellion's leader, William Mackenzie, fled to Buffalo, New York, where he openly sought support for the rebellion, including the acquisition of arms and the recruitment of personnel for a "Patriot Army". ¹⁶⁶ Hundreds of volunteers did join Mackenzie, and arms and ammunition were supplied to aid in the rebellion. ¹⁶⁷

On December 13, 1837, Mackenzie and his rebel followers established a headquarters on Navy Island, located in British territory on the Canadian side of the

¹⁶⁴ JOHN BASSETT MOORE, 2 DIGEST OF INTERNATIONAL LAW 409 (1906); R.Y. Jennings, *The Caroline and McLeod Cases*, 32 AM. J. INT'L L. 82 (1938); Martin Rogoff & Edward Collins, Jr., *The Caroline Incident and the Development of International Law*, 16 BROOK. J. INT'L L. 493 (1990).

¹⁶⁵ Rogoff & Collins, supra note 164, at 493-494.

MOORE, supra note 164, at 409; Jennings, supra note 164, at 82; Rogoff & Collins, supra note 164, at 493-494

¹⁶⁷ Jennings, supra note 164, at 82.

Niagara River, and there they proclaimed a provisional government of Upper Canada and made preparations to invade the Canadian mainland. New recruits, artillery, and other weapons arrived almost daily, and by December 28, 1837, the "Patriot Army" on Navy Island had grown to about 1000 well-armed men. The British Lieutenant Governor of Upper Canada had sent a letter on December 13, 1837, to the Governor of the State of New York, requesting that the support the rebels were receiving in Buffalo, New York be restrained by appropriate U.S. authorities, but no response had been received. 170

On December 29, 1837, the *Caroline*, a privately owned, United States-flagged steamboat, "began and ended its service for hire" to Mackenzie's "Patriot Army" forces located on Navy Island. ¹⁷¹ The *Caroline* had departed Buffalo and made three trips to Navy Island that day, each time delivering men, arms, and other materials to the rebel forces. ¹⁷² In order to prevent further reinforcements and war materials from reaching the rebels, and to deprive the rebels of their likely means of access to reach the mainland of Canada, the commander of the British forces across the river at Chippewa, Colonel McNab, decided that the destruction of the *Caroline* was necessary, and he therefore directed Royal Navy Captain Drew to conduct an immediate night-time expedition to do so. ¹⁷³ Captain Drew, commanding a force of about 50 men on seven boats, proceeded to Navy Island, but when he discovered that the *Caroline* was not docked at Navy Island as expected, he went on to the U.S. port of Schlosser, New York, where he located the

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¹⁶⁸ MOORE, supra note 164, at 409; Rogoff & Collins, supra note 164, at 494.

¹⁶⁹ *Id.*; Jennings, *supra* note 164, at 83.

Jennings, supra note 164, at 83; Rogoff & Collins, supra note 164, at 494.

¹⁷¹ Rogoff & Collins, *supra* note 164, at 494-495.

MOORE, supra note 164, at 409; Jennings, supra note 164, at 83; Rogoff & Collins, supra note 164, at 495

¹⁷³ Jennings, supra note 164, at 83-84; Rogoff & Collins, supra note 164, at 495.

Caroline. 174 There, Captain Drew and his men forcibly boarded and seized the ship, towed it into the current of the Niagara River, set it on fire, and then abandoned it prior to the ship descending the Niagara falls. 175 Two Americans were killed during the British attack. 176

The incursion of British forces into U.S. territory, the destruction of the *Caroline*, and the killing of two Americans "naturally aroused great indignation in the United States", and on January 5, 1838, U.S. Secretary of State John Forsyth sent a letter to Henry Fox, the British Minister in Washington, stating that the incident had caused "the most painful emotions of surprise and regret" and would be made "the subject of a demand for redress." Fox responded in a letter dated February 6, 1838 that the British attack was justified by "the necessity of self-defense and self-preservation" in that British subjects in Upper Canada had already suffered violence at the hands of the rebels, and were "threatened with still further injury and outrage" by the actions of the Caroline. 178 On May 22, 1838, the U.S. presented Britain with a formal demand for reparation, which the British agreed to consider; however, the controversy remained dormant until late 1840, when a British subject named Alexander McLeod, who was visiting the State of New York, was arrested by New York authorities for murder and arson for his alleged participation in the *Caroline* incident. ¹⁷⁹ McLeod's arrest led to renewed diplomatic correspondence between Britain and the U.S. regarding the Caroline incident, and the

¹⁷⁴ Rogoff & Collins, *supra* note 164, at 495.

¹⁷⁵ Jennings, *supra* note 164 at 84; Rogoff & Collins, *supra* note 164, at 495.

¹⁷⁷ Jennings, *supra* note 164, at 85; Rogoff & Collins, *supra* note 164, at 495.

¹⁷⁸ Jennings, supra note 164, at 85; Rogoff & Collins, supra note 164, at 497.

¹⁷⁹ MOORE, supra note 164, at 410; Jennings, supra note 164, at 85; Rogoff & Collins, supra note 164, at 497.

British demanded McLeod's release by New York state authorities due to the fact that the destruction of the *Caroline* was a public act of force by Great Britain, taken in self-defense, by persons acting under the authority of superior British officers. ¹⁸⁰

Daniel Webster, who had replaced John Forsyth as U.S. Secretary of State, agreed with the British position regarding McLeod's arrest¹⁸¹, but he strongly disagreed with the British view that the destruction of the *Caroline* was justified by the international legal right of self-defense. In a letter to the British Minister in Washington Henry Fox dated April 24, 1841, Webster stated that the destruction of the *Caroline* could not be justified "by any reasonable . . . construction of the right of self-defense under the law of nations", and that when the exercise of the international legal right of self-defense "has led to the commission of hostile acts within the territory of a power at peace, nothing less than a clear and absolute necessity can afford ground of justification." Webster asserted that the British Government must show:

"... a necessity of self-defense, instant, overwhelming, leaving no choice of means and no moment for deliberation. It will be for it to show, also, that the local authorities of Canada, even supposing the necessity of the moment authorized them to enter the territories of the United States at all, did nothing unreasonable or excessive;

¹⁸² Rogoff & Collins, supra note 164, at 497.

¹⁸⁰ MOORE, *supra* note 164, at 410-411; Jennings, *supra* note 164, at 85; Rogoff & Collins, *supra* note 164, at 497.

¹⁸¹ Rogoff & Collins, *supra* note 164, at 497. McLeod was eventually tried in the State of New York and was acquitted on proof of an alibi. MOORE, *supra* note 164, at 411.

since the act, justified by the necessity of self-defense, must be limited by that necessity, and kept clearly within it." ¹⁸³

Webster further asserted to Fox that Britain's actions regarding the *Caroline* did not meet this international legal standard for self-defense, because in order to do so:

"It must be shown that admonition or remonstrance to the persons on board the *Caroline* was impracticable, or would have been unavailing; it must be shown that daylight could not be waited for; that there could be no attempt at discrimination between the innocent and the guilty; that it would not have been enough to seize and detain the vessel; but that there was a necessity, present and inevitable, for attacking her in the darkness of the night, while moored to the shore, and while unarmed men were asleep on board, killing some and wounding others, and then drawing her into the current, above the cataract, setting her on fire, and, careless to know whether there might not be in her the innocent with the guilty, or the living with the dead, committing her to a fate which fills the imagination with horror. A necessity for all this, the Government of the United States cannot believe to have existed." ¹⁸⁴

In late 1841, the British Government sent to Washington a special Minister Plenipotentiary, Lord Ashburton, who was specifically directed to resolve several outstanding issues between Great Britain and the U.S., including the *Caroline* incident. On July 27, 1842, Webster forwarded a note to Lord Ashburton regarding the *Caroline* incident, and enclosed a copy of his previous letter of April 24, 1841 to Henry Fox, and

¹⁸³ Jennings, supra note 164, at 89; Rogoff & Collins, supra note 164, at 497-498.

¹⁸⁴ Jennings, *supra* note 164, at 89; Rogoff & Collins, *supra* note 164, at 499-500.

¹⁸⁵ Jennings, *supra* note 164, at 88.

which had contained Webster's formulation of the international legal right of self-defense. ¹⁸⁶ In a response letter dated July 28, 1842, Lord Ashburton agreed with Webster's formulation of the legal requirements for the use of force in self-defense, and acknowledged that respect for the territorial integrity of independent nations was critical and that action taken in self-defense, even when required by urgent necessity, must be "strictly confined within the narrowest limits imposed by that necessity." ¹⁸⁷

Although Lord Ashburton then attempted to argue in his response letter that the facts and circumstances of the *Caroline* incident did meet the legal standard for self-defense formulated by Webster, Lord Ashburton concluded his response by acknowledging that a violation of U.S. territory, whether justifiable or not, was a significant matter and that some explanation and apology for the incident should have been made at the time. Webster responded to Lord Ashburton in a letter dated August 6, 1842, and accepted Britain's acknowledgement that an explanation and apology was due at the time of the incident. Webster also expressed satisfaction "that your Lordship fully admits those great principles of public law, applicable to cases of this kind, which this government has expressed". In particular, Webster reiterated to Lord Ashburton that while exceptions to the principle of the inviolability of the territory of independent states based on "the great law of self-defense" do exist, such exceptions

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¹⁸⁶ Jennings, *supra* note 164, at 88-89.

¹⁸⁷ Rogoff & Collins, *supra* note 164, at 498.

¹⁸⁸ MOORE, *supra* note 164, at 411; Jennings, *supra* note 164, at 89-91; Rogoff & Collins, *supra* note 164, at 499-500.

¹⁸⁹ MOORE, *supra* note 164, at 412; Jennings, *supra* note 164, at 91; Rogoff & Collins, *supra* note 164, at 500.

¹⁹⁰ Id

"should be confined to cases in which the necessity of that self-defense is instant, overwhelming, and leaving no choice of means, and no moment for deliberation." ¹⁹¹

Webster's formulation of the international legal right of self-defense during his diplomatic correspondence with the British Government over the Caroline incident was important because it defined, explicitly and in writing, the legal content of that right. 192 Webster's formulation articulated that in order to be lawful, a nation's use of force in self-defense must be based on three elements: necessity, imminence, and proportionality. A nation must first demonstrate that armed action was necessary to defend itself against an attack or threat of attack, because the danger was real and serious ("overwhelming necessity") and no other peaceful means were reasonably available to eliminate it ("no choice of means"). 193 A nation must also demonstrate that the danger was truly imminent in a temporal sense ("instant", "leaving no moment for deliberation"), such that as with the element of necessity, there was insufficient time to attempt to resolve the danger peacefully. 194 Finally, a nation must demonstrate that its armed response in self-defense was proportional to the danger, in that its response was limited to the amount of force necessary to eliminate the danger and was not excessive ("nothing unreasonable or excessive", "limited by the necessity and kept clearly within it"). 195 Webster's written articulation of these three elements of the international legal right of self-defense, which

¹⁹¹ MOORE, *supra* note 164, at 412.

¹⁹² Jennings, *supra* note 164, at 92; Rogoff & Collins, *supra* note 164, at 498, 501.

Rogoff & Collins, *supra* note 164, at 498; ANTHONY CLARK AREND & ROBERT J. BECK, INTERNATIONAL LAW AND THE USE OF FORCE: BEYOND THE UN CHARTER PARADIGM 72 (1993) [hereinafter AREND & RECK]

¹⁹⁴ Rogoff & Collins, supra note 164, at 498; AREND & BECK, supra note 193, at 72.

^{.95} Id

was clearly inspired by the municipal law of individual self-defense¹⁹⁶, made it "no longer possible for the British to talk vaguely of self-defense and self-preservation as if the mere utterance of the words excused any and every sin", and thereby contributed significantly to the establishment of the right of self-defense, including the right of anticipatory defense against a threat of imminent attack, in customary international law.

Finally, some contemporary legal scholars have been critical of the *Caroline* incident and of Webster's formulation of the international legal right of self-defense. For example, Professor Michael W. Doyle argues that because the British forces at Chippewa under Colonel McNab's command greatly outnumbered the "Patriot Army" on Navy Island, and because there was no evidence on December 29, 1837 of an impending attack by the "Patriot Army", the provision by the *Caroline* of personnel and supplies to Navy Island did not constitute an imminent threat to the British. In view of this, Professor Doyle asserts that although Webster's formulation of the legal content of the international legal right of self-defense has become the "gold standard" for anticipatory defensive actions under international law, the *Caroline* incident itself did not meet the criteria for which it has since become famous. In Professor Doyle also argues that Webster's formulation of the required elements of self-defense is deeply flawed, in that Webster's formulation justifies "reflex defensive reactions to imminent threats and nothing more." Professor Myres McDougal has offered similar criticism of Webster's self-

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¹⁹⁶ Weightman, supra note 24, at 1106.

¹⁹⁷ Jennings, *supra* note 164, at 89.

¹⁹⁸ MICHAEL W. DOYLE, STRIKING FIRST: PREEMPTION AND PREVENTION IN INTERNATIONAL CONFLICT 13-14 (2008).

¹⁹⁹ DOYLE, *supra* note 198, at 14.

²⁰⁰ *Id*. at 15.

defense formulation, stating that Webster's criteria is "cast in language so abstractly restrictive as almost, if read literally, to impose paralysis." While I will discuss more fully in Part 3 of this dissertation the concern that a strict requirement of temporal imminence for action in self-defense is insufficient to address contemporary threats faced by states today, I am nevertheless of the view that despite these criticisms, the *Caroline* incident remains a key precedent in international law because it constitutes both an example of state practice and of clear *opinio juris* by Great Britain and the U.S. regarding the international legal right of states to use armed force in self-defense against attacks and threats of imminent attack. The fact that both Great Britain and the U.S. agreed, in written diplomatic correspondence, to Webster's international legal formulation of the criteria for anticipatory defense makes the *Caroline* incident "all the more valuable as a precedent."

D. The Fur Seal Arbitration (1893)

From 1886 to 1889, a dispute occurred between Great Britain and the U.S. regarding British Canadian sealing vessels that were engaged in pelagic sealing (the killing of fur seals in the ocean as distinguished from killing them in their breeding locations on land) in the Bering Sea, at distances of fifteen to one hundred fifteen miles from shore. The U.S. asserted a property interest in the fur seals because the seals bred on the Pribilof Islands, which were owned by the U.S., and while the U.S. did not claim "all-purpose jurisdiction" over the Bering Sea, the U.S. did assert a property right to protect the Pribilof Island fur seals, particularly the females, from over-fishing while the

²⁰¹ MCDOUGAL & FELICIANO, *supra* note 64, at 217.

²⁰² Jennings, *supra* note 164, at 92.

²⁰³ Rogoff & Collins, *supra* note 164, at 502.

fur seals were searching for food in the Bering Sea.²⁰⁴ In the exercise of this asserted right to protect the fur seals from potential extinction, U.S. revenue cutters seized a total of fourteen British Canadian pelagic sealing vessels, which resulted in several of the vessels being condemned and ordered to be sold, and in the fining and imprisonment of the sealing vessels' principal officers.²⁰⁵ After extensive diplomatic correspondence failed to resolve the matter, in 1892 Great Britain and the U.S. entered into a treaty by which they agreed to submit the dispute to international arbitration.²⁰⁶ The treaty provided for the appointment of seven arbitrators, two by the U.S., two by Great Britain, and one each by France, Italy, and Sweden/Norway.²⁰⁷

During the arbitration hearings, which were held in Paris from March to August 1893, the U.S. argued that seizing the British Canadian pelagic sealing vessels was necessary as a matter of self-defense. Mr. James Carter, representing the U.S., asserted to the Arbitration Tribunal that the international legal right of self-defense extended to the protection of a nation's property, and that if a nation's property is attacked, it has the right to defend its property using "such means and methods and weapons as are necessary fully and perfectly to protect itself." In support of these assertions, Carter specifically cited the *Caroline* incident, which in his view justified the U.S. taking action to seize the pelagic sealing vessels due to a "well-grounded apprehension" that there was a necessity to act in self-defense to protect the U.S. property interest in preserving the fur seal

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²⁰⁹ Id.

²⁰⁴ Rogoff & Collins, *supra* note 164, at 503.

²⁰⁵ *Id*. at 502.

²⁰⁶ Id.; William Williams, Reminiscences of the Bering Sea Arbitration, 37 AM. J. INT'L L. 562 (1943).

²⁰⁷ Williams, *supra* note 206, at 565.

²⁰⁸ Rogoff & Collins, *supra* note 164, at 503; Williams, *supra* note 206, at 569-570.

herd. ²¹⁰ In response, the British representative, Sir Charles Russell, argued that it was incorrect for the U.S. to assert that the international legal right of self-defense authorized a nation to do on the high seas whatever it might conceive to be necessary to protect its property or its interests, and that the use of force in self-defense was only lawful during "occasions of emergency- sudden emergency- occasions when there is no time (to use the expressive language of an eminent statesman of the United States . . .)- when there is no time for deliberation, no time for contrivance, no time for warning, no time for diplomatic expostulation. That is the very idea at the bottom of all these exceptional acts of self-defence". ²¹¹ Russell added that in this case, there was sufficient time for the U.S. to conduct deliberation, including diplomacy, and that consequently there was no instant, overwhelming necessity for the U.S. to have seized the British Canadian pelagic sealing vessels under the international legal right of self-defense.²¹²

The Arbitration Tribunal did not accept the U.S. contention that the international legal right of self-defense justified its seizure of British Canadian pelagic sealing vessels on the high seas for the purpose of protecting its alleged property interest in the Pribilof Islands' fur seal herd.²¹³ In its award announced on August 8, 1893, the Arbitration Tribunal held by a vote of five to two (with the two U.S.-appointed arbitrators in the minority) that the U.S. did not have "any right of protection or property in the fur seals . . when such seals are found outside the ordinary three mile limit" (i.e., outside the three

²¹⁰ Rogoff & Collins, *supra* note 164, at 503; Williams, *supra* note 206, at 569-570.

²¹¹ Rogoff & Collins, *supra* note 164, at 503-504.

²¹² Rogoff & Collins, *supra* note 164, at 504.

²¹³ Id

mile territorial sea claimed by the U.S. and most other nations at that time). ²¹⁴ The U.S., having lost before the Arbitration Tribunal, ultimately paid Britain over \$450,000.00 in damages. ²¹⁵

While the majority of the Arbitration Tribunal did not issue a written opinion stating the specific grounds on which they reached their decision²¹⁶, their finding that the U.S. seizure of the British Canadian pelagic sealing vessels on the high seas was not justified clearly indicates that they did not believe that protection of the fur seal herd constituted a real and serious danger to the U.S., or that there was insufficient time and opportunity for the U.S. to address the danger by peaceful means. The decision of the Arbitration Tribunal is therefore an example of state practice and *opinio juris* regarding the international legal right of self-defense, including the right of anticipatory defense against an imminent threat, in that the majority specifically considered the legal arguments of the U.S. and Britain regarding the applicability of the Caroline criteria for lawful self-defense and apparently concluded that in this case the required elements of necessity and imminence were not met. In my view, the fact that the Arbitration Tribunal consisted of international jurists from France, Italy, and Sweden/Norway, in addition to the U.S. and Britain, strengthens the fur seal arbitration as a precedent indicating wider acceptance of the Caroline criteria for self-defense as customary international law.

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²¹⁴ Williams, *supra* note 206, at 582.

²¹⁵ Rogoff & Collins, *supra* note 164, at 504.

²¹⁶ Williams, supra note 206, at 583.

E. Diplomatic Correspondence Regarding the Kellogg-Briand Pact (1928)

On August 27, 1928, the General Treaty for the Renunciation of War as an Instrument of National Policy, also known as the Kellogg-Briand Pact (after U.S. Secretary of State Kellogg and French Foreign Minister Briand) (hereinafter the "Pact"), was signed in Paris²¹⁷, and prior to the outbreak of World War II the Pact had 63 parties, a record number for that period.²¹⁸ In Article I of the Pact, the parties condemned recourse to war for the solution of international controversies, and renounced it as an instrument of national policy in their relations with one another.²¹⁹ In Article II, the parties agreed that the settlement of all disputes with each other "shall never be sought except by pacific means".²²⁰ While the Pact contained no provisions regarding the international legal right of self-defense, formal diplomatic notes reserving the right of self-defense were exchanged between the principal parties prior to the Pact's conclusion, and there was never any doubt that the Pact's renunciation of war had to be construed accordingly.²²¹

During the initial negotiation of the Pact, the U.S. had advocated for a simple and unqualified renunciation of war as an instrument of national policy; however, France favored a renunciation only of wars of aggression and argued for inclusion in the Pact of language that specifically reserved the international legal right of states to resort to the

²¹⁷ General Treaty for the Renunciation of War as an Instrument of National Policy, Aug. 27, 1928, 46 Stat. 2343 T.S. No. 796, 94 L.N.T.S. 57 [hereinafter Kellogg-Briand Pact].

²¹⁸ DINSTEIN, *supra* note 17, at 87.

²¹⁹ Kellogg-Briand Pact. *supra* note 217. at art. I.

²²⁰ *Id*. at art. II.

²²¹ DINSTEIN, *supra* note 17, at 87-88.

use of military force in self-defense.²²² After considering alternate draft treaty language proposed by France, on June 23, 1928, U.S. Secretary of State Kellogg forwarded identic notes to the principal states parties involved in negotiating the Pact (Australia, Belgium, Canada, Czechoslovakia, France, Germany, Great Britain, India, Irish Free State, Italy, Japan, New Zealand, Poland, and South Africa), setting forth his views regarding the issue of whether language on self-defense should be included in the Pact.²²³ Kellogg first stated:

"There is nothing in the American draft of an anti-war treaty which restricts or impairs in any way the right of self-defense. That right is inherent in every sovereign state and is implicit in every treaty. Every nation is free at all times and regardless of treaty provisions to defend its territory from attack or invasion and it alone is competent to decide whether circumstances require recourse to war in self-defense. If it has a good case, the world will applaud and not condemn its action."

Kellogg then asserted that since the right of self-defense is an inalienable attribute of sovereignty, the inclusion of a specific textual reference to self-defense within the Pact was neither necessary nor desirable:

"Express recognition by treaty of this inalienable right, however, gives rise to the same difficulty encountered in any effort to define aggression. It is the identical question approached from the other side. Inasmuch as no treaty provision can add to the natural

²²² D.W. BOWETT, SELF-DEFENCE IN INTERNATIONAL LAW 132 (1958).

ldentic Notes of the Government of the United States Regarding the General Treaty for the Renunciation of War, June 23, 1928, reprinted In 22 AM. J. INT'L L. SUPP. 109 (1928) [hereinafter Identic Notes].

²²⁴ Identic Notes, *supra* note 223, 22 AM J. INT'L L. SUPP. 109-110.

right of self-defense, it is not in the interest of peace that a treaty should stipulate a juristic conception of self-defense since it is far too easy for the unscrupulous to mold events to accord with an agreed definition."²²⁵

After receiving U.S. Secretary of State Kellogg's identic notes, all of the principal states parties involved in negotiating the Pact forwarded written responses to the U.S. Government stating that they agreed with Secretary Kellogg's explanations regarding the international legal right of self-defense, and that they were therefore prepared to sign and conclude the Pact based on those explanations.²²⁶

Secretary Kellogg's description of self-defense as a right "inherent in every sovereign state", as an "inalienable attribute of sovereignty", and as a "natural right" suggest that he was referring to the right of self-defense as a natural law concept, i.e., one that was based on God's Eternal Law as rationally understood by human beings. ²²⁷ As previously discussed, the natural law concept of self-defense permitted the use of armed force to defend against either an armed attack or a threat of imminent armed attack, and this natural law concept of self-defense had become well established in municipal law systems during the Middle Ages and had been incorporated into the law of nations by the classic writers on international law. ²²⁸ In view of this, I consider that the diplomatic correspondence between the U.S. and the other principal states parties involved in negotiating the Pact constitutes an example of both state practice and *opinio juris*

²²⁵ Identic Notes, *supra* note 223, 22 AM J. INT'L L. SUPP. 110.

Notes to the Government of the United States Regarding the General Treaty for the Renunciation of War, July 8-20, 1928, *reprinted in 23 AM. J. INT'L L. SUPP. 1-13 (1929).*

Weightman, supra note 24, at 1108.

See notes 43-122, *supra* and accompanying text.

regarding the international legal right of self-defense, and that their acceptance of the concept of self-defense as an "inherent" and "natural" right indicates their acceptance that states may use armed force in self-defense against attacks and threats of imminent attack.

F. Britain's Attack on the Vichy France Naval Fleet (1940)

In June 1940, Paris fell to the military forces of Nazi Germany and on June 22, 1940 the defeated French Government entered into an armistice agreement with Germany. 229 Under the terms of the armistice, all of France except the southern third, minus the Atlantic coast, came under German occupation, and the unoccupied portion of France continued to function as a semi-independent rump state known as Vichy France. 230 In addition to controlling the unoccupied portion of France, the Vichy Government controlled France's extensive overseas empire and France's powerful naval fleet, which at that time was the world's fourth largest navy and included some of the world's newest and most powerful warships. 231 The armistice provided that part of the French fleet would continue to be stationed in French overseas possessions to enable the Vichy Government to maintain control over France's overseas empire, but that the bulk of the French fleet would return to unoccupied France under German and Italian inspection and overall supervision. 232

Although Great Britain was not at war with Vichy France and indeed, had been allied with France in the war against Nazi Germany prior to the June 1940 armistice, the British Government viewed with grave concern the prospect of the return of the bulk of

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²²⁹ Gill, *supra* note 16, at 129.

²³⁰ Gill, *supra* note 16, at 129.

²³¹ Id. at 129-130.

²³² Id.

the French naval fleet to Vichy France, since this would allow Germany to gain control of the French fleet and to turn it against Britain if the Germans wished to do so.²³³ The British Government assessed that if Germany seized control of the bulk of the French fleet, Britain would be forced to withdraw from the Mediterranean and would potentially be faced with the loss of overall naval superiority, which would most likely have resulted in its loss of the war.²³⁴

In view of this serious and imminent danger, British Prime Minister Winston Churchill ordered Britain's armed forces to carry out Operation Catapult on July 3-4, 1940, which involved the neutralization or, if necessary, the destruction of Vichy France naval forces located in French overseas bases. British forces first offered the French overseas naval commanders an ultimatum with three possible alternatives: join the British and continue the fight against Germany; sail under British escort to either the French West Indies or to a U.S. port to be demobilized; or scuttle the vessels under British supervision, and failure by the French naval commanders to agree would result in the British opening fire. The local commanders of the French naval forces located in the French West Indies and in Alexandria, Egypt accepted the British ultimatum, and the neutralization of those French naval vessels was accomplished without bloodshed; however, the commander of the main French naval strike force in French North Africa refused the ultimatum, and the British forces then attacked, destroying or heavily

²³³ Gill, *supra* note 16, at 131.

²³⁴ Id

²³⁵ *Id*. at 131-132.

²³⁶ *Id*. at 132.

damaging the French naval squadron located there.²³⁷ The British attack successfully neutralized a most important segment of Vichy France's naval squadron located at French North Africa, but at a heavy cost: some 1300 French sailors died and 340 were wounded.²³⁸

It is submitted that Britain's use of armed force to neutralize and/or destroy the Vichy France naval fleet in 1940 is an example of state practice of the lawful use of armed force in anticipatory defense to repel an imminent threat of attack. Given the terms of the armistice agreement between Germany and Vichy France, which called for the bulk of the world's fourth largest navy to return to unoccupied France and be placed under German/Italian "inspection and supervision", Britain faced a grave and immediate threat to its national security, and the window of opportunity to carry out the neutralization operation with the greatest chance of success and the least prospect of unnecessary casualties was extremely narrow.²³⁹ The threat posed to Britain by the incorporation of the French naval fleet into Germany's war effort "can only be described as overwhelming, since it would have almost inevitably meant British defeat, especially in the first year following the fall of France." Additionally, Britain attempted to remove the threat without the use of armed force by offering the local French naval commanders alternatives which were "honorable, reasonable and, in fact, the only ones the British could offer under the circumstances." ²⁴¹ I therefore consider that the British action against the Vichy France naval fleet was a lawful exercise of the international legal

²³⁷ Gill, *supra* note 16, at 132.

²³⁸ Id

²³⁹ *Id.* at 133-134.

²⁴⁰ *Id*. at 134.

²⁴¹ Id

right of anticipatory defense, in that the action was necessary (the threat was grave and no reasonable alternatives existed), the threat was temporally imminent, and Britain's defensive use of force was the minimum necessary to eliminate the danger.

G. The International Military Tribunals at Nuremberg and Tokyo

On August 8, 1945, the U.S., Great Britain, France, and the Soviet Union entered into an agreement establishing the International Military Tribunal at Nuremberg (hereinafter "Nuremberg Tribunal") to try and punish top officials in Nazi Germany for numerous violations of international law, including the commission of crimes against peace by planning, preparation, initiation or waging of wars of aggression in violation of international treaties, agreements, and assurances. 242 Nineteen other nations- Greece, Denmark, Yugoslavia, Netherlands, Czechoslovakia, Poland, Belgium, Ethiopia, Australia, Honduras, Norway, Panama, Luxembourg, Haiti, New Zealand, India, Venezuela, Uruguay, and Paraguay- also expressed their adherence to the agreement establishing the Nuremberg Tribunal.²⁴³ Among the charges brought against top Nazi officials under the heading of "crimes against peace" was the German invasion of Norway in April 1940, which Nuremberg prosecutors argued was in violation of the Kellogg-Briand Pact of 1928, ratified by Germany and 62 other nations, which prohibited resort to war as an instrument of national policy.²⁴⁴ The top Nazi officials defended the German invasion of Norway on the ground that Germany was acting in self-defense, in that Germany was compelled to invade Norway in order to forestall the allied powers

²⁴² International Military Tribunal at Nuremberg, Judgment and Sentences, Oct. 1, 1946, *reprinted in* 41 AM. J. INT'L L. 172, 174 (1947) [hereinafter Nuremberg Judgment].
²⁴³ *Id.* at 172.

Nuremberg Judgment, *supra* note 242, at 203-207; Rogoff & Collins, *supra* note 164, at 504-505.

from invading Norway, and that Germany's invasion was thus a lawful exercise of the international legal right of anticipatory defense.²⁴⁵

In its judgment dated October 1, 1946, the Nuremberg Tribunal rejected the contention that Germany's invasion of Norway was a lawful exercise of the right of anticipatory defense. ²⁴⁶ The Nuremberg Tribunal held that the proper legal standard for assessing a claim of anticipatory defensive action was U.S. Secretary of State Daniel Webster's formulation during the *Caroline* incident, and specifically stated that anticipatory defensive action in foreign territory ". . . is justified only in the case of 'an instant and overwhelming necessity for self-defense, leaving no choice of means, and no moment [for] deliberation' (The Caroline Case, Moore's Digest of International Law, II, 412)."²⁴⁷ Applying this legal standard to the facts, the Nuremberg Tribunal found that Germany's military plans for the invasion and occupation of Norway were prepared long in advance of any similar plans by the allied powers, and that the purpose of Germany's invasion of Norway was actually to acquire military bases from which Germany could launch more effective attacks against Britain and France. 248 Since Germany's invasion of Norway was not carried out in order to forestall an imminent threat of an allied landing in Norway, the Nuremberg Tribunal held that it was not a legitimate exercise of the

Nuremberg Judgment, *supra* note 242, at 205; Rogoff & Collins, *supra* note 164, at 505.

²⁴⁶ Nuremberg Judgment, *supra* note 242, at 207; Rogoff & Collins, *supra* note 164, at 505; BOWETT, *supra* note 222, at 142; MCDOUGAL & FELICIANO, *supra* note 64, at 232.

²⁴⁷ Nuremberg Judgment, *supra* note 242, at 205.

Nuremberg Judgment, *supra* note 242, at 206.

international legal right of anticipatory defense and was instead an act of aggressive war.²⁴⁹

Similarly, in its judgment of November 12, 1948, the International Military Tribunal for the Far East (hereinafter "Tokyo Tribunal"), which had been established under a charter similar to that of the Nuremberg Tribunal to try and punish top Japanese officials for unlawfully waging aggressive war, considered a claim by the Japanese defendants that Japan's military actions against the Netherlands in the Far East were justifiable under the international legal right of self-defense. ²⁵⁰ Because the Netherlands had declared war on Japan on December 8, 1941, prior to the actual invasion of the Netherlands East Indies by Japanese troops and prior to Japan's declaration of war against the Netherlands, both of which had occurred on January 11, 1942, the top Japanese officials argued that Japan's invasion of the Netherlands East Indies was defensive in nature and did not constitute aggressive war.²⁵¹ The Tokyo Tribunal rejected this argument, finding that as early as November 5, 1941, Japan had issued operational orders for attacks upon the Netherlands East Indies and that on December 1, 1941, an Imperial Conference in Japan had formally decided that Japan would open hostilities against Britain, the U.S., and the Netherlands. ²⁵² In light of this evidence, the Tokyo Tribunal held that the fact that the Netherlands, "... being fully apprised of the imminence of the attack, in self-defense declared war against Japan on 8th December and

²⁴⁹ Nuremberg Judgment, *supra* note 242, at 206-207.

²⁵⁰ International Military Tribunal for the Far East, Judgment, Nov. 12, 1948, *reprinted in* II THE LAW OF WAR: A DOCUMENTARY HISTORY 1029, 1051-1054 (Leon Friedman, ed., 1972) [hereinafter Tokyo Judgment]. The nations that participated in the Tokyo Tribunal were the U.S., China, Great Britain, the Soviet Union, Australia, Canada, France, Netherlands, New Zealand, India, and the Philippines. *Id.* at 1029. ²⁵¹ *Id.*; MCDOUGAL & FELICIANO, *supra* note 64, at 231.

²⁵² Tokyo Judgment, *supra* note 250, at 1053-1054; MCDOUGAL & FELICIANO, *supra* note 64, at 232.

thus officially recognized the existence of a state of war which had been begun by Japan, cannot change that war from a war of aggression on the part of Japan into something other than that."²⁵³ The Tokyo Tribunal concluded that Japan had in fact conducted a war of aggression against the Netherlands.²⁵⁴

The judgments of the Nuremberg and Tokyo Tribunals recognized and applied U.S. Secretary of State Daniel Webster's formulation of the international legal right of self-defense in the Caroline incident to determine whether actions by states constituted lawful anticipatory defense. In particular, the Nuremberg Tribunal specifically cited the Caroline incident for the applicable international legal standard for self-defense, and held that to be justifiable, anticipatory defensive action by a state must be based on an instant and overwhelming necessity that was temporally imminent ("leaving no choice of means and no moment for deliberation"). Although the Tokyo Tribunal did not refer specifically to the Caroline incident, the Tribunal did apply the self-defense element of imminence when it held that the Netherlands' declaration of war on Japan on December 8, 1941 was a legitimate defensive response to a real and imminent threat of armed attack by Japan. The judgments of the Nuremberg and Tokyo Tribunals therefore constitute strong evidence of opinio juris that states recognized in customary international law a permissive right to use armed force in self-defense against an attack or threat of imminent attack, provided that the criteria of real and serious necessity, temporal imminence of the threat, and proportionality of response were met. This conclusion is further strengthened by the fact that on December 11, 1946, the United Nations General Assembly, in

²⁵³ Tokyo Judgment, *supra* note 250, at 1053.

²⁵⁴ *Id*. at 1054.

Resolution 95(I), unanimously affirmed the principles of international law recognized by both the charter and judgment of the Nuremberg Tribunal. As Professor Michael Scharf has noted, this Resolution ... had all the attributes of a resolution entitled to great weight as a declaration of customary international law: it was labeled an 'affirmation' of legal principles; it dealt with inherently legal questions; it was passed by a unanimous vote; and none of the members expressed the position that it was merely a political statement."²⁵⁶

This chapter has discussed the assertions and practice by states of the international legal right of self-defense, including the right of anticipatory defense against a threat of imminent attack, from the late 18th to the mid-20th centuries. It began by discussing, as an example of state practice, the recognition in the U.S. Constitution of a U.S. state's responsibility to protect its citizens from invasion or imminent threat of invasion, and then described several other examples of state practice regarding the international legal right of anticipatory defense against imminent attack, including Britain's seizure of the Danish fleet in 1807, the *Caroline* incident, and the British attack on the Vichy France naval fleet in 1940. The chapter also discussed several examples of *opinio juris* regarding the international legal right of self-defense and anticipatory defense, such as the 1893 Fur Seal Arbitration (rejecting the U.S. claim of a serious and imminent threat); the diplomatic correspondence reserving an "inherent" or "natural" legal right of self-defense in the 1928 Kellogg-Briand Pact; and the adoption by the International Military Tribunals at Nuremberg and Tokyo of the self-defense principles articulated in the *Caroline*

²⁵⁵ G.A. Res. 95(I) (Dec. 11, 1946).

²⁵⁶ Scharf, *supra* note 135, at 333.

incident, which I believe demonstrate that at the time the United Nations Charter was signed in 1945, the international legal right of self-defense, including the right of anticipatory defense against a threat of imminent attack, was part of customary international law. The next chapter will discuss anticipatory defense in the United Nations Charter era, and will demonstrate via analysis of the provisions of Article 51 of the Charter and examples of state practice and *opinio juris* that Article 51 preserved the pre-existing customary international law right of states to take anticipatory defensive action against the threat of an imminent armed attack.

CHAPTER V. PART 1: ANTICIPATORY DEFENSE IN THE UNITED NATIONS CHARTER ERA

On April 25, 1945, with World War II still ongoing, the nations of the world convened in San Francisco to conduct final negotiations for a collective security system to be implemented through the proposed new United Nations (UN) organization. The delegations of the smaller nations at San Francisco were optimistic because they believed that the world's great powers had committed themselves to cooperation in the pursuit of common goals under the auspices of the new UN Security Council, thus making the maintenance of international peace and security a real possibility. Accordingly, on June 26, 1945, the UN Charter was signed with the lofty intent to "save succeeding generations from the scourge of war" and for the purpose of maintaining international peace and security through effective collective action to prevent and remove threats to the peace and to suppress acts of aggression.

To implement this new collective security system, the states parties to the UN Charter agreed to settle their international disputes by peaceful means²⁶², and they specifically agreed in Article 2(4) of the Charter to refrain in their international relations from the threat or use of force against the territorial integrity or political independence of

²⁵⁷ Timothy L. H. McCormack, *Anticipatory Self-Defence in the Legislative History of the United Nations Charter*, 25 ISR. L. REV. 1, 15 (1991); Timothy Kearley, *Regulation of Preventive and Preemptive Force in the United Nations Charter: A Search for Original Intent*, 3 WYO. L. REV. 663, 679 (2003).

²⁵⁸ McCormack, *supra* note 257, at 15.

²⁵⁹ Charter of the United Nations, Jun. 26, 1945, 1 U.N.T.S. XVI.

²⁶⁰ U.N. Charter, prmbl.

²⁶¹ *Id.*, art. 1(1).

²⁶² *Id.*, art. 2(3).

any state, or in any other manner inconsistent with the purposes of the UN. 263 They conferred on the UN Security Council primary responsibility for the maintenance of international peace and security on their behalf²⁶⁴, and agreed to accept and carry out the decisions of the Security Council. 265 They also empowered the Security Council to determine the existence of any threat to the peace, breach of the peace, or act of aggression and to decide on appropriate measures to maintain or restore international peace and security. 266 Measures the Security Council was authorized to take included non-forceful actions such as interruption of economic or diplomatic relations²⁶⁷, as well as "such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security."²⁶⁸ Any military operations directed by the Security Council could be conducted using military forces from UN member states.²⁶⁹

Article 51 of the UN Charter contains the only reference in the Charter to the international legal right of self-defense. ²⁷⁰ Article 51 states:

"Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority

²⁶³ U.N. Charter, art. 2(4).

²⁶⁴ *Id.*, art. 24(1).

²⁶⁵ *Id*. art. 25.

²⁶⁶ *Id.*, art. 39.

²⁶⁷ *Id.*, art. 41.

²⁶⁸ *Id.*, art. 42.

²⁷⁰ McCormack, *supra* note 257, at 7.

and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security."²⁷¹

While Article 51 thus appears to recognize the "inherent" legal right of states to use armed force in self-defense, the language "if an armed attack occurs" has caused controversy among states and legal scholars regarding whether, following the entry into force of the UN Charter, it remains lawful for states to use force in self-defense against a threat of imminent armed attack that has not yet occurred, in accordance with pre-UN Charter customary international law. Although some legal scholars identify additional variations It believe that the principal legal positions in this controversy fall into one of two schools of thought, which I will refer to as restrictionist and counter-restrictionist. In general, the restrictionist school argues that the words "if an armed attack occurs" in Article 51 prohibit states from using force in self-defense unless an actual armed attack has occurred, while the counter-restrictionist school, to which I adhere, contends that Article 51 does not prohibit states from using force in anticipatory defense to repel a threat of imminent armed attack in accordance with pre-UN Charter customary international law.

²⁷¹ U.N. Charter, art. 51.

McCormack, supra note 257, at 1-2; AREND & BECK, supra note 193, at 72-73.

Professor Sean D. Murphy identifies four different schools of thought, which he labels the strict-constructionist school, the imminent threat school, the qualitative threat school, and the "Charter-is-dead" school. Murphy, *supra* note 133, at 703.

My adoption of the restrictionist and counter-restrictionist labels follows Professors Arend and Beck. AREND & BECK, *supra* note 193, at 73.

²⁷⁵ AREND & BECK, *supra* note 193, at 72-73.

This chapter will discuss anticipatory defense in the UN Charter era, and will demonstrate that the Charter did not eliminate the pre-UN Charter customary international law right to use force in anticipatory defense against a threat of imminent armed attack. After first discussing the restrictionist and counter-restrictionist positions in greater detail, the chapter will note the lack of any guidance from the International Court of Justice regarding the right of anticipatory defense and will then discuss two examples of post-Charter state practice: the 1967 Six Day War and the 1981 Israeli strike on the Osirak nuclear reactor in Iraq. The chapter will then discuss the impact that the terrorist attacks of September 11, 2001 have had on the legal concept of anticipatory defense, including the issuance by the U.S. in September 2002 of a National Security Strategy that asserted a doctrine of preventive defense, the U.S.-led attack on Iraq in March 2003, and the reports of the UN High-Level Panel of Experts and the UN Secretary General in 2004-2005. The chapter will conclude with a discussion of state practice and opinio juris on the international legal right of anticipatory defense that has occurred since the UN Reports in 2004-2005, which support the continued existence of the customary international law right to use force in anticipatory defense to repel a threat of imminent armed attack.

A. Interpreting Article 51 of the UN Charter: The Restrictionist View Regarding Anticipatory Defense

The restrictionist school of thought, whose adherents include such notable legal scholars as Professor Ian Brownlie²⁷⁶, Professor Philip Jessup²⁷⁷, Professor Louis

²⁷⁷ PHILIP C. JESSUP, A MODERN LAW OF NATIONS 166 (1968).

²⁷⁶ IAN BROWNLIE, INTERNATIONAL LAW AND THE USE OF FORCE BY STATES 278 (1963).

Henkin²⁷⁸, and Professor Yoram Dinstein²⁷⁹, interprets Article 51 of the UN Charter as prohibiting a state from using force in self-defense unless and until it suffers an armed attack. 280 The restrictionists cite the plain language of the authentic English language text of Article 51, which states, "Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs . . . " (emphasis added), and they assert that under Article 31 of the Vienna Convention on the Law of Treaties²⁸¹ this language must be presumed to have its ordinary meaning. ²⁸² The restrictionists thus contend that the clear wording "if an armed attack occurs" in Article 51 constitutes a bright-line rule that prohibits any use of defensive armed force if an armed attack has not yet occurred.²⁸³ As Professor Olivier Corten puts it, "Either it is a case of an armed attack and the victim state has a right to defend itself, or it is some other case, no matter which, and that right cannot be exercised. The existence of a simple threat, whether imminent or not, is undeniably in the second category."284 The restrictionists thus conclude that Article 51 prohibits states from using armed force in anticipatory defense against a threat of imminent attack, and they variously assert that in accordance with the *lex posterior*

 $^{^{278}}$ LOUIS HENKIN, HOW NATIONS BEHAVE 140-143 (2nd ed. 1979).

²⁷⁹ DINSTEIN, *supra* note 17, at 197.

²⁸⁰ OLIVIER CORTEN, THE LAW AGAINST WAR: THE PROHIBITION ON THE USE OF FORCE IN CONTEMPORARY INTERNATIONAL LAW 407-408 (Christopher Sutcliffe trans., 2010); RUYS, *supra* note 21, at 259.

Vienna Convention on the Law of Treaties, art. 31(1), May 23, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention]. Article 31(1) of the Vienna Convention states that a treaty shall be interpreted in good faith in accordance with ordinary meaning to be given to the terms of the treaty in their context and in light of the treaty's object and purpose. Although the Vienna Convention does not apply retroactively to treaties concluded before the Vienna Convention entered into effect, and therefore does not apply to the UN Charter, the provisions of the Vienna Convention reflect a wide international consensus on treaty interpretation and are therefore used by some legal scholars when interpreting the UN Charter. McCormack, *supra* note 257, at 4-7.

²⁸² CORTEN, *supra* note 280, at 407.

²⁸³ *Id.*; RUYS, *supra* note 21, at 259.

²⁸⁴ CORTEN, *supra* note 280, at 407-408.

principle²⁸⁵Article 51 has overruled any incompatible pre-UN Charter customary international law²⁸⁶, or that pre-UN Charter customary international law on the use of force must simply be presumed to be the same as the restrictionist interpretation of Article 51.²⁸⁷

With regard to the context of the UN Charter, including its object and purpose, the restrictionists argue that their interpretation of Article 51 as prohibiting the use of armed force in anticipatory defense against a threat of imminent attack is fully consistent with the broad prohibition in Article 2(4) of the Charter of the threat or use of force by states in their international relations. They assert that since the right to use force in self-defense in Article 51 constitutes an exception to Article 2(4)'s comprehensive prohibition on the use of force, such an exception must be interpreted restrictively, and that because Articles 2(4) and 39 of the Charter specifically mention the "threat of force" and "threats to the peace", this shows that the drafters of the Charter specifically considered such matters and intentionally chose to require states to submit them to the Security Council. The restrictionists believe that this interpretation is also consistent with the object and purpose of the UN Charter, which in their view was designed to limit the unilateral use of force by states as much as possible, and to subject disputes that involve threats to the control of the Security Council. 290

²⁸⁵ The principle *lex posterior derogati legi priori* is a general legal canon of construction which states that where two equally authoritative legal provisions appear to conflict, the later in time prevails. Harding v. VA, 448 F. 3d 1373, 1376 n. 2 (Fed. Cir. 2006).

²⁸⁶ CORTEN, supra note 280, at 411; RUYS, supra note 21, at 259.

²⁸⁷ CORTEN, *supra* note 280, at 411.

²⁸⁸ CORTEN, *supra* note 280, at 408; RUYS, *supra* note 21, at 259.

²⁸⁹ CORTEN, *supra* note 280, at 408; RUYS, *supra* note 21, at 259.

²⁹⁰ CORTEN. *supra* note 280, at 412; RUYS, *supra* note 21, at 259.

Although the restrictionist school contends that the plain language "if an armed attack occurs" in Article 51 is clear and controlling and that there is therefore no need to resort to supplementary means of interpretation such as the preparatory work (travaux preparatoires, hereinafter the "travaux") of the UN Charter²⁹¹, they generally assert that there is nothing in the *travaux* to suggest that the phrase "if an armed attack occurs" was intended to be declaratory instead of regulatory, or that this phrase should be broadly construed to include implicitly the right of anticipatory defense against an imminent threat. ²⁹² The restrictionists also point to an exchange between members of the U.S. delegation at the UN Charter negotiating conference in San Francisco, in which U.S. State Department Legal Advisor Green Hackworth expressed concern that the language "if an armed attack occurs" in the draft version of Article 51 "greatly qualified the right of self-defense", and was told in reply by former Minnesota Governor Harold Stassen, who was also a member of the U.S. delegation, that "[t]his was intentional and sound. We did not want exercised the right of self-defense before an armed attack had occurred."293 When another member of the U.S. delegation asked what action could be undertaken under the draft Article 51 against a fleet that had "started from abroad against an American republic but had not yet attacked", Governor Stassen replied similarly that "We could not under this provision [the draft Article 51] attack the fleet but we could send a

²⁹¹ Article 32 of the Vienna Convention states that recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, when the interpretation according to the plain language of the treaty either leaves the meaning "ambiguous or obscure" or leads to a result that is "manifestly absurd or unreasonable". Vienna Convention, *supra* note 281, art. 32.

²⁹² CORTEN, *supra* note 280, at 414-415; RUYS, *supra* note 21, at 260.

²⁹³ CORTEN, *supra* note 280, at 414-415; RUYS, *supra* note 21, at 260; THOMAS M. FRANCK, RECOURSE TO FORCE: STATE ACTION AGAINST THREATS AND ARMED ATTACKS 50 (2002).

fleet of our own and be ready in case an attack came."²⁹⁴ The restrictionists argue that these exchanges within the U.S. delegation support their position that the drafters of what became Article 51 intentionally limited the international legal right of self-defense to situations of actual armed attack.²⁹⁵

The restrictionists also advance policy arguments that question the desirability of interpreting Article 51 to allow for the international legal right of anticipatory defense against a threat of imminent attack. ²⁹⁶ They express concern that if anticipatory defensive actions are interpreted to be lawful, such an interpretation would "open up the floodgates to precisely those risks of abuse that the Charter set out to eradicate", such as the World War II claim by Germany that it invaded Belgium and the Netherlands to forestall an imminent attack by France and Britain on the Ruhr district.²⁹⁷ The restrictionists also contend that clear and objective criteria to justify anticipatory defensive action do not exist, which means that the lawfulness of such action "would largely hinge upon the intention of the opponent, i.e., a subjective element which may be difficult to substantiate by means of convincing evidence, and which may alter in the course of time."298 Additionally, the restrictionists argue that due to the speed and destructive potential of modern weapons it is especially important to avoid military escalation through anticipatory defensive actions since "false alerts may lead to disaster", and that threatened states still retain viable options to address threatening situations such as

²⁹⁴ CORTEN, *supra* note 280, at 415; RUYS, *supra* note 21, at 260; FRANCK, *supra* note 293, at 50.

²⁹⁵ CORTEN, *supra* note 280, at 415; RUYS, *supra* note 21, at 260.

²⁹⁶ CORTEN, *supra* note 280, at 412; RUYS, *supra* note 21, at 261.

²⁹⁷ CORTEN, *supra* note 280, at 412.

²⁹⁸ RUYS, *supra* note 21, at 261.

conducting military preparations of their own or submitting a complaint to the Security Council.²⁹⁹

Before proceeding in the next section of this chapter with a discussion of the counter-restrictionist interpretation of Article 51 of the UN Charter, I note that a major weakness in the restrictionist view is its contention that Article 51 somehow magically erased the existing, pre-UN Charter customary international law that permitted states to use armed force in anticipatory defense against a threat of imminent attack. As I have argued in chapters II and III *supra*, the international legal right of anticipatory defense is an ancient right that traces back at least as far as the Middle Ages, and it evolved from the self-defense concepts of necessity and imminence that began in medieval canon law, natural law, and municipal law and which were then incorporated into the law of nations by the classic writers on international law. 300 As discussed in chapter IV supra, by the late 18th to mid-20th centuries, there are numerous examples of state practice and *opinio* juris to demonstrate that the international legal right of anticipatory defense as formulated by U.S. Secretary of State Daniel Webster during the Caroline incident had gained wider acceptance beyond the U.S. and Great Britain³⁰¹, and in my view the adoption of the Caroline formulation by the Nuremberg and Tokyo Tribunals and the UN General Assembly's unanimous affirmation of the legal principles set forth in the Nuremberg judgment establish beyond question that at the time the UN Charter was signed there was a well-established permissive rule of customary international law that allowed states to use force in anticipatory defense against a threat of imminent attack. Since anticipatory

²⁹⁹ RUYS, *supra* note 21, at 261-262.

³⁰⁰ See notes 29-122 *supra* and accompanying text.

³⁰¹ See notes 203-256 *supra* and accompanying text.

defense was the established rule of customary international law, it is therefore a question of fact as to whether Article 51 intentionally ended that rule, and a substantial amount of state practice and *opinio juris* would be required, to include the practice and views of specially affected states in the area of the *jus ad bellum*, to demonstrate that the right of anticipatory defense was abolished. As the remaining sections in this chapter will demonstrate, no such thing has occurred.

B. Interpreting Article 51 of the UN Charter: The Counter-restrictionist View Regarding Anticipatory Defense

The better interpretation of Article 51 of the UN Charter is that of the counterrestrictionist school of thought, which asserts that Article 51 was not intended to and did
not end the pre-UN Charter customary international law right for states to use force in
anticipatory defense to repel a threat of imminent armed attack. Notable legal scholars
who adhere to the counter-restrictionist interpretation of Article 51 include Professor
C.M.H. Waldock³⁰², Professor Derek W. Bowett³⁰³, Professor Myres McDougal³⁰⁴, and
Professor John Norton Moore³⁰⁵, and they contend that the language in Article 51 which
states that "[n]othing in the present Charter shall impair the *inherent right* of individual or
collective self-defense . . ." (emphasis added) specifically refers to the pre-UN Charter
customary international law right of self-defense, which was inherent in every sovereign
state and which included a right to use force in anticipatory defense against an imminent

³⁰² C.M.H. Waldock, *The Regulation of the Use of Force by Individual States in International Law*, 81 HAGUE ACADEMY RECUEIL DES COURS 451, 498 (1952-II).

³⁰³ BOWETT, *supra* note 222, at 188-189.

MCDOUGAL & FELICIANO, *supra* note 64, at 238; Myres S. McDougal, *The Soviet-Cuban Quarantine and Self-Defense*, 57 AM. J. INT'L L. 597, 599 (1963).

³⁰⁵ John Norton Moore, *Jus ad Bellum Before the International Court of Justice*, 52 VA. J. INT'L L. 903, 956 (2012).

attack. 306 While acknowledging that the English language text of Article 51 does contain the phrase "if an armed attack occurs", the counter-restrictionists view this phrase as simply highlighting the most obvious form of armed aggression- an actual armed attackthat triggers the international legal right of self-defense, and they contend that this phrase was in no way intended to eliminate the customary international law right of states to take anticipatory defensive action against an imminent attack. 307 In the words of Professor McDougal, "... nothing in the 'plain and natural meaning' of the words of the Charter requires an interpretation that Article 51 restricts the customary right of self-defense. The proponents of such an interpretation [incorrectly] substitute for the words 'if an armed attack occurs' the very different words 'if, and only if, an armed attack occurs'."308 The counter-restrictionists reject such "logic chopping" of the English language text of Article 51 as inappropriate, especially in a constitution-type treaty like the UN Charter, and they note that the equally authentic French language text of Article 51 uses the broader phrase "armed aggression" (aggression armee) rather than "armed attack", which supports their position that Article 51 was not intended to restrict the international legal right of selfdefense to situations in which an armed attack has already occurred. 309

Since the English language text of Article 51, which Professor McDougal calls an "inept piece of draftsmanship" thus admits of two divergent interpretations- one preserving the pre-UN Charter customary international law right of anticipatory defense

³⁰⁶ BOWETT, *supra* note 222, at 188-189.

³⁰⁷ BOWETT, *supra* note 222, at 188-189; McDougal, *supra* note 304, at 599-600; Moore, *supra* note 305, at 956

³⁰⁸ McDougal, supra note 304, at 600.

MCDOUGAL & FELICIANO, supra note 64, at 234; McDougal, supra note 304, at 600; Moore, supra note 305, at 912 n. 24, 915; McCormack, supra note 257, at 36.

MCDOUGAL & FELICIANO, supra note 64, at 234.

and the other eliminating that right³¹¹- the counter-restrictionists assert that the Charter's *travaux* must be consulted to help determine the drafters' intent.³¹² They contend that a careful review of the Charter's *travaux* suggests only that Article 51 was intended to safeguard the international legal right of self-defense, not restrict it³¹³, and that there is ". . . . not the slightest evidence that the framers of the United Nations Charter, by inserting one provision which expressly reserves a right of self-defense, had the intent of imposing by this provision new limitations upon the traditional right of states."³¹⁴ As one example, the counter-restrictionists cite the fact that Commission I, Committee 1 of the San Francisco negotiating conference, which dealt with the general purposes and principles of the UN Charter including what became the prohibition of the use of force in Article 2(4), stressed in its final report that "[t]he use of arms in legitimate self-defense remains admitted and unimpaired."³¹⁵

The counter-restrictionists also note from the *travaux* that like the 1928 Kellogg-Briand Pact, early drafts of the UN Charter said nothing at all regarding the right of self-defense, and that the principal reason Article 51 was ultimately added to the Charter was to accommodate the concerns of Latin American nations that regional collective security organizations such as the Inter-American system would retain their ability to engage in collective defense without awaiting authorization from the UN Security Council.³¹⁶

³¹¹ AREND & BECK, *supra* note 193, at 72-73; BOWETT, *supra* note 222, at 187.

³¹² BOWETT, supra note 222, at 188; MCDOUGAL & FELICIANO, supra note 64, at 234-235.

³¹³ BOWETT, supra note 222, at 188.

³¹⁴ McDougal, supra note 304, at 599.

³¹⁵ BOWETT, *supra* note 222, at 185; MCDOUGAL & FELICIANO, *supra* note 64, at 235-236; McDougal, *supra* note 304, at 599-600; Moore, *supra* note 305, at 912 n. 24.

³¹⁶ BOWETT, *supra* note 222, at 182-183; MCDOUGAL & FELICIANO, *supra* note 64, at 235; Moore, *supra* note 305, at 911.

Indeed, Professor Timothy Kearley, who conducted a comprehensive review of the U.S. delegation's UN Charter negotiating records, found that the primary focus of discussion regarding what became Article 51 of the UN Charter was in terms of its being a solution to the "regional problem" of allowing regional collective security organizations to continue to exercise collective defense within the larger UN organization, rather than its being a definition of an individual state's right to use force in its own defense.³¹⁷ Professor Kearley's review also found that gaining acceptance of the "new" right of collective defense in Article 51 was challenging, in that the British were shocked by the U.S. notion of "collective self-defense" whereby one state could use force to protect another state distant from it. 318 In this regard, Professor Kearley asserts that the conversations within the U.S. delegation in which former Governor Stassen stated that the U.S. "did not want exercised the right of self-defense before an armed attack had occurred" and "could not attack a fleet" that had started toward an American republic. which are often cited by the restrictionists as evidence that Article 51 was intended to end the right of anticipatory defense, were actually references by Governor Stassen to the right of collective defense and not to the right of an individual state to use force in its own defense. ³¹⁹ Professor Kearley states that this interpretation of the two conversations is in keeping with the U.S. delegation's overall objectives of ensuring acceptance within the Charter of a limited "new" right of collective defense- a right for regional security

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³¹⁷ Kearley, *supra* note 257, at 706.

³¹⁸ *Id*. at 697.

³¹⁹ *Id*. at 705, 710-711.

organizations to respond collectively to an armed attack- while preserving maximum freedom of action for individual states to use force in their own defense. 320

Regarding the context of the UN Charter, including its object and purpose, the counter-restrictionists argue that their interpretation of Article 51 as preserving the right of individual states to use force in anticipatory defense against an imminent attack is fully consistent with Article 2(4)'s prohibition on the threat and use of force in international relations. They assert that anticipatory defensive action against unlawful aggression is fully consistent with the UN Charter's purpose of preserving international peace and security, and that since Article 2(4) prohibits both the threat and use of force it is appropriate to interpret Article 51 as permitting individual states to exercise the right of self-defense against both attacks and threats of imminent attack. As Professor McDougal explained, ... a decent respect for balance and effectiveness would suggest that a conception of impermissible coercion, which includes threats of force, should be countered with an equally comprehensive and adequate conception of permissible or defensive coercion, honoring appropriate response to threats of imminent attack.

The counter-restrictionists also advance policy arguments in support of interpreting Article 51 to allow for the international legal right of anticipatory defense

Kearley, *supra* note 257, at 700, 703, 710-712. Of course, as noted by Professor Moore, there is no evidence that these very brief conversations within the U.S. delegation, whatever their intent, were accepted by any other delegations at the San Francisco conference as support for an interpretation of Article 51 to end the right of anticipatory defense for states. Moore, *supra* note 305, at 912 n. 24.

³²¹ BOWETT, *supra* note 222, at 185-186; McDougal, *supra* note 304, at 600.

٦٢٤ Id.

³²³ McDougal, *supra* note 304, at 600.

against a threat of imminent attack.³²⁴ They assert that in cases in which the UN Security Council is unable or unwilling to take timely collective action to respond to threats to international peace and security, and a threat of armed attack becomes imminent, it would be "a travesty of the purposes of the Charter to compel a defending state to allow its assailant to deliver the first and perhaps fatal blow", and that to read Article 51 otherwise is "to protect the aggressor's right to the first stroke". 325 In particular, the counterrestrictionists contend that in light of the speed and destructive power of modern weapons, such as nuclear weapons and ballistic missiles, which make it possible to destroy a state's entire capacity for further resistance, "... the principle of effectiveness, requiring that agreements be interpreted in accordance with the major purposes and demands projected by the parties, could scarcely be served by requiring states confronted with necessity for defense to assume the posture of 'sitting ducks'."³²⁶ The counterrestrictionists also express concern that an unrealistic interpretation of Article 51 which requires states to forego anticipatory defense against a threat of imminent attack will undermine the rule of law, in that states faced with such situations may simply reject the relevance of the *ius ad bellum* or of international law itself.³²⁷

I adhere to the counter-restrictionist interpretation of Article 51 of the UN Charter because I believe that the drafters of the Charter did not intend to overrule the pre-UN Charter customary international law right of individual states to use armed force to repel a threat of imminent attack. The language of Article 51 which states that nothing in the

³²⁴ Waldock, *supra* note 302, at 486-498; BOWETT, *supra* note 222, at 191-192; McDougal, *supra* note 304, at 600-601.

³²⁵ Waldock, *supra* note 302, at 498.

³²⁶ McDougal, supra note 304, at 601.

³²⁷ Moore, *supra* note 305, at 904-905.

Charter shall impair the "inherent right" of self-defense clearly refers to the pre-UN Charter customary international law right, which per the diplomatic notes exchanged by the principal states parties to the 1928 Kellogg-Briand Pact was considered to be inherent in every sovereign state, and I believe that by 1945 all states understood that this international legal right of self-defense included a right to take action in anticipatory defense based on the elements of necessity, imminence, and proportionality that U.S. Secretary of State Daniel Webster articulated in resolving the *Caroline* incident. I also agree with the counter-restrictionists that it is inappropriate to interpret a constitutiontype treaty such as the UN Charter by focusing on phrases like "if an armed attack occurs" in isolation, especially when there is a clear divergence in phrasing between the equally authentic English and French language texts. Additionally, I find nothing in my review of the scholarly literature, which includes two major reviews by legal scholars of the negotiating history of the UN Charter³²⁸, which indicates that the drafters of the Charter considered, let alone intentionally eliminated the pre-UN Charter customary international law right of individual states to take necessary forceful action in anticipatory defense. At the very most, the evidence suggests that the "if an armed attack occurs" trigger may have been intended by some delegations at the San Francisco conference to limit the "new" international legal right for regional security organizations to engage in collective self-defense. Finally, while I acknowledge the concern of the restrictionists that allowing individual states to use force in anticipatory defense could result in some unwise, mistaken, or even intentionally misleading claims by states regarding this right, the fact remains that the international community will still assess and react to the validity

³²⁸ McCormack, supra note 257; Kearley, supra note 257.

of any such claims in forums such as the UN Security Council and General Assembly.

The fear of potentially illegitimate claims is no reason to attempt to eliminate the right of individual states to take anticipatory defensive action against a threat of imminent attack, particularly when such a right may be essential for survival.

The next section of this chapter will discuss briefly the International Court of Justice's non-position on anticipatory defense. Following that discussion, the remainder of this chapter will discuss examples of post-UN Charter state practice and *opinio juris* regarding anticipatory defense, including the 1967 Six Day War, the 1981 Israeli strike on the Osirak nuclear reactor in Iraq, and the impact of the September 11, 2001 terrorist attacks and their aftermath on anticipatory defense.

C. The International Court of Justice's Non-Position³²⁹ on Anticipatory Defense

Some restrictionists and counter-restrictionists have occasionally cited the case law of the International Court of Justice (ICJ) to support their respective positions regarding the continued existence of the customary international law right of anticipatory defense following the entry into force of the UN Charter. For example, Professor Waldock, a counter-restrictionist, contends that in the 1949 *Corfu Channel* case the ICJ held that anticipatory defensive action by a state is lawful if there is a strong probability of armed attack- an imminent threat of armed attack. The relevant facts of the *Corfu Channel* case were that in May 1946, Albanian shore batteries fired on two British

³²⁹ RUYS, *supra* note 21, at 262.

³³⁰ Id

³³¹ Corfu Channel (U.K. v. Alb.), Judgment, 1949 I.C.J. Rep. 4 (Apr. 9) [hereinafter Corfu Channel]. ³³² Waldock, *supra* note 302, at 500.

warships without warning which were sailing in Albanian territorial waters while making passage through the North Corfu Channel, a strait used for international navigation. 333

Diplomatic correspondence ensued in which Albania denied that foreign warships had a right of innocent passage through her territorial waters in the strait, and Britain asserted that they did possess such a right and that any further attack would be met with a forceful response. 334 In October 1946, four British warships sailed through the strait to assert their right of passage and to test Albania's reaction, and the British ships were at "action stations" during the transit of the strait with authority to return fire if attacked. 335 Two of the British warships struck mines while transiting the strait, and Britain strongly suspected that Albania was responsible. 336 In November, 1946 the British Navy returned to the strait with a large force of minesweepers and swept the remaining mines, after which Britain brought a legal action against Albania in the ICJ. 337

Professor Waldock argues that in its judgment in the *Corfu Channel* case, the ICJ supported the validity of anticipatory defense because it held that Britain's keeping its warships at "action stations" while transiting Albanian territorial waters at a time of political tension was not an unreasonable precaution in light of the previous Albanian attack. In particular, Professor Waldock notes that the ICJ said the following regarding the transit of the British warships through the strait at "action stations":

³³³ Waldock, supra note 302, at 499.

³³⁴ Id

³³⁵ Id.

^{336 ,}

^{337 . .}

³³⁸ *Id*. at 500.

"The intention must have been, not only to test Albania's attitude *but at the same time to demonstrate such force that she would abstain from firing again on passing ships*.

Having regard, however, to all the circumstances of the case . . . the Court is unable to characterize these measures taken by the United Kingdom authorities as a violation of Albania's sovereignty."³³⁹

However, with all due respect to Professor Waldock, I concur with the assessment of Professor Bowett (a fellow counter-restrictionist) that it is difficult to deduce anything quite so definite regarding the lawfulness of anticipatory defense from the ICJ's *Corfu Channel* judgment.³⁴⁰ While I certainly concur with the ICJ's finding that it was lawful for the British warships to be at "action stations" in preparation for a potential attack by Albania, this is hardly the same as an actual use of armed force by Britain to repel a threat of imminent attack. Additionally, in my view the ICJ's judgment was based primarily on the right of warships to transit an international strait rather than the right of self-defense, and any implicit support for a right of anticipatory defense is undermined by the ICJ's additional holding in the *Corfu Channel* judgment that Britain's action in sweeping the mines from the strait violated Albania's sovereignty.³⁴¹

In a similar attempt to stretch the meaning of an ICJ judgment, some restrictionists assert that the ICJ implicitly rejected the lawfulness of anticipatory defense in its judgment in the 1986 *Nicaragua* case.³⁴² Very briefly stated, the relevant facts in

Waldock, supra note 302, at 500 citing Corfu Channel, supra note 331, 1949 I.C.J. Rep. at 31 (emphasis by Professor Waldock).

³⁴⁰ BOWETT, *supra* note 222, at 190.

³⁴¹ BOWETT, *supra* note 222, at 190; Moore, *supra* note 305, at 916-918.

³⁴² RUYS, *supra* note 21, at 263.

the *Nicaragua* case were that in the early 1980s the Sandinista regime in Nicaragua began a major covert war against neighboring states, particularly El Salvador, which was intended to overthrow the government of El Salvador.³⁴³ The U.S. responded in collective defense to assist El Salvador in repelling Nicaragua's armed aggression, and it did so by assisting in organizing, training, financing, and arming a "contra" insurgency against the Sandinista regime in Nicaragua.³⁴⁴ Nicaragua then brought a legal action against the U.S. at the ICJ for the "contra" operation.³⁴⁵

Restrictionists point to the fact that in its judgment in the *Nicaragua* case, the ICJ majority stated that in the case of self-defense by an individual state, ". . . the exercise of this right is subject to the state concerned having been the victim of an armed attack.

Reliance on collective self-defense does not remove the need for this." They argue that this statement indicates that the ICJ rejected the counter-restrictionist interpretation of Article 51 of the UN Charter. However, the flaw in this argument is the fact that in the immediately preceding paragraph of its *Nicaragua* judgment, the majority specifically stated:

"In view of the circumstances in which the dispute has arisen, reliance is placed by the Parties only on the right of self-defense in the case of an armed attack which has already occurred, and the issue of the lawfulness of a response to the imminent threat of

³⁴³ Moore, *supra* note 305, at 919-920.

³⁴⁴ *Id*. at 923.

³⁴⁵ Moore, *supra* note 305, at 926.

³⁴⁶ Nicaragua, *supra* note 142, 1986 I.C.J. Rep. at 103, para. 195.

RUYS, supra note 21, at 263.

an armed attack has not been raised. Accordingly the Court expresses no view on that issue."348

The ICJ majority in the *Nicaragua* case thus intentionally avoided taking a position regarding the lawfulness of anticipatory defense against a threat of imminent attack. The ICJ also took the same non-position on the lawfulness of anticipatory defense in the 2005 *Congo* case, which involved claims by Uganda of a right to take forceful defensive action within the territory of the Democratic Republic of the Congo (DRC) due to attacks being carried out against Uganda by irregular forces operating from within the DRC. The ICJ majority in the *Congo* case stated that since Uganda had asserted that its defensive military operations were not a use of force against an anticipated attack, once again the issue of the lawfulness of a response to the imminent threat of armed attack had not been raised, and the Court accordingly expressed no view on the issue. 350

In view of the foregoing, it is clear that the ICJ has not yet expressed any definitive position regarding the continuing existence of the pre-UN Charter customary international law right of individual states to use armed force in anticipatory defense against a threat of imminent attack. That said, the ICJ majority did appear to recognize, in *obiter dicta* within its *Nicaragua* judgment, the counter-restrictionist view that Article 51 of the UN Charter did not eliminate the pre-UN Charter customary international law

³⁴⁸ Nicaragua, *supra* note 142, 1986 I.C.J. Rep. at 103, para. 194.

³⁴⁹ RUYS, *supra* note 21, at 263; Moore, *supra* note 305, at 944-946.

³⁵⁰ Armed Activities on the Territory of the Congo (Dem. Rep. Congo v. Uganda), Judgment, 2005 I.C.J. Rep. 168, 222 (Dec. 19), para. 143.

³⁵¹ RUYS, *supra* note 21, at 263.

right of self-defense.³⁵² The Court stated that Article 51 is only meaningful on the basis that there is a "natural" or "inherent" right of self-defense and that it is "hard to see how this can be other than of a customary nature"; that the Charter, having recognized the existence of this right, does not go on to regulate all aspects of its content, since the Charter does not provide a definition of "armed attack" or mention the customary international law requirement of proportionality; and that it therefore cannot be held that Article 51 "subsumes and supersedes" customary international law and instead demonstrates that the pre-UN Charter customary international law of self-defense "continues to exist alongside treaty law." This dictum by the ICJ in the Nicaragua case is persuasive authority for the counter-restrictionist position that Article 51 was not intended to and did not eliminate the pre-UN Charter customary international law right of self-defense, which included a right to use armed force in anticipatory defense against a threat of imminent attack.

Since the ICJ has not issued a definitive ruling regarding the continued existence of the pre-UN Charter customary international law right of individual states to use armed force in anticipatory defense against a threat of imminent attack, the continued existence of this right must be assessed by looking to examples of state practice and *opinio juris* in the post-UN Charter period. The remainder of this chapter will discuss such examples, starting with the 1967 Six Day War and the 1981 Israeli strike on the Osirak nuclear reactor in Iraq.

³⁵² Nicaragua, *supra* note 142, 1986 I.C.J. Rep. at 94, para 176.

³⁵³ Nicaragua, *supra* note 142, 1986 I.C.J. Rep. at 94, para 176.

D. State Practice: The Six Day War (1967)

In the first few months of 1967, tension rapidly increased between Israel and its Arab neighbors. 354 Israel was first confronted by an upsurge in terrorist attacks and sabotage incidents emanating from Syria, with scarcely a day passing "without a mine, a bomb, a hand-grenade or a mortar exploding on Israel's soil, sometimes with lethal or crippling effects, always with an unsettling psychological influence." Additionally, Egypt adopted an increasingly hostile posture toward Israel, and on May 14, 1967, heavy concentrations of Egyptian troops were deployed to the Sinai border with Israel, to which Israel responded by ordering a partial mobilization of its reserve forces. ³⁵⁶ On May 18, 1967, Egyptian President Nasser demanded the immediate withdrawal of the UN Emergency Force (UNEF) which had been deployed as a peacekeeping force along the Sinai border and at Sharm el Sheikh, and the withdrawal of UNEF was viewed by Israel as preparation by Egypt for aggression against Israel. Then on May 23, 1967, Egypt declared that the Strait of Tiran would be closed to Israeli shipping and to the ships of other nations carrying "strategic goods" to Israel's southernmost port of Eilat. 358 Israel viewed Egypt's closure of the Strait of Tiran to Israeli shipping as the imposition by Egypt of a blockade of Eilat, through which Israel normally received approximately eighty percent of its oil imports and crucial amounts of other essential materials.³⁵⁹

³⁵⁴ RUYS, *supra* note 21, at 272.

³⁵⁵ U.N. SCOR, 22nd Yr., 1348th mtg. at 16, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban).

³⁵⁶ RUYS, *supra* note 21, at 272.

³⁵⁷ U.N. SCOR, 22nd Yr., 1358th mtg. at 20, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

³⁵⁸ *Id*.

³⁵⁹ *Id.*; Feinstein, *supra* note 130, at 550.

During the last week of May, 1967, tensions increased even further when Egypt significantly increased its forward deployed military forces to "offensive positions" along the Sinai frontier with Israel, along the Gaza strip, and at the approaches to Eilat. 360 This build-up of Egyptian forces included five infantry divisions (approximately 80,000 men), hundreds of assault aircraft, and two armored divisions (approximately 900 tanks), with a "special striking force" of at least 200 tanks also positioned against the Israeli port of Eilat. ³⁶¹ In addition to this massive build-up of forces, Egyptian authorities made various statements threatening war with Israel, including calls by Islamic religious authorities in Cairo for Egypt to wage a holy war (jihad) against Israel and, most importantly, a May 26, 1967 speech in which Egyptian President Nasser stated, "We intend to open a general assault against Israel. This will be total war. Our basic aim will be to destroy Israel."362 On May 30, 1967, Egypt signed a mutual defense agreement with Jordan; Jordan began to mobilize its military forces; and Egypt also formed a joint military command with Syria. 363 Syria had previously mobilized its military forces "to the last man" and had 50,000 troops "poised aggressively on the heights overlooking Israel". 364 Iraqi troops had reinforced Jordanian units in areas immediately facing vital and vulnerable Israeli communication centers, and expeditionary forces from Algeria and Kuwait had reached

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³⁶⁰ U.N. SCOR, 22nd Yr., 1358th mtg. at 20, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

³⁶¹ *Id.*; U.N. SCOR, 22nd Yr., 1348th mtg. at 14, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban).

³⁶² U.N. SCOR, 22nd Yr., 1348th mtg. at 15, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban); U.N. SCOR, 22nd Yr., 1358th mtg. at 20-21, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

³⁶³ U.N. SCOR, 22nd Yr., 1358th mtg. at 21, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron); RUYS, *supra* note 21, at 273.

³⁶⁴ U.N. SCOR, 22nd Yr., 1358th mtg. at 21, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

Egyptian territory.³⁶⁵ The result of these Arab force deployments was that Israel was surrounded by potential adversaries who together possessed an overwhelming numerical superiority in available combat forces, and Israel's vulnerability was compounded by a precarious geographical position that left Israel susceptible to being cut in two if the Jordanian forces succeeded in driving a wedge between Israel's northern and southern halves.³⁶⁶ In the words of Mordecai Kidron, Israel's Deputy Representative to the UN, "We were surrounded. The armed ring was closed. All that the Arab forces were waiting for was the signal to start."³⁶⁷

In the early morning hours of June 5, 1967, Israel struck first in anticipatory defense against the imminent threat of armed attack posed by the assembled Arab forces. The Israeli Air Force (IAF), flying low to avoid detection by Egyptian radar, successfully destroyed the bulk of Egypt's modern combat aircraft and air defenses on the ground within the first few hours. Despite Israeli warnings, Jordan and Syria quickly commenced offensive military operations in support of Egypt, and the IAF responded by completely destroying Jordan's air force. Having established air superiority, the Israeli armed forces were then able to drive through the Egyptian army's positions in the Sinai and reach the Suez Canal, while simultaneously taking the initiative

³⁶⁵ U.N. SCOR, 22nd Yr., 1348th mtg. at 14, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban).

³⁶⁶ Gill, *supra* note 16, at 135.

³⁶⁷ U.N. SCOR, 22nd Yr., 1358th mtg. at 21, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

³⁶⁸ FRANCK, *supra* note 293, at 103; Gill, *supra* note 16, at 136; RUYS, *supra* note 21, at 273.

³⁶⁹ Id

³⁷⁰ *Id*.

against the Jordanian and Syrian forces on those fronts.³⁷¹ By June 11, 1967, when all parties to the conflict finally accepted the UN Security Council's call for a cease-fire, Israel had achieved a sweeping military victory over its opponents and its forces occupied the Sinai, the Gaza strip, the West Bank, and the Golan Heights.³⁷²

The Six Day War was discussed extensively within the UN Security Council and subsequently within the Fifth Special Emergency Session of the UN General Assembly. The UN Security Council discussions, Israel misleadingly implied that its attack on the morning of June 5, 1967 had been provoked by Egyptian military aircraft "taking off toward their assigned targets" and by Egyptian artillery firing on Israeli farming villages the wever, Israel also emphasized repeatedly that the actions and statements by Egypt and the other Arab nations prior to the outbreak of hostilities had posed a grave and imminent threat to Israel. For example, during the June 6, 1967 discussion within the Security Council, Abba Eban, Israel's Ambassador to the U.S. and Permanent Representative to the UN, asserted that the threat faced by Israel consisted of, "... the sabotage movement; the blockade of the port [of Eilat]; and, perhaps more imminent than anything else, this vast and purposeful encirclement movement, against the background of an authorized presidential statement announcing that the objective of the encirclement was to bring about the destruction and annihilation of a sovereign

³⁷¹ Gill, *supra* note 16, at 136.

³⁷² FRANCK, *supra* note 293, at 103; Gill, *supra* note 16, at 136; RUYS, *supra* note 21, at 273.

³⁷⁴ U.N. SCOR, 22nd Yr., 1348th mtg. at 15, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban); U.N. SCOR, 22nd Yr., 1358th mtg. at 21, U.N. Doc. S/PV.1358 (Jun. 13, 1967) (Statement of Israeli Dep. Rep. Kidron).

state"³⁷⁵ (emphasis added). Ambassador Eban also emphasized that "[t]he policy, the arms, the men had all been brought together" and that Israel was "thus *threatened* with collective assault [against] the last sanctuary of a people which had seen six millions of its sons exterminated by a more powerful dictator two decades before"³⁷⁶ (emphasis added). With Israel's margin of security becoming smaller and smaller, Ambassador Eban stated that Israel had responded defensively on the morning of June 5, 1967, ". . . in accordance with its *inherent* right of self-defense as formulated in Article 51 of the United Nations Charter"³⁷⁷ (emphasis added).

Proposed resolutions branding Israel as the aggressor in the Six Day War and requiring Israel to withdraw its forces immediately from the Arab territory it had occupied failed to obtain sufficient votes, either in the UN Security Council or in the UN General Assembly. A draft Security Council resolution sponsored by the Soviet Union that would have condemned Israel's actions and demanded return of all captured territory was rejected when it received only four of fifteen Council votes, and the Fifth Special Emergency Session of the UN General Assembly, which was convened on June 17, 1967 at the Soviet Union's insistence, rejected several similar proposed resolutions by wide margins. It is significant that during the General Assembly debates, a number of delegates referred to the *Caroline* formulation of the international legal right of self-defense, which indicates that many states assessed Israel's actions in the context of the

³⁷⁵ U.N. SCOR, 22nd Yr., 1348th mtg. at 17, U.N. Doc. S/PV.1348 (Jun. 6, 1967) (Statement of Israeli AMB. Eban)

³⁷⁶ *Id*. at 15.

³⁷⁷ Id

³⁷⁸ FRANCK, *supra* note 293, at 103-104; Gill, *supra* note 16, at 136; RUYS, *supra* note 21, at 273-274.

customary international law right of anticipatory defense.³⁸⁰ It is also significant that when the Security Council finally passed a resolution regarding the Six Day War³⁸¹, the resolution contained no condemnation of Israel's actions and instead called on all the parties to the conflict to reach a lasting settlement on the basis of an acceptance of Israel's right to security.³⁸²

Overall, Israel's military strike that began the Six Day War "... is an almost textbook example of anticipatory self-defense in the face of an immediate threat of an armed attack". 383 While it is unfortunate that Israel made some statements during the UN Security Council discussions that incorrectly implied that it had responded to an actual armed attack, in the words of Professor Thomas Franck "the primary facts speak for themselves": Israel had not yet been attacked militarily when it launched the first strike against the Egyptian air force on the morning of June 5, 1967, and its attack on Egypt was an exercise of the international legal right of anticipatory defense against a threat of imminent armed attack by Egypt and its Arab allies. 384 Egypt, Jordan, and Syria had taken a number of steps prior to the commencement of hostilities which clearly pointed to their capability and intention to attack Israel in the immediate future, and the numerical superiority of the Arab combat forces arrayed against Israel certainly posed a credible and overwhelming threat. 385 Israel also had no realistic alternative to taking anticipatory defensive action, since the Arab forces were in position to launch an immediate attack

³⁸⁰ Gill, supra note 16, at 136.

³⁸¹ S.C. Res. 242 (Nov. 22, 1967).

³⁸² *Id.*; Gill, *supra* note 16, at 136.

³⁸³ Gill, *supra* note 16, at 138.

³⁸⁴ Gill, *supra* note 16, at 138; FRANCK, *supra* note 293, at 104-105.

³⁸⁵ Gill, *supra* note 16, at 139.

and Israel lacked sufficient strategic depth to absorb a significant first blow. ³⁸⁶ In my view, by failing to condemn Israel's actions the majority of the international community recognized that under the circumstances Israel was indeed faced with a serious and imminent threat of armed attack, and that Israel's anticipatory defensive response was reasonable in the face of that threat. Israel's strike to begin the Six Day War is therefore a clear example of post-UN Charter state practice of lawful anticipatory defense.

Finally, while some restrictionists contend that the Six Day War is not a valid precedent in support of anticipatory defense³⁸⁷ their arguments against it are unconvincing. For example, Professor Christine Gray asserts that since Israel failed to claim explicitly in the UN Security Council discussions that it was relying on the international legal right of anticipatory defense, its actions in striking first therefore "do not count" as state practice. ³⁸⁸ The weakness of this argument is that, as previously discussed in Chapter IV *supra*, the *opinio juris* of a state exercising a permissive right of customary international law can be inferred from the state's actions and no accompanying *opinio juris* from that state is required. ³⁸⁹ Additionally, Israel's representatives did argue during the UN Security Council discussions that Israel's defensive response was necessary to remove a serious and imminent threat of armed attack, and that this response was legally justified under the "inherent" right of self-defense as formulated in Article 51 of the UN Charter. ³⁹⁰ Restrictionists also contend that certain post-conflict statements by

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³⁸⁶ Gill, *supra* note 16, at 139.

³⁸⁷ CORTEN, *supra* note 280, at 436-438; RUYS, supra note 21, at 274-280; CHRISTINE GRAY, INTERNATIONAL LAW AND THE USE OF FORCE 170-171 (4th ed., 2018).

³⁸⁸ GRAY, *supra* note 387, at 170-171.

³⁸⁹ See notes 147-148 *supra* and accompanying text.

³⁹⁰ See notes 375-377 *supra* and accompanying text.

Israeli officials, some of which were made long after the Six Day War, call into question whether Israel truly regarded the military preparations and statements made by the Arab states as an imminent threat.³⁹¹ Regardless of the merits of such post-conflict statements, the determining factor in assessing the lawfulness of anticipatory defensive action must be what the defending state *ex ante* reasonably expected to occur.³⁹² The invocation of the right of anticipatory defense must be assessed based on the information reasonably available to the defending state in the conditions prevailing at the time the decision was made, without the benefit of post-conflict hindsight.³⁹³

E. State Practice: The Israeli Strike on the Osirak Nuclear Reactor in Iraq (1981)

On Sunday, June 7, 1981, nine combat aircraft of the Israeli Air Force carried out a surgical strike that destroyed the Osirak (Tamuz-1) nuclear reactor located at the Tuwaitha research center near Baghdad, Iraq. ³⁹⁴ Iraq had purchased the Osirak nuclear reactor from France in 1975, and under the terms of the purchase agreement between France and Iraq, the Osirak reactor had been subject to inspection by the International Atomic Energy Agency (IAEA) in accordance with the Nuclear Non-Proliferation Treaty (NPT) ³⁹⁵, to which Iraq was a party. ³⁹⁶ Although the Osirak reactor was not yet

³⁹¹ RUYS, *supra* note 21, at 279-280; GRAY, *supra* note 387, at 171 n. 253.

³⁹² David A. Sadoff, *Striking a Sensible Balance on the Legality of Defensive First Strikes*, 42 VAND. J. TRANSNAT. L. 441, 492 (2009).

³⁹³ *Id*. at 492 n. 236.

³⁹⁴ FRANCK, *supra* note 293, at 105; Gill, *supra* note 16, at 139; RUYS, *supra* note 21, at 280-281.

³⁹⁵ Treaty on the Nonproliferation of Nuclear Weapons, *opened for signature* July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161 (entered into force Mar. 5, 1970) [hereinafter NPT].

³⁹⁶ Gill, *supra* note 16, at 139; U.N. SCOR, 36th Yr., 2280th mtg. at 5, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Iraqi Rep. Hammadi).

operational at the time of the Israeli strike³⁹⁷, Israel informed the UN Security Council by letter on June 8, 1981 that it had learned from "sources whose reliability is beyond any doubt" that the Osirak reactor was designed to produce nuclear weapons and that Israel was the intended target of those weapons.³⁹⁸ Israel stated that had the Osirak reactor become operational it would have been capable of producing, from enriched uranium or from plutonium, nuclear weapons of "Hiroshima size", and that it believed Iraqi President Saddam Hussein would not hesitate to launch such weapons against Israeli cities and population centers.³⁹⁹

Israel's letter of June 8, 1981 to the Security Council asserted that Israel viewed Iraq's acquisition of nuclear weapons as a mortal danger, and that under no circumstances would Israel allow an enemy state to develop weapons of mass destruction against the Israeli people. Israel also informed the Security Council that it had learned that the Osirak reactor would be completed and put into operation as early as July, 1981, and that once the reactor became operational a defensive military strike would be impossible without risking massive radioactive fallout that would likely cause extensive civilian casualties in Baghdad. In view of this, Israel stated that it had decided to strike the Osirak reactor before it became operational to eliminate the existential threat to the Israeli

³⁹⁷ Gill, *supra* note 16, at 139.

Permanent Rep. of Israel to the U.N., Letter dated June 8, 1981 from the Permanent Rep. of Israel to the U.N. addressed to the Security Council, U.N. Doc. S/14510 (Jun. 8, 1981).

³⁹⁹ Id.

⁴⁰⁰ *Id*.

⁴⁰¹ *Id*.

people, and Israel also noted that the strike was carried out on a Sunday in order to minimize the risk of casualties to the 100-150 foreign experts employed at the reactor. 402

When the Osirak strike was subsequently discussed in the UN Security Council, Iraq characterized the Israeli action as a flagrant act of aggression, and emphasized that under the NPT all states have a right to develop nuclear technology for peaceful purposes; that the Osirak reactor had been subject to IAEA inspections and safeguards in accordance with the NPT; and that the IAEA had inspected Iraq's nuclear facilities as recently as January 1981, to include the Osirak reactor, and had found that all nuclear material was satisfactorily accounted for and that there was no evidence of any activity in violation of the NPT. 403 In response, Israel argued that Iraq had been conspiring to destroy Israel ever since Israel's establishment, as evidenced by Iraq's participation in Arab wars against Israel in 1948, 1967, and 1973; that Iraqi leaders, including Iraqi President Saddam Hussein, had continued to state that they did not accept Israel's right to exist and that the only solution to the "Zionist State" was war; that Iraq had insisted on receiving weapons-grade highly enriched uranium from its nuclear fuel supplier, in sufficient quantities to enable Iraq to develop nuclear weapons, despite the ready availability of non-weapons grade nuclear fuel; and that the NPT inspections and safeguards system contained several serious loopholes, such as the fact that IAEA inspectors may only inspect declared nuclear sites, which makes the system easily

⁴⁰² Permanent Rep. of Israel to the U.N., Letter dated June 8, 1981 from the Permanent Rep. of Israel to the U.N. addressed to the Security Council, U.N. Doc. S/14510 (Jun. 8, 1981).

 $^{^{403}}$ U.N. SCOR, 36^{th} Yr., 2280 th mtg. at 3, 5, 7, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Iraqi Rep. Hammadi).

exploitable by a state like Iraq that is determined to obtain nuclear weapons. 404 Israel also stated that it had made repeated efforts in diplomatic channels to raise concerns regarding Iraq's nuclear development program, all of which went unheeded, and that it only resorted to a military strike when it became clear that the Osirak reactor could become operational in less than a month. 405 Israel stated that in view of this grave threat, it "... could not possibly stand idly by while an irresponsible, ruthless, and bellicose regime, such as that of Iraq, acquired nuclear weapons, thus creating a constant nightmare for Israel." 406

In contrast to its approach during the UN Security Council discussions of the Six Day War, Israel explicitly invoked the customary international law right of anticipatory defense as the legal justification for its strike on the Osirak nuclear reactor. ⁴⁰⁷ Israel informed the Security Council that in destroying the Osirak reactor, Israel had exercised its "inherent and natural right of self-defense" as understood in general international law "and as *preserved* in Article 51 of the Charter of the United Nations" (emphasis added), which was a clear assertion of the counter-restrictionist position that Article 51 preserved and did not eliminate the pre-UN Charter customary international law right of anticipatory defense. ⁴⁰⁹ Israel also cited several eminent counter-restrictionist legal

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⁴⁰⁴ U.N. SCOR, 36th Yr., 2280th mtg. at 8-10, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Israeli Rep. Blum); U.N. SCOR, 36TH Yr., 2288th mtg. at 5-8, U.N. Doc. S/PV.2288 (Jun. 19, 1981) (Statement of Israeli Rep. Blum).

⁴⁰⁵ U.N. SCOR, 36th Yr., 2280th mtg. at 10-11, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Israeli Rep. Blum).

⁴⁰⁶ *Id*. at 11.

 $^{^{\}rm 407}$ RUYS, supra note 21, at 283 n. 158.

⁴⁰⁸ U.N. SCOR, 36th Yr., 2280th mtg. at 8, 11, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Israeli Rep. Rlum)

⁴⁰⁹ RUYS, *supra* note 21, at 283 n. 158.

scholars- Professors Waldock, Bowett, and McDougal- for the proposition that Article 51 does not prohibit individual states from striking first in anticipatory defense because no state can be expected to await an initial attack by an aggressor that could jeopardize the state's existence. However, the international community resoundingly rejected Israel's claim that the Osirak strike was a lawful exercise of the right of anticipatory defense. On June 19, 1981, the UN Security Council unanimously adopted a resolution that strongly condemned Israel's strike on the Osirak reactor as a clear violation of the UN Charter, and called upon Israel to refrain in the future from any such acts or threats thereof. On November 13, 1981, the UN General Assembly, by a vote of 109 to two (Israel and the U.S.) with 34 abstentions, adopted a resolution that not only copied the findings of the Security Council but added an explicit condemnation of the Israeli "aggression".

Although the international community rejected Israel's claim that the Osirak strike was a lawful exercise of the international legal right of anticipatory defense, it is significant that in doing so many delegates "... did not reject the concept of anticipatory self-defense *per se*, but rather Israel's reliance on it under the circumstances. Israel's reliance upon anticipatory self-defense was rejected explicitly by a number, and implicitly by a majority of delegates as not meeting the *Caroline* criteria of immediacy

⁴¹⁰ U.N. SCOR, 36th Yr., 2280th mtg. at 11, U.N. Doc. S/PV.2280 (Jun. 12, 1981) (Statement of Israeli Rep. Blum); U.N. SCOR, 36TH Yr., 2288th mtg. at 8-9, U.N. Doc. S/PV.2288 (Jun. 19, 1981) (Statement of Israeli Rep. Blum).

⁴¹¹ Gill, *supra* note 16, at 140.

⁴¹² S.C. Res. 487 (Jun. 19, 1981).

⁴¹³ G.A. Res. 36/27 (Nov. 13, 1981).

⁴¹⁴ RUYS, *supra* note 21, at 282.

and lack of feasible alternatives."415 Since the Osirak nuclear reactor was not yet operational, and since the IAEA had stated that Iraq was in compliance with all of its NPT requirements, there was no conclusive evidence that Iraq was acquiring, much less developing nuclear weapons at the time the Israeli strike was carried out, and there was also no clear evidence of an intent by Iraq to attack Israel in the foreseeable future. 416 Since Israel could not produce clear evidence of more than, at the most, a potential future threat to its security, its true justification for the Osirak strike appeared to many delegates to be preventive defense against a future, non-imminent threat, rather than the pre-UN Charter customary international law right of anticipatory defense against a temporally imminent threat of armed attack. 417 Therefore, in my view the rejection by a majority of the UN delegates of the lawfulness of preventive military action against future, nonimminent threats⁴¹⁸ may still be viewed as implicit support for the pre-UN Charter customary international law right of anticipatory defense, provided that the elements of necessity and imminence as formulated in the *Caroline* incident have been plausibly met. 419 Indeed, several delegations including the U.K., Sierra Leone, Uganda, Niger, Malaysia, and Oman, specifically emphasized that anticipatory defensive action was only lawful if the threat of attack is imminent, and the U.S. joined in condemning the Israeli

⁴¹⁵ Gill, *supra* note 16, at 140.

⁴¹⁶ *Id*. at 141.

⁴¹⁷ Gill, *supra* note 16, at 141; RUYS, *supra* note 21, at 283.

⁴¹⁸ RUYS, *supra* note 21, at 285 n. 162. A representative example is Spain's statement during the UN Security Council discussions: "Israel seeks to justify this act of aggression by presenting it as preventive action to avert some future, hypothetical threat to its security. That justification is absolutely unacceptable . . . The Charter does not allow for . . . any right to preventive action by which a Member State could set itself up as judge, party, and policeman in respect to another country." U.N. SCOR, 36th Yr., 2282nd mtg. at paras. 77-78, U.N. Doc. S/PV.2282 (Jun. 15, 1981) (Spain).

⁴¹⁹ Gill, *supra* note 16, at 140, 142.

Accordingly, I believe that the international community's response to Israel's 1981 strike on the Osirak reactor is an example of verbal state practice and *opinio juris* that under customary international law, a state's use of armed force in anticipatory defense must meet the requirements of necessity and temporal imminence in order to be lawful. In this regard, I note that even the restrictionist Professor Tom Ruys grudgingly concedes that the UN discussions regarding the Osirak strike "reveal a crack in the *opinio juris*" in favor of the right of anticipatory defense against a threat of imminent attack. 421

F. The Impact of the 9/11 Terrorist Attacks on Anticipatory Defense

On the morning of September 11, 2001, Al-Qaeda terrorists hijacked American Airlines Flight 11, a commercial passenger plane, and intentionally crashed it into the northern tower of the World Trade Center in New York City. 422 Within the next two hours, Al-Qaeda terrorists similarly turned three other commercial passenger planes into weapons of mass destruction: United Airlines Flight 175 was hijacked and intentionally crashed into the southern tower of the World Trade Center; American Airlines Flight 77 was hijacked and intentionally crashed into the Pentagon in Washington, DC; and United Airlines Flight 93 was hijacked and intentionally crashed in a field near Shanksville, Pennsylvania after unarmed passengers attempted to overwhelm the hijackers, thereby preventing the terrorists from crashing the plane into the U.S. Capitol or the White

⁴²⁰ FRANCK, *supra* note 293, at 78-79; RUYS, *supra* note 21, at 285-286.

⁴²¹ RUYS. *supra* note 21. at 287.

⁴²² The 9/11 Commission Report, July 22, 2004, at 7, www.9-11commission.gov/report/911Report.pdf (accessed Apr. 30, 2019) [hereinafter 9/11 Report].

House. 423 Almost 3000 people were killed during the attacks, which together constituted the most devastating attack on the U.S. since the Japanese attack at Pearl Harbor. 424 Millions around the world watched in horror and disbelief as the two World Trade Center towers collapsed, and it quickly ". . . began to dawn that the brief interlude of the post-Cold War period was over and that a new era had started."425

On October 7, 2001, the U.S., with support from the U.K., began military operations in self-defense against both the Al-Qaeda terrorist group and the Taliban, the de facto Afghan regime that had cooperated with Al-Qaeda and granted it safe haven in Afghanistan. These defensive military operations against Al-Qaeda and the Taliban, known as Operation Enduring Freedom, received widespread approval from the international community, including support from the North Atlantic Treaty Organization (NATO) and the Organization of American States (OAS). However, as defensive military operations in Afghanistan proceeded, the U.S. Administration of President George W. Bush also began to look beyond eliminating Al-Qaeda's safe haven in Afghanistan and to analyze broader lessons from the September 11, 2001 terrorist attacks, in order to prevent such catastrophic attacks from occurring again. The Bush Administration's view was that a fundamental reassessment of the threats facing the U.S. was required, and that existing security doctrines had to be adapted to enable the U.S. to defend itself more effectively in a changed international security environment.

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⁴²³ 9/11 Report, *supra* note 422, at 7-14.

⁴²⁴ RUYS, *supra* note 21, at 306.

⁴²⁵ Id

⁴²⁶ Id

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⁴²⁸ RUYS, *supra* note 21, at 306; HENDERSON, *supra* note 19, at 285-286.

such security doctrine that the Bush Administration believed was ripe for adaptation was the customary international law concept of anticipatory defense, which, as fallout from the terrorist attacks of September 11, 2001, was subsequently impacted by the U.S. issuance in September 2002 of a National Security Strategy that asserted a doctrine of preventive defense; by the U.S.-led attack on Iraq in March 2003; and by the reports of the UN High-Level Panel of Experts and the UN Secretary-General in 2004-2005.

1. The U.S. National Security Strategy of September 2002

On September 17, 2002, the Bush Administration published the 2002 U.S. National Security Strategy (hereinafter the "NSS"). 429 The NSS stated that it had taken the U.S. more than a decade to understand the new security threat posed by rogue states and terrorist organizations that were not susceptible to traditional strategies of deterrence or containment, and that in particular, the fact that these rogue states and terrorist organizations were determined to acquire and use weapons of mass destruction (WMD) meant that the U.S. must be prepared to stop its enemies *before* they are able to threaten or use WMD against the United States or our allies. 430 The NSS then addressed the customary international law right of anticipatory defense, and asserted that although international law had long recognized that nations need not suffer an attack before they can lawfully take action to defend themselves against forces that present an imminent danger of attack, the concept of imminent threat must be adapted to the capabilities and objectives of modern enemies whose attacks, by terror or potentially by WMD, can be

⁴²⁹ National Security Council, The National Security Strategy of the United States of America, Sept. 17, 2002, https://georgewbush-whitehouse.archives.gov/nsc/nss/2002/ (accessed Apr. 30, 2019) [hereinafter NSS].

⁴³⁰ NSS, *supra* note 429, at 13-15.

easily concealed, delivered covertly, and executed without warning. All The NSS also asserted that to forestall or prevent such hostile acts by our enemies, the U.S. would act preventively, even against threats that had not yet fully materialized, because ... [t]he greater the threat, the greater is the risk of inaction- and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy's attack . . . in an age where the enemies of civilization openly and actively seek the world's most destructive technologies, the United States cannot remain idle while dangers gather. Salary and actively seek the world's most destructive technologies, the United States cannot remain idle while dangers gather.

The 2002 NSS thus articulated a new concept of preventive defense that, "[r]ising like a phoenix from the ashes of the September 11 terrorist attacks" was designed to preclude emerging threats by rogue states and terrorist organizations from endangering the U.S. or its allies. All Rather than relying on the customary international legal right of anticipatory defense, which authorized anticipatory defensive action by a state against specific and temporally imminent threats of attack, the NSS advocated a far broader right to use armed force to prevent more generalized, non-imminent threats from materializing. In the words of Professor Terry Gill, this would authorize anticipatory defensive action against "... a vague new concept of inchoate threats which could manifest themselves at some point in the future, instead of concrete or probable threats of attack within the foreseeable future."

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⁴³¹ NSS, *supra* note 429, at 15.

⁴³² Id

⁴³³ Miriam Sapiro, *Iraq: The Shifting Sands of Preemptive Self-Defense*, 97 AM. J. INT'L L. 599 (2003).

⁴³⁴ *Id.*; RUYS, *supra* note 21, at 309-310.

⁴³⁵ Id

⁴³⁶ Gill, *supra* note 16, at 148.

preventive defense against non-imminent future threats that the international community had overwhelmingly rejected after the Osirak strike in 1981, and which generated significant concern among legal scholars regarding its subjectivity and potential for abuse. These concerns regarding the new concept of preventive defense set forth in the NSS intensified further as it became clear in late 2002 and early 2003 that the U.S. intended to take military action to prevent Iraq from acquiring or using WMD. The second strike in 1981, and which generated significant concern among legal scholars regarding its subjectivity and potential for abuse.

2. The U.S.-Led Attack on Iraq (2003)

In an address to the UN General Assembly on September 12, 2002, U.S. President George W. Bush highlighted Iraq's consistent failure to abide by the WMD inspections regime that had been imposed on Iraq by the UN Security Council in Resolution 687⁴³⁹ as part of the cease-fire that ended the 1991 Persian Gulf War. Security Council Resolution 687 had imposed extensive WMD disarmament obligations on Iraq which were to be enforced through regular inspections by UN and IAEA weapons inspectors, and the Security Council had deemed these requirements to be essential to the restoration of international peace and security. However, President Bush reminded the General Assembly in his September 2002 address that despite repeated Security Council condemnations, it had been almost four years since UN weapons inspectors had last been permitted to set foot in Iraq, and he stressed that while the U.S. remained willing to work

⁴³⁷ Sapiro, *supra* note 433, at 599; RUYS, *supra* note 21, at 310.

⁴³⁸ RUYS, supra note 21, at 310; HENDERSON, supra note 19, at 288.

⁴³⁹ S.C. Res. 687 (Apr. 3, 1991).

⁴⁴⁰ RUYS, *supra* note 21, at 310-311.

William H. Taft IV & Todd F. Buchwald, *Preemption, Iraq, and International Law,* 97 AM. J. INT'L L. 557, 559 (2003).

with the Security Council, the requirements of Resolution 687 would have to be enforced or further action would be unavoidable.⁴⁴²

Iraq initially appeared to back down in the face of President Bush's warning, as it notified the UN on September 16, 2002 that it was prepared to allow the UN Monitoring, Verification and Inspections Commission (UNMOVIC) to operate in Iraq again. 443 This apparent progress was undermined, however, by further indications that Iraq was continuing to obstruct the work of the UN weapons inspectors 444, and in response the UN Security Council met again on November 8, 2002 and adopted Resolution 1441. This resolution afforded Iraq a "final opportunity" to comply with its WMD disarmament obligations; ordered Iraq to submit by December 8, 2002 a full and complete declaration of all aspects of its WMD-related programs and to allow UNMOVIC and IAEA inspectors unrestricted access; stated that failure to comply would be regarded as a "further material breach" of Iraq's obligations and would have "serious consequences"; and stated that upon receipt of a report by UNMOVIC and the IAEA regarding Iraq's compliance the Security Council would immediately convene to consider the situation. 446 In the Security Council discussions regarding the adoption of Resolution 1441, numerous Council members, including the U.S. and the U.K., stated that the resolution contained no "hidden triggers" and no "automaticity" with regard to the use of force, and that if UNMOVIC and the IAEA were to find a material breach of the resolution the issue

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⁴⁴² President of the United States of America, Remarks at the U.N. General Assembly, U.N. Doc. A/57/PV.2 (Sept. 12, 2002).

⁴⁴³ RUYS, *supra* note 21, at 311.

⁴⁴⁴ Id

⁴⁴⁵ S.C. Res. 1441 (Nov. 8, 2002).

⁴⁴⁶ S.C. Res. 1441, *supra* note 445, at paras. 1-4, 11-13; Taft & Buchwald, *supra* note 441, at 560-561.

would be brought before the Council again for further discussion. 447 The U.S. added, however, that if the Security Council failed to act decisively in the event of further Iraqi violations, Resolution 1441 "... does not constrain any Member State from acting to defend itself against the threat posed by Iraq or to enforce relevant United Nations resolutions and protect world peace and security."448

On January 27, 2003, UNMOVIC Executive Chairman Hans Blix and IAEA Director General Mohamed El-Baradei updated the UN Security Council on Iraq's compliance with Resolution 1441. 449 UNMOVIC Executive Chairman Blix noted that Iraq was demonstrating some cooperation with the inspections process, but noted several discrepancies with Iraq's December 8, 2002 written declaration regarding its WMD programs, at least one of which appeared to be deliberate. ⁴⁵⁰ He stated that Iraq still appeared ". . . not to have come to a genuine acceptance- not even today- of the disarmament that was demanded of it and that it needs to carry out to win the confidence of the world". 451 In contrast, IAEA Director General El-Baradei stated that in the two months since IAEA inspectors had been allowed back into Iraq they had found no evidence that Iraq had resumed its nuclear weapons program, and he assessed that if Iraq increased its cooperation with the IAEA from passive to proactive, the IAEA would be able to provide credible assurance within the "next few months" that Iraq had no nuclear

⁴⁴⁷ RUYS, *supra* note 21, at 312.

⁴⁴⁸ U.N. SCOR, 57TH Yr., 4644th mtg. at 3, U.N. Doc. S/PV.4644 (Nov. 8, 2002) (U.S.). ⁴⁴⁹ U.N. SCOR, 58th Yr., 4692nd mtg., U.N. Doc. S/PV.4692 (Jan. 27, 2003).

⁴⁵⁰ U.N. SCOR, 58th Yr., 4692nd mtg. at 2-8, U.N. Doc. S/PV.4692 (Jan 27, 2003) (Statement of UNMOVIC Exec. Chair Blix).

⁴⁵¹ *Id*. at 3.

weapons program. Hose divergent reports led to dramatic stand-off between permanent members of the Security Council, with U.S. Secretary of State Colin Powell attending a February 2003 Council meeting to present intelligence information regarding Iraq's alleged continuing efforts to pursue WMD, and with France, China, and Russia insisting that the inspections regime should be continued and refusing to support a further resolution to authorize the use of force. Although the UN Secretary General stated publicly that if the U.S. and others were to "go outside the Council and take military action" it would not be in conformity with the UN Charter, on March 20, 2003, the U.S., U.K., and Australia notified the Security Council that they had commenced military operations against Iraq. By May 1, 2003, the Iraqi army had been defeated and Iraqi President Saddam Hussein was removed from power.

When the U.S.-led attack on Iraq was discussed in the UN Security Council, the legal justification cited by the U.S., U.K., and Australia was that Iraq's continued material breaches of its WMD disarmament obligations under Resolutions 687 and 1441 had revived the authority previously provided in UN Security Council Resolution 678⁴⁵⁷ for UN member states to use "all necessary means" to compel Iraq to comply with the Council's mandates and to restore international peace and security. 458 Since self-defense

⁴⁵² U.N. SCOR, 58th Yr., 4692nd mtg. at 9-12, U.N. Doc. S/PV.4692 (Jan 27, 2003) (Statement of IAEA Dir. Gen. El-Baradei).

⁴⁵³ RUYS, *supra* note 21, at 313; Taft & Buchwald, *supra* note 441, at 562.

⁴⁵⁴ RUYS, *supra* note 21, at 313.

⁴⁵⁵ U.N. Doc. S/2003/350, Mar. 20, 2003 (U.K.); U.N. Doc. S/2003/351, Mar. 20, 2003 (U.S.); U.N. Doc. S/2003/352, Mar. 20, 2003 (Australia).

⁴⁵⁶ Council on Foreign Relations, *The Iraq War Timeline*, available at https://www.cfr.org/timeline/iraq-war (accessed May 1, 2019).

⁴⁵⁷ S.C. Res. 678 (Nov. 29, 1990).

⁴⁵⁸ RUYS, *supra* note 21, at 314; Taft & Buchwald, *supra* note 441, at 562-563.

was not asserted as a legal justification, the discussions within the Security Council focused on whether the use of military force had been authorized under the Council's resolutions and not on the scope of the international legal right of self-defense, and while a number of states supported the intervention against Iraq, the majority of states deplored the intervention and/or labelled it a violation of the UN Charter. Nevertheless, in a nationally televised address on March 17, 2003, in which he gave Iraqi President Saddam Hussein an ultimatum to leave Iraq within 48 hours or face military action, President Bush had asserted that due to the threat posed by Iraq's pursuit of WMD and support for terrorism:

"We are acting now because the risks of inaction would be far greater. In one year, or five years, the power of Iraq to inflict harm on all free nations would be multiplied many times over. With these capabilities, Saddam Hussein and his terrorist allies could choose the moment of deadly conflict when they are strongest. We choose to meet that threat now where it arises, before it can appear suddenly in our skies and cities."

Coming only six months after the issuance of the 2002 NSS, this assertion by President Bush suggests that the U.S. was in fact implementing its new strategy of preventive defense when it led the attack on Iraq in March 2003. Viewed in that light, there was no credible evidence in March 2003 of an imminent attack by Iraq against the

⁴⁵⁹ RUYS, *supra* note 21, at 316-317.

⁴⁶⁰ President George W. Bush, Address to the Nation on Iraq, Mar. 17, 2003, 39 WEEKLY COMP. PRES. DOC. 338, 340 (Mar. 24, 2003).

⁴⁶¹ Sapiro, *supra* note 433, at 602.

U.S. or its coalition allies 462, and the intelligence regarding Iraq's reconstitution of its previous WMD programs and its links to Al-Qaeda was at best inconclusive. 463 Absent credible evidence of a serious and temporally imminent threat by Iraq to attack the U.S. or its allies, the U.S.-led attack on Iraq in March 2003 did not meet the customary international legal requirements for the use of force in anticipatory defense, and I consider that it is instead an example of state practice in which the U.S. asserted the right to use force against a potential, non-imminent threat to prevent that threat from ever materializing. The international community's largely negative reaction to the U.S.-led intervention in Iraq, albeit focused primarily on the separate issue of UN Security Council authorization, may properly be regarded as an implicit rejection of the lawfulness of the use of armed force in preventive defense against potential, non-imminent threats. 464 While the March 2003 attack on Iraq may thus have only limited direct relevance regarding the customary international legal right of anticipatory defense, it served as a catalyst for a significant reconsideration of anticipatory defense under the auspices of the UN Secretary-General. 465

⁴⁶² RUYS, *supra* note 21, at 318; Gill, *supra* note 16, at 147; Sapiro, *supra* note 433, at 603.

⁴⁶³ Gill, *supra* note 16, at 144, 147; Sapiro, *supra* note 433, at 603. With the wisdom of hindsight, the 9/11 Commission concluded in December 2004 that there was no credible evidence that Iraq had assisted Al-Qaeda in preparing for or carrying out the 9/11 terrorist attacks. Gill, *supra* note 16, at 144 n. 75. Similarly, in 2005 the Commission on the Intelligence Capabilities of the U.S. Regarding Weapons of Mass Destruction concluded that "not one bit" of the pre-war U.S. intelligence that Iraq had reconstituted its WMD programs could be confirmed after the 2003 Iraq war, calling this "one of the most damaging intelligence failures in recent American history." Final Report of the Commission on the Intelligence Capabilities of the U.S. Regarding Weapons of Mass Destruction, Mar. 31, 2005 at 3, available at https://fas.org/irp/offdocs/wmd_report.pdf (accessed May 1, 2019).

⁴⁶⁴ RUYS, *supra* note 21, at 318.

⁴⁶⁵ *Id*.

3. Reports of the UN High-Level Panel of Experts and the UN Secretary-General (2004-2005)

In his address to the UN General Assembly on September 23, 2003, UN Secretary-General Kofi Annan acknowledged the strongly divergent views within the international community regarding the March 2003 Iraq intervention that had resulted in paralysis within the Security Council, and stated that the international community had come to a "fork in the road" regarding the established system of collective security based on the UN Charter. He Secretary-General noted that while there was general agreement within the international community regarding the need to respond to new threats such as terrorism and the proliferation of WMD, there was disagreement regarding the previous understanding that while all states, if attacked, retained the inherent right of self-defense, decisions to use force to deal with broader threats to international peace and security needed the unique legitimacy of the Security Council. In a clear reference to the Iraq crisis, the Secretary explained that some states were now challenging this shared understanding because:

". . . an armed attack with weapons of mass destruction could be launched at any time, without warning, or by a clandestine group. Rather than wait for that to happen, they argue, States have the right and obligation to use force pre-emptively, even on the territory of other States, and even while the weapons systems that might be used to attack them are still under development. According to this argument, States are not obliged to

⁴⁶⁶ U.N. GAOR, 58th Sess., 7th plen. mtg. at 2-3, U.N. Doc. A/58/PV.7 (Sept. 23, 2003).

wait until there is agreement in the Security Council. Instead, they reserve the right to act unilaterally, or in ad hoc coalitions."⁴⁶⁸

The Secretary-General asserted that this argument represented a fundamental challenge to the principles on which, however imperfectly, the UN collective security system had rested since the founding of the organization, and expressed concern that if it were to be adopted it would result in a proliferation of unilateral and lawless uses of force, with or without justification. In response to this concern, the Secretary-General advised the General Assembly that he intended to establish a high-level panel to examine the threats and current challenges to international peace and security.

On December 2, 2004, the Secretary-General forwarded to the General Assembly the final report of his High-Level Panel on Threats, Challenges, and Change (hereinafter "High-Level Panel") which was titled *A More Secure World: Our Shared Responsibility.* ⁴⁷¹ The High-Level Panel consisted of sixteen eminent persons from around the world, including three former Prime Ministers and the heads or former heads of the Organization of American States, the Organization of African Unity, and the League of Arab States. ⁴⁷² The High-Level Panel also had a geographically balanced composition, with representatives from all five permanent member states of the Security

⁴⁶⁸ U.N. GAOR, 58th Sess., 7th plen. mtg. at 3, U.N. Doc. A/58/PV.7 (Sept. 23, 2003).

⁴⁶⁹ Id.

⁴⁷⁰ *Id*. at 4.

⁴⁷¹ Report of the UN Secretary-General's High-Level Panel on Threats, Challenges and Change, *A More Secure World: Our Shared Responsibility*, U.N. Doc. A/59/565 (Dec. 2, 2004) [hereinafter High-Level Panel]. ⁴⁷² *Id.* at 93-94. Annex II.

Council as well as representatives from key regional states such as Australia, Brazil, Egypt, India, and Pakistan.⁴⁷³

In the section of its report that analyzed collective security and the use of force, the High-Level Panel stated that "properly understood and applied", Article 51 of the UN Charter was still fully capable of addressing contemporary security threats, and the High-Level Panel explained that despite the seemingly restrictive language "if an armed attack occurs" in Article 51, "... a threatened state, according to long established international law, can take military action as long as the threatened attack is *imminent*, no other means would deflect it and the action is proportionate", (emphasis in original). Based on this interpretation of Article 51, the High-Level Panel asserted that no rewriting or revision of Article 51 was necessary. 475 The High-Level Panel stated that the real problem regarding use of force in international relations occurs when the threat in question is not imminent but is still claimed to be real, such as the acquisition by a state, with allegedly hostile intent, of nuclear weapons-making capability. 476 The High-Level Panel rejected the legitimacy of individual states using force unilaterally and preventively against nonimminent or non-proximate threats, stating that if there is good evidence of a necessity for preventive military action such evidence should be presented to the UN Security Council, which can authorize such preventive action if it chooses to do so. 477 The High-Level Panel stated that if the Security Council fails to authorize preventive military action, then by definition there will be sufficient time to pursue other strategies to

⁴⁷³ High-Level Panel, *supra* note 471, at 93-94, Annex II.

⁴⁷⁴ *Id.* at 13, 54, para. 188.

⁴⁷⁵ *Id.* at 55, para. 192.

⁴⁷⁶ *Id.* at 54, para. 188.

⁴⁷⁷ *Id.* at 55, para. 190.

eliminate the threat, such as negotiation, deterrence, and containment, and to revisit the military option again as required. The High-Level Panel observed that for those impatient with the requirement to seek Security Council authorization for preventive military action against non-imminent threats, ... the answer must be that, in a world full of perceived potential threats, the risk to the global order and the norm of non-intervention on which it continues to be based is simply too great for the legality of unilateral preventive action, as distinct from collectively endorsed action, to be accepted. Allowing one so to act is to allow all. Allowing one so to act is to allow all.

On March 21, 2005, in preparation for a UN summit in September 2005, UN Secretary-General Annan issued a follow-up report to the UN General Assembly titled *In Larger Freedom: Towards Development, Security, and Human Rights for All* in which he addressed the use of force in international relations based on the final report of the High-Level Panel. The Secretary-General noted that it was essential to seek consensus on when and how force can be used to defend international peace and security, since UN member states had disagreed about whether states had the international legal right to defend themselves against imminent threats, and whether states had a broader right to use armed force preventively against latent or non-imminent threats. In this regard, the Secretary-General stated that imminent threats are fully covered under Article 51 of the UN Charter, which "safeguards the inherent right of sovereign states to defend

⁴⁷⁸ High-Level Panel, *supra* note 471, at 55, para. 190.

⁴⁷⁹ *Id.* at 55, para. 191.

⁴⁸⁰ Report of the U.N. Secretary-General, *In Larger Freedom: Towards Development, Security, and Human Rights for All*, at 3, 33, paras. 4, 122-125, U.N. Doc. A/59/2005 (Mar. 21, 2005) [hereinafter Secretary-General's Report].

⁴⁸¹ *Id.* at 33, para. 122.

themselves against armed attack", and that "[l]awyers have long recognized that this covers an imminent attack as well as one that has already happened." Where threats "are not imminent but latent", the Secretary-General stated that the UN Charter gives full authority to the Security Council to use military force, including preventively, to preserve international peace and security. 483

The reports of the UN High-Level Panel of Experts and the UN Secretary-General both accepted unequivocally the counter-restrictionist view that Article 51 of the UN Charter preserved and did not eliminate the pre-UN Charter customary international legal right of individual states to use force in anticipatory defense against an imminent threat of armed attack. In particular, the seniority, experience, and geographic balance of the High-Level Panel lends enormous credibility to its finding that "properly understood", Article 51 must be interpreted to allow for anticipatory defensive action against serious and imminent threats of armed attack where no other non-forceful means are reasonably available to a state to eliminate the threat. I therefore consider that the High-Level Panel's final report constitutes a powerful example of verbal state practice and *opinio juris* that supports the continued existence in the UN Charter era of a customary international law right of anticipatory defense against an imminent threat of attack, and that the Secretary-General's follow-up report is additional persuasive evidence that the counter-restrictionist interpretation of Article 51 is correct.

Of course, the restrictionists contest the significance of these two UN reports, arguing that following publication of the reports a number of states expressed opposition

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⁴⁸² Secretary-General's Report, *supra* note 480, at 33, para. 124.

⁴⁸³ *Id.* at 33, para. 125.

to their interpretation of Article 51, to include the Non-Aligned Movement (NAM), representing approximately 117 states, which issued several written statements expressing the NAM's view that Article 51 is "restrictive" and should not be "re-written or re-interpreted". 484 The restrictionists also point out that, perhaps due to this push-back, the final outcome document at the September 2005 UN summit did not specifically mention the right of anticipatory defense, stating only that in regard to the use of force in international relations the "relevant provisions" of the UN Charter are "sufficient to address the full range of threats to international peace and security." Once again, the weakness in these arguments is that they fail to address the fact that the right of individual states to anticipatory defense against imminent threats of armed attack is the established rule of customary international law, and that therefore, a significant quantity and quality of state practice and opinio juris is required to demonstrate that this wellestablished rule is no longer valid. In my view, the unequivocal support of these two UN reports for the counter-restrictionist position on Article 51 is powerful evidence that the established customary law right of anticipatory defense has not been overruled.

G. State Practice and Opinio Juris from 2006 to 2018

1. The Chatham House Principles

In October 2006, the U.K.'s Royal Institute of International Affairs (sister institution of the U.S. Council on Foreign Relations), also known as Chatham House⁴⁸⁶, published a set of principles on the international legal right of states to use force in self-

⁴⁸⁴ CORTEN, *supra* note 280, at 430-432; RUYS, *supra* note 21, at 339-341.

⁴⁸⁵ CORTEN, *supra* note 280, at 434-435; RUYS, *supra* note 21, at 341.

⁴⁸⁶ Royal Institute of International Affairs (Chatham House), https://www.chathamhouse.org/about/history (accessed May 2, 2019).

defense. 487 The principles were developed by Chatham House based on its survey of the views of over a dozen eminent British practitioners and scholars in the areas of international law and international relations, and were intended to provide a clear statement of the current rules of international law governing the use of force by states in self-defense. 488 Principal "A" of the so-called Chatham House principles stated that the international legal right of self-defense "encompasses more than the right to use force in response to an ongoing attack", and Principles "B" and "C" stated that individual states may lawfully use force in self-defense to avert an imminent armed attack. 489 Principle "D" then reiterated that a state may use force in self-defense against a threatened armed attack only if the threatened attack is imminent. ⁴⁹⁰ The explanatory comments by Chatham House in support of these principles stated that the view that states have a right to act in self-defense to avert the threat of an imminent attack is "widely, though not universally, accepted" and that it is simply "unrealistic in practice to suppose that selfdefence must in all cases await an actual attack." Since these Chatham House principles, which clearly adopt the counter-restrictionist interpretation of Article 51 of the UN Charter, were based in part on the views of eminent practitioners of international law, and since they specifically purport to be a statement of current international law, in my view they constitute an example of U.K. opinio juris that supports the continued existence of the customary international law right of states to use force in anticipatory defense against a threat of imminent attack.

⁴⁸⁷ Elizabeth Wilmshurst, *The Chatham House Principles of International Law on the Use of Force in Self-Defence*, 55 INT'L & COMP. L. QTRLY 963 (2006).

⁴⁸⁸ Wilmshurst, supra note 487, at 963.

⁴⁸⁹ Id at 964-966

⁴⁹⁰ *Id*. at 967.

⁴⁹¹ *Id.* at 964.

2. The Israeli Strike on the Al-Kibar Nuclear Reactor in Syria

On September 6, 2007, the Israeli Air Force conducted a strike on a secret nuclear facility being constructed (with North Korean assistance) by the Syrian government near Al-Kibar in northeastern Syria. Although the Syrian government has never admitted it, U.S. intelligence reported in 2008 that the Al-Kibar facility, which was destroyed in the Israeli attack, was a "nearly completed nuclear reactor intended to produce plutonium for a weapons program", and that the Al-Kibar facility was "weeks and possibly months from operational capacity". Despite the fact that Syria razed the remnants of the Al-Kibar facility following the attack, in an apparent effort to remove any remaining evidence of the nature of the installation, an IAEA inspection in 2008 discovered plutonium particles at the Al-Kibar site, which appeared to confirm that the destroyed facility was a secret nuclear reactor being constructed by Syria in violation of Syria's obligations as a non-nuclear weapon state party to the NPT. 494

In stark contrast to the international community's condemnation of Israel following the 1981 air strike on Iraq's Osirak nuclear reactor, the international community was virtually silent following Israel's destruction of the Al-Kibar facility in

⁴⁹² Leonard S. Spector & Avner Cohen, *Israel's Strike on Syria's Reactor: Implications for the Non-Proliferation Regime*, ARMS CONTROL TODAY (July/August 2008),

http://www.armscontrol.org/act/2008 07-08/SpectorCohen (accessed May 8, 2019); Katherine Slager, Note and Comment, Legality, Legitimacy, and Anticipatory Self-Defense: Considering an Israeli Preemptive Strike on Iran's Nuclear Program, 38 N.C. J. INT'L L. & COMM. REG. 267, 304-306 (2012); Leah Schloss, Note, The Limits of the Caroline Doctrine in the Nuclear Context: Anticipatory Self-Defense and Nuclear Counter-Proliferation, 43 GEO. J. INT'L L. 555, 564-566 (2012).

⁴⁹³ Slager, *supra* note 492, at 304-305.

⁴⁹⁴ Spector & Cohen, *supra* note 492; Slager, *supra* note 492 at 304-306; Schloss, *supra* note 492, at 564-566.

Syria. ⁴⁹⁵ Israel said nothing after the attack and did not provide any legal justification for its actions, and Syria registered a rather muted complaint with the UN Security Council and General Assembly, asserting only that Israel had committed a breach of Syria's airspace. ⁴⁹⁶ Other than Syria, not a single Arab government commented on the attack, much less called for Israel's condemnation, a reaction which Egypt's *Al-Ahram Weekly* characterized as the "synchronized silence of the Arab world". ⁴⁹⁷ Only North Korea condemned the Israeli attack, which Western media took as evidence that North Korean nationals were in fact involved in the secret project to construct the Al-Kibar facility. ⁴⁹⁸ Even more significantly, the Israeli attack on Al-Kibar was not even brought up for debate at the UN Security Council, or at the First Committee of the UN General Assembly, which deals with disarmament and international security, even though both bodies had opportunities to do so. ⁴⁹⁹

In my view, the international community's silence following Israel's 2007 air strike at Al-Kibar is best explained by the fact that unlike the Iraqi reactor at Osirak, which was openly purchased from France, declared, and subject to IAEA monitoring, the Al-Kibar reactor was secretly built with North Korean aid, undeclared, deliberately concealed, and not subject to IAEA safeguards. These differences, once revealed, made the Al-Kibar reactor immediately suspect, as did the fact that, unlike the Osirak reactor which was appropriately sized and designed for nuclear research, the Al-Kibar

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⁴⁹⁵ Spector & Cohen, *supra* note 492; Slager, *supra* note 492 at 304-306; Schloss, *supra* note 492, at 564-566.

⁴⁹⁶ Id

⁴⁹⁷ Id.

⁴⁹⁸ Id

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⁵⁰⁰ Spector & Cohen, *supra* note 492.

reactor was modeled on a reactor specifically designed to produce plutonium for nuclear arms. 501 Additionally, Israel likely felt that diplomatic options for dealing with the Al-Kibar facility, such as raising the matter with the IAEA and the UN Security Council, would be unsuccessful in view of the Iranian example of "stalling for time, delaying inspections, removing evidence, [and] asserting . . . that the site [is] peaceful in nature". 502 Therefore, while the international community's silence makes it difficult to predict the lasting normative legacy of Israel's 2007 strike on Al-Kibar for the international legal right of anticipatory defense, it does appear that the international community was more willing to tolerate the defensive use of force against the threat posed by an aggressive state's construction of an undeclared nuclear facility that was likely oriented toward the production of weapons, even without a clear showing by Israel that the mere existence of the not-yet-operational Al-Kibar facility constituted a temporally imminent threat of armed attack by Syria. 503

3. The Institute of International Law's Santiago Conference Resolution

At its October 2007 Santiago Conference, the Institute of International Law (Institut de Droit International) (hereinafter "IIL"), which is composed of distinguished international law practitioners and scholars from across the world and which meets every two years for the purpose of adopting "Resolutions of a normative character" to highlight

 $^{^{\}rm 501}$ Spector & Cohen, supra note 492. $^{\rm 502}$ Id.

and promote respect for current international law⁵⁰⁴, adopted through its Tenth Commission a Resolution titled Present Problems of the Use of Armed Force in *International Law- Self-Defence*. 505 The Resolution stated in part that the international legal right of self-defense "arises for a target state in case of an actual or manifestly imminent armed attack" (emphasis added) and that there is no basis in international law for "preventive" self-defense in the absence of an actual or manifestly imminent armed attack. 507 Although this Resolution appears on its face to support the continued existence in customary international law of the right of a state to use force in anticipatory defense against a threat of imminent attack, the accompanying report of the IIL's Tenth Commission Sub-Group on Self-Defence indicates that "manifestly imminent" actually refers to so-called "interceptive" self-defense against an armed attack that is so imminent that it can be deemed to have already begun to occur. 508 However, in my view the IIL's Resolution does constitute at least implicit opinio juris in support of a permissive right of anticipatory defense because "... once we are willing to consider that an attack has begun even in situations where it can conceivably be stopped before it

See Institute of International Law, http://www.idi-iil.org/en/a-propos/ (accessed May 2, 2019).

⁵⁰⁵ Institute of International Law, Tenth Commission, Santiago Session, Resolution 10A, *Present Problems* of the Use of Armed Force in International Law- Self-Defence (Oct. 27, 2007), http://www.idi-iii.org/app/uploads/2017/06/2007 san 02 en.pdf (accessed Apr. 8, 2019).

⁵⁰⁶ *Id.* at para. 3.

⁵⁰⁷ *Id*. at para. 6.

Froblems of the Institute of International Law, Tenth Commission, Sub-Group on Self-Defence, Present Problems of the Use of Force in International Law at p. 118-119, paras. 86-87 (Jun. 2007), http://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Roucounas.pdf (accessed Apr. 8, 2019); See also DINSTEIN, https://www.idi-iil.org/app/uploads/2017/06/Rouc

actually affects the target state, then we are back to asking the same questions that arise in the context of anticipatory self-defense." ⁵⁰⁹

4. The Leiden Policy Recommendations

A clearer endorsement of the pre-UN Charter customary international law right of anticipatory defense can be found in the results of the three year consultative expert process on counter-terrorism and international law conducted from 2007-2010 by Leiden University's Grotius Center for International Legal Studies with the full support of the Government of the Netherlands. 510 The consultative process involved approximately thirty renowned international experts on counter-terrorism and international law, including practitioners, the judiciary, and academia, and working groups included experts from Argentina, Canada, Netherlands, Germany, Italy, Israel, South Africa, the U.K., and U.S. 511 The results of the consultative process were published on April 1, 2010 in the a document titled Leiden Policy Recommendations on Counter-Terrorism and International Law⁵¹², and in the key focus area of the use of force in self-defense by states against terrorist non-state actors, the Leiden Policy Recommendations asserted that "...[s]tates have a right of self-defence against a threatened attack, but only if the attack is imminent and if the action in self-defence is necessary to avert the attack and is proportionate to it."513 The Leiden Policy Recommendations also stated that action to

⁵⁰⁹ Noam Lubell, "The Problem of Imminence in an Uncertain World" *in* THE OXFORD HANDBOOK OF THE USE OF FORCE IN INTERNATIONAL LAW 704-705 (Marc Weller ed., 2015).

⁵¹⁰ Nico Schrijver & Larissa van den Herik, *Leiden Policy Recommendations on Counter-Terrorism and International Law*, 57 NETH. INT'L L. REV. 531 (2010) [hereinafter Leiden Policy Recommendations].

⁵¹¹ *Id*. at 531, 533, 550 Annex 1.

⁵¹² *Id.* at 531-533.

⁵¹³ *Id.* at 543, para. 45.

avert an imminent attack must be distinguished from the use of preventive force before a threat has crystallized, which could only be lawful if authorized by the UN Security Council. The Leiden Policy Recommendations thus clearly endorsed the continued existence of the customary international law right of states to use force in anticipatory defense to repel an imminent threat of armed attack where the long-established elements of necessity, temporal imminence, and proportionality are met. Since these recommendations reflect the views of international law practitioners and the judiciary and were developed by Leiden University's Grotius Center with the support of the Government of the Netherlands, I believe they represent additional *opinio juris* in support of the customary international law right of anticipatory defense against a threat of imminent attack.

5. Official Endorsements by the U.S., U.K. and Australian Governments

During 2016 and 2017, the Governments of the U.S., the U.K., and Australia each publicly endorsed the continued existence of the customary international law right of states to use force in anticipatory defense to repel a threat of imminent armed attack. On April 1, 2016, Brian J. Egan, the Legal Adviser to the U.S. State Department, gave a public address titled *International Law, Legal Diplomacy, and the Counter-ISIL Campaign* to the annual meeting of the American Society of International Law in which he stated that under the *jus ad bellum*, a state may use force in the exercise of its inherent right of self-defense "not only in response to armed attacks that have occurred, but to

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⁵¹⁴ Leiden Policy Recommendations, *supra* note 510, at 543, para. 45.

imminent ones before they occur³⁵¹⁵ (emphasis in original). Egan also stated that during the past eighteen months, nine other states had notified the UN Security Council that they were using armed force against the Islamic State of Iraq and the Levant (ISIL) terrorist group in Syria, and that the consistent theme throughout those reports was that "the right of self-defense extends to using force to respond to actual or imminent armed attacks by non-state armed groups like ISIL." ⁵¹⁶ Egan's view regarding the official U.S. position on anticipatory defense was reiterated in December 2016 when U.S. President Barack Obama issued a report intended to explain the domestic and international legal bases for the U.S.'s use of military force overseas, and specifically stated in the report that under the jus ad bellum, a state may use force in the exercise of its inherent right of self-defense "not only in response to armed attacks that have already occurred, but also in response to imminent attacks before they occur"⁵¹⁷ (emphasis in original). These official endorsements of the right of anticipatory defense by the U.S. Government in 2016 were soon followed in 2017 by similar public addresses by the Attorneys-General of the U.K. and Australia, which stated the official positions of those Governments that the inherent right of self-defense described in Article 51 of the UN Charter includes the customary international law right to use force in anticipatory defense against a threat of imminent

⁵¹⁵ Brian J. Egan, Address at the American Society of International Law Annual Meeting: International Law, Legal Diplomacy, and the Counter-ISIL Campaign (Apr. 1, 2016) [hereinafter Egan Address] (transcript available at https://www.justsecurity.org/wp-content/uploads/2016/04/Egan-ASIL-speech.pdf) (accessed May 3, 2019).
⁵¹⁶ Id

⁵¹⁷ THE WHITE HOUSE, REPORT ON THE LEGAL AND POLICY FRAMEWORKS GUIDING THE UNITED STATES' USE OF MILITARY FORCE AND RELATED NATIONAL SECURITY OPERATIONS at 9 (Dec. 2016) [hereinafter U.S. Legal Frameworks Report],

https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/Legal_Policy_Report.pdf (accessed Mar. 7, 2019).

armed attack.⁵¹⁸ Such official and public endorsements of the international legal right of anticipatory defense by the U.S., U.K., and Australian Governments constitute clear examples of verbal state practice and *opinio juris* in support of the continued existence of this right in customary international law, and are particularly compelling due to the fact that these three states are consistent and experienced participants in the legal field of the *jus ad bellum*.

6. The 2017 Tallinn Manual

The 2017 update of the *Tallinn Manual on the International Law Applicable to Cyber Operations*⁵¹⁹ (hereinafter "*Tallinn Manual*") also endorsed the international legal right of states to use force in anticipatory defense against a threat of imminent armed attack. Developed over a four year period by a geographically diverse group of twenty-four international law experts, and benefitting from "the unofficial input of many states" and over 50 peer reviewers, the 2017 *Tallinn Manual* identified "black letter" rules of international law that are applicable to cyber operations and provided commentary on

The Rt. Hon. Jeremy Wright, U.K. Attorney-General, Address at the International Institute for Strategic Studies: The Modern Law of Self-Defence (Jan. 11, 2017) [hereinafter Wright Address] (transcript available at https://www.ejiltalk.org/the-modern-law-of-self-defence/) (accessed Apr. 5, 2019) ("Like many other states, the long-standing U.K. view is that Article 51 of the UN Charter does not require a state passively to await an attack, but includes the 'inherent right'- as it's described in Article 51- to use force in self-defence against an 'imminent' armed attack, referring back to customary international law."); Sen. The Hon. George Brandis, Attorney-General of Australia, Address at the T.C. Beirne School of Law, Queensland: The Right of Self-Defence Against Imminent Armed Attack in International Law (Apr. 11, 2017) [hereinafter Brandis Address] (transcript available at https://www.ejiltalk.org/the-right-of-self-defence-against-imminent-armed-attack-in-international-law/) (accessed Feb. 14, 2019) ("[I]t is now recognized that customary international law permits self-defence not only against an armed attack that has occurred but also against one that is imminent . . .[that] has certainly been the long-held Australian position . . . ".).

⁵¹⁹ TALLINN MANUAL 2.0 ON THE INTERNATIONAL LAW APPLICABLE TO CYBER OPERATIONS (Michael N. Schmitt ed., 2nd ed. 2017) [hereinafter TALLINN MANUAL 2.0].

each rule. 520 In regard to the international legal right of self-defense, the 2017 Tallinn Manual asserted in Rule 71 that a state that is the target of a cyber operation that rises to the level of an armed attack may exercise its inherent right of self-defense in response, and it also asserted in Rule 73 that the right to use force in self-defense arises if a cyber armed attack "occurs or is imminent". ⁵²¹ In its commentary accompanying Rule 73, the 2017 Tallinn Manual explained that even though Article 51 of the UN Charter does not expressly provide for defensive action in anticipation of an armed attack, under customary international law as formulated during the Caroline incident a state may lawfully defend itself once an armed attack is imminent. 522 In view of the importance of the Tallinn Manual to the nascent field of the legal regulation of cyber operations; the geographic diversity of the international law experts and peer reviewers that contributed to the 2017 Tallinn Manual; and the fact that many states unofficially provided input for its development, I consider the 2017 Tallinn Manual's endorsement of the right of anticipatory defense against threats of imminent attack to be an example of both verbal state practice and *opinio juris* in support of the continued existence of this right in customary international law.

7. The International Law Association's Sydney Conference Resolution

In August 2018, the International Law Association's (ILA's) Committee on the Use of Force concluded an almost eight-year effort to produce a final report on

⁵²⁰ TALLINN MANUAL 2.0, *supra* note 519, at i, xii-xviii.

⁵²¹ *Id*. at 339, 350.

⁵²² *Id.* at 350-351.

aggression and the use of force. 523 The ILA is an international non-governmental organization whose purpose is to study, clarify, and develop international law⁵²⁴, and in November 2010 the ILA had established a Committee on the Use of Force consisting of international law experts from twenty-one different states- including four of the five permanent member states of the UN Security Council- to develop a report reflecting a common general position among the experts regarding the current state of the jus ad bellum. 525 In its final report, the ILA's Committee on the Use of Force addressed the international legal right of anticipatory defense, and noted that while there is still a debate between the restrictionist and counter-restrictionist interpretations of Article 51 of the UN Charter, "... there would seem to be increasing support for the view that the right to selfdefence does exist in relation to manifestly imminent attacks, narrowly construed."526 The Committee's final report also noted that the counter-restrictionist interpretation of Article 51 had received "further validation" in the reports of the UN High-Level Panel and the UN Secretary-General in 2004-2005. 527 The Committee's final report concluded that although the issue of how best to interpret Article 51 remains "unsettled", there may be "... reason to accept that when faced with a specific imminent armed attack based on objectively verifiable indicators, states may engage in measures to defend themselves in order to prevent the attack. Any such measures would have to conform to [the

International Law Association, Committee on the Use of Force, Sydney Conference, Final Report on Aggression and the Use of Force (Aug. 19-24, 2018) (available at http://www.ila-hq.org/index.php/committees) (accessed May 3, 2019) [hereinafter ILA Report].

⁵²⁴ International Law Association, http://www.ila-hq.org/index.php/about-us (accessed May 3, 2019).

⁵²⁵ ILA Report, *supra* note 523, at 1-2.

⁵²⁶ ILA Report, *supra* note 523, at 13.

⁵²⁷ Id.

requirements of] necessity and proportionality". ⁵²⁸ The ILA's 78th Conference, held at Sydney, Australia from August 19-24, 2018, commended the Committee's final report to all those concerned with the *jus ad bellum*, and in a clear reference to the UN High-Level Panel's previous report, specifically stated that the current international law on the use of force, "properly interpreted and applied", remains a solid cornerstone for international peace and security. ⁵²⁹ Despite its grudging reference to the debate between the restrictionist and counter-restrictionist interpretations of Article 51 remaining unsettled, I consider that the ILA Conference's endorsement of the Use of Force Committee's finding that "there may be reason to accept" a right of states to use force in anticipatory defense against a threat of imminent attack constitutes further evidence of *opinio juris* that this right continues to exist in customary international law.

In summary, Article 51 of the UN Charter was not intended to and did not eliminate the pre-UN Charter customary international law right of individual states to use force in anticipatory defense against a threat of imminent armed attack. The language of Article 51 which states that nothing in the Charter shall impair the "inherent right" of self-defense clearly refers to the pre-UN Charter customary international law right of self-defense, which included a right to take action in anticipatory defense based on the elements of necessity, temporal imminence, and proportionality that U.S. Secretary of State Daniel Webster articulated in resolving the *Caroline* incident. The ICJ's *obiter dicta* in its *Nicaragua* judgment supports this interpretation, and review of the Charter's

⁵²⁸ ILA Report, *supra* note 523, at 14.

⁵²⁹ International Law Association Conference Resolution 4/2018, Committee on the Use of Force, Sydney Conference (Aug. 19-24, 2018) (available at http://www.ila-hq.org/index.php/committees) (accessed May 3, 2019).

travaux demonstrates that Article 51 was added to the Charter solely to accommodate the concerns of Latin American nations that regional collective security organizations would retain their ability to engage in collective defense. Article 51 was thus intended to preserve and not to eliminate the pre-UN Charter customary international law right of individual states to use force in self-defense against attacks and threats of imminent attack. Post-UN Charter state practice clearly supports this interpretation of Article 51, to include the 1967 Six Day War, in which the majority of the international community was unwilling to condemn Israel's anticipatory defensive action in the face of a serious and imminent threat of attack, and Israel's 1981 strike on the Osirak nuclear reactor, in which the majority of the international community condemned Israel's anticipatory defensive action only because there was no clear evidence of an imminent threat of attack by Iraq against Israel. Additionally, the crisis of the terrorist attacks of September 11, 2001, which led the U.S. to issue a 2002 NSS that asserted a broad doctrine of preventive defense and to engage in a preventive attack Iraq in 2003, resulted in a reaffirmation of the customary international law right of anticipatory defense against threats of imminent attack in the reports of the UN High-Level Panel of Experts and the UN Secretary-General in 2004-2005. Subsequently, the U.S., U.K., and Australian Governments publicly asserted their adherence to the customary international law right of anticipatory defense against threats of imminent armed attack, and a clear and powerful trend of verbal state practice and opinio juris supporting this position is found in the 2006 Chatham House principles (states may lawfully use force to avert imminent armed attacks); the 2007 IIL Santiago Conference Resolution (self-defense arises in case of "manifestly imminent" armed attacks); the 2010 Leiden Policy Recommendations (states

have a right of self-defense against a threatened attack if the attack is imminent); the 2017 *Tallinn Manual* (right to self-defense arises if a cyber armed attack "occurs or is imminent"); and the 2018 ILA Sydney Conference endorsement of the ILA Use of Force Committee's final report (may be reason to accept that a right of self-defense exists in relation to specific imminent armed attacks). In view of this significant body of state practice and *opinio juris*, and bearing in mind that the permissive right of individual states to use force in anticipatory defense was established in customary international law prior to the UN Charter, I conclude that the right of anticipatory defense was not eliminated by the Charter and that it continues to exist today in customary international law.

This chapter concludes Part 1 of the dissertation, which first discussed the origins of the right of anticipatory defense against a threat of imminent attack in medieval canon law, natural law, and municipal law and then discussed how the classical writers incorporated the right of anticipatory defense into the emerging field of international law. Part 1 then discussed the right of anticipatory defense during the late 18th to mid-20th centuries, including the formulation by U.S. Secretary of State Daniel Webster during the *Caroline* incident which asserted that to be lawful, anticipatory action by a state in self-defense must meet the elements of necessity, temporal imminence, and proportionality. Part 1 concluded by demonstrating that Webster's formulation of the international legal right of anticipatory defense during the *Caroline* incident became a permissive rule of customary international law through its adoption in the Nuremberg Tribunal's judgment and the UN General Assembly's unanimous affirmation of the legal principles set forth in

the Nuremberg judgment, and that Article 51 of the UN Charter was not intended to and did not eliminate this pre-UN Charter customary international law right to use force in anticipatory defense to repel a threat of imminent armed attack.

Having demonstrated in Part 1 of the dissertation the continued existence in customary international law of the right of individual states to use force in anticipatory defense against threats of imminent attack in accordance with the Caroline criteria, Parts 2 and 3 of the dissertation will examine whether the customary international law requirement that a threat of attack must involve a high degree of temporal imminence in order to justify anticipatory defensive action by a state is adequate to address contemporary security threats such as WMD, terrorism, and cyber armed attacks. To examine this question, Part 2 will discuss as a case study the facts regarding the nuclear threat currently posed to Israel by Iran, a state which has actively sought a nuclear weapons capability and which sponsors international terrorist organizations dedicated to Israel's destruction. Part 3 of the dissertation will then argue that the customary international law requirement of a high degree of temporal imminence to justify anticipatory defensive action by states is not adequate to address the Iranian nuclear threat to Israel, and after examining alternate approaches offered by states and legal scholars regarding the imminence requirement, will propose a new multi-part test to guide state decision-making in determining whether a threat of attack is imminent.

PART 2: CASE STUDY OF THE INTERNATIONAL LEGAL RIGHT TO USE ARMED FORCE IN ANTICIPATORY DEFENSE: THE IRANIAN NUCLEAR THREAT TO ISRAEL

CHAPTER VI. PART 2: ISRAEL'S PERCEIVED EXISTENTIAL THREAT FROM IRAN

As discussed briefly in Chapter I *supra*, Israel views a nuclear weapons-capable Iran as an existential threat to its survival, and for this reason, a number of Israeli officials and experts have stated that Israel must not permit Iran to acquire a nuclear weapons capability, with some calling for preventive military strikes to eliminate this perceived existential threat. This chapter will demonstrate that Israel's perceived existential threat from Iran is reasonable in view of Iran's specific threats to destroy Israel; Iran's state sponsorship of anti-Israel terrorist organizations, particularly Hezbollah, Hamas, and Palestinian Islamic Jihad; Iran's attempt to establish an additional military front against Israel in Syria; and Iran's pursuit of a nuclear weapons capability, including Iran's continuing development and operation of ballistic missiles such as the Shahab-3/3M that are capable of delivering nuclear weapons to attack Israel.

A. Iran's Specific Threats to Destroy Israel

One significant factor in Israel's perception of an existential threat from Iran is that Iran's senior leaders, including former Iranian Supreme Leader Ayatollah Ruhollah Khomeini, current Iranian Supreme Leader Ayatollah Ali Khamenei, and former Iranian

⁵³⁰ CORDESMAN & SEITZ, *supra* note 10, at 289, 295.

President Mahmoud Ahmadinejad, have consistently made threatening and extreme statements calling for the destruction of the state of Israel. 531 The desire of Iran's senior leaders to destroy Israel dates back to the earliest days of the Iranian revolution in the 1980s, when former Iranian Supreme Leader Khomeini stated, "One of our major points is that Israel must be destroyed."532 This call for the destruction of Israel was consistent with Khomeini's politicized and radicalized version of Shia Islam, under which the vitality of his Islamist vision for Iran was contingent upon its relentless export to other states outside Iran.⁵³³ For Khomeini, the global order was divided between two competing entities: states like the U.S. and Israel, whose priorities were defined by Western conventions, and the revolutionary Islamic Republic of Iran, whose purpose was to redeem a divine Islamic mandate by realizing God's will on earth. ⁵³⁴ To support this Islamist vision, Khomeini's internationalism had to have an antagonist, a foil against which to define itself, and Khomeini therefore portraved Israel and other "Western powers" as illegitimate and rapacious imperialists determined to exploit Iran's wealth for their own aggrandizement, to subjugate Muslims, and to impose their immoral Western culture upon Muslim nations in the name of modernity. 535

⁵³¹ CORDESMAN & SEITZ, *supra* note 10, at 11.

⁵³² Editorial, *Israel Must Be "Eliminated"*, WALL ST. J., Sept. 26, 2012, at A18 [hereinafter WSJ Editorial].

⁵³³ Ray Takeyh, All the Ayatollah's Men, NAT'L. INT. (Aug. 22, 2012),

https://nationalinterest.org/print/article/all-the-avatollah's-men-7344.

⁵³⁴ *Id*. ⁵³⁵ *Id*.

Following Khomeini's death in 1989, Iran's senior leaders have consistently reiterated Khomeini's call for the destruction of Israel. 536 For example, even prior to his election as President of Iran (the second highest office in Iran behind the Supreme Leader, and the highest elected office) in 2005, Mahmoud Ahmadinejad declared in a televised speech, "Iran's position, which was first expressed by the Imam [Khomeini] and stated several times by those responsible, is that the cancerous tumor called Israel must be uprooted from the region", and Ahmadinejad similarly stated a year later, "The foundation of the Islamic regime is opposition to Israel and the perpetual subject of Iran is the elimination of Israel from the region."537 After becoming President of Iran, Ahmadinejad addressed an October 2005 "World Without Zionism" Conference held in Tehran and stated that, "... our dear Imam [Khomeini] ordered that this Jerusalem occupying regime [Israel] must be erased from the page of time. This was a very wise statement."538 Similarly, the Commander of Iran's Islamic Revolutionary Guard Corps (IRGC)⁵³⁹, General Mohammed-Ali Jafari, advised the Secretary-General of Hezbollah in February 2008 that, "[i]n the near future, we will witness the destruction of the cancerous microbe Israel by the strong and capable hands of the nation of Hezbollah", and Ayatollah Ahmad Janati, Chairman of the Guardian Council of the Iranian Constitution,

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⁵³⁶ KENNETH M. POLLACK, UNTHINKABLE: IRAN, THE BOMB, AND AMERICAN STRATEGY 30 (2013) ("Ayatollah Khomeini was both anti-Semitic and anti-Zionist, and his beliefs have influenced his followers and successors.").

⁵³⁷ CORDESMAN & SEITZ, supra note 10, at 11-12.

⁵³⁸ *Id*. at 12

The Islamic Revolutionary Guard Corps (IRGC) is a hard-line, elite military/security force within Iran which has five branches consisting of a ground force, an air force, a navy, the paramilitary Bassij Force, and the extraterritorial Qods Force. Its missions include preserving internal security within Iran, as well as preserving the security of Iran's governing theocratic regime from internal or external threats. The IRGC is believed to be deeply involved in Iran's nuclear, missile, and other weapons proliferation activities. CORDESMAN & SEITZ, *supra* note 10, at 17-27.

told reporters during a 2008 parade in honor of the 1979 Iranian revolution that "the blind enemies should see that the wish of these people is the death . . . of Israel." The Chief of Staff of the Iranian Armed Forces, Major General Hassan Firouzabadi, added in May 2012 that "the Iranian nation is standing for its cause that is the full annihilation of Israel." ⁵⁴¹

Specific threats to destroy Israel have also been made by Yahya Rahim Safavi, one of the founders of the IRGC and now senior advisor to Iran's Supreme Leader Khamenei. 542 Safavi has continually referred to Israel as impure, unhygienic, and contaminated, and in public remarks made in February 2008, Safavi stated that "with God's help the time has come for the Zionist regime's death sentence" and that "the death of this unclean regime [Israel] will arrive soon following the revolt of Muslims."543 Another close confidant of and spokesperson for Supreme Leader Khamenei, Hossein Shariamadari, wrote an editorial in the Iranian daily *Kayhan* on October 30, 2005, in which he stated, "We declare explicitly that we will not be satisfied with anything less than the complete obliteration of the Zionist regime from the political map of the world", and two years later, Shariamadari stated similarly, "... [the words] 'Death to Israel' are not only words written on paper but [are] rather a symbolic approach that reflects the desire of all the Muslim nations."544 Additionally, former Iranian President Hashemi Rafsanjani, who was often described as a moderate in Western media accounts, stated in 2001 that "[i]f one day the Islamic world is also equipped with [nuclear] weapons . . .

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⁵⁴⁰ CORDESMAN & SEITZ, *supra* note 10, at 12.

⁵⁴¹ WSJ Editorial, *supra* note 532, at A18.

⁵⁴² CORDESMAN & SEITZ, *supra* note 10, at 12.

⁵⁴³ CORDESMAN & SEITZ, *supra* note 10, at 12.

⁵⁴⁴ Id

then the imperialists' strategy will reach a standstill because the use of even one nuclear bomb inside Israel will destroy everything. However, it will only harm the Islamic world. It is not irrational to contemplate such an eventuality."⁵⁴⁵ This chilling statement implies that for Iran it is "not irrational" to contemplate the deaths of millions of Muslims in exchange for the destruction of Israel because millions of other Muslims will survive, but the Jewish state will not. ⁵⁴⁶

Iran's current Supreme Leader, Ayatollah Ali Khamenei, shares Khomeini's view that the U.S. "implanted" Israel into the Middle East to fight against the Islamic world, and he also wishes to see the state of Israel destroyed. In July 2015, Khamenei published in Iran a 400 page book titled *Palestine: The Most Important Problem of the Islamic World*, in which he set forth in detail his views regarding Israel's illegitimacy as a state and his strategy for the destruction of Israel. Purporting to speak on behalf of the entire Islamic community or *Ummah*, Khamenei states that the liberation of Palestine and the destruction of the state of Israel is a religious duty for all Muslims, because all Islamic religious scholars have stressed that if any part of Islamic territory is occupied by the enemies of Islam, then all Muslims have a duty to resist so that they can restore the

⁵⁴⁵ WSJ Editorial, *supra* note 532, at A18; Norman Podhoretz, *Stopping Iran: Why the Case for Military Action Still Stands*, COMMENT. MAG. (Nov. 9, 2011), https://www.commentarymagazine.com/foreign-policy/middle-east/iran/stopping-iran-why-the-case-for-military-action-still-stands-2/ (Accessed Jun. 7, 2019).

⁵⁴⁶ WSJ Editorial, *supra* note 532, at A18.

⁵⁴⁷ POLLACK, *supra* note 536, at 14.

⁵⁴⁸ AYATOLLAH ALI KHAMENEI, PALESTINE: THE MOST IMPORTANT PROBLEM OF THE ISLAMIC WORLD (Saeed Solh-Mirzai ed., 2015), Excerpt in English, http://s15.Khamenei.ir/ndata/news/18463/Palestine-english.pdf (Accessed May 20, 2019) [hereinafter KHAMENEI English Excerpt]; Amir Taheri, *The Ayatollah's Plan for Israel and Palestine*, GATESTONE INST. (July 31, 2015), https://www.gatestoneinstitute.org/6263/khamenei-israel-palestine.

occupied territories.⁵⁴⁹ Khamenei also states that all Muslims have a religious duty to assist the Palestinians in destroying the state of Israel because in Islam a person who hears a Muslim's cries for help and fails to respond is not a Muslim, and in this case it is not just a single individual but an entire Palestinian nation that is oppressed by Israel and is crying out for help.⁵⁵⁰ Khamenei asserts that Iran supports the Palestinian nation and other oppressed Muslim nations because the Holy Quran requires all Muslims to support the oppressed.⁵⁵¹

In view of these Islamic religious duties, Khamenei states that Iran's goal, and the goal of the entire Islamic *Ummah*, is to liberate Palestine and "wipe out the Israeli government". S52 According to Khamenei, the division of the land of Palestine by the UN in 1948, which resulted in the declaration of the state of Israel, was illegitimate and was in fact a pretext to allow the Western powers to occupy Palestinian land and to establish an anti-Islamic regime in the heart of the Islamic world. Khamenei states that the Western powers exaggerated the statistics regarding the number of Jewish victims of World War II and the facts regarding the Holocaust (which Khamenei calls "a story that has not even been confirmed") in order to create public sympathy and prepare the ground for the occupation of Palestine by the "usurping Zionist regime", and that the collective goal of the Western powers and the Zionists was to establish a new Middle East in which Israel will gradually gain economic domination over Arab countries and other nations in

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⁵⁴⁹ KHAMENEI English Excerpt, *supra* note 548, at 11, 61; Taheri, *supra* note 548 ("[A] land that falls under Muslim rule, even briefly, can never again be ceded to non-Muslims. What matters in Islam is control of a land's government, even if the majority of inhabitants are non-Muslims.").

⁵⁵⁰ KHAMENEI English Excerpt, *supra* note 548, at 64.

⁵⁵¹ *Id*. at 25.

⁵⁵² *Id*. at 11.

⁵⁵³ *Id*. at 44, 46.

the region as well as the oil-rich regions of the Middle East.⁵⁵⁴ Since Israel has been "tasked" with protecting the interests of the Western powers by "constantly posing threats" to the security of the Islamic countries in order to prevent the Islamic countries from creating a solid and harmonious coalition and making full use of their facilities, wealth, and human capacities, Khamenei believes that the existence of Israel is a "great threat to the nations and countries of the region" and that wiping out Israel is in the interest of Iran and all other Islamic nations.⁵⁵⁵ In view of this grave threat, Khamenei states that the liberation of Palestine through the elimination of Israel is the most important issue of the world of Islam.⁵⁵⁶

Khamenei's recommended strategy for destroying the state of Israel and liberating Palestine is for the Palestinian nation, supported by all Muslims throughout the world, to engage in a long period of low intensity warfare ("militant and selfless struggle") against Israel that is designed to make life unpleasant if not impossible for a majority of Israeli Jews so that they will leave Israel. Khamenei's calculation is based on the assumption that large numbers of Israelis have dual-nationality and would prefer emigration to Europe or the U.S. to daily threats of death, and that once the cost of staying in Israel has become too high for many Jews, the Western powers, particularly the U.S., will decide that the cost of continued support to Israel exceeds the benefits and will acquiesce in the

⁵⁵⁴ KHAMENEI English Excerpt, supra note 548, at 22, 44, 74.

⁵⁵⁵ Id at 22 AA 87

⁵⁵⁶ Id at 11-12

⁵⁵⁷ *Id.* at 18; Taheri, *supra* note 548.

creation of a new state of Palestine- consisting of the land of Israel, the West Bank, and Gaza- under Muslim rule. 558

Although Khamenei claims that he is not recommending "classical wars" to destroy Israel and that he does not want to "massacre the Jews", he exhorts the Palestinians and the entire Islamic *Ummah* to engage in armed struggle or *jihad* against Israel and he specifically encourages them to carry out suicide attacks ("martyrdom operations") which he describes as "the peak of the greatness of a nation and the peak of epic resistance". Shamenei also expresses approval of the fact that anti-Israel "combatant" organizations, including Hezbollah, Hamas, and Palestinian Islamic Jihad, have realized that the only way to save Palestine is through martyrdom operations since the Israeli enemy is "helpless in the face of martyrdom missions and those who are not afraid of death", and he calls upon all Muslims and Muslim nations to take part in this *jihad* and to provide Palestine with financial, political, intelligence, and military assistance. Shamenei states that the fate of the world of Islam and the fate of all Islamic countries depends on the fate of Palestine.

Taheri, *supra* note 548. Khamenei proposes that Israel, the West Bank, and Gaza would revert to a UN mandate for a brief period during which a referendum would be held to create the new state of Palestine. All Palestinians and their descendants, wherever located, would be able to vote in the referendum, while Jews who "have come from other places" and thus have no "genuine roots" in the region would be excluded. Studies by the Iranian Foreign Ministry apparently suggest that at least 8 million Palestinians across the globe would be eligible to vote, against only 2.2 million Jews, so Khamenei is certain of the results of his proposed referendum. Taheri, *supra* note 548.

⁵⁵⁹ KHAMENEI English Excerpt, *supra* note 548, at 18, 51, 57-60; Taheri, *supra* note 548.

⁵⁶⁰ KHAMENEI English Excerpt, *supra* note 548, at 67, 93-94.

⁵⁶¹ *Id*. at 51.

Khamenei strongly rejects any recognition of Israel, negotiations with Israel, and/or peaceful coexistence with Israel. ⁵⁶² He states that Muslim nations are prohibited from negotiating with or recognizing Israel because this would mean "displacing the Palestinian people from Palestine and allowing the enemy to occupy Palestine forever", which would be a treachery to both the Muslim and the Palestinian nations. 563 Khamenei asserts that the only avenue for the deliverance of Palestine is through the resistance and patience of *jihad*, and he boasts about the success of his plans to make life impossible for Israelis through terror attacks from Lebanon and Gaza, noting that Iran has "intervened in anti-Israeli matters, and it brought victory in the 33-day war by Hezbollah against Israel in 2006 and in the 22-day war between Hamas and Israel in the Gaza Strip."564 Khamenei further asserts that the elimination of Israel will mean that the Western powers' hegemony and threats will be discredited in the Middle East, and he boasts that in its place "the hegemony of Iran will be promoted." Khamenei also assures the Palestinians and the entire Islamic *Ummah* that they will ultimately be victorious in liberating Palestine:

"We believe that annihilation of the Israeli regime is the solution to the issue of Palestine. Do not say this is not possible. Everything is possible . . . the Zionist regime . . . might last another forty years, but annihilation is the destiny of the Israeli government. It is doomed to annihilation . . . Israel will disappear . . . This is what the people of Iran

⁵⁶² KHAMENEI English Excerpt, *supra* note 548, at 20-21, 24, 39, 49-50.

⁵⁶³ Id at 24 39

⁵⁶⁴ *Id.* at 39, 59, 67; Taheri, *supra* note 548.

⁵⁶⁵ Taheri, *supra* note 548.

and the Islamic Republic say and it will happen. This will be possible thanks to your vigilance and thanks to the vigilance of Muslim nations." ⁵⁶⁶

Supreme Leader Khamenei's 2015 publication of *Palestine: The Most Important Problem of the Islamic World* is reminiscent of Adolf Hitler's publication of *Mein Kampf*, in that each of these works advocates revolutionary changes to the existing international system and proposes to replace it with a new order dominated by Iran and Germany, respectively. ⁵⁶⁷ Like Hitler, Khamenei explicitly spells out in his book the goals he wishes his nation to pursue, which for the Islamic Republic of Iran is the destruction of the state of Israel through a long term campaign of low level warfare and its replacement by a new state of Palestine that is under Islamic rule and is beholden to Iran. ⁵⁶⁸ Taken at face value, Khamenei's published goal of the destruction of Israel, combined with the history of similar threats by numerous Iranian senior leaders starting with the Ayatollah Khomenei, can certainly be interpreted by Israel to show "... that Iran may be hard or impossible to deter, might be reckless in escalating a crisis, and might use weapons of mass destruction against Israel." ⁵⁶⁹

While some may dismiss these Iranian threats as mere domestic political rhetoric, and point to other statements in which Supreme Leader Khamenei, former President Ahmadinejad, and other Iranian officials have denied any intent to acquire nuclear weapons, such explicit threats to destroy Israel certainly raise concerns about Iran's true

⁵⁶⁶ KHAMENEI English Excerpt, *supra* note 548, at 39, 101-102.

⁵⁶⁷ Norman Podhoretz, *The Case for Bombing Iran*, COMMENT. MAG. (June 2007), https://www.commentarymagazine.com/articles/the-case-for-bombing-iran/ (Accessed May 21, 2019). https://www.commentarymagazine.com/articles/the-case-for-bombing-iran/ (Accessed May 21, 2019). https://www.commentarymagazine.com/articles/the-case-for-bombing-iran/ (Accessed May 21, 2019).

⁵⁶⁹ CORDESMAN & SEITZ, *supra* note 10, at 8-9.

intentions in regard to its nuclear program.⁵⁷⁰ This is particularly true since leading scholars of Iran are consistent in their findings that profound hatred of Israel and visceral anti-Semitism are central to the theology, revolutionary theory, and strategic worldview of Iran's top clerical leadership.⁵⁷¹ Israeli leaders cannot simply dismiss Iran's threats to destroy the Jewish state, because they know that Iran's rejectionist stance against Israel is not just a matter of words: Iran's state sponsorship of anti-Israel terrorist organizations such as Hezbollah and Hamas has already resulted in the deaths of hundreds of Israelis.⁵⁷² Israeli leaders also cannot dismiss Iran's threats because they know from painful experience that the fact that a state's top leaders use extreme threatening language is no historical guarantee that they do not mean exactly what they say.⁵⁷³

B. Iran's State Sponsorship of Anti-Israel Terrorist Organizations

In addition to Iran's specific threats to destroy the state of Israel, Israel's perceived existential threat from Iran must also be understood in light of Iran's long-standing state sponsorship of anti-Israel terrorist organizations, particularly Hezbollah, Hamas, and Palestinian Islamic Jihad (PIJ). ⁵⁷⁴ Hassan Nasrallah, the Secretary-General of the Hezbollah terrorist organization, has described being asked whether the destruction of

⁵⁷⁰ CORDESMAN & SEITZ, *supra* note 10, at 9.

⁵⁷¹ ALLIN, *supra* note 1, at 40.

⁵⁷² *Id*. at 41

⁵⁷³ CORDESMAN & SEITZ, *supra* note 10, at 9.

the Clock, A Report on U.S. Policy Toward Iranian Nuclear Development, BIPARTISAN POLICY CENTER (Feb. 2012) at 33-35, https://bipartisanpolicy.org/wp-content/uploads/2019/03/BPC-Iran-Report.pdf (Accessed Aug. 26, 2019) [hereinafter BPC Report]; Bryan P. Schwartz & Christopher C. Donaldson, Protecting the Playground: Options for Confronting the Iranian Regime, 35 BROOKLYN J. INTL. L. 395, 396-398 (2010) [hereinafter Schwartz & Donaldson]; Yaakov Lappin, Egypt and Iran Vie for Influence in Gaza, BEGIN-SADAT CTR. STRAT. STUD. PERSP. PAPER No. 1, 166 (May 7, 2019), https://besacenter.org/perspectives-papers/egypt-iran-influence-gaza/ (Accessed Jun. 4, 2019) ("PIJ is an explicit proxy of Iran").

Israel and the liberation of Palestine was Hezbollah's goal, to which he replied, "That is the principal objective of Hezbollah." Nasrallah has stated that Israel is an "illegal state; it is a cancerous entity and the root of all the crises and wars." On Hezbollah's Al-Manar satellite television station, Jews are referred to as pigs and monkeys, the Holocaust is denied, and participants in a network-sponsored symposium urged that Israel "be completely wiped out" and that "just like Hitler fought the Jews" the "great Islamic nation of *jihad* should fight the Jews and burn them." Similarly, the Hamas terrorist organization believes, as stated in its 1988 organizational covenant, that "[i]n the face of the Jews' usurpation of Palestine, it is compulsory that the banner of *jihad* be raised." Since Hezbollah, Hamas, and PIJ are all staunchly committed to Israel's destruction, Iran's state sponsorship of these terrorist organizations contributes to Israel's perception that a nuclear-armed Iran would be an existential threat to the survival of Israel.

1. Iran's State Sponsorship of Hezbollah

The Hezbollah terrorist organization was created in 1982 by Iran's IRGC, and with Iran's state sponsorship, Hezbollah has become "a potent militia, a trainer for regional terror groups, and an exporter of terror; all owing a great deal to Hezbollah's ties to Tehran." In June 1982, after more than 270 terrorist attacks against Israel by the Palestine Liberation Organization (PLO), which was operating primarily out of Lebanon,

⁵⁷⁵ Andrea Levin, *Death and Destruction are Hezbollah's Goals*, THE N.Y. TIMES (Aug. 8, 2006), http://www.nytimes.com/2006/08/08/opinion/08iht-edlevin.2417146.html? r=0 (Accessed Aug. 20, 2019) [hereinafter Levin].

⁵⁷⁶ Levin, *supra* note 575.

⁵⁷⁷ Id

⁵⁷⁸ THE COVENANT OF THE ISLAMIC RESISTANCE MOVEMENT (Aug. 18, 1988), art. 15, http://avalon.law.yale.edu/20th_century/hamas.asp (Accessed Aug. 12, 2019) [hereinafter HAMAS COVENANT]; Schwartz & Donaldson, *supra* note 574, at 398.

⁵⁷⁹ CORDESMAN & SEITZ, supra note 10, at 84.

Israel invaded Lebanon in order to prevent further PLO attacks, and the IRGC then organized Hezbollah from various radical Shiite militias in Lebanon who were opposed to the Israeli invasion and who wanted to establish an Islamic fundamentalist state in Lebanon modeled after revolutionary Iran. Iran initially sent as many as 1500 IRGC personnel to Lebanon to train and indoctrinate Hezbollah recruits, and the IRGC established paramilitary training camps in Lebanon's Bekaa Valley, where Hezbollah recruits learned how to conceal themselves and ambush Israeli patrols; how to infiltrate Israeli-held territory, and how to build roadside bombs and conduct psychological warfare. Iran also provided extensive funding for Hezbollah- as much as five to ten million dollars per month- which included money for salaries for Hezbollah fighters and funds to establish schools and hospitals for Hezbollah fighters and their families. One of Hezbollah's early leaders declared that Hezbollah's relationship with Iran was "one of a junior to a senior . . . Of a soldier to his commander."

Hezbollah burst into the consciousness of Israel and the West in the early 1980s after conducting a series of dramatic and bloody terrorist attacks in Lebanon.⁵⁸⁴ In November 1982 and again in November 1983, Hezbollah suicide attacks destroyed the Israeli military and intelligence facilities at the Israeli Defense Force (IDF) forward headquarters located in Tyre, Lebanon, killing over 100 Israeli personnel.⁵⁸⁵ When the

⁵⁸⁰ AUGUSTUS RICHARD NORTON, HEZBOLLAH 32-35 (2007); Jason S. Wrachford, *The 2006 Israeli Invasion of Lebanon: Aggression, Self-Defense, or a Reprisal Gone Bad?*, 60 A.F. L. REV. 29, 42-43 (2007)

⁵⁸¹ Daniel Byman, *The Lebanese Hezbollah and Israeli Counterterrorism*, 34 STUD. CONFLICT & TERRORISM 917, 920 (2011).

⁵⁸² Byman, *supra* note 581, at 920.

⁵⁸³ Id

⁵⁸⁴ *Id*. at 919.

⁵⁸⁵ *Id*.

U.S., France, the U.K., and Italy all sent troops to Lebanon in 1982 to attempt to limit the violence and to oversee the evacuation of the PLO, Hezbollah began targeting these Western peacekeeping forces as well, and in 1983 Hezbollah suicide bombings resulted in the deaths of 63 personnel at the U.S. embassy in Beirut, 241 U.S. Marines at their compound in Beirut, and 58 French soldiers in a similar attack in Lebanon. Concurrent with its use of suicide bombings, Hezbollah also took hostages in order to frighten Westerners into leaving Lebanon, and by 1988 Hezbollah had kidnapped approximately 80 foreign personnel while working closely with Iran in abducting the hostages and in negotiating their release. With this lethal combination of suicide bombings and hostage taking, all of which was supported and facilitated by Iran, Hezbollah became the face of international terrorism.

In February 1985, Hezbollah released an official document titled *An Open Letter to All the Oppressed in Lebanon and the World* (hereinafter 1985 Open Letter), in which it declared its existence as an organization and announced its program goals.⁵⁸⁹ In this 1985 Open Letter, Hezbollah pledged to obey the orders of Iran's Supreme Leader, Ayatollah Khomeini, and to continue waging a war of resistance against the "occupation forces" of Israel and the U.S. until such forces were expelled from Lebanon.⁵⁹⁰ Hezbollah described Israel as the "vanguard of the U.S. in our Islamic world"; as the "hated enemy

⁵⁸⁶ Byman, *supra* note 581, at 919.

⁵⁸⁷ *Id*.

⁵⁸⁸ Id.

⁵⁸⁹ *Id.*; CASEY L. ADDIS & CHRISTOPHER M. BLANCHARD, CONG. RESEARCH SERV., R41446, HEZBOLLAH: BACKGROUND AND ISSUES FOR CONGRESS 8, 11 (2011); Hezbollah, *An Open Letter to All the Oppressed in Lebanon and the World*, AS-SAFIR (Lebanon), (Feb. 16, 1985), https://israelipalestinian.procon.org/files/hezbollah_program.pdf (Accessed July 9, 2019) [hereinafter 1985 Open Letter].

⁵⁹⁰ Id

that must be fought until the hated ones get what they deserve"; and as the "greatest danger to our future generations and to the destiny of our lands, particularly as [Israel] glorifies the ideas of settlement and expansion, initiated in Palestine, and yearning outward to the extension of the Great Israel, from the Euphrates to the Nile." Hezbollah's 1985 Open Letter also called specifically for the destruction of the state of Israel:

"Our primary assumption in our fight against Israel states that the Zionist entity is aggressive from its inception, and [is] built on lands wrested from their owners at the expense of the rights of the Muslim people. Therefore our struggle will end only when this entity is obliterated. We recognize no treaty with it, no cease fire, and no peace agreements". 592

Hezbollah's 1985 Open Letter continues to guide the terrorist organization, although its leaders have since reaffirmed Hezbollah's program goals using more politically sophisticated language. ⁵⁹³ In November 2009, Hezbollah released an updated political document titled *The New Hezbollah Manifesto* (hereinafter 2009 Manifesto), in which it reaffirmed its political and ideological alliance with Iran by stating that Hezbollah considers Iran to be a "central state in the Muslim world" that has "supported the resistance movements in our region, and stood with courage and determination at the

⁵⁹¹ 1985 Open Letter, *supra* note 589.

⁵⁹² NORTON, *supra* note 580, at 38-39; Byman, *supra* note 581, at 920; 1985 Open Letter, *supra* note 589. ⁵⁹³ ADDIS & BLANCHARD, supra note 589, at 11; Benedetta Berti, *The "Rebirth" of Hezbollah: Analyzing the 2009 Manifesto*, 12 INST. NAT'L. SEC. STUD. STRAT. ASSESSMENT 91, 93 (Feb. 2010), https://www.inss.org.il/wp-content/uploads/2017/02/FILE1267609505-1.pdf (Accessed July 9, 2019).

side of the Arab and Islamic causes and especially the Palestinian one."⁵⁹⁴ Since Iran has strongly supported the "main cause" of the Arabs and Muslims- the Palestinian cause and hostility toward Israel- Hezbollah states that Iran should be met with cooperation and brotherhood and should be dealt with as a power that "boosts the strength and might of the people of our region."⁵⁹⁵ The 2009 Manifesto is silent regarding the command relationship between Iran and Hezbollah, which likely stems from Hezbollah's more sophisticated political goal of asserting itself as a Lebanese national movement and downplaying those who describe the group as an Iranian puppet.⁵⁹⁶

The 2009 Manifesto also reaffirms Hezbollah's views regarding the state of Israel, albeit in more refined language than the 1985 Open Letter's explicit call for Israel to be "obliterated". Hezbollah states in the 2009 Manifesto that Israel remains an eternal threat to Lebanon and that armed resistance against Israel remains a necessity as long as Israel continues to threaten Lebanon and aspires to seize Lebanon's lands and water. ⁵⁹⁷ Hezbollah also states that it is committed to assisting the cause of Palestinian resistance against Israel; that armed struggle and military resistance is the best way to end the unjust Israeli occupation of Palestine; and that Hezbollah will therefore continue to build up its military capabilities in order to fulfill its Islamic duty to achieve the liberation of occupied Arab and Muslim territory. ⁵⁹⁸ Hezbollah specifically states that it will support the Palestinian resistance in its armed struggle against Israel, and it reiterates its absolute

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Berti, *supra* note 593, at 94; Hezbollah, *The New Hezbollah Manifesto* (Nov. 2009), Ch. 2, Sec. 6, http://www.lebanonrenaissance.org/assets/uploads/15-The-New-Hezbollah-Manifesto-Nov09.pdf (Accessed July 9, 2019) [hereinafter 2009 Manifesto].

⁵⁹⁵ ADDIS & BLANCHARD, supra note 589, at 12; 2009 Manifesto, supra note 594, Ch. 2, Sec. 6.

⁵⁹⁶ Berti, *supra* note 593, at 94-95.

⁵⁹⁷ *Id.* at 95; 2009 Manifesto, *supra* note 594, Ch. 2, Sec. 2.

⁵⁹⁸ 2009 Manifesto, *supra* note 594, Ch. 2, Sec. 5 & Ch.3, Sec. 1.

rejection of any negotiations, recognition, or compromises with Israel since such actions would result in "recognizing the legitimacy and existence of this entity and giving up to it the lands it usurped from Arab and Islamic Palestine." Hezbollah thus reaffirms its long-held position, which is shared by Iranian Supreme Leader Khamenei and Iran's most senior leaders, that the state of Israel is an illegitimate state that must be eliminated through the use of armed force.

From the time of its creation by Iran's IRGC in 1982, Hezbollah has acted on its anti-Israel program goals by engaging in armed attacks against Israel. 600 After Israel's initial invasion of Lebanon in 1982, Hezbollah conducted a paramilitary campaign against the IDF that included two successful suicide bombing attacks against the IDF's forward headquarters located at Tyre, Lebanon 601, and in 1985, Israel withdrew its forces from most of Lebanon and established a security zone in a narrow strip of territory that extended eight miles into southern Lebanon along the border with Israel. 602 At first the security zone appeared to succeed, since the zone made it harder for Hezbollah to infiltrate into Israel and to carry out short-range rocket attacks on Israel; however, Hezbollah continued its paramilitary and terrorist attacks against the IDF throughout the 1990s, and large-scale Israeli military operations in 1993 and 1996 in response to Hezbollah attacks failed to destroy Hezbollah, to prevent it from launching rockets into northern Israel, or to dislodge it from its enclaves in southern and eastern Lebanon. 603

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⁵⁹⁹ Berti, *supra* note 593, at 95; 2009 Manifesto, *supra* note 594, Ch. 3, Sec. 2 & Sec. 3.

⁶⁰⁰ Wrachford, supra note 580, at 44.

Note 585, supra and accompanying text.

Wrachford, *supra* note 580, at 43 n. 102; Byman, *supra* note 581, at 921; ADDIS & BLANCHARD, *supra* note 589, at 8

⁶⁰³ Byman, *supra* note 581, at 921-923; ADDIS & BLANCHARD, *supra* note 589, at 8.

Hezbollah also worked directly with the IRGC to attack Israeli civilian targets abroad, notably the bombing of the Israeli Embassy in Buenos Aires in 1992 in which 29 were killed and 242 injured, and the bombing of the Jewish community center in Buenos Aires in 1994, which killed 85 and wounded 300 others. ⁶⁰⁴ Hezbollah ultimately claimed credit for forcing Israel's complete withdrawal from Lebanon, which occurred in June 2000, but a small enclave of land known as the Shebaa Farms near the Lebanese-Israeli-Syrian triborder has remained in dispute since the Israeli withdrawal, and Hezbollah has used the continuing Israeli presence in the Shebaa Farms area as an excuse to continue its armed "resistance" against Israel. ⁶⁰⁵ Iranian Supreme Leader Khamenei gave his blessing for Hezbollah to continue this resistance, both in Lebanon and in the Israeli-Palestinian theater. ⁶⁰⁶

From June 2000 to July 2006, Hezbollah conducted regular, low level armed attacks against Israel, such as firing at and bombing IDF posts and convoys (usually in the Shebaa Farms area); targeting Israelis in random shootings; ambushing IDF patrols; kidnapping IDF personnel and Israeli civilians; and firing rockets and mortars into Israel from across the border, which killed a total of 21 Israelis (mostly IDF soldiers) and

606 NORTON, supra note 580, at 90.

⁶⁰⁴ BPC Report, *supra* note 574, at 34; Schwartz & Donaldson, *supra* note 574, at 397; ALAN DERSHOWITZ, THE CASE AGAINST ISRAEL'S ENEMIES 187 (2008); MATTHEW LEVITT, HEZBOLLAH: THE GLOBAL FOOTPRINT OF LEBANON'S PARTY OF GOD 75-78, 88-101 (2013).

⁶⁰⁵ NORTON, *supra* note 580, at 90-91; Wrachford, *supra* note 580, at 43 n. 102; Byman, *supra* note 581, at 925; ADDIS & BLANCHARD, *supra* note 589, at 8, 15. With regard to the Shebaa Farms, Israel and most third parties have long maintained that it is part of the Golan Heights area that Israel captured from Syria during the 1967 Six Day War; however, Lebanon, supported by Syria, now asserts that the Shebaa Farms area is part of Lebanon and that Israel should therefore have withdrawn from it when Israel abandoned its self-declared security zone in southern Lebanon in 2000. Wrachford, *supra* note 580, at 43 n. 102; ADDIS & BLANCHARD, *supra* note 589, at 15.

injured 36 more. ⁶⁰⁷ In response to these continuing armed attacks, Israel only conducted limited defensive strikes against Hezbollah targets in southern Lebanon, which emboldened Hezbollah to conduct more aggressive attacks. ⁶⁰⁸ On July 12, 2006, Hezbollah launched a series of rocket attacks against IDF border positions while Hezbollah fighters simultaneously crossed into Israel and attacked an IDF patrol, killing three IDF soldiers, wounding two more, and dragging the two wounded IDF soldiers back into Lebanon. ⁶⁰⁹ When IDF forces made an initial attempt to rescue the two kidnapped soldiers, three more IDF soldiers were killed. ⁶¹⁰ Israel then launched a large-scale military operation against Hezbollah called Operation Change of Direction (known in Israel as the Second Lebanon War and in Lebanon as the 34-Day War), whose goals included the return of the two IDF soldiers, the expulsion of Hezbollah from the border area, the elimination of Hezbollah's rocket threat, and the disarming of Hezbollah. ⁶¹¹

For the next thirty-four days (July 12 to August 14, 2006), Israel conducted extensive military strikes against Hezbollah positions in southern Lebanon, against Hezbollah command and control targets throughout Lebanon, and against specified infrastructure targets in Beirut and in northern Lebanon. More than two weeks into the operation, Israel also sent ten thousand IDF troops into southern Lebanon to establish a security zone along the border. Hezbollah responded with thousands of rocket and missile attacks against Israel, most of which were short-range 122 mm Katyusha rockets,

⁶⁰⁷ Wrachford, *supra* note 580, at 46; Byman, *supra* note 581, at 925-926.

⁶⁰⁸ Wrachford, *supra* note 580, at 46-47; Byman, *supra* note 581, at 926.

⁶⁰⁹ Wrachford, *supra* note 580, at 47; Byman, *supra* note 581, at 927.

⁶¹⁰ *Id*.

⁶¹¹ Id

⁶¹² Id

⁶¹³ Wrachford, *supra* note 580, at 48; Byman, *supra* note 581, at 928.

and many of these rockets fell on Israeli cities, resulting in the deaths of 53 Israeli civilians. 614 Israel was unable to achieve its objective of stopping Hezbollah's rocket attacks, and in fact by the end of hostilities Hezbollah was launching more than two hundred rockets into Israel each day, twice as many as at the start of the operation. 615 Hezbollah's use of civilian areas for command and control, storage, and shelter frustrated the IDF's attempts to limit civilian casualties and damage to civilian infrastructure in Lebanon. 616 Hezbollah fighters also fought bravely and demonstrated considerable skill in paramilitary operations, such as conserving ammunition, placement of their mortars, and mining areas to force IDF armored units to take routes where anti-tank weapons were prepared to ambush them. 617 Hezbollah was aided by direct IRGC support during the hostilities, including on-the-ground training of Hezbollah fighters, and engineering support for construction of a tunnel to move fighters and of underground storerooms to hold missiles and ammunition. 618

On August 11, 2006, the UN Security Council passed a resolution calling for a cease-fire and for the withdrawal of all Israeli forces from southern Lebanon⁶¹⁹, and major hostilities ended on August 14, 2006.⁶²⁰ As a result of the thirty-four day military operation, 120 IDF personnel were killed and the estimated number of Hezbollah fighters

⁶¹⁴ Wrachford, *supra* note 580, at 48; Byman, *supra* note 581, at 928. On July 16, 2006, Hezbollah struck the city of Haifa, Israel's third largest city, with longer-range rockets provided by Iran and Syria, resulting in the death of eight Israeli civilians. NORTON, *supra* note 580, at 138.

⁶¹⁵ Byman, *supra* note 581, at 929; Joseph Alagha, *The Israeli-Hezbollah 34-Day War: Causes and Consequences*, 30 ARAB STUD. Q. 1, 7-8 (Spring 2008).

⁶¹⁶ ADDIS & BLANCHARD, *supra* note 589, at 10.

⁶¹⁷ Byman, *supra* note 581, at 929.

⁶¹⁸ CORDESMAN & SEITZ, *supra* note 10, at 86.

⁶¹⁹ S.C. Res. 1701, U.N. Doc. S/RES/1701 (Aug. 11, 2006).

⁶²⁰ Wrachford, *supra* note 580, at 48.

killed ranges from 250 (Lebanese Government and Associated Press figures) to 600 (Israeli Government claim). Lebanon's infrastructure and economy were severely damaged due to Israel's targeting of Lebanese roads, bridges, airports, harbors, fuel supplies, power facilities, etc., and between 700,000 and 1,000,000 Lebanese residents were displaced. On the Israeli side, several cities sustained heavy damage from Hezbollah rocket attacks and approximately 300,000 Israeli residents were displaced.

Although Hezbollah claims that the 34-Day War against Israel was a "divine victory", Hezbollah incurred considerable military losses and the war was an economic calamity for Lebanon, with Hezbollah's Shiite constituents in Lebanon suffering terribly. Because of this, an uneasy state of mutual deterrence has existed between Israel and Hezbollah since the 2006 war, and Hezbollah has not carried out any significant attacks against Israel along Israel's northern border with Lebanon since the war ended. However, Iran, as Hezbollah's state sponsor, ramped up its funding and

⁶²¹ Wrachford, *supra* note 580, at 50; Alagha, *supra* note 615, at 3.

⁶²² Wrachford, *supra* note 580, at 50-51; Alagha, *supra* note 615, at 3.

⁶²³ Id

⁶²⁴ NORTON, supra note 580, at 152; Byman, supra note 581, at 930. Despite its status as a U.S. State Department-designated terrorist organization, in 1992 Hezbollah, with Iran's approval, became a political party in Lebanon and began participating in Lebanese elections. It now has elected members within the Lebanese Parliament and controls several positions in the Lebanese Government's cabinet. Hezbollah's leadership thus feels political pressure when its Shiite constituents within Lebanon suffer. NORTON, supra note 580, at 98-102; Byman, supra note 581, at 930; ADDIS & BLANCHARD, supra note 589, at 1. ⁶²⁵ Byman, supra note 581, at 930, 935-936; Carmit Valensi & Yoram Schweitzer, Hezbollah's Concept of Deterrence According to Nasrallah: from the Second Lebanon War to the Present, in THE QUIET DECADE: IN THE AFTERMATH OF THE SECOND LEBANON WAR, 2006-2016 116, 125 (Udi Dekel, Gabi Siboni, & Omer Einav, eds. July 2017), https://www.inss.org.il/wp-content/uploads/2017/07/memo167 6.pdf ("[Hezbollah Secretary-General] Nasrallah's speeches indicate that mutual deterrence exists, both as a result of the Second Lebanon War and because of the regional situation"); Hezbollah's Hold on Lebanon-Implications for a Third Lebanon War, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE STRAT. ASSESSMENT (July 2017) at 1, http://www.bicom.org.uk/analysis/hezbollahs-hold-on-lebanonimplications-for-a-third-lebanon-war/ (Accessed Jun. 4, 2019) [hereinafter BICOM Third Lebanon War] ("Neither Israel nor Hezbollah are seeking to end the state of mutual deterrence that has characterized

other support to defray Hezbollah's soaring costs as it attempted to rebuild following the 2006 war, and Iranian financial support was critical in fulfilling Hezbollah's unprecedented needs such as restocking weapons supplies, investing in reconstruction of damaged fortifications and facilities, and buying favor within the Lebanese towns and villages that were damaged or destroyed during the war.⁶²⁶

Today Iran, through the IRGC, continues to provide Hezbollah with funding, training, weapons, and equipment, and Iran's annual financial support to Hezbollah is estimated to be a staggering \$700 million per year, which accounts for the overwhelming majority of Hezbollah's annual budget. With the IRGC's active support, Hezbollah has significantly strengthened its military capabilities, and it now has a greatly enhanced arsenal of approximately 100,000 to 130,000 rockets and missiles, many of which are hidden in houses and civilian infrastructure in Hezbollah-dominated villages in southern Lebanon. In contrast, Hezbollah had a total stockpile of only 14,000 rockets and missiles prior to the 2006 war, which enabled it to fire an average of 118 rockets/missiles a day: Israel estimates that with its enhanced arsenal of 100,000-130,000 rockets and missiles, Hezbollah will now be able to fire roughly 1000-1200 a day, which will challenge and may overwhelm Israeli missile defense systems. Of these 100,000-

their relationship since August 2006, though the potential exists for miscalculation by either side that drags the parties into another war.").

⁶²⁶ LEVITT, supra note 604, at 371; Alagha, supra note 615, at 6, 14.

⁶²⁷ U.S. STATE DEPARTMENT, IRAN ACTION GROUP, OUTLAW REGIME: A CHRONICLE OF IRAN'S DESTRUCTIVE ACTIVITIES 9-10 (SEPT. 2018), https://www.state.gov/wp-content/uploads/2018/12/Iran-Report.pdf (Accessed Aug. 16, 2019) [hereinafter OUTLAW REGIME].

⁶²⁸ Id.; Britain Israel Communications & Research Centre Briefing, Hezbollah's Precision Missile Project, (Feb. 2019) at 2, http://www.bicom.org.uk/analysis/bicom-briefing-hezbollahs-precision-missile-project/(Accessed Jun. 4, 2019) [hereinafter BICOM Precision Missile Project].

⁶²⁹ Valensi & Schweitzer, *supra* note 625, at 119; BICOM Third Lebanon War, *supra* note 625, at 2-3; BICOM Precision Missile Project, *supra* note 628, at 2, 10-11.

130,000 rockets and missiles, approximately 14,000 are assessed to be Zelzal-2 and SCUD missiles with a range of 200-400 kilometers, which means that Hezbollah now has the ability to range targets throughout central Israel. Additionally, the IRGC is actively attempting to upgrade the accuracy of Hezbollah's large arsenal of rockets and missiles, both by providing Hezbollah with advanced precision guided missiles and by undertaking an extensive project to fit GPS-type guidance systems onto Hezbollah's existing stockpile of Zelzal-2 and other unguided rockets and missiles. Precision guided rockets/missiles present a far greater strategic threat than the unguided rockets and missiles previously employed by Hezbollah, because they enable Hezbollah to target key Israeli infrastructure much more accurately and with fewer strikes. Because of Israel's small size, dense population, and dependence on a few critical infrastructure sites- e.g. power stations, military bases, and Ben Gurion International Airport- damage to a small number of these sites could have severe consequences.

In addition to upgrading the quantity, range, and accuracy of Hezbollah's arsenal of rockets and missiles in southern Lebanon, since 2013 the IRGC has employed Hezbollah to assist Syrian President Bashar al-Assad in defeating the various armed groups in Syria that have rebelled against him.⁶³⁴ The estimated 5000-8000 Hezbollah

⁶³⁰ BICOM Precision Missile Project, *supra* note 628, at 3, 7.

⁶³¹ BICOM Precision Missile Project, *supra* note 628, at 3-6; Yaakov Lappin, *Why Hezbollah Truly Threatens Israel*, THE ALGEMEINER (Jul. 28, 2019), https://www.algemeiner.com/2019/07/28/why-hezbollah-truly-threatens-israel/.

⁶³² BICOM Precision Missile Project, *supra* note 628, at 3.

⁶³³ Id at 2 7

⁶³⁴ LEVITT, *supra* note 604, at 370-371; BICOM Third Lebanon War, supra note 625, at 3-4; Udi Dekel & Assaf Orion, *The Next War Against Hezbollah: Strategic and Operational Considerations, in* THE QUIET DECADE: IN THE AFTERMATH OF THE SECOND LEBANON WAR, 2006-2016 131, 132 (Udi Dekel, Gabi Siboni, & Omer Einav eds. July 2017), https://www.inss.org.il/wp-content/uploads/2017/07/memo167 6.pdf (Accessed Jul. 9, 2019); Donna Abu-Nasr & Jonathan Ferziger,

fighters that have deployed to Syria to fight alongside the Syrian Army have gained significant operational experience, notably operating tanks provided by Syria, coordinating with air power provided by Russia, and developing special operations capabilities to enable Hezbollah to penetrate Israel and seize control of villages or critical installations. 635 Hezbollah's new battlefield experience in Syria, combined with Iran's state sponsorship, the massive upgrade of Hezbollah's rocket and missile capabilities, and Hezbollah's continued ideological commitment to Israel's destruction, have led Israeli officials to warn that Hezbollah will one day turn its focus back to attacking the Jewish state, and Israel's discovery in December 2018 of six cross-border underground attack tunnels that Hezbollah had dug between Lebanon and Israel for use in infiltrating fighters and weapons during a future ground attack against Israel has raised concern that that time may be approaching. 636 The Israeli government therefore continues to assess that Hezbollah constitutes a principal military threat to Israel, and senior IDF officials have indicated that another major armed confrontation between a far more capable Hezbollah and Israel is "only a matter of time". 637

What's Next for Hezbollah After Its Syrian Adventure?, BLOOMBERG NEWS (Dec. 11, 2018), https://www.bloomberg.com/news/articles/2018-12-11/whats-next-for-hezbollah-after-its-syria-adventure-quicktake (Accessed Jul. 12, 2019).

⁶³⁶ Abu-Nasr & Ferziger, *supra* note 634; Britain Israel Communications & Research Centre Briefing, *The Tunnels and Hezbollah's Wider Strategy* (Dec. 2018), http://www.bicom.org.uk/analysys/bicom-briefing-tunnels-hezbollahs-wider-strategy/ (Accessed Jun. 4, 2019); Orna Mizrahi, *Operation Northern Shield: Interim Assessment*, INST. NAT'L. SEC. STUD. INSIGHT No. 1127 (Jan. 8, 2019), https://www.inss.org.il/publication/operation-northern-shield-interim-assessment/ (Accessed Jun. 7, 2019); Judah Ari Gross, *Finding 6th*, *Biggest, and Last Hezbollah Tunnel, IDF Ends Northern Shield Op*, TIMES OF ISRAEL (Jan. 13, 2019), https://www.timesofisrael.com/finding-final-hezbollah-attack-tunnel-inf-wraps-up-operation-northern-shield/ (Accessed Jun. 7, 2019).

⁶³⁷ Byman, *supra* note 581, at 936; Dekel & Orion, *supra* note 634, at 131-132.

2. Iran's State Sponsorship of Hamas and Palestinian Islamic Jihad

Iran is also a state sponsor of the anti-Israel Palestinian terrorist organizations

Hamas and Palestinian Islamic Jihad (PIJ), with the U.S. State Department noting in

September 2018 that the IRGC provides significant funding, training, weapons, and
equipment to Hamas and PIJ. Hamas emerged as a separate Palestinian terrorist
organization in early 1988, in the wake of the first Palestinian *intifada* (uprising) against
the Israeli occupation of the West Bank, Gaza, and East Jerusalem, and portrayed itself as
a more Islamic alternative to the PLO who, in the view of Hamas' leaders, had failed to
fulfill their Islamic duty to end the occupation of Palestine. Hamas' overarching goal is
to destroy the state of Israel and to establish in its place an Islamic Palestinian state in
what was once British Mandatory Palestine, a territory that today comprises all of Israel,
the West Bank, and Gaza.

Hamas' partner (and sometimes rival) within the anti-Israel Palestinian terrorist movement is the smaller but ruthlessly efficient PIJ, which broke off from the PLO in 1981 and, inspired by the 1979 Iranian revolution, began carrying out a campaign of spectacular terrorist attacks against Israeli soldiers in the name of revolutionary Islam. Although Hamas and PIJ were fierce rivals in the late 1980s and early 1990s- largely due to ideological differences over PIJ's affinity for (and Hamas' rejection of) Iranian Supreme Leader Khomeini's concept of rule of the state by a single "jurisprudent"

⁶³⁸ OUTLAW REGIME, supra note 627, at 9.

⁶³⁹ MATTHEW LEVITT, HAMAS: POLITICS, CHARITY, AND TERRORISM IN THE SERVICE OF JIHAD 8-9 (2006) [hereinafter LEVITT HAMAS]; TAREQ BACONI, HAMAS CONTAINED 3-4 (2018).

⁶⁴⁰ LEVITT HAMAS, supra note 639, at 8-9; BACONI, supra note 639, at 3-4.

⁶⁴¹ LEVITT HAMAS, supra note 639, at 25-26; BACONI, supra note 639, at 18.

(Islamic cleric) - by 1995 they largely set aside their differences and, at the behest of Iran and with Hezbollah's facilitation, the two groups began coordinating their anti-Israel terrorist activities.⁶⁴² In September 2017, Hamas and PIJ formed a joint command to coordinate their activities in Gaza, and in May 2018, Hamas and PIJ issued a joint statement vowing to work together against Israel.⁶⁴³

As noted above⁶⁴⁴, Hamas's August 1988 organizational covenant makes clear that Hamas refuses to recognize the state of Israel, rejects peace with Israel, and seeks the destruction of Israel through armed struggle or *jihad*.⁶⁴⁵ The covenant states that the land of Palestine is an Islamic endowment (*waqf*) that has been consecrated for future Muslim generations "until Judgment Day"; that this Islamic endowment remains "as long as earth and heaven remain" and no part of it may be squandered or given up; and that when an enemy should "tread upon Muslim land" it becomes an individual religious duty of every Muslim to resist and quell that enemy.⁶⁴⁶ In view of Israel's existence upon land that Hamas considers to belong to Islamic Palestine in perpetuity, it follows, as the covenant explains, that "there is no solution to the Palestinian question except through *jihad*", and that "so-called peaceful solutions and international conferences" are all a "waste of time" and are "only ways of setting the infidels in the land of the Muslims as arbitrators." ⁶⁴⁷

⁶⁴² LEVITT HAMAS, *supra* note 639, at 14-15, 26.

⁶⁴³ Daniel Levin, *Iran, Hamas, and Palestinian Islamic Jihad*, U.S. INST. OF PEACE: THE IRAN PRIMER (Jul. 9, 2018), https://iranprimer.usip.org/blog/2018/jul/09/iran-hamas-and-palestinian-islamic-jihad (Accessed Aug. 19, 2019).

⁶⁴⁴ Note 578 supra and accompanying text.

⁶⁴⁵ HAMAS COVENANT, supra note 578; LEVITT HAMAS, supra note 639, at 31; BACONI, supra note 639, at 20-24

⁶⁴⁶ HAMAS COVENANT, *supra* note 578, arts. 11-12; LEVITT HAMAS, *supra* note 639, at 31; BACONI, *supra* note 639, at 23.

⁶⁴⁷ HAMAS COVENANT, *supra* note 578, arts. 13, 15; LEVITT HAMAS, *supra* note 639, at 31; BACONI, *supra* note 639, at 23-24.

The covenant states that Hamas considers itself to be "the spearhead of the circle of struggle with world Zionism", and it calls on all Arab and Islamic nations and groups to join Hamas in the armed struggle against Israel to "confront the Zionist invasion and defeat it". ⁶⁴⁸ PIJ shares these same ideological positions, including a categorical rejection of any peaceful resolution of the Palestinian question and a belief that the "*jihad* solution" is the only choice to achieve the liberation of Palestine. ⁶⁴⁹

In May 2017, Hamas issued a new political document (hereinafter Hamas Political Document) that reaffirmed the anti-Israel positions and strategy Hamas previously set forth in its 1988 organizational covenant. For example, the Hamas Political Document reiterates that Palestine is a sacred Arab Islamic land "whose status has been elevated by Islam" but that this land was "seized by a racist, anti-human and colonial Zionist project that was founded . . . on recognition of a usurping entity and on imposing a *fait accompli* by force"; that Palestine is the land and home of the Palestinian people and that the establishment of Israel does not "annul the right of the Palestinian people to their entire land"; and that no part of the land of Palestine shall be compromised or conceded "no matter how long the occupation lasts", since Hamas rejects any alternative to the full and complete liberation of Palestine "from the river to the sea". 651

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Hamas Political Document, *supra* note 650, Prmb. & arts. 2-3, 10, 20.

⁶⁴⁸ HAMAS COVENANT, *supra* note 578, arts. 29, 32-35.

⁶⁴⁹ BACONI, supra note 639, at 18; Levin, supra note 643.

⁶⁵⁰ BACONI, supra note 639, at 245; Hamas in 2017: The Document in Full, MID. E. EYE (May 1, 2017), https://www.middleeasteye.net/news/hamas-charter-1637794876 (Accessed Jan. 27, 2019) [hereinafter Hamas Political Document]; Yasmeen Serhan, What Hamas's New Document Does and Doesn't Say, THE ATLANTIC (May 1, 2017), https://www.theatlantic.com/news/archive/2017/05/what-hamass-new-document-does-and-doesnt-say/525006/ (Accessed Jan. 27, 2019); Memo, New Hamas Document Calls for Israel's Destruction, AM. ISR. PUB. AFF. COMMITTEE (May 8, 2017), https://www.aipac.org/-/media/publications/policy-and-politics/aipac-analyses/issue-memos/2017/new-hamas-document-calls-for-israels-destruction.pdf (Accessed Jan. 27, 2019) [hereinafter AIPAC Memo].

The Hamas Political Document also reaffirms that the establishment of Israel is "entirely illegal" and that there shall be no negotiations with Israel or recognition of Israel's legitimacy, since there is no alternative to a "fully sovereign Palestinian state on the entire national Palestinian soil, with Jerusalem as its capital." In addition, the Hamas Political Document reaffirms that Hamas's goal is "to liberate Palestine and confront the Zionist project"; that resisting the Israeli occupation of Palestine "with all means and methods" is a legitimate right, at the heart of which lies armed resistance, which Hamas regards as "the strategic choice for protecting the principles and the rights of the Palestinian people"; and that resistance and *jihad* for the liberation of Palestine remains both a legitimate right and a religious duty for the Palestinian people in particular and for the entire Arab and Islamic *Ummah* in general. The Hamas Political Document thus reiterates Hamas's long-held claims to all Israeli territory and does nothing to alter Hamas's long-standing commitment to terrorism and the destruction of Israel.

Like Hezbollah⁶⁵⁵, Hamas and PIJ have from their inception acted on their anti-Israel program goals by conducting armed attacks against Israel, including suicide and other bombings, rocket and mortar attacks, and shooting attacks.⁶⁵⁶ In particular, Hamas and PIJ are known for their suicide bombing attacks on military and civilian targets in Israel, which are indiscriminate in nature and are intended to terrorize not only the targeted individuals but the general Israeli society, and Hamas has worked to create a "culture of suicide terrorists" among Palestinians by extending an Islamic religious

⁶⁵² Hamas Political Document, *supra* note 650, arts. 18-22, 27.

⁶⁵³ *Id.*, arts. 1, 23-26, 32.

⁶⁵⁴ AIPAC Memo, *supra* note 650.

⁶⁵⁵ See note 600 *supra* and accompanying text.

⁶⁵⁶ LEVITT HAMAS, supra note 639, at 12.

justification to so-called "martyrdom operations" and by paying and supporting the families of suicide bombers. From February 1989 to March 2000, Hamas and PIJ conducted at least 27 terrorist attacks against Israel, including 12 suicide bombings, which killed over 180 Israelis and wounded over 1200, and these attacks only increased after the second Palestinian uprising or *intifada* against the Israeli occupation began in September 2000. Between 2000 and 2005, Hamas and PIJ conducted over 400 terrorist attacks against Israel, including 96 suicide combings, which claimed the lives of more than 500 Israelis and wounded more than 5000. September 2000.

In September 2005, Israel withdrew all of its military and security forces from Gaza, along with all of its civilian settlers, but imposed more stringent external controls over the border between Gaza and Israel, including construction of a seven meter high security barrier that Hamas and PIJ believe "caged the Palestinians in". 660 Israel's construction of this security barrier along the border with Gaza, as well as its construction of a similar security barrier between Israel and the Palestinian area in the West Bank, led to a significant decrease in suicide bombings, so Hamas and PIJ began relying on rocket and mortar attacks to carry out their anti-Israel program goals. 661 By June 2007, when Hamas seized political control over Gaza from the Palestinian Authority by force, Hamas and PIJ were firing an average of three rockets a day from Gaza into towns and villages in southern Israel, and Israel responded by imposing tighter controls on all imports into Gaza to prevent weapons, ammunition, and similar items from reaching Hamas and

⁶⁵⁷ LEVITT HAMAS, *supra* note 639, at 12, 108, 120; BACONI, *supra* note 639, at 30.

⁶⁵⁸ LEVITT HAMAS, supra note 639, at 12; Levin, supra note 643.

⁶⁵⁹ Id

⁶⁶⁰ BACONI, *supra* note 639, at 89-90.

⁶⁶¹ Levin, supra note 643.

PIJ. 662 Unfortunately, these import controls failed to stop the rocket attacks, and the continued rocket attacks by Hamas and PIJ against southern Israel eventually prompted Israel to conduct three major defensive military operations against Hamas and PIJ in Gaza: Operation Cast Lead (December 2008-January 2009), Operation Pillar of Defense (November 2012), and Operation Protective Edge (July-August 2014). 663

On December 27, 2008, in response to continued rocket fire by Hamas and PIJ into southern Israel, the IDF launched Operation Cast Lead, an extensive campaign of aerial bombardment of Hamas and PIJ military targets in Gaza that lasted for three weeks. 664 Hamas and PIJ responded with additional rocket fire into Israeli towns and villages in southern Israel, at a rate of about 30 rockets a day, and by the time Israel declared a unilateral cease-fire on January 16, 2009, thirteen Israelis (including four civilians) and an estimated 1400 Palestinians (including many civilians) had been killed. 665 Iran provided increased financial support and more advanced rockets to Hamas and PIJ during the hostilities and seized the opportunity to rally Islamic fundamentalists against Israel and its supporters. 666 The January 2009 cease-fire largely held until November 14, 2012, when, in response to renewed and persistent rocket attacks by Hamas and PIJ in protest of Israel's external security and import controls on Gaza, the IDF commenced Operation Pillar of Defense, a ten day military operation that targeted Hamas/PIJ military sites in Gaza such as rocket and weapons storage facilities and

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⁶⁶² BACONI, supra note 639, at 131, 135, 144.

⁶⁶³ *Id.* at 155-159, 193-195, 212-223.

⁶⁶⁴ Id at 155-150

⁶⁶⁵ Id

⁶⁶⁶ BPC Report, supra note 574, at 34; Levin, *supra* note 643; CORDESMAN & SEITZ, *supra* note 10, at 86.

paramilitary training camps.⁶⁶⁷ Hamas and PIJ responded by firing hundreds of additional rockets into southern Israeli towns and villages, and Iran provided direct support to Hamas and PIJ during the conflict by supplying PIJ with more advanced Fajr-5 rockets, which have a range of up to 50 miles.⁶⁶⁸ Six Israelis and 174 Palestinians were killed during Operation Pillar of Defense, and on November 24, 2014, Israel and Hamas/PIJ agreed to a cease-fire that called for Hamas and PIJ to stop attacking Israel and for Israel to allow increased goods and services to reach Gaza.⁶⁶⁹

The November 2012 cease-fire between Israel and Hamas/PIJ prevented further major military confrontations until July 8, 2014, when Hamas kidnapped and killed three Israeli teenagers in the West Bank and then conducted increasing rocket attacks against Israel from Gaza to protest Israel's heavy-handed law enforcement operations in the West Bank to try to find and rescue the missing teenagers. In response, the IDF conducted Operation Protective Edge, a 51-day military operation consisting of an aerial bombardment followed by a ground invasion of Gaza that was intended to degrade Hamas/PIJ's paramilitary infrastructure and to neutralize their network of cross-border attack tunnels that allowed Hamas/PIJ fighters to infiltrate into Israel. Hamas and PIJ responded by firing hundreds of additional rockets into Israel, including longer-range rockets supplied by Iran that reached significantly further into Israeli cities; however, the IDF's attacks resulted in enormous damage to Gaza's infrastructure and already-fragile economy, and the conflict resulted in the deaths of 66 IDF soldiers and five Israeli

⁶⁶⁷ BACONI, *supra* note 639, at 193-195.

⁶⁶⁸ *Id.*; Levin, *supra* note 643.

⁶⁶⁹ BACONI, *supra* note 639, at 193-195.

⁶⁷⁰ *Id.* at 212-223.

⁶⁷¹ *Id*.

civilians along with approximately 728 Hamas/PIJ fighters and 1492 Palestinian civilians. Figure 26, 2014 and Hamas/PIJ accepted an informal, Egyptian-brokered cease-fire on August 26, 2014 which called for a cessation of hostilities and commencement of reconstruction in Gaza, as well as discussions regarding easing Israeli import restrictions on Gaza.

Iran remains today the most important and explicit state sponsor of the Hamas and PIJ anti-Israel terrorist organizations, and continues to provide them with significant funding, weapons, training, and logistics support. The U.S. State Department estimated in September 2018 that Iran provides up to \$100 million per year in combined financial support to the paramilitary wings of Hamas and PIJ, and more recent reporting from Israel indicates that Iran has agreed to increase its paramilitary funding support to Hamas to \$360 million per year in exchange for intelligence on the location of Israeli missile stockpiles and a commitment by Hamas to attack Israel from Gaza in the event that a war breaks out between Israel and Iran or Hezbollah on Israel's northern border. Iran continues to provide Hamas and PIJ with weapons and ammunition, including advanced rockets, and it also provides paramilitary and terrorist training to Hamas and PIJ fighters, both at its own terrorist training camps and at Iranian-funded Hezbollah terrorist training

⁶⁷² BACONI, *supra* note 639, at 212-223; Levin, *supra* note 643.

⁶⁷³ BACONI, *supra* note 639, at 220-221.

⁶⁷⁴ OUTLAW REGIME, *supra* note 627, at 9-10; LEVITT HAMAS, *supra* note 639, at 172; Levin, *supra* note 643

⁶⁷⁵ OUTLAW REGIME, supra note 627, at 10; Anna Ahronheim, *Iran Increases Hamas Funding in Exchange for Intelligence on Israel Missiles*, THE JERUSALEM POST (Aug. 6, 2019), https://www.ipost.com/Middle-East/Iran-increases-Hamas-funding-in-exchange-for-intel-on-Israel-missiles-579836 (Accessed Aug. 6, 2019).

camps in Lebanon's Bekaa Valley.⁶⁷⁶ Iran appears to view Gaza as another base from which it can exercise its radical revolutionary influence to encourage the growth of a terrorist force that threatens Israel and the stability of the region, and Iran is tightening its links with Hamas and PIJ through increased transfers of funds and weapons in order to influence Hamas and PIJ to disrupt any process that can lead to a situation of calm.⁶⁷⁷ Iran's state sponsorship of Hamas and PIJ thus appears to be part of its asymmetric warfare strategy for destroying Israel, in which "[t]he more Israel bleeds on its borders, the less it can engage Iran directly."⁶⁷⁸

Unfortunately, Iran's asymmetric warfare strategy of encouraging Hamas and PIJ to continue to conduct armed attacks against Israel from Gaza appears to be working. On November 11-13, 2018, after three and a half years of relative calm along the Israel-Gaza border, Hamas fired an anti-tank missile at a bus carrying IDF soldiers alongside the Gaza border, severely wounding one soldier, and Hamas and PIJ then fired around 500 rockets and mortar shells from Gaza into southern Israel in less than two days, killing one person and wounding dozens. ⁶⁷⁹ Israel responded by carrying out defensive air strikes against selective Hamas and PIJ military targets in Gaza, before both sides acceded to strong urging from Egypt to return to the previous cease-fire. ⁶⁸⁰ Then on May 4-6, 2019, a PIJ sniper injured several IDF soldiers along the Gaza border and when the IDF

⁶⁷⁶ LEVITT HAMAS, supra note 639, at 175-177; Levin, supra note 643.

⁶⁷⁷ Yaakov Lappin, *Egypt and Iran Vie for Influence in Gaza*, BEGIN SADAT CTR. STRAT. STUD. PERSPECTIVES PAPER No. 1, 166 (May 7, 2019), https://besacenter.org/perspectives-papers/egypt-iran-influence-gaza/ (Accessed Jun. 4, 2019).

۳٬۶ Id.

⁶⁷⁹ Michael Herzog, Assessing the Latest Conflict in Gaza, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE BRIEFING (December 2018), http://www.bicom.org.uk/wp-content/uploads/2018/12/Gaza-Dec-2018-3.pdf (Accessed Jun. 4, 2019).

responded by firing at a Hamas military position, Hamas and PIJ fired over 700 rockets into southern Israel over the next two days. ⁶⁸¹ Hamas and PIJ calculated their targets, allowing for gradual escalation- from local communities along the border to the major cities in southern Israel up to Beer Sheeba- but refrained from firing toward Tel Aviv so as not to provoke a stronger IDF response. 682 Israel responded by conducting defensive strikes on selective Hamas and PIJ "value targets" such as military/security headquarters facilities and by targeting a specific Hamas operative responsible for providing Hamas with Iranian funds. 683 Although calm was once again restored after two days, if Hamas and PIJ continue to conduct such significant rocket attacks against Israel it is possible that the Israeli Government will once again escalate their defensive response beyond a short exchange of fire, and may even conduct another ground operation in Gaza, since no reasonable government can accept a situation whereby every few months hundreds of rockets are fired into its cities. 684 So although Israel has no interest in being dragged into another major military confrontation with Hamas and PIJ in Gaza, it appears that that is the goal of Iran's state sponsorship of Hamas and PIJ, and therefore the potential for further armed attacks by Hamas and PIJ against Israel remains high. 685

Iran's state sponsorship of the anti-Israel terrorist groups Hezbollah, Hamas, and PIJ, which includes significant funding, weapons, logistics support and training as well as

⁶⁸¹ Michael Herzog, *Will Iran Leave the Nuclear Deal and How Do We Interpret Recent Events in Gaza?*, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (May 10, 2019), http://www.bicom.org.uk/blogpost/will-iran-leave-the-nuclear-deal-and-how-do-we-interpret-recent-events-in-gaza/# (Accessed Jun. 4, 2019).

Herzog, supra note 681.

⁶⁸³ Id

⁶⁸⁴ Id

⁶⁸⁵ Herzog, *supra* note 679; Herzog, *supra* note 681.

direct assistance in conducting military attacks against Israel, underscores the U.S. State Department's finding in September 2018 that Iran is "the world's leading state sponsor of terrorism" and that Iran has expanded its involvement with terrorist groups that target U.S. and Israeli interests. 686 Iran's significant support for these vicious terrorist organizations that have sworn to destroy Israel is clearly a factor in Israel's perception that a nuclear-armed Iran poses an existential threat to Israel's survival, especially since terrorist organizations like Hezbollah could potentially serve as a delivery mechanism for a nuclear weapon by other means. 687 In the words of Israeli Prime Minister Benjamin Netanyahu, "... given this record of Iranian aggression without nuclear weapons, just imagine Iranian aggression with nuclear weapons. Imagine their long range missiles tipped with nuclear warheads, their terror networks armed with atomic bombs . . . [w]ho would be safe anywhere?" 1888 Iran's state sponsorship of anti-Israel terrorist organizations has thus helped convince senior Israeli political and military leaders that Iran is "... determined to obtain deliverable nuclear weapons that could be used against Israel, either directly or through surrogates like Hezbollah"⁶⁸⁹, and that therefore, a nuclear-armed Iran is an existential threat to Israel.

C. Iran's Attempt to Establish an Additional Military Front Against Israel in Syria

Iran's attempt to establish an additional military front against Israel in Syria also contributes to Israel's perception that a nuclear-armed Iran poses an existential threat to

⁶⁸⁶ OUTLAW REGIME, supra note 627, at 9; BPC Report, supra note 574, at 35.

⁶⁸⁷ BPC Report, *supra* note 574, at 24.

⁶⁸⁸ Netanyahu 2012 Speech, *supra* note 11.

⁶⁸⁹ DERSHOWITZ, supra note 604, at 212.

Israel's existence. Iranian military advisors, operating under the command of the IRGC, have been deployed to Syria since the outset of the Syrian civil war in 2011 to assist the forces of Syrian President Bashar al-Assad in defeating the various opposition rebel groups aligned against his regime; however, Israel believes that Iran's real design is to establish a long-term Iranian military presence in Syria- including significant Shiite militia forces under Iranian command, permanent military bases, and a military industry to manufacture precision-guided rockets and missiles- in order to turn Syria's entire territory into an active military front against Israel alongside Lebanon. 690

The former Chief of Staff of the IDF, Lieutenant General Gadi Eisenkot, has stated publicly that Iran's strategy to establish an additional military front against Israel in Syria includes a plan to build an Iranian-led Shiite militia force of up to 100,000 Shiite fighters in Syria. ⁶⁹¹ In furtherance of this planned force build-up, Iran has deployed approximately 8000-10,000 IRGC fighters to Syria to command, support, and train other Shiite militia forces in Syria in order to transform those militias into more professional Iranian proxy forces modeled after Hezbollah. ⁶⁹² Iran has also directed the deployment of 5000-8000 Hezbollah fighters to Syria where, as previously noted, they have gained

⁶⁹⁰ Ephraim Kam, *Iran's Shiite Foreign Legion*, 20 INST. NAT'L. SEC. STUD. STRAT. ASSESSMENT No. 3 49 (Oct. 2017), https://www.inss.org.il/publication/irans-shiite-foreign-legion/?offset=45&posts=164&subject=258 (Accessed Jul. 9, 2019); Michael Herzog, *Amid De-Escalation in Southern Syria: How to Stop the Iranian Push for Regional Dominance*, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE STRAT. ASSESSMENT (Sept. 2017) at 4, http://www.bicom.org.uk/analysis/strategic-assessment-southern-syria-stop-iranian-plan-regional-dominance/ (Accessed Jun. 4, 2019).

⁶⁹¹ Iran "Chose the Wrong Playing Field" in Syria, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (Jan. 14, 2019), http://www.bicom.org.uk/news/iran-chose-the-wrong-playing-field-in-syria/ (Accessed Jun. 4, 2019) [hereinafter BICOM Wrong Playing Field].

⁶⁹² Iranian Forces and Shia Militias in Syria, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE BRIEFING (Mar. 2018) at 2-3, http://www.bicom.org.uk/wp-content/uploads/2018/03/Briefing-Iranian-forces-and-Shia-militias-in-Syria-April-update.pdf (Accessed Jun. 4, 2019) [hereinafter BICOM Shia Militias].

considerable combat experience that has improved their paramilitary capabilities.⁶⁹³ Additionally, Iran has recruited, financed, organized, trained, equipped, and placed under IRGC command and/or guidance numerous other Shiite militia forces in Syria, including the Syrian National Defense Forces (NDF), a force of Syrian local militias that is made up of approximately 90,000-100,000 fighters and which has been unified under the IRGC; the Afghan Fatemiyoun Division, consisting of approximately 10,000-12,000 Afghani Shiite fighters who had originally fled Afghanistan and volunteered to serve in Syria in order to secure residence and work permits in Iran; the Pakistani Zainebiyoun Brigade, consisting of up to 1000 Pakistani Shiite fighters who volunteered to serve in Syria for reasons similar to the Afghanis; and the Al-Nujaba Movement, a force of up to 9000 Iraqi Shiite fighters who are subordinate to the Shiite Popular Mobilization Units (PMUs) in Iraq and who are also supported by Hezbollah. 694 Israel is deeply concerned that by building up this extensive Iranian-led Shiite militia force in Syria, Iran is following its "tried and tested model" that worked with frightening efficiency with Hezbollah in Lebanon: build up a proxy Shiite militia; support it with significant weapons and cash; incite sectarian conflict and encourage brutal levels of violence; weaken the host nation's central government; and transition the militia into a potent political force that no future host government can ignore. ⁶⁹⁵

⁶⁹³ See notes 634-635 *supra* and accompanying text.

⁶⁹⁴ BICOM Shia Militias, *supra* note 692, at 2-3; Kam, *supra* note 690, at 49-52; OUTLAW REGIME, *supra* note 627, at 12-13; Joseph Hincks, *Israel and Iran Are Waging a Secret War in Syria. Here's How It Finally Went Public*, TIME (Jan. 25, 2019), http://time.com/5513411/israel-iran-secret-war-syria/ (Accessed Jun. 7, 2019).

⁶⁹⁵ James Sorene, *Iran's Plan for Syria is a Clear and Present Danger for the Middle East and Europe*, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (Mar. 12, 2018),

In addition to building up an extensive, Iranian-led Shiite militia force, Iran is also establishing a long-term military presence in Syria by building permanent military facilities, including military bases and military industrial facilities. 696 Iran has established 10-13 IRGC military bases across Syria, which are used for a number of purposes such as command and control, barracks, logistics, training, and facilitating the transfer of weapons and ammunition to Hezbollah in Lebanon. 697 Iran has also established IRGC operations centers at all of the Syrian Air Force Bases; is building military industrial facilities in Syria for the manufacture of precision-guided rockets and missiles; and has constructed warehouses operated by the IRGC for storage of short and medium-range missiles that are capable of reaching any part of Israel. ⁶⁹⁸ Of special concern to Israel is the establishment of Iranian intelligence bases in the Syrian Golan Heights, and the ongoing takeover of entire neighborhoods in southern Syria by the IRGC, Hezbollah, and Shiite militia forces, transforming these neighborhoods and villages into terrorist fortresses similar to those in southern Lebanon. 699 Iran's establishment of a military and terrorist infrastructure and network in the Golan Heights and throughout southern Syria

http://www.bicom.org.uk/blogpost/irans-plan-syria-clear-present-danger-middle-east-europe/ (Accessed Jun. 4, 2019).

⁶⁹⁶ Herzog, supra note 690, at 1, 4; BICOM Wrong Playing Field, supra note 691; BICOM Shia Militias, supra note 692, at 1, 4-5; Sorene, supra note 695.

⁶⁹⁷ BICOM Shia Militias, *supra* note 692, at 4-5.

⁶⁹⁸ Herzog, *supra* note 690, at 1, 4; BICOM Wrong Playing Field, *supra* note 691; BICOM Shia Militias, *supra* note 692, at 1, 4-5.

⁶⁹⁹ Kam, *supra* note 690, at 54-55; BICOM Wrong Playing Field, *supra* note 691; Sorene, *supra* note 695; Taylor Luck, *What Russian Deal? Israel and Jordan Cast Wary Eye Toward Syria*, CHRIST. SCI. MONITOR (Aug. 12, 2019), https://www.csmonitor.com/World/Middle-East/2019/0812/What-Russian-deal-Israel-and-Jordan-cast-wary-eye-toward-Syria (Accessed Aug. 14, 2019).

creates a nightmare scenario for Israel: an Iranian-led, unified military front along Israel's entire northern border with Syria.⁷⁰⁰

The establishment by Iran of a permanent military presence in Syria could also allow Iran to create an Iranian Shiite militia-controlled land corridor stretching from Iran through Iraq and Syria to Lebanon, which would greatly increase Iran's ability to provide advanced weapons, ammunition, and other support to Hezbollah. 701 From Israel's perspective, the potential permanent entrenchment of Iran and its Shiite militia proxy forces in Syria is a major, long-term strategic threat, as it would turn Syria's entire territory (not just southern Syria) into an active military front against Israel. 702 Israeli military planners assess that in a future war between Israel and Hezbollah- a war they view as inevitable- Israel would then face the Lebanese and Syrian theaters operating together as one long military and terrorist front under unified Iranian command. 703 Therefore, while Israel has generally tried to avoid being dragged into the Syrian civil war, in view of Iran's attempt to establish an additional military front against Israel in Syria the Israeli government has defined and articulated a number of "red lines" that if crossed by Iran or its proxy forces would trigger responsive Israeli military action in Syria. The known Israeli "red lines" in Syria are: cross-border terrorist attacks and/or firing of weapons into Israel's territory from Syria; the shipment of strategic "tie breaking" weapons systems, such as precision-guided surface-to-surface rockets and

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⁷⁰⁰ Kam, *supra* note 690, at 55-56; Herzog, *supra* note 690, at 3; Hincks, *supra* note 694; Sorene, *supra* note 695; Luck, *supra* note 699.

⁷⁰¹ Herzog, *supra* note 690, at 1, 4.

⁷⁰² Id at 1

⁷⁰³ Herzog, *supra* note 690, at 4.

⁷⁰⁴ *Id*. at 2-5.

missiles- from or through Syria to Hezbollah in Lebanon; the establishment of an Iranian and Shiite militia-controlled military infrastructure in southern Syria; and the consolidation by Iran of a permanent military front against Israel throughout the whole of Syria.⁷⁰⁵

For the past several years, Israel has taken defensive military action in Syria when the foregoing Israeli "red lines" have been crossed by Iran and its proxy Shiite militia forces. ⁷⁰⁶ For example, on September 7, 2017, the Israeli Air Force (IAF) attacked and destroyed an Iranian-funded military complex in the Syrian town of Masyaf that was producing both chemical weapons and advanced long-range missiles for shipment to Hezbollah in Lebanon. ⁷⁰⁷ On February 10, 2018, the IRGC flew an armed drone into Israeli airspace, and the IAF then shot down the drone and attacked and destroyed the IRGC base in Syria from which the drone had been launched. ⁷⁰⁸ The IAF lost one F-16 aircraft to anti-aircraft fire during Israel's defensive counter-attack, and in response the IAF also destroyed numerous IRGC and Shiite militia anti-aircraft sites in Syria. ⁷⁰⁹ This exchange represented the first direct military confrontation between Israel and Iran in the Syrian theater. ⁷¹⁰

⁷⁰⁵ Herzog, *supra* note 690, at 2-5; Yaakov Lappin, *Israel's Red Lines in Lebanon and Syria*, BEGIN-SADAT CTR. STRAT. STUD. PERSPECTIVES PAPER No. 1, 080 (Feb. 3, 2019), https://besacenter.org/perspectives-papers/israel-red-lines-lebanon-syria/ (Accessed Jun. 4, 2019).

⁷⁰⁶ Herzog, supra note 690, at 2; Lappin, supra note 705.

Amos Yadlin, *How to Understand Israel's Strike on Syria*, N.Y. TIMES (Sept. 8, 2017), https://www.nytimes.com/2017/09/08/opinion/how-to-understand-israels-strike-on-syria.html (Accessed Mar. 1, 2019).

⁷⁰⁸ BICOM Shia Militias, *supra* note 692, at 1; Sorene, *supra* note 695; Calev Ben-Dor, *The "Campaign Between the Wars" Escalates*, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (Feb. 11, 2018), http://www.bicom.org.uk/blogpost/campaign-wars-escalates/ (Accessed Jun. 4, 2019).

⁷⁰⁹ BICOM Shia Militias, *supra* note 692, at 1; Sorene, *supra* note 695; Ben-Dor, *supra* note 708.

On May 10, 2018, the IRGC and Iranian-controlled Shiite militias fired a volley of 20 Fajr-5 rockets at Israeli military positions on the Golan Heights, and the IAF responded by conducting a broad defensive counter-attack against Iranian targets in Syria, including 70 military sites connected to the IRGC and nearly all of Iran's military infrastructure in Syria. Twenty-three IRGC and Shiite militia fighters were reportedly killed by the IAF's counter-attack. The IRGC and Iranian-controlled Shiite militias fired additional rockets at Israeli military positions on the Golan Heights on January 20, 2019, after which the IAF again conducted defensive counter-strikes against Iranian targets in Syria, including Iranian warehouses containing Iranian weapons located near the Damascus International Airport, resulting in the deaths of 12 IRGC fighters.

By mid-January 2019, the continuing armed clashes between Israel and Iran in Syria led Israeli Prime Minister Benjamin Netanyahu and outgoing IDF Chief of Staff Lieutenant General Gadi Eisenkot to publicly acknowledge for the first time that Israel had been systematically targeting Iran's military infrastructure in Syria, with Lieutenant General Eisenkot stating that Israeli forces had conducted "thousands of attacks" against Iranian targets in Syria in 2017 and 2018 in order to prevent Iran from establishing an additional military front against Israel. 714 Prime Minister Netanyahu separately

⁷¹¹ Calev Ben-Dor, Israel and Iran: Unstoppable Forces and Immovable Objects, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (May 10, 2018), http://www.bicom.org.uk/blogpost/israel-iran-unstoppable-forces-immovable-objects/ (Accessed Jun. 4, 2019); Loveday Morris, Ruth Eglash, & Louisa Loveluck, Israel Launches Massive Military Strike Against Iranian Targets in Syria, WASH. POST (May 10, 2018), https://www.washingtonpost.com/world/middle_east/israel-says-retaliation-just-thetip-of-the-iceberg-after-iran-blamed-for-overnight-strikes/2018/05/10/bd2fde18-53e8-11e8-a6dca1d035642ce_story.html?noredirect=on&utm_term=.4b3c1a6b8ec4 (Accessed Apr. 10, 2019).

Ben-Dor, supra note 711.

⁷¹³ Hincks, *supra* note 694.

⁷¹⁴ BICOM Wrong Playing Field, *supra* note 691; Isabel Kershner, *Israel, in Rare Admission, Confirms Strike* on *Iranian Targets in Syria*, N.Y. TIMES (Jan. 13, 2019),

acknowledged that Israeli forces had worked with "impressive success" to prevent Iran's military entrenchment in Syria and had struck Iranian and Hezbollah targets in Syria "hundreds of times". However, these public acknowledgments by senior Israeli officials of Israeli "red lines" in Syria failed to alter or deter Iran's paramilitary activities in the Syrian theater, and Israel subsequently conducted additional military strikes against Iranian and Iranian-controlled Shiite militia targets in Syria on June 2, 2019 and again on July 1, 2019. The IAF strike on June 2, 2019 was against the Syrian T-4 Airbase and weapons depot in Homs, Syria, which is controlled by the IRGC and is used by the IRGC as an operations center and for storage of Iranian Shahab-1, Fajr-5, and Fateh-110 missiles. The IAF strike on July 1, 2019, in which the Israeli Navy also participated, was against multiple Iranian and Hezbollah targets in Syria, including 10 IRGC and Hezbollah bases, an IRGC headquarters south of Damascus, and numerous Hezbollah ammunition warehouses. Ten Hezbollah and Shiite militia fighters were reportedly killed in that Israeli preventive military strike.

Iran's continuing efforts to establish an additional military front against Israel in Syria- which have already led to a series of direct, low-level military confrontations

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https://www.nytimes.com/2019/01/13/world/middleeast/israel-iran-strike-syria-tunnels.html (Accessed Apr. 10, 2019).

⁷¹⁵ Kershner, supra note 714.

⁷¹⁶ Israeli Forces Hit T-4 Airbase in Syria, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE (Jun. 3, 2019), http://www.bicom.org.uk/news/israeli-forces-hit-t-4-airbase-in-syria/ (Accessed Jun. 4, 2019) [hereinafter BICOM T-4 Airbase]; Jack Khoury, Israel Strikes Iranian Targets in Syria, Report Says: 16 Killed, 21 Wounded, HAARETZ (Jul. 1, 2019), https://www.haaretz.com/middle-east-news/israel-strikes-iran-hezbollah-targets-in-syria-four-killed-21-wounded-1.7425013 (Accessed Jul. 1, 2019); Isabel Kershner, Israel is Blamed for Deadly Missile Strikes in Syria, N.Y. TIMES (Jul. 1, 2019), https://www.nytimes.com/2019/07/01/world/middleeast/israel-syria-airstrikes.html (Accessed Jul. 1, 2019).

⁷¹⁷ BICOM T-4 Airbase, *supra* note 716.

⁷¹⁸ Khoury, *supra* note 716; Kershner, *supra* note 716.

⁷¹⁹ *Id*.

between Israel and IRGC/Iranian-controlled Shiite militia forces in the Syrian theaterconstitute an additional and highly significant threat to Israel's security. Senior Israeli military and political leaders assess that Israel cannot allow the IRGC, Hezbollah, and other Iranian-controlled forces to become entrenched against Israel in Syria, and that Israel also cannot allow Syria to become a military industrial base for the manufacture of precision-guided rockets and missiles and the transfer of those weapons to Hezbollah. 720 As Israeli Prime Minister Benjamin Netanyahu has stated publicly, "Iran is busy turning Syria into a base of military entrenchment. It wants to use Syria and Lebanon as war fronts against its declared goal to eradicate Israel. This is something Israel cannot accept." As of late August 2019, tensions between Israel and Iran remain high, with reports that the IAF conducted military strikes against Iranian-controlled PMU Shiite militia missile storage depots in Iraq in July and August 2019⁷²²- a significant expansion of the military theater for Israel- and reports that on August 24, 2019 the IAF attacked IRGC and Iranian-controlled Shiite militia targets southeast of Damascus, Syria in anticipatory defense against an imminent IRGC-directed armed drone attack against Israel. 723 As Israel and Iran appear to be inching closer to a potentially serious military

⁷²⁰ Kershner, *supra* note 716.

⁷²¹ Hincks, *supra* note 694.

⁷²² Jonathan Spyer, *Israeli Jets Appear to Have Struck Iraq for the First Time Since 1981*, WALL ST. J. (Aug. 2, 2019) at A15; Lolita Baldor & Josef Federman, *Israel Blamed for Hit on Iran-Backed Militia Depot in Iraq*, ASSOC. PRESS (Aug. 23, 2019), https://apnews.com/06ef6f4d525e408d953f6f31497283aa (Accessed Aug. 23, 2019).

Bassem Mroue, Israel Says It Thwarts Imminent Iranian Attack From Syria, ASSOC. PRESS (Aug. 24, 2019), https://www.nytimes.com/aponline/2019/08/24/world/middleeast/ap-ml-syria-israel.html (Accessed Aug. 25, 2019); James McAuley & Liz Sly, Israel Army Announces Strikes Against Planned Iranian Drone Operation in Syria, WASH. POST (Aug. 25, 2019), https://www.washingtonpost.com/world/middle-east/israel-army-announces-strikes-against-planned-iranian-drone-operation-in-syria/2019/08/25/34f1486a-c706-11e9-b5e4-54aa56d5b7ce_story.html (Accessed Aug. 25, 2019).

confrontation in Syria and/or Lebanon, Israel has good reason to be gravely concerned about Iran's long-standing attempts to develop a nuclear weapons capability.

D. Iran's Pursuit of a Nuclear Weapons Capability

1. Early Efforts: From the Shah to the 1990s

Iran's interest in nuclear technology began in the late 1960s, when the Iranian monarch, Shah Mohammed Reza Pahlavi, took a personal interest in nuclear power and directed the creation of a nuclear research center at Tehran University, the centerpiece of which was to be a five megawatt research reactor purchased from the United States. The United States also agreed to lease Iran enriched uranium to power its new research reactor, and in 1967 Iran took possession of this U.S. nuclear fuel and successfully started the reactor. By 1974, Iran declared its intention to develop a robust domestic nuclear power industry for the production of electricity, and also announced its goal of attaining all the technology and facilities necessary for independent control of the complete nuclear fuel cycle. However, in June 1974, the Shah made a public statement indicating that Iran would have nuclear weapons in the near future, although he soon recanted his

 ⁷²⁴ Brian L. Bengs, Legal Constraints Upon the Use of a Tactical Nuclear Weapon Against the Natanz Nuclear Facility in Iran, 40 GEO. WASH. INTL. L. REV. 323, 329 (2008).
 ⁷²⁵ Id. at 329.

NET ASSESSMENT 10-11 (Gary Samore ed. 2005) [hereinafter IISS]; Bengs, *supra* note 724 at 330. The nuclear fuel cycle involves the following major steps: 1) mining and milling of uranium ore into uranium oxide (yellowcake); 2) conversion of uranium oxide into uranium hexafluoride gas; 3) enrichment (gas diffusion or centrifuge) to concentrate the level of uranium (U-235) between 3% and 5%; 4) conversion into uranium dioxide powder and compression into small pellets for inclusion in metal fuel rods; 5) use of the fuel rods in a reactor to produce electricity; 6) storage of spent fuel rods in cooling ponds to reduce heat and radiation levels; 7) reprocessing to recover approximately 96% of the original uranium, 1% plutonium, and isolate 3% waste; 8) sealing the radioactive waste within liquid glass in metal containers; and 9) final disposal of radioactive waste at designated sites. ANTHONY V. NERO, JR., A GUIDEBOOK TO NUCLEAR REACTORS 264-274 (1979); Bengs, *supra* note 724, at 330 n. 49.

statement and indicated that Iran and other regional states should avoid seeking nuclear weapons.⁷²⁷ Nevertheless, Iran apparently conducted research at that time into uranium enrichment and nuclear reprocessing methods for producing weapons-grade nuclear material. 728 The ability to enrich uranium beyond what is necessary for reactor-grade fuel (3-5%) and to reprocess spent nuclear fuel are both major proliferation concerns, because continuing the uranium enrichment process beyond what is necessary for reactor-grade fuel will eventually produce weapons-grade uranium, and reprocessing spent nuclear fuel allows for the collection of weapons-grade plutonium.⁷²⁹

Iran signed the Nuclear Non-Proliferation Treaty (NPT)⁷³⁰ in July, 1968, ratified the NPT in February, 1970 and continues to remain a party to the agreement. 731 The NPT. which is "the bedrock of the global non-proliferation regime" with 187 state parties, divides the world into "official nuclear-weapon states and non-nuclear weapon states". 732 For purposes of the NPT, nuclear-weapon states are those states that have "manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967"733, which includes the United States, Russia, the United Kingdom, France, and China. 734 Per Articles I and II of the NPT, the nuclear-weapon states pledge not to transfer nuclear weapons to any other state or assist in the development of nuclear

⁷²⁷ Bengs, *supra* note 724, at 330; ANTHONY H. CORDESMAN & KHALID R. AL-RODHAN, IRAN'S WEAPONS OF MASS DESTRUCTION 102 (2006).

⁷²⁸ ALIREZA JAFARZADEH, THE IRAN THREAT: PRESIDENT AHMADINEJAD AND THE COMING NUCLEAR CRISIS 130 (2007); IISS, supra note 533, at 11; Bengs, supra note 724, at 330.

⁷²⁹ NERO, supra note 726, at 21, 186-197; Bengs, supra note 724, at 332.

⁷³⁰ Treaty on the Non-Proliferation of Nuclear Weapons, opened for signature July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161 (entered into force Mar. 5, 1970) [hereinafter NPT].

⁷³¹ Bengs, *supra* note 724, at 329-330.

⁷³² Arsalan M. Suleman, Bargaining in the Shadow of Violence: The NPT, IAEA, and Nuclear Non-Proliferation Negotiations, 26 BERKELEY J. INT'L. L. 206, 208, 214 (2008).

⁷³³ NPT, *supra* note 730, art. IX.

⁷³⁴ Suleman, *supra* note 732, at 214.

weapons by other states, and the non-nuclear weapon states party to the treaty agree not to "manufacture, or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance" in their manufacture. 735 The legal basis for enforcing this pledge is found in Article III of the NPT, which requires nonnuclear weapon states party to the treaty to accept comprehensive safeguards established by the International Atomic Energy Agency (IAEA) for the purpose of verification of the fulfillment of their non-proliferation obligations assumed under the treaty. ⁷³⁶ These safeguards, which are negotiated by the non-nuclear weapon state party and the IAEA in a comprehensive safeguards agreement, allow the IAEA to monitor and verify that the non-nuclear weapon state party is only using nuclear material and/or technology for peaceful purposes and is not diverting nuclear material and/or technology for weapons purposes. 737 As a non-nuclear weapon state party to the NPT, Iran entered into a comprehensive safeguards agreement with the IAEA on May 15, 1974, and this safeguards agreement remains in force. 738 Accordingly, because Iran has been a nonnuclear weapon state party to the NPT since 1970 and has had a comprehensive safeguards agreement with the IAEA since 1974, Iran is prohibited from acquiring or seeking to acquire nuclear weapons or other nuclear explosive devices, and Iran is also required to allow the IAEA to monitor and verify Iran's compliance with these international legal obligations in accordance with its comprehensive safeguards agreement.

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⁷³⁵ NPT, *supra* note 730, arts. I, II; Suleman, *supra* note 732, at 215.

⁷³⁶ NPT, *supra* note 730, art. III; Suleman, *supra* note 732, at 215.

⁷³⁷ NPT, *supra* note 730, art. III; Suleman, *supra* note 732, at 215, 217 n. 42.

⁷³⁸ Agreement Between Iran and the IAEA for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, IAEA Doc. INFCIRC/214, May 15, 1974; GOV/2013/6, *supra* note 5, at n. 1.

The 1979 Islamic Revolution in Iran deposed the Shah and brought to power Supreme Leader Ayatollah Ruhollah Khomeini, who showed little enthusiasm for continuing the Shah's ambitious nuclear development program because Khomeini considered it to be a "suspicious Western innovation". 739 However, Iraq's use of chemical weapons and long range missiles against Iran during the eight year Iran-Iraq War (1980-1988) rekindled Iran's interest in pursuing a nuclear development program, and following Khomeini's death in 1989, the new Iranian Supreme Leader, Ayatollah Ali Khamenei, sought to revive both Iran's overt civilian nuclear program and its undeclared nuclear activities. ⁷⁴⁰ During the 1990s, Iran turned to China for assistance with its nuclear program, and China sold Iran nuclear technology, trained Iranian scientists, and assisted Iran in constructing an industrial-scale uranium conversion facility at the Esfahan Nuclear Technology Center, thereby providing Iran with the capability to produce large quantities of materials for enrichment and nuclear fuel fabrication. 741 In 1991, China even provided Iran with 1.8 tons of uranium ore that was not reported to the IAEA as required under Iran's comprehensive safeguards agreement, which allowed Iran to carry out undeclared uranium conversion, reduction and enrichment experiments. 742 Iran also sought assistance from Russia, which agreed in 1995 to complete Iran's unfinished Bushehr nuclear reactor, and Iran also obtained unauthorized technical assistance from various individual Russian scientists and institutes which enabled Iran to begin

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⁷⁴² Id

⁷³⁹ IISS, *supra* note 726, at 9, 11-12.

⁷⁴⁰ CORDESMAN & SEITZ, *supra* note 10, at 3; Bengs, *supra* note 724, at 332-333; IISS, *supra* note 726, at 9, 11-12

⁷⁴¹ Bengs, *supra* note 724, at 334-335; IISS, *supra* note 726, at 13.

construction of a heavy-water production plant at Arak.⁷⁴³ Disturbingly, Iran also secretly obtained, in the mid-1990s, enrichment centrifuge design information and components from the same A.Q. Khan nuclear black market network that had previously enabled Pakistan to produce weapons-grade uranium, and these essential centrifuge designs and components enabled Iran to begin building pilot and industrial-scale centrifuge plants at Natanz.⁷⁴⁴

2. Exposure and UN Security Council Intervention

In August 2002, an exiled Iranian opposition group, the National Council of Resistance of Iran (NCRI), publicly exposed for the first time the existence of Iran's underground "nuclear fuel production" facility at Natanz and Iran's heavy-water production facility at Arak, which the NCRI claimed were being used by Iran as part of a clandestine nuclear weapons program. The allegation that Iran had a uranium enrichment facility at Natanz and a heavy-water production facility at Arak (see Appendix A), neither of which had previously been reported to the IAEA, triggered an international response, and the IAEA's concerns about the nature of Iran's nuclear program grew as it discovered that, ". . . as early as the late 1970s and early 1980s, and continuing into the 1990s and 2000s, Iran had used undeclared nuclear material for testing and experimentation in several uranium conversion, enrichment, fabrication and

Bengs, *supra* note 724, at 334-335; IISS, *supra* note 726, at 13. Heavy water is a key component of a type of nuclear reactor that enables production of plutonium from natural uranium without going through the uranium enrichment process. While heavy water could be used merely for the production of electricity in a reactor, its inherent capability for use in large scale production of weapons-grade plutonium presents a major proliferation risk. Bengs, *supra* note 724, at 340 n. 157.

⁷⁴⁴ Bengs, *supra* note 724, at 334; IISS, *supra* note 726, at 12, 14, 30.

Bengs, *supra* note 724, at 340-341; IISS, *supra* note 726, at 16; Suleman, *supra* note 732, at 236.

irradiation activities, including the separation of plutonium, at undeclared locations and facilities." ⁷⁴⁶ By February 2003, with United States and other coalition forces mobilized for the then-imminent invasion of Iraq, Iran sought to provide the international community with assurances that its nuclear activities were solely for peaceful purposes.⁷⁴⁷ For example, after postponing earlier visits, Iran permitted the IAEA to inspect the facilities at Natanz and Arak in February 2003, and officially declared the existence of those facilities to the IAEA during those visits. 748 Iran also agreed to a modification to its comprehensive safeguards agreement with the IAEA- known as a modified Code 3.1-, under which Iran would be required to submit to the IAEA design information for all new nuclear facilities as soon as the decision to construct or authorize construction of such facilities was made⁷⁴⁹, and in December 2003, Iran signed and announced its intent to abide by (pending ratification by its Parliament) an Additional Protocol to its comprehensive safeguards agreement, which upon entry into force would allow the IAEA to conduct expanded inspections of Iran's declared and undeclared nuclear facilities. 750 On November 14, 2004, Iran also declared a temporary, voluntary cessation of its uranium enrichment activities. 751 Additionally, Iran acknowledged to the IAEA that it had utilized entities with links to its Ministry of Defense in some of its previously undeclared nuclear activities; that it had had contacts with intermediaries of the A.Q. Khan clandestine nuclear supply network in 1987 and the early 1990s; and that

⁷⁴⁶ IAEA, Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran, IAEA Doc. GOV/2011/65 (Nov. 8, 2011) [hereinafter GOV/2011/65] at Annex, para. 3.

⁷⁴⁷ Bengs, *supra* note 724, at 340-341; IISS, *supra* note 726, at 16; Suleman, *supra* note 732, at 236.

⁷⁴⁸ Bengs, *supra* note 724, at 341; IISS, *supra* note 726, at 16-17.

⁷⁴⁹ GOV/2011/65, *supra* note 746, at Annex, para. 4.

⁷⁵⁰ *Id.*; Bengs, *supra* note 724, at 342; IISS, *supra* note 726, at 20; Suleman, *supra* note 732, at 237. Suleman. *supra* note 732, at 237.

it had received from the A.Q. Khan network documents offering assistance with the development of uranium centrifuge enrichment technology and describing processes for the conversion of uranium fluoride compounds into uranium metal and the production of hemispherical enriched uranium metallic components. In essence, from 2003 to early 2006, Iran sought to reassure the international community that its assertions regarding the peaceful purposes of its nuclear program could be trusted, through a strategy consisting of apparent cooperation with the IAEA, confirmation of only those things the IAEA had clearly identified as violations of Iran's NPT and/or IAEA safeguards obligations, loudly proclaiming Iran's right to nuclear technology for peaceful purposes as a member of the NPT, and generally trying to buy time.

Following Iran's election in 2005 of a confrontational new President, Mahmoud Ahmadinejad, Iran "... was largely unwilling to make any further concessions and prior trust-building concessions such as [Iran's] voluntary implementation of the Additional Protocol were cancelled." Iran re-started its uranium enrichment activities in August 2005, and subsequently stopped implementing both its February 2003 agreement to provide the IAEA with design information for all new nuclear facilities and the December 2003 Additional Protocol to its comprehensive safeguards agreement. Meanwhile, the IAEA continued to seek clarification from Iran of issues regarding the scope and nature of Iran's nuclear program, particularly in light of Iran's

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⁷⁵² GOV/2011/65, *supra* note 746, at Annex para. 5. The additional proliferation concern regarding uranium metal is that when highly enriched uranium (HEU) retrieved from the enrichment process is to be used in a nuclear device, it is first converted to uranium metal. The metal is then cast and machined into suitable components for a nuclear core. GOV/2011/65, *supra* note 746, at Annex para. 31.

⁷⁵³ Bengs, *supra* note 724, at 341-342; GOV/2011/65, *supra* note 746, at Annex para. 5.

⁷⁵⁴ Bengs, *supra* note **724**, at **342**.

⁷⁵⁵ Suleman, *supra* note 732, at 237; GOV/2011/65, *supra* note 746, at Annex para. 4 n. 5, 6.

acknowledgment of its previous contacts with the A.Q. Khan clandestine nuclear supply network and additional information, provided to the IAEA in 2005 by an NPT member state, which indicated that Iran had been engaged in activities involving studies on a so-called "green salt project" involving uranium enrichment, high explosives testing, and the re-engineering of an Iranian missile re-entry vehicle to accommodate a nuclear warhead. All of this information, taken together, gave rise to IAEA concerns about possible military dimensions to Iran's nuclear program, and on September, 24, 2005, the IAEA officially concluded that Iran's violations of its comprehensive safeguards agreement with the IAEA, including Iran's failure to declare nuclear material and facilities and its history of concealing its nuclear activities constituted non-compliance with Iran's NPT obligations. Five months later, on February 4, 2006, the IAEA referred the matter to the United Nations Security Council.

On July 31, 2006, the Security Council, acting under Article 40 of Chapter VII of the UN Charter⁷⁵⁹, adopted Resolution 1696, in which the Council noted with serious concern that after more than three years of IAEA efforts to seek clarity about all aspects of Iran's nuclear program, the IAEA was still unable either to provide assurances on the absence of undeclared nuclear material and activities in Iran or to resolve outstanding issues regarding possible military dimensions of Iran's nuclear program; called upon Iran

⁷⁵⁶ CORDESMAN & SEITZ, *supra* note 10, at 258; GOV/2011/15, *supra* note 746, at Annex para. 6.

⁷⁵⁷ Bengs, supra note 724, at 342; Suleman, supra note 732, at 237; IAEA, Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, IAEA Doc. GOV/2005/77 (Sept. 24, 2005).

⁷⁵⁸ Suleman, supra note 732, at 237; IAEA, Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, IAEA Doc. GOV/2006/14 (Feb. 4, 2006).

⁷⁵⁹ U.N. Charter, art. 40 ("In order to prevent an aggravation of the situation, the Security Council may . . . call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable.").

to comply fully with all IAEA-requested monitoring and inspection actions; and demanded that Iran suspend all uranium enrichment-related and reprocessing activities, including research and development, to be verified by the IAEA. 760 When Iran failed to comply with Resolution 1696, the Security Council, acting under Article 41 of Chapter VII of the UN Charter⁷⁶¹, adopted Resolution 1737, in which the Council affirmed that Iran must, without further delay, comply fully with all IAEA-requested monitoring and inspections actions; decided that Iran must, without further delay, suspend all uranium enrichment-related and reprocessing activities, including research and development, and must suspend work on all heavy water-related projects, including the construction of a research reactor moderated by heavy water, all of which was to be verified by the IAEA; and imposed initial sanctions (embargo on proliferation sensitive nuclear materials, equipment, goods, technology, and financial assistance) on Iran for failure to comply with Resolution 1696. 762 Iran made no effort to comply with Resolutions 1696 and 1737, and in response, the Security Council adopted additional resolutions in 2007, imposing an arms embargo on Iran and reiterating its demand that Iran cease enriching uranium⁷⁶³, and in 2008, extending financial sanctions to specific individuals known to work with the Iranian nuclear program. 764

Once again, Iran refused to comply with the Security Council's mandates regarding its nuclear program, which led the Council, on June 9, 2010 to adopt

⁷⁶⁰ S.C. Res. 1696, U.N. Doc. S/RES/1696 (Jul. 31, 2006).

⁷⁶¹ U.N. Charter, art. 41 ("The Security Council may decide what measures not involving the use of force are to be employed to give effect to its decisions, and it may call upon Members of the United Nations to apply such measures.").

⁷⁶² S.C. Res. 1737, *supra* note 5.

⁷⁶³ S.C. Res. 1747, U.N. Doc. S/RES/1747 (Mar. 24, 2007).

⁷⁶⁴ S.C. Res. 1803, U.N. Doc. S/RES/1803 (Mar. 3, 2008); Bengs, *supra* note 724, at 344.

Resolution 1929, in which the Council noted with serious concern that Iran had not suspended its uranium enrichment-related and reprocessing activities and heavy waterrelated projects, nor had Iran cooperated with the IAEA to clarify remaining issues of concern to exclude the possibility of military dimensions of Iran's nuclear program, as required by prior Security Council resolutions; that elements of the Islamic Revolutionary Guard Corps (IRGC) had a role in Iran's proliferation sensitive nuclear activities and in the development of nuclear weapon delivery systems; that Iran had constructed a new uranium enrichment facility, the Fordow Fuel Enrichment Plant, located at an existing defense establishment near the Iranian city of Qom, in violation of Iran's obligation to suspend all uranium enrichment-related activities, and that Iran had failed to notify the IAEA of this new facility until September 2009; and that Iran had enriched uranium (U-235) to 20% ⁷⁶⁵, and did so without notifying the IAEA in sufficient time for the IAEA to adjust the existing safeguards procedures. 766 In response to these serious concerns, the Security Council, acting again under Article 41 of Chapter VII of the UN Charter, decided that Iran must comply fully and without delay with its comprehensive safeguards agreement with the IAEA, reaffirming the Council's prior decisions that Iran must cooperate fully with the IAEA on all outstanding issues, particularly those giving rise to concerns about possible military dimensions of Iran's nuclear program, including by providing access without delay to all sites, equipment, persons and documents requested by the IAEA; reaffirmed that in accordance with Iran's obligations under previous

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⁷⁶⁵ Uranium-235 (U-235) enriched to greater than 20% is considered directly usable for the manufacture of weapons. U-235 enriched below 20% is not weapons usable, but could be converted to weapons-grade material through further uranium enrichment. C.W. Forsberg, C.M. Hopper, J.L. Richter, H.C. Vantine, *Definition of Weapons-Usable Uranium-233*, ORNL/TM-13517 (March 1998) at 7, http://moltensalt.org/references/static/downloads/pdf/ORNL-TM-13517.pdf (accessed May 8, 2019). ⁷⁶⁶ S.C. Res. 1929, U.N. Doc. S/RES/1929 (June 9, 2010); GOV/2011/65, *supra* note 746, at paras. 20-26.

Security Council resolutions to suspend all reprocessing, heavy water-related and uranium enrichment-related activities, Iran must not begin construction on any new uranium-enrichment, reprocessing, or heavy water-related facilities and must discontinue any ongoing construction of any such facilities; decided that Iran must not undertake any activity related to ballistic missiles capable of delivering nuclear weapons, including launches using ballistic missile technology; and decided to impose additional sanctions on Iran (expanded arms embargo, travel ban, financial sanctions, and extension of sanctions to IRGC individuals and entities) for its non-compliance with past Security Council resolutions.⁷⁶⁷

3. Nuclear Explosive Development Indicators and Further Stalemate

On November 8, 2011 the IAEA issued an updated report to the Security Council on Iran's implementation of both its comprehensive safeguards agreement with the IAEA and relevant provisions of the Security Council resolutions governing Iran's nuclear activities. 768 The IAEA's report began by noting that, contrary to IAEA guidance and the relevant Security Council resolutions, Iran had not suspended its uranium enrichmentrelated activities in the declared nuclear facilities at Natanz (enrichment up to 20% U-235) and Fordow (enrichment up to 20% U-235); had not suspended uranium enrichment-related activities at the declared uranium conversion facility and Fuel Manufacturing Plant at Esfahan; and had not suspended work on all heavy water-related projects, including construction of the heavy water moderated research reactor (IR-40 Reactor) and operation of the Heavy Water Production Plant at the declared heavy water

⁷⁶⁷ S.C. Res. 1929, *supra* note 766. ⁷⁶⁸ GOV/2011/65, *supra* note 746.

facilities at Arak. 769 The IAEA's report also noted that because Iran was still not implementing the signed (but never ratified) Additional Protocol to its comprehensive safeguards agreement, the IAEA was not in a position to provide credible assurance of the absence of undeclared nuclear material and activities in Iran or to conclude that all nuclear material in Iran was being used for peaceful purposes. 770 Additionally, the IAEA's report reiterated the IAEA's serious concerns regarding possible undisclosed military dimensions to Iran's nuclear program, and stated that information available to the IAEA indicated that Iran had carried out activities relevant to the development of a nuclear explosive device; that prior to the end of 2003, these activities took place under a structured program within the Iranian government; and that some of these activities relevant to the development of a nuclear explosive device continued after 2003 and might still be ongoing.⁷⁷¹ Specifically, the IAEA noted that it possessed information assessed as credible that Iran had carried out the following activities relevant to the development of a nuclear explosive device: efforts, some successful, to procure nuclear related and dual use equipment and materials by military related individuals and entities; efforts to develop undeclared pathways for the production of nuclear material; the acquisition of nuclear weapons development information and documentation from a clandestine nuclear supply network; and work on the development of an indigenous design of a nuclear weapon including the testing of components. 772 The IAEA also noted that although it had repeatedly called on Iran to engage with the IAEA on these issues in order to exclude the

⁷⁶⁹ GOV/2011/65, *supra* note 746, at paras. 7-14, 20-22, 25, 27, 29-37.

⁷⁷⁰ *Id.* at paras. 48, 52.

⁷⁷¹ *Id.* at paras. 5, 38-45, 53.

⁷⁷² *Id.* at paras. 42-43.

existence of possible military dimensions to Iran's nuclear program, Iran had not engaged with the IAEA on these matters in any substantive way since August 2008.⁷⁷³

In order to keep the Security Council and IAEA member states fully informed of the basis for the IAEA's concerns regarding possible military dimensions to Iran's nuclear program, the IAEA set out, in an Annex to its November 8, 2011 report a detailed analysis of the information available to the IAEA which had given rise to those concerns.⁷⁷⁴ The IAEA noted in the Annex that between 2007 and 2010, Iran had continued to conceal nuclear activities, by not informing the IAEA in a timely manner of the decision to construct or to authorize construction of a new nuclear power plant at Darkhovin and a third uranium enrichment facility near Qom (the Fordow Fuel Enrichment Plant), and that while Iran had acknowledged certain information regarding its past nuclear activities, many of Iran's answers to questions posed by the IAEA were imprecise and/or incomplete, and the information was slow in coming and sometimes contradictory. 775 The IAEA stated that this, combined with events such as Iran's dismantling of the Lavisan-Shian site in late 2003/early 2004 (discussed further below) and a pattern of late or after the fact acknowledgement of the existence of previously undeclared parts of Iran's nuclear program, had tended to increase the IAEA's concerns rather than dispel them. 776 Based on these considerations, and in light of the IAEA's overall knowledge of Iran's nuclear program (including information provided to the IAEA by other member states), the IAEA then set forth in the Annex its analysis of

⁷⁷³ GOV/2011/65, *supra* note 746, at para. 39.

⁷⁷⁴ *Id.* at paras. 5, 40, and Annex.

⁷⁷⁵ *Id.* at Annex, paras. 10, 15.

⁷⁷⁶ *Id.* at Annex, para. 15.

twelve specific "nuclear explosive development indicators" which had led the IAEA to believe that Iran could be on an acquisition path involving highly enriched uranium (HEU) pertinent to the development of an HEU nuclear implosion device.⁷⁷⁷

According to the IAEA, the first nuclear explosive development indicator was information that sometime after the commencement by Iran in the late 1980s of covert nuclear procurement activities, Iran established organizational structures and administrative arrangements for un undeclared nuclear program, which was managed through the Physics Research Center (PHRC) at Lavisan-Shian, Iran, and which was overseen by an organization within Iran's Ministry of Defense (Iran claimed that the PHRC site at Lavisan-Shian was focused only on preparedness for treatment of casualties from nuclear accidents and attacks, but in late 2003/early 2004 Iran completely cleared the site, thereby preventing any IAEA inspection or verification efforts). ⁷⁷⁸ Information provided to the IAEA by member states indicated that the PHRC activities involved studies in three technical areas: the so-called "green salt project", whose purpose was to provide a source of uranium suitable for use in an undeclared nuclear program, the product of which would be converted into metal for use in a nuclear warhead; high explosives (including the development of exploding bridgewire detonators); and reengineering of the payload chamber of Iran's Shahab-3 missile re-entry vehicle to accommodate the new warhead. 779 The IAEA's information also indicated that Iran abruptly halted these activities in 2003, but that some of the activities were resumed later,

⁷⁷⁷ GOV/2011/65, *supra* note 746, at Annex, paras. 15-16.

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⁷⁷⁸ *Id.* at Annex, paras. 18-24.

⁷⁷⁹ Id

and could be highly relevant to a nuclear weapons program. The IAEA's second nuclear explosive development indicator was information regarding instances, throughout the entire timeline, of procurement and attempted procurement by individuals associated with Iran's undeclared nuclear program of equipment, materials and services which, although having other civilian applications, would be useful in the development of a nuclear explosive device. Among such equipment, materials and services were: high speed electronic switches and spark gaps (useful for triggering and firing detonators); high speed cameras (useful in experimental diagnostics); neutron sources (useful for calibrating neutron measuring equipment); radiation detection and measuring equipment (useful in a nuclear material production environment); and training courses on topics relevant to nuclear explosives development (such as neutron cross section calculations and shock wave interactions/hydrodynamics).

The third nuclear explosive development indicator noted by the IAEA was information regarding Iran's acquisition of nuclear materials, including documentation suggesting that Iran was working on a project to secure a source of uranium suitable for use in an undisclosed enrichment program, and information that Iran had made progress with experimentation aimed at the recovery of uranium from fluoride compounds. The IAEA also noted that, although now declared and under IAEA safeguards, a number of facilities dedicated to uranium enrichment (the Fuel Enrichment Plant and Pilot Fuel Enrichment Plant at Natanz and the Fordow Fuel Enrichment Plant near Oom) were

⁷⁸⁰ GOV/2011/65, supra note 746, at Annex, paras. 18-24.

⁷⁸¹ *Id.* at Annex, paras. 25-26.

⁷⁸² Id

⁷⁸³ *Id.* at Annex, paras. 27-30.

covertly built by Iran and only declared once the IAEA was made aware of their existence by sources other than Iran, which, taken together with Iran's past efforts to conceal activities involving nuclear material, increased the IAEA's concern about the possible existence of additional undeclared nuclear facilities and material in Iran. ⁷⁸⁴ The fourth nuclear explosive development indicator noted by the IAEA was information that Iran had received nuclear explosive design information from a clandestine nuclear supply network, which may have included details on the design and construction of, and the manufacture of components for, a nuclear explosive device, and that Iran had also carried out preparatory work (not involving nuclear material) for the fabrication of natural and highly enriched uranium metal components for a nuclear explosive device. 785 A fifth nuclear explosive development indicator, according to the IAEA, was documentation that from 2002 to 2003, Iran had developed fast functioning detonators, known as "exploding bridgewire detonators" and had also developed or acquired suitable high voltage firing equipment for firing the detonators. ⁷⁸⁶ The IAEA noted that the development of safe, fast-acting detonators, and equipment suitable for firing the detonators, is an integral part of a program to develop an implosion-type nuclear device, and that, given the limited civilian and conventional military applications for such technology, Iran's development of such detonators and equipment was a matter of concern. 787

The IAEA's sixth nuclear explosive development indicator was information provided by a member state that Iran had access to information on the design concept of a

⁷⁸⁴ GOV/2011/65, *supra* note 746, at Annex, para. 30.

⁷⁸⁵ *Id.* at Annex, paras. 31-37.

⁷⁸⁶ *Id*. at Annex, paras. 38-40.

⁷⁸⁷ Id

multipoint initiation system that can be used to initiate effectively and simultaneously a high explosive charge over its surface, and that Iran used this multipoint initiation concept in at least one large scale experiment in 2003 to initiate a high explosive charge in the form of a hemispherical shell. The IAEA noted that detonators provide point source initiation of explosives, and that in an implosion-type nuclear explosive device, an additional component known as a multipoint initiation system can be used to reshape the detonation wave into a converging smooth implosion to ensure uniform compression of the core fissile material to supercritical density. Additionally, the IAEA had strong indications that Iran's development of the multipoint initiation system, and its development of the high speed diagnostic configuration used to monitor related experiments, were assisted by a foreign expert who worked for much of his career with this technology in the nuclear weapon program of his country of origin, and that Iran had, after 2003, engaged in experimental research with a scaled down version of the multipoint initiation system.

A seventh nuclear explosive development indicator was information provided to the IAEA by member states that in 2000, Iran constructed a large explosives containment vessel (or chamber) at its Parchin military complex in which to conduct hydrodynamic experiments. The IAEA noted that one necessary step in a nuclear weapon development program is determining whether a theoretical design of an implosion-type device will work in practice, and to that end, high explosives tests known as

⁷⁸⁸ GOV/2011/65, *supra* note 746, at Annex, paras. 41-46.

⁷⁸⁹ *Id.* Supercritical density is one at which fissionable material is able to sustain a chain reaction in such a manner that the rate of reaction increases. GOV/2011/65, *supra* note 746, at Annex, para. 41 n. 39.

⁷⁹⁰ GOV/2011/65, *supra* note 746, at Annex, paras. 44-45.

⁷⁹¹ *Id.* at Annex, paras. 47-51.

"hydrodynamic experiments" are conducted in which fissile and nuclear components may be replaced with surrogate materials. The IAEA's information indicated that Iran had manufactured simulated nuclear explosive components using high density materials such as tungsten, and that the large explosives containment vessel at Parchin was designed to contain the detonation of up to 70 kilograms of high explosives, which would be suitable for carrying out these types of hydrodynamic experiments. The IAEA stated that such hydrodynamics experiments, which involve high explosives in conjunction with nuclear material or nuclear material surrogates, are "strong indicators of possible weapon development", and further stated that the use of surrogate material and/or the confinement of an explosives containment vessel like the one at Parchin, could be used to prevent contamination of the site with nuclear material.

The IAEA's eighth nuclear explosive development indicator was information provided by member states that in 2008 and 2009, Iran conducted studies involving the modeling of spherical geometries, consisting of components of the core of a highly enriched uranium (HEU) nuclear device subjected to shock compression, for their neutronic behavior at high density and a determination of their subsequent nuclear explosive yield. The IAEA stated that it had information regarding the models used in those studies and the results of their calculations, and that it was unaware of any other application for such studies other than a nuclear explosive device. In addition, the IAEA obtained information from member states that Iranian officials had previously

⁷⁹² GOV/2011/65, *supra* note 746, at Annex, paras. 47-51.

⁷⁹³ Id

⁷⁹⁴ Id

⁷⁹⁵ *Id.* at Annex, paras. 52-54.

⁷⁹⁶ Id

requested assistance (in one case from an institute in a nuclear weapon state) on calculations relevant to the development of a nuclear explosive device, such as neutron cross section calculations and complex calculations related to the state of criticality of a solid sphere of uranium being compressed by high explosives.⁷⁹⁷

A ninth nuclear explosive development indicator was information provided to the IAEA by member states that Iran had undertaken the manufacture of small capsules suitable for use as containers of a component containing nuclear material, and that Iran may have experimented with such components in order to assess their performance in generating neutrons. ⁷⁹⁸ The IAEA noted that such components, if placed in the center of a nuclear core of an implosion-type nuclear device and compressed, could produce a burst of neutrons suitable for initiating a chain reaction; that the location where Iran's neutron initiation experiments were conducted was said to have been cleaned of contamination after the experiments had taken place; that the design of the capsules and the material associated with them are consistent with the device design information which the clandestine nuclear supply network allegedly provided to Iran; and that information provided by a member state indicated that Iran had in 2006 embarked on a four year program to further validate the design of this neutron source, including through the use of a non-nuclear material to avoid contamination. ⁷⁹⁹ The tenth nuclear explosive development indicator, according to the IAEA, was information provided by a member state that Iran may have planned and undertaken preparatory experimentation which

⁷⁹⁷ GOV/2011/65, *supra* note 746, at Annex, paras. 52-54.

⁷⁹⁸ *Id.* at Annex, paras. 55-57.

⁷⁹⁹ Id

would be useful were Iran to carry out a test of a nuclear explosive device. ⁸⁰⁰ In particular, the IAEA noted that it had information that Iran had conducted a number of practical tests to see whether its exploding bridgewire detonators and firing equipment would function satisfactorily over long distances between a firing point and a test device located down a deep shaft, and that it had documentation in Farsi, provided by a member state, which relates directly to the logistics and safety arrangements that would be necessary for conducting a nuclear test. ⁸⁰¹

The eleventh nuclear explosive development indicator noted by the IAEA was documentation that during the period 2002 to 2003, Iran conducted a structured and comprehensive program of engineering studies, known as Project 111, to examine how to integrate a new spherical payload into the existing payload chamber which would be mounted into the re-entry vehicle of Iran's Shahab-3 ballistic missile. Ro2 According to the documentation, which was provided to the IAEA by a member state, Iran conducted computer modeling studies of at least 14 progressive design iterations of the payload chamber and its contents to examine how they would stand up to the various stresses that would be encountered on being launched and travelling on a ballistic trajectory to a target, and that during these studies, prototype components were allegedly manufactured at workshops known to exist in Iran but which Iran refused to allow the IAEA to visit. Ro3 The documentation also indicated that Iran considered subjecting the prototype payload and its chamber to engineering stress tests to see how well they would stand up in

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⁸⁰⁰ GOV/2011/65, *supra* note 746, at Annex, para. 58.

⁸⁰¹ Id

⁸⁰² *Id*. at Annex, paras. 59-63.

⁸⁰³ Id

practice to simulated launch and flight stresses (so-called "environmental testing"), which would have complemented the computer modeling studies described above, and the IAEA assessed these Project 111 activities as being highly relevant to a nuclear weapons program. 804

The IAEA's twelfth and final nuclear explosive development indicator was documentation, provided to the IAEA by member states, which indicated that, as part of the engineering studies carried out by Iran under Project 111 to integrate the new payload into the re-entry vehicle of Iran's Shahab-3 ballistic missile, additional work was conducted on the development of a prototype firing system that would enable the payload to explode "both in the air above a target, or upon impact of the re-entry vehicle with the ground." The IAEA, in conjunction with experts from member states other than those that had provided the information in question, carried out an assessment of the possible nature of this new payload, and concluded that "any payload option other than nuclear which could also be expected to have an airburst option (such as chemical weapons) could be ruled out."

On November 16, 2012 the IAEA again updated the Security Council on Iran's implementation of both its comprehensive safeguards agreement with the IAEA and relevant provisions of the Security Council resolutions governing Iran's nuclear

⁸⁰⁴ GOV/2011/65, *supra* note 746, at Annex, paras. 62-63.

⁸⁰⁵ *Id.* at Annex, paras. 64-65.

⁸⁰⁶ Id

activities. 807 The IAEA noted that since its November 2011 report, the IAEA had made intensive efforts to seek to resolve all of the outstanding issues related to possible military dimensions of Iran's nuclear program by encouraging Iran, through several rounds of talks, to conclude and implement a structured approach to clarifying and resolving those issues, but that no concrete progress had been achieved. 808 In particular, Iran had not agreed on a structured approach to resolving outstanding issues related to possible military dimensions to its nuclear program, nor had Iran agreed to the IAEA's request for access to the Parchin site, where the IAEA believes Iran may have constructed a large explosives containment vessel in which to conduct hydrodynamic experiments.⁸⁰⁹ Indeed, the IAEA reported that since it had notified Iran in January 2012 of its specific concern regarding the large explosives containment vessel at Parchin, satellite imagery indicated that Iran had conducted extensive activities and made significant changes at that location, including shrouding of the containment vessel building and another building; razing and removal of five other buildings or structures and the site perimeter fence; run-off of large amounts of liquid from the containment building over a prolonged period; and initial scraping and removal of considerable quantities of earth at the location and its surrounding area, covering over 25 hectares, followed by further removal of earth to a greater depth at the location and the depositing of new earth in its place. 810 The IAEA noted that due to these extensive activities undertaken by Iran at the Parchin site, if and

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⁸⁰⁷ IAEA, Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran, IAEA Doc. GOV/2012/55 (November 16, 2012) [hereinafter GOV/2012/55].

⁸⁰⁸ GOV/2012/55, *supra* note 807, at paras. 4-6, 42.

⁸⁰⁹ *Id*. at paras. 4, 42-43.

⁸¹⁰ GOV/2012/55, supra note 807, at para. 44.

when the IAEA gains access to the location its ability to conduct effective verification will have been seriously compromised.⁸¹¹

On February 21, 2013 the IAEA submitted a further update to the Security Council on Iran's implementation of both its comprehensive safeguards agreement with the IAEA and relevant provisions of the Security Council resolutions governing Iran's nuclear activities.⁸¹² The IAEA noted that despite three further rounds of talks held since its November 2012 report, no agreement had been reached with Iran on implementing a structured approach for resolving outstanding issues related to a possible military dimension to Iran's nuclear program, which prevented any substantive work on resolving those issues. 813 The IAEA also noted that since its November 2012 report, Iran had conducted further clean-up work at the Parchin site, including re-installing some of the explosives containment vessel building's features; alternations to the roofs of the containment vessel building and the other large building; and spreading, leveling and compacting of another layer of material over a large area, which will seriously undermine the IAEA's ability to conduct effective verification if and when Iran allows the IAEA access (as repeatedly requested) to the site. 814 Finally, the IAEA re-affirmed yet again that Iran had not suspended its uranium enrichment-related activities in the declared nuclear facilities at Natanz (enrichment up to 20% U-235) and Fordow (enrichment up to 20% U-235), and that Iran had recently started installation of more advanced centrifuges for the first time at the Natanz Fuel Enrichment Plant; that Iran had not suspended

⁸¹¹ GOV/2012/55, *supra* note 807, at para. 45.

⁸¹² GOV/2013/6, *supra* note 5.

⁸¹³ *Id.* at paras. 5-6.

⁸¹⁴ *Id.* at paras. 50-54.

reactor (IR-40 Reactor) and operation of the Heavy Water Production Plant (HWPP) at the declared heavy water facilities at Arak; that Iran had stated that the IR-40 heavy water reactor at Arak was expected to be operational in the first quarter of 2014, and that despite previous IAEA requests, Iran had not allowed the IAEA access to the HWPP at Arak and had never allowed the IAEA to take samples of the heavy water stored at the Arak Uranium Conversion Facility; and that because Iran was still not implementing the signed (but never ratified) Additional Protocol to its comprehensive safeguards agreement, the IAEA was not in a position to provide credible assurance of the absence of undeclared nuclear material and activities in Iran or to conclude that all nuclear material in Iran was being used for peaceful purposes.

4. Iran's Development and Operation of Ballistic Missiles Capable of Delivering Nuclear Weapons

In addition to the IAEA's concerns that Iran had actively pursued two of the three main components of a nuclear weapon- fissile material (either highly enriched uranium (HEU) or plutonium) and a device, usually referred to as a "weapon", which is designed to force the fissile material into a supercritical mass- the U.S. intelligence community assessed that Iran had also pursued the third and final component of a nuclear weapon: a

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⁸¹⁵ GOV/2013/6, *supra* note 5, at paras. 8, 11-28, 32-46, 58, 62-63.

capable delivery mechanism. ⁸¹⁶ Specifically, in March 2013, U.S. Director of National Intelligence James Clapper stated that Iran had developed and operated ballistic missiles capable of delivering weapons of mass destruction, and that Iran would likely choose a ballistic missile as its preferred method of delivering a nuclear weapon if such a weapon was ever fielded. ⁸¹⁷ Accordingly, a critical aspect of the potential existential threat posed to Israel by Iran's nuclear program is the fact that Iran has developed and operated medium-range surface-to-surface ballistic missiles, particularly the Shahab-3/3M, which are capable of reaching Israel with a nuclear payload and which Iran has placed under the command of the hard-line IRGC. ⁸¹⁸

In the early 1990s, Iran began a technological partnership with North Korea in order to develop longer range and more capable ballistic missiles that could potentially be used to carry nuclear weapons and to threaten targets outside the region in Israel and Europe. ⁸¹⁹ In particular, Iran acquired the designs for the North Korean No-Dong medium-range ballistic missile in order to manufacture its own version of the missile, the Shahab-3, and began testing early versions of the Shahab-3 in 1997 and 1998. ⁸²⁰ While the Shahab-3 may have been based on North Korean designs and technology, it was developed and produced in Iran and evolved steadily over time to satisfy Iran's strategic

⁸¹⁶ BPC Report, *supra* note 574, at 24; *Worldwide Threat Assessment of the U.S. Intelligence Community, Hearing Before the S. Sel. Comm. On Intelligence, 7 (Mar. 12, 2013) (Statement of James R. Clapper, Director of National Intelligence),*

http://www.dni.gov/files/documents/Intelligence%20Reports/2013%20ATA%20SFR%20for%20SSCI%2012%20Mar%202013.pdf (Accessed Aug. 28, 2019) [hereinafter DNI 2013 Testimony].

⁸¹⁷ DNI 2013 Testimony, supra note 816, at 7.

⁸¹⁸ CORDESMAN & SEITZ, supra note 10, at 97; BPC Report, supra note 574, at 24.

⁸¹⁹ CORDESMAN & SEITZ, supra note 10, at 109.

⁸²⁰ CORDESMAN & SEITZ, *supra* note 10, at 109; Robert Einhorn & Vann H. Van Diepen, *Constraining Iran's Missile Capabilities*, BROOKINGS INST. (Mar. 2019) at 10, https://www.brookings.edu/wp-content/uploads/2019/03/FP 20190321 Missile Program WEB.pdf (Accessed Jun. 24, 2019).

requirements.⁸²¹ Iranian indigenous improvements to the Shahab-3 included increasing the Shahab-3's accuracy, lethality, and range (both to strike targets at greater distances and to enable Iran to strike Israel from more secure positions within the Iranian interior).⁸²² Iran's Shahab-3 and other ballistic missile development efforts are controlled and executed by the IRGC.⁸²³

The Shahab-3 is a single-stage, liquid propellant ballistic missile capable of ranges from 1300 kilometers up to 2000 kilometers (see Appendix B) depending on warhead mass. Host analysts speculate that its nominal payload is between 760 kilograms and 1100 kilograms, with the lighter warhead associated with the longer range variant. Although the Shahab-3 is believed to be armed with a unitary, high explosive warhead, the Shahab-3 has the payload capacity (approximately 1 ton) and the airframe diameter (greater than 1.2m) to carry a nuclear warhead. According to Anthony Cordesman and Adam Seitz of the U.S. Center for Strategic and International Studies, it seems clear that the Shahab-3 missile ... could carry a well-designed nuclear weapon in a well-designed warhead to ranges well over 1000km, and Iran may have access to such warhead designs. Indeed, the U.S. and the IAEA have information suggesting that the A.Q. Khan clandestine nuclear supply network sold Iran the designs, or key elements of the designs, of a Chinese nuclear warhead with a mass of as little as 500 kilograms and a

⁸²¹ CORDESMAN & SEITZ, supra note 10, at 109; IISS, supra note 726, at 98.

⁸²² Einhorn & Van Diepen, supra note 820, at 10.

⁸²³ CORDESMAN & SEITZ, supra note 10, at 109.

⁸²⁴ IISS, supra note 726, at 98; Einhorn & Van Diepen, supra note 820, at 9-10.

⁸²⁵ Id

⁸²⁶ IISS, *supra* note 726, at 99.

⁸²⁷ CORDESMAN & SEITZ, supra note 10, at 116.

one-meter diameter, which could be delivered on a Shahab-3 ballistic missile. 828 Additionally, the IAEA has credible evidence that Iran at least studied how to develop a nuclear warhead for the Shahab-3 in the early 2000s. 829 Although public information on the total number of deployed Shahab-3 missiles varies widely, a conservative 2005 estimate indicated that Iran had deployed a single Shahab-3 battalion consisting of six launchers and 24 missiles in the field, with additional missiles in reserve, while other sources claimed that Iran had deployed two Shahab-3 battalions, which would mean roughly twelve launchers and 48 deployed missiles. 830

In August 2004 and again in October 2004, Iran successfully test-launched a modified version of the Shahab-3 ballistic missile, which is now known as the Shahab-3M. 831 The Shahab-3M ballistic missile has a smaller-in-diameter warhead (the so-called "baby bottle design"), and it appears that the missile's instrumentation packageincluding the navigation, guidance and control equipment- may be designed to remain with the warhead after separation from the main missile body. 832 This raises the possibility that the Shahab-3M's safety, arming and fusing system may be more sophisticated than that seen in its predecessor (the Shahab-3), and if so, the Shahab-3M may be intended to perform several new missions, including airburst detonations at a specified altitude. 833 This is a key capability, because in the event that a Shahab-3M ballistic missile is used to carry a nuclear warhead, a sophisticated safety-arming and

⁸²⁸ CORDESMAN & SEITZ, supra note 10, at 116.

⁸²⁹ See notes 802-806 supra and accompanying text; Einhorn & Van Diepen, supra note 820, at 3, 18. 830 IISS, *supra* note 726, at 100.

⁸³¹ *Id.* at 101.

⁸³² *Id*.

⁸³³ Id.

fusing system- one capable of initiating before the warhead impacts the ground- would be needed to maximize the effects of such a weapon. 834 Following Iran's October 2004 test launch of a Shahab-3M missile, then-U.S. Secretary of State Colin Powell specifically suggested that Iran was modifying the Shahab-3 to carry a nuclear warhead. 835

Today Iran has the largest ballistic missile force in the Middle East, with more than 10 different short and medium-range ballistic missile systems either in its inventory or in development, and a stockpile of hundreds of missiles that threaten neighboring states in the region, including Israel. See Iran has continued to develop, test, and field a variety of solid and liquid propellant medium-range ballistic missile systems that are capable of reaching Israel, including the Shahab-3/3M, Ghadr-1, Emad, Sejil (or Ashura), and Khorramshahr, all of which have a range of 2000 kilometers. In accordance with the standards set forth in the 35-nation Missile Technology Control Regime (MTCR), all of these Iranian medium-range ballistic missiles are capable of delivering a payload of at least 500 kilograms to a range of 300 kilometers, which means that they are designated as Category I missile systems and are internationally regarded as being inherently capable of delivering nuclear weapons. See Such missiles are physically capable of delivering a payload with a weight representative of a first-generation nuclear warhead (500 kilograms) to a range of regional strategic significance (300 kilometers), irrespective of

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⁸³⁴ IISS, *supra* note 726, at 101-102.

⁸³⁵ Id. at 102; CORDESMAN & SEITZ, supra note 10, at 115.

⁸³⁶ OUTLAW REGIME, *supra* note 627, at 19.

⁸³⁷ OUTLAW REGIME, *supra* note 627, at 19-20; Einhorn & Van Diepen, *supra* note 820, at 9-12; Farhad Rezaei, *Iran's Ballistic Missile Program: New Developments*, BEGIN-SADAT CTR. STRAT. STUD. PERSPECTIVES PAPER No. 1, 110 (Mar. 12, 2019), https://besacenter.org/perspectives-papers/irans-ballistic-missile-program/ (Accessed Jun. 4, 2019).

⁸³⁸ Einhorn & Van Diepen, supra note 820, at 18.

whether they were designed, intended, or tested to do so⁸³⁹, and as noted above, Iran is believed to have previously acquired the designs of a nuclear warhead and to have studied how to develop a nuclear warhead for the Shahab-3 ballistic missile.⁸⁴⁰

Accordingly, in the event that Iran makes a final decision to acquire a nuclear weapons capability, its ballistic missile force provides a readily adaptable capability for delivering such weapons to their intended targets, including the ability to reach Israel. In view of this, it is reasonable for Israel to conclude that Iran most likely already has the third and final component of a nuclear weapons capability- a capable delivery mechanism- as Israel continues to monitor very closely Iran's efforts to acquire fissile material and nuclear weaponization capabilities.

5. Analysis of the Evidence as of March 2013

Although Iran has consistently denied that its nuclear activities are intended for anything other than peaceful purposes, by March 2013 the cumulative weight of evidence had grown so large that it was difficult *not* to believe that Iran was ". . . seeking to develop, manufacture, and deploy nuclear weapons and nuclear-armed missiles." In view of the evidence, it was reasonable for Israel and the entire international community to conclude that Iran had actively pursued and was continuing to pursue two of the three main components of a nuclear weapon: 1) the accumulation of fissile material, either highly enriched uranium (HEU) or plutonium, and 2) a device, usually referred to as the "weapon", which is designed to force the fissile material into a supercritical mass.

⁸³⁹ Einhorn & Van Diepen, supra note 820, at 18.

⁸⁴⁰ Notes 802-806 & 827-829 *supra* and accompanying text.

⁸⁴¹ CORDESMAN & SEITZ, *supra* note 10, at 3.

thereby unleashing a nuclear chain reaction, most commonly done using spherically arranged high explosives.⁸⁴² It was also reasonable, as discussed above, to conclude that Iran had already acquired the third and final component of a nuclear weapon: a delivery capability via Iran's Shahab-3/3M ballistic missiles.⁸⁴³

Regarding Iran's acquisition of fissile material, the evidence as of March 2013 showed that from the time of the Shah, Iran had sought the capability to enrich and reprocess uranium for the purpose of producing weapons-grade nuclear material⁸⁴⁴; that Iran's undeclared nuclear activities were revived in the 1990s, and included the undisclosed acquisition of nuclear materials such as 1.8 tons of uranium ore from China⁸⁴⁵; that Iran received critical enrichment centrifuge design information and components from the same A.Q. Khan clandestine nuclear supply network that had previously enabled Pakistan to produce weapons grade uranium⁸⁴⁶; that Iran had intentionally and repeatedly constructed and operated undeclared nuclear facilities, including the underground fuel enrichment plant at Natanz, the heavy water production facility at Arak, a new nuclear reactor at Darkhovin, and the underground fuel enrichment facility at a military location at Fordow, near Qom, thereby enabling Iran to conduct undeclared nuclear enrichment and reprocessing activities and demonstrating a pattern of late or after the fact acknowledgement of such facilities when the IAEA learned of their existence from independent sources⁸⁴⁷; that Iran had intentionally failed, for over six

⁸⁴² BPC Report, supra note 574, at 24.

⁸⁴³ Notes 816-840 *supra* and accompanying text.

⁸⁴⁴ Notes 727-729, *supra* and accompanying text.

⁸⁴⁵ Notes 740-744, *supra* and accompanying text

⁸⁴⁶ Notes 744 & 752 *supra* and accompanying text.

⁸⁴⁷ Notes 745-746, 748, 769, & 775-776 *supra* and accompanying text.

years, to suspend all uranium enrichment-related and reprocessing activities, including research and development, and all heavy water-related projects at its declared nuclear facilities in direct violation of mandatory UN Security Council Resolutions 1737, 1747, and 1929⁸⁴⁸; that Iran was enriching uranium up to 20% U-235 at several of its declared nuclear facilities, without notifying the IAEA in sufficient time to allow the IAEA to adjust existing safeguards, and had begun installing more advanced centrifuges at Natanz to increase its enrichment capability, which is significant because enriching uranium to 20% U-235 consumes about four-fifths of the time needed to produce weapons-grade uranium should a decision be made to do so⁸⁴⁹; that Iran had not allowed the IAEA access to the Heavy Water Production Plant (HWPP) at Arak since August 2011, and had never allowed the IAEA to take samples of the heavy water at Arak, which is significant because heavy water production plants can be used to produce weapons-grade plutonium⁸⁵⁰; and that because Iran had failed to implement the Additional Protocol to its comprehensive safeguards agreement, the IAEA could not provide credible assurance of the absence of undeclared nuclear materials or activities in Iran or conclude that all nuclear material in Iran was being used for peaceful purposes.⁸⁵¹ In view of this accumulated evidence of Iran's efforts to acquire fissile material, I believe that former U.S. State Department spokesperson Victoria Nuland was correct when she stated:

"The Iranian nuclear program offers no plausible reason for its existing enrichment of uranium up to nearly 20 percent, nor ramping up this production,

⁸⁴⁸ Notes 759-767 *supra* and accompanying text.

Notes 765-766 & 815 supra and accompanying text; BPC Report, supra note 574, at 28.

⁸⁵⁰ Note 815 supra and accompanying text; CORDESMAN & SEITZ, supra note 10, at 229.

⁸⁵¹ Note 815. *supra* and accompanying text.

nor moving centrifuges underground. And its failure to comply with its obligations to suspend its enrichment activities . . . [has] given all of us in the international community reason to doubt its intentions."⁸⁵²

Regarding Iran's acquisition of a "weapon" designed to force fissile material into a supercritical mass, the evidence as of March 2013 showed that during the 1990s, Iran acquired documents describing the process for conversion of uranium fluoride compounds into uranium metal and for the production of hemispherical enriched uranium components from the same A.Q. Khan clandestine nuclear supply network that had previously enabled Pakistan to develop nuclear weapons⁸⁵³; that Iran had used entities and individuals with links to its Ministry of Defense, including the IRGC, in its proliferation sensitive nuclear activities and in the development of nuclear weapon delivery systems⁸⁵⁴; that Iran conducted its undeclared nuclear activities under a structured program, which included engineering studies (the "green salt project") involving uranium enrichment, high explosives testing, and re-engineering of Iran's Shahab-3 missile re-entry vehicle to accommodate a nuclear warhead 855; and that Iran procured and attempted to procure equipment, materials and services which would be useful in the development of a nuclear explosive device, including high speed electronic switches and spark gaps (useful for triggering and firing detonators); high speed cameras (useful in experimental diagnostics); neutron sources (useful for calibrating neutron measuring equipment); radiation detection and measuring equipment (useful in a nuclear

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⁸⁵² BPC Report, supra note 574, at 24.

⁸⁵³ Notes 744 & 752, supra and accompanying text.

⁸⁵⁴ Notes 752, 764-766, & 778, *supra* and accompanying text.

⁸⁵⁵ Notes 756, 771, 779 supra and accompanying text.

material production environment); and training courses on topics relevant to nuclear explosives development (such as neutron cross section calculations and shock wave interactions/hydrodynamics). Section as "exploding bridgewire detonators" and developed fast functioning detonators, known as "exploding bridgewire detonators" and had also developed or acquired suitable high voltage firing equipment for firing the detonators, which are an integral part of a program to develop an implosion-type nuclear device section, that Iran had access to information on the design concept of a multipoint initiation system that can be used to initiate effectively and simultaneously a high explosive charge over its surface, that Iran used this multipoint initiation concept in at least one large scale experiment in 2003 to initiate a high explosive charge in the form of a hemispherical shell, and that Iran's development of the multipoint initiation system was assisted by a foreign expert who worked for much of his career with this technology in the nuclear weapon program of his country of origin.

The evidence as of March 2013 regarding Iran's acquisition of a nuclear weaponization capability also showed that in 2000, Iran constructed a large explosives containment vessel (or chamber) at its Parchin military complex in which to conduct hydrodynamic experiments, and that such hydrodynamics experiments, which involve high explosives in conjunction with nuclear material or nuclear material surrogates, are strong indicators of possible nuclear weapons development strong in

⁸⁵⁶ Notes 781-782 *supra* and accompanying text.

⁸⁵⁷ Notes 786-787 *supra* and accompanying text.

⁸⁵⁸ Notes 788-790 supra and accompanying text.

⁸⁵⁹ Notes 791-794 supra and accompanying text.

components of the core of a highly enriched uranium (HEU) nuclear device subjected to shock compression, for their neutronic behavior at high density and a determination of their subsequent nuclear explosive yield 860; that Iran manufactured small capsules suitable for use as containers of a component containing nuclear material, that Iran may have experimented with such components in order to assess their performance in generating neutrons, and that Iran in 2006 embarked on a four year program to further validate the design of this neutron source, including through the use of a non-nuclear material to avoid contamination. 861 Finally, the evidence showed that Iran planned and undertook preparatory experimentation which would be useful to carry out a test of a nuclear explosive device, including practical tests to see whether its exploding bridgewire detonators and firing equipment would function satisfactorily over long distances between a firing point and a test device located down a deep shaft, and that Iran had documentation directly related to the logistics and safety arrangements that would be necessary for conducting a nuclear test⁸⁶²; that Iran conducted a structured and comprehensive program of engineering studies, known as Project 111, to examine how to integrate a new spherical payload into the existing payload chamber which would be mounted into the re-entry vehicle of Iran's Shahab-3 missile, conducted computer modeling studies of at least 14 progressive design iterations of the payload chamber and its contents, and considered (and may well have conducted) engineering stress tests to see how well the payload chamber and its contents would stand up in practice to simulated

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⁸⁶⁰ Notes 795-797 *supra* and accompanying text.

⁸⁶¹ Notes 798-799 *supra* and accompanying text.

Notes 800-801 *supra* and accompanying text.

launch and flight stresses (so-called "environmental testing")⁸⁶³; and that Iran conducted additional work on the development of a prototype firing system that would enable the payload to explode "both in the air above a target, or upon impact of the re-entry vehicle with the ground", which the IAEA assessed as being applicable only to a nuclear payload.⁸⁶⁴

In view of this extensive evidence, I believe that by March 2013 it was reasonable for Israel and the international community to conclude that Iran had actively pursued and was continuing to pursue the necessary scientific knowledge and components- in short, the capability- to assemble an implosion-type nuclear weapon, suitable for delivery via Iran's Shahab-3 ballistic missiles in the event that Iran's Supreme Leader made the final decision to develop a nuclear weapons capability. Additionally, the international community's concerns regarding the cumulative evidence of Iran's pursuit of a nuclear weapons capability were only increased by Iran's clean-up of suspected nuclear weapons-related sites such as Lavisan-Shian and Parchin, thereby preventing potential IAEA verification efforts, and by Iran's continued failure to implement a structured approach to answer the IAEA's questions regarding possible military dimensions to Iran's nuclear program.

In asserting that by March 2013 it was reasonable for Israel and the international community to conclude that Iran had pursued and was continuing to pursue both the acquisition of fissile material and the capability to weaponize such fissile material, I

⁸⁶³ Notes 802-804 *supra* and accompanying text.

⁸⁶⁴ Notes 805-806 *supra* and accompanying text.

⁸⁶⁵ Notes 778, 808-811, & 813-814 *supra* and accompanying text.

recognize that the cumulative evidence, albeit extensive, was circumstantial: there was no definitive evidence or "smoking gun" that Iran had made a final, irreversible decision to make or deploy nuclear weapons. 866 I also recognize that the unclassified, open source materials that form the evidentiary basis for my assertion that by 2013 it was reasonable to conclude that Iran was pursuing a nuclear weapons capability, to include the IAEA's November 2011 analysis of Iran's nuclear program, were themselves partly dependent on the collection of intelligence, since much of what Iran had done or was suspected of doing in regard to its nuclear program was most likely covert. 867 Since the end of 2003, Western intelligence agencies, especially those of Israel and the United States, have increased their efforts to gather intelligence on Iran's nuclear activities; however, that does not mean that the results are perfect. 868 Historical experience shows that it is difficult to locate nuclear activities being carried out by states that do not wish such activities to be exposed, and that Western intelligence agencies have had notable failures in detecting and/or assessing foreign nuclear activities, including the failure to identify in time the A.Q. Khan clandestine nuclear supply network, the failure to detect Libya's nuclear activities, and the exaggeration of Iraq's weapons of mass destruction capabilities prior to Operation Iraqi Freedom in 2003. 869

Despite these legitimate concerns, in my view by March 2013 the cumulative weight of the available evidence supported the U.S. intelligence community's assessment that Iran was pursuing nuclear capabilities to give it the ability to develop nuclear

⁸⁶⁶ CORDESMAN & SEITZ, supra note 10, at 264; DNI 2013 Testimony, supra note 816, at 7.

⁸⁶⁷ CORDESMAN & SEITZ, *supra* note 10, at 260.

⁸⁶⁸ MICHAEL KARPIN, THE BOMB IN THE BASEMENT: HOW ISRAEL WENT NUCLEAR AND WHAT THAT MEANS FOR THE WORLD 347 (2006).

⁸⁶⁹ KARPIN, *supra* note 868, at 347-348.

weapons should its Supreme Leader decide to do so, and that in particular, Iran had made significant progress in increasing its uranium enrichment rate, thereby better positioning Iran to produce weapons-grade highly enriched uranium (HEU) should it choose to do so. 870 Indeed, Iran's use of an increased quantity and quality of uranium enrichment centrifuges shortened the time required for Iran to produce sufficient HEU for a nuclear weapon, which is the foremost technical hurdle for any country seeking to become a nuclear power, and once Iran had produced a sufficient amount of HEU, "... policymakers, military leaders and strategic planners should assume that [Iran] has a nuclear weapons capability, even if it does not test the device."871 Most importantly, by March 2013 Israel was definitely convinced that Iran was pursuing the capability to manufacture and deploy nuclear weapons, and that the only way to prevent Iran from developing a nuclear weapons capability was for the international community to draw a "red line" on Iran's uranium enrichment program before Iran reached the point where it was only a few months or weeks away from amassing enough HEU to make a nuclear weapon.872

Faced with the enormously dangerous situation in which Iran had continued to build up its nuclear program in defiance of multiple UN Security Council resolutions that required Iran to suspend its uranium enrichment activities; to suspend its construction of a heavy water reactor and related projects; to refrain from any activity related to ballistic missiles capable of delivering nuclear weapons; and to ratify and implement the

⁸⁷⁰ DNI 2013 Testimony, *supra* note 816, at 7.

⁸⁷¹ BPC Report, *supra* note 574, at 19-29.

⁸⁷² Netanyahu 2012 Speech, supra note 11.

Additional Protocol to its comprehensive safeguards agreement with the IAEA⁸⁷³, the international community responded by implementing significant economic sanctions against Iran and by engaging in multilateral negotiations that were intended to ensure that Iran's nuclear program was solely for peaceful purposes.⁸⁷⁴ For example, shortly after the UN Security Council adopted Resolution 1929⁸⁷⁵, the U.S. enacted the Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) of 2010 that imposed both a total U.S. trade embargo on Iran and comprehensive U.S. sanctions targeting financial transactions and investments related to Iran's use of refined petroleum products, and the U.S. subsequently tightened its domestic sanctions on the Iranian energy, petrochemical, and financial sectors through additional Federal legislation in 2012 and 2013. 876 The European Union (EU) also imposed significant economic sanctions on Iran that placed restrictions on investments by European companies in Iran's energy sector and prohibited the provision of banking, financial, and insurance services to Iranian companies. 877 The significant economic sanctions imposed on Iran by the U.S. and the EU eventually contributed to an economic collapse within Iran that paved the way for multilateral negotiations⁸⁷⁸, and on November 24, 2013 an interim nuclear accord-known as the Joint Plan of Action (JPA)- was reached between the five permanent members of the UN Security Council (the U.S., UK, France, Russia, and China) plus Germany

⁸⁷³ Notes 759-767 *supra* and accompanying text.

⁸⁷⁴ Cristian DeFrancia, Enforcing the Nuclear Nonproliferation Regime: The Legality of Preventive Measures, 45 VAND. J. TRANSNAT'L. L. 705, 755 (2012); Raj Bhala, Fighting Iran With Trade Sanctions, 31 ARIZ. J. INT'L. & COMP. L. 251, 255-256, 264-266 (2014); PAUL K. KERR & KENNETH KATZMAN, CONG. RESEARCH SERV., R43333, IRAN NUCLEAR AGREEMENT AND U.S. EXIT 1-2 (Jul. 20, 2018).

⁸⁷⁵ Notes 766-767 *supra* and accompanying text.

⁸⁷⁶ DeFrancia, *supra* note 874, at 755; Bhala, *supra* note 874, at 264-266, 286-292, 314-320, 339-345.

⁸⁷⁷ DeFrancia, *supra* note 874, at 755.

⁸⁷⁸ Bhala. *supra* note 874, at 255.

(hereinafter the P5+1) and Iran to freeze most aspects of Iran's nuclear program in place, in order to allow the P5+1 and Iran additional time to negotiate a comprehensive solution that would alleviate international concerns regarding Iran's nuclear program. ⁸⁷⁹ On July 14, 2015 the P5+1, the EU, and Iran finalized this comprehensive solution, which is now known as the Joint Comprehensive Plan of Action (JCPOA) ⁸⁸⁰, and the next chapter will examine the JCPOA, including its major provisions; its principal strengths and areas of concern; Iran's compliance with the JCPOA; and the subsequent U.S. withdrawal from the JCPOA, and will conclude with a brief assessment of the JCPOA's impact on the Iranian nuclear threat to Israel.

 $^{^{879}}$ KERR & KATZMAN, supra note 874, at 1, 5-7. 880 $\emph{Id}.$ at 1, 8.

CHAPTER VII. PART 2: DIPLOMATIC EFFORTS TO REMOVE THE IRANIAN NUCLEAR THREAT: THE JOINT COMPREHENSIVE PLAN OF ACTION

After several years of intense multilateral negotiations, the P5+1, the EU, and Iran (hereinafter referred to collectively as the participants) finalized the Joint Comprehensive Plan of Action (JCPOA) on July 14, 2015 and submitted a draft resolution to the UN Security Council to endorse the JCPOA. Self The JCPOA is an unsigned, non-legally binding, written set of political commitments between the participants for "initial mutually determined limitations" on the scope of Iran's nuclear program, including its uranium enrichment activities and potential plutonium-producing activities, in exchange for permanent, comprehensive lifting of all UN Security Council sanctions as well as all multilateral and national sanctions related to Iran's nuclear program. The P5+1 and the EU envisioned that implementation of the initial agreed limits on Iran's nuclear program set forth in the JCPOA, including measures providing for transparency and verification, would "progressively allow them to gain confidence in the exclusively peaceful nature of Iran's program", and Iran envisioned that the JCPOA's initial limits on its nuclear program would be "... followed by a gradual evolution, at a reasonable pace, of Iran's

881 Joint Comprehensive Plan of Action, Jul. 14, 2015, 55 I.L.M. 98, https://2009-2017.state.gov/e/eb/tfs/spi/iran/jcpoa/index.htm (Accessed Aug. 3, 2019) [hereinafter JCPOA]; KERR &

KATZMAN, *supra* note 874, at 1, 5-8; PAUL K. KERR, CONG. RESEARCH SERV., RL34544, IRAN'S NUCLEAR PROGRAM: STATUS 9-10, 55-60 (May 10, 2019).

from any state party to the agreement.").

883 JCPOA, supra note 881, at Pref.; KERR & KATZMAN, supra note 881, at 7.

Binding Political Commitment, 9 J. NAT'L. SEC. L. & POL'Y. 589, 590 (2018) ("[T]he Iran Nuclear Deal is a true anomaly: it is the only highly significant non-proliferation agreement to be negotiated as an unsigned non-binding political commitment in modern American history . . . concluded without even a signature

peaceful nuclear program, including its enrichment activities, to a commercial program for exclusively peaceful purposes, consistent with international non-proliferation norms." The JCPOA states that Iran "reaffirms that under no circumstances will Iran ever seek, develop, or acquire any nuclear weapons."

The commitments set forth in the JCPOA came into effect for the participants on JCPOA Adoption Day, which was defined in the JCPOA as 90 days after endorsement of the JCPOA by the UN Security Council⁸⁸⁶, and on July 20, 2015 the UN Security Council adopted Resolution 2231 for this purpose, thereby placing JCPOA Adoption Day at October 18, 2015. 887 In Resolution 2231, the Security Council welcomed the diplomatic efforts by the participants to reach a comprehensive, long-term solution to the Iranian nuclear issue; "endorsed" the JCPOA and urged its full implementation on the timeline established in the JCPOA; and "called upon" all UN Member States to take such actions as may be appropriate to support the participants' implementation of the JCPOA. 888 The Security Council also requested that the IAEA conduct all necessary verification and monitoring of Iran's nuclear-related commitments for the full duration of those commitments under the JCPOA, and decided, acting under Article 41 of Chapter VII of the UN Charter: that upon verification by the IAEA that Iran had taken the initial nuclearrelated actions specified in the JCPOA as required for JCPOA Implementation Day, the provisions of all previous UN Security Council Resolutions regarding Iran's nuclear

⁸⁸⁴ JCPOA, *supra* note 881, at Pref.; KERR & KATZMAN, *supra* note 881, at 7; Blaise Misztal, *Iran Deal: Section-by-Section Analysis*, BIPARTISAN POL'Y. CTR. (Jul. 14, 2015), https://bipartisanpolicy.org/blog/irandeal-analysis/ (Accessed May 20, 2019).

⁸⁸⁵ JCPOA, supra note 881, at pref., & prmbl. para. Iii.

⁸⁸⁶ JCPOA, *supra* note 881, at para. 34(ii) & Annex V, para. 6; KERR & KATZMAN, *supra* note 874, at 8.

⁸⁸⁷ S.C. Res. 2231, U.N. Doc. S/RES/2231 (Jul. 20, 2015); KERR & KATZMAN, *supra* note 874, at 8.

⁸⁸⁸ S.C. Res. 2231, *supra* note 887, at prmbl., & paras. 1-2.

program (1696 (2006), 1737 (2006), 1747 (2007), 1803 (2008), 1835 (2008), 1929 (2010), and 2224 (2015)) would be terminated; that in the event that the Security Council was notified by a JCPOA participant of an issue the JCPOA participant believed constituted "significant non-performance of commitments under the JCPOA" by Iran, the Council would vote within 30 days of that notification on a draft resolution to continue in effect the termination of all previous UN Security Council Resolutions on Iran's nuclear program, and that if that draft resolution was not adopted, then all provisions of the previous UN Security Council Resolutions would be reinstated; and that on the date ten years after JCPOA Adoption Day (i.e., October 18, 2025), provided that the provisions of the previous UN Security Council Resolutions had not been reinstated, Resolution 2231 would be terminated and the Security Council would conclude its consideration of the Iranian nuclear issue. 889

JCPOA Implementation Day was defined in the JCPOA as the date on which, simultaneous with the IAEA reporting to the UN Security Council its verification that Iran had completed certain initial nuclear-related measures required by the JCPOA, the U.S. and the EU would cease application of specified sanctions related to Iran's nuclear program and the UN Security Council would terminate all previous Security Council Resolutions on Iran's nuclear program. Security Council Manuary 16, 2016 when the IAEA verified and confirmed to the UN Security Council that Iran had: modified its Arak heavy water research reactor to prevent it from producing

⁸⁸⁹ S.C. Res. 2231, *supra* note 887, at paras. 3, 5, 7-12.

⁸⁹⁰ JCPOA, *supra* note 881, at para. 34(iii), & Annex V, paras. 14-18; KERR & KATZMAN, *supra* note 874, at 8; Blaise Misztal, *Implementation Day Does Not Keep Polarization at Bay*, BIPARTISAN POL'Y. CTR. (Jan. 20, 2016), https://bipartisanpolicy.org/blog/implementation-day-does-not-keep-polarization-at-bay/ (Accessed May 20, 2019).

large quantities of plutonium; reduced the total number of its installed uranium enrichment centrifuges from some 19,000 (including 1000 next-generation IR-2m centrifuges) to the JCPOA-agreed 5060 IR-1 centrifuges at the Natanz Fuel Enrichment Plant; ceased any enrichment of uranium above 3.67% U-235; reduced its stockpile of 3.67% enriched uranium to no more than 300 kilograms; eliminated or transformed its stockpile of 20% enriched uranium into forms that cannot easily be reintroduced into the enrichment process; restricted its research and development of advanced centrifuge technology as required by the JCPOA; and made arrangements with the IAEA to allow the IAEA to implement all monitoring and verification measures required by the JCPOA. 891 Based on this IAEA verification, the JCPOA participants began full implementation of the JCPOA on January 16, 2016, with the U.S. and the EU terminating and/or ceasing application of all nuclear-related economic and financial sanctions and related designations that had previously been imposed on Iran, covering areas such as efforts to reduce Iran's crude oil sales; support for Iran's petroleum, petrochemical, and energy sectors; and financial transactions with Iranian banks and other financial institutions.⁸⁹² In accordance with UN Security Council Resolution 2231, all previous UN Security Council Resolutions on Iran's nuclear program were terminated on JCPOA

⁸⁹¹ KERR & KATZMAN, *supra* note 874, at 8; JCPOA, *supra* note 881, Annex V, paras. 15.1-15.11; Misztal, *supra* note 890; Int'l. Atomic Energy Agency [IAEA], *Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/INF/2016/1 (Jan. 16, 2016).*

KERR & KATZMAN, *supra* note 874, at 8; JCPOA, *supra* note 881, paras. 18-22, 24, 31, Annex II, & Annex V paras. 16-17; KERR, *supra* note 881, at 10; Samuel Estreicher & Steven Menashi, *Taking Steel Seizure Seriously: The Iran Nuclear Agreement and the Separation of Powers*, 86 FORD. L. REV. 1199, 1202-1203 (2017) (President Obama "concluded he could lift the [U.S.] sanctions based on congressionally delegated authority in the existing sanctions legislation . . .To comply with the commitments he made in the JCPOA . . . President Obama invoked these waiver provisions in tandem to cease altogether enforcing [U.S.] sanctions provisions related to Iran's nuclear program.").

Implementation Day, subject to reinstatement in the event of significant non-performance by Iran of its JCPOA commitments, leaving the NPT, Resolution 2231, and the JCPOA as the remaining legal and political framework for Iran's nuclear program.⁸⁹³

A. Major Provisions of the JCPOA

The JCPOA's major provisions- described in the JCPOA as "voluntary measures" undertaken by the participants- impose constraints on Iran's uranium enrichment activities; on its potential plutonium-producing activities such as its construction of a heavy-water nuclear research reactor at Arak; and on activities by Iran that could contribute to the development of a nuclear explosive device. ⁸⁹⁴ The JCPOA's major provisions also require IAEA verification and monitoring of Iran's nuclear-related activities in order to detect any Iranian efforts to produce nuclear weapons using either declared or undeclared facilities, and require the UN Security Council to approve the procurement by Iran of any nuclear-related or dual-use items and technologies. ⁸⁹⁵ According to U.S. officials, Iranian compliance with the JCPOA's major provisions will effectively extend the amount of time that Iran would need to produce enough weaponsgrade highly enriched uranium (HEU) for one nuclear weapon to a minimum of one year, for a period of at least 10 years. ⁸⁹⁶

⁸⁹³ KERR & KATZMAN, *supra* note 874, at 8; JCPOA, *supra* note 881, Annex V, para. 18; KERR, supra note 881, at 10; S.C. Res. 2231, *supra* note 887, at para 7(a).

⁸⁹⁴ KERR & KATZMAN, supra note 874, at 9.

⁸⁹⁵ Id.; KERR, supra note 881, at 18; Colin Kahl, Deputy Assistant to the President and National Security Adviser to the Vice President, Keynote Address at the Arms Control Association Annual Meeting (May 14, 2015), https://www.armscontrol.org/events/2015-05-14/May-14-Annual-Meeting-Unprecedented-Challenges-for-Nonproliferation-and-Disarmament#Kahl (Accessed Jun. 21, 2019).

⁸⁹⁶ KERR & KATZMAN, *supra* note 874, at 9; KERR, *supra* note 881, at 39-40; Kahl, *supra* note 895.

1. Restrictions on Iran's Uranium Enrichment Activities

The JCPOA states that for 15 years⁸⁹⁷, Iran will only enrich uranium at its Natanz Fuel Enrichment Plant (FEP) and that for 10 years Iran will use no more than 5060 firstgeneration IR-1 centrifuges to enrich uranium, from those IR-1 centrifuges that are already installed and operating at the Natanz FEP. 898 All excess centrifuges at the Natanz FEP beyond the 5060 IR-1 centrifuges authorized for uranium enrichment must be removed and stored in Hall B of the Natanz FEP under continuous IAEA monitoring. 899 The JCPOA also states that for 15 years, Iran will limit its level of uranium enrichment to no more than 3.67% U-235 and will limit its total stockpile of 3.67% low-enriched uranium (LEU) to no more than 300 kilograms. 900 Excess quantities of LEU must be down-blended to natural uranium level or sold on the international market in return for natural uranium delivered to Iran, and any uranium oxide that Iran had previously enriched to between 5% and 20% U-235 must be transferred outside of Iran, fabricated into nuclear fuel for the Tehran Research Reactor (under IAEA monitoring), or diluted to an enrichment level of 3.67% or less. 901 Iran's previous production of uranium enriched to 20% U-235 was a proliferation concern because such production requires approximately 90% of the effort necessary to produce weapons-grade HEU, which contains about 90% U-235.902

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⁸⁹⁷ The JCPOA notes that unless otherwise specified, the durations of the commitments set forth in the JCPOA are to be calculated from JCPOA Implementation Day, which as noted above occurred on January 16, 2016. JCPOA, *supra* note 881, at Annex I, para. 1; Notes 890-891 *supra* and accompanying text.

⁸⁹⁸ JCPOA, supra note 881, at paras. 2; 5; Annex I, sec. F, para. 27; & Annex I, sec. P, para. 72.

⁸⁹⁹ *Id.* at para. 2 & Annex I, sec. F, para. 29.

⁹⁰⁰ JCPOA, *supra* note 881, at paras. 5; 7; Annex I, sec. F, para. 28; & Annex I, sec. J, para. 56.

⁹⁰¹ *Id.* at para. 7 & Annex I, sec. J, paras. 57-59.

⁹⁰² KERR. *supra* note 881, at 23.

The JCPOA requires Iran to convert its separate Fordow Fuel Enrichment Plant (FFEP) into a nuclear, physics, and technology center, and states that for 15 years, Iran will not conduct any uranium enrichment or uranium enrichment research and development and will have no nuclear material at the FFEP. 903 Consistent with these requirements, the JCPOA states that for 15 years, Iran will maintain no more than 1044 first-generation IR-1 centrifuges at the FFEP, with 348 of those IR-1 centrifuges being transitioned in joint partnership with Russia for the production of stable isotopes for medical and industrial uses and the rest remaining idle. 904 Excess centrifuges and uranium enrichment infrastructure at the FFEP will be removed and stored in Hall B of the Natanz FEP under IAEA continuous monitoring.

With regard to the manufacturing by Iran of uranium enrichment centrifuges, the JCPOA states that Iran must use its already-existing stock of IR-1 centrifuges that are in excess of the 5060 IR-1 centrifuges authorized to remain installed and operating at the Natanz FEP and the 1044 IR-1 centrifuges authorized to remain installed at the FFEP to replace any failed or damaged machines, and that for 10 years, whenever Iran's total stock of excess/replacement IR-1 centrifuges falls to 500 or below, Iran may manufacture enough IR-1 centrifuges to keep its total stock of replacement machines at 500. 906 The JCPOA also states that after 10 years, Iran is authorized to begin phasing out its first-generation IR-1 centrifuges and that to accomplish this transition, Iran may commence manufacturing more advanced IR-6 and IR-8 centrifuges without rotors from year 8

⁹⁰³ JCPOA, supra note 881, at para 6 & Annex I, sec. H, paras. 44-45.

⁹⁰⁴ *Id.* at para. 6 & Annex I, sec. H, paras. 46-51.

⁹⁰⁵ Id

⁹⁰⁶ *Id*. at Annex I, sec. K, para. 62.

through year 10 at a rate of 200 centrifuges per year for each type. ⁹⁰⁷ After year 10, Iran may manufacture complete IR-6 and IR-8 centrifuges at the same rate to meet its uranium enrichment and enrichment research and development needs, in accordance with a long-term uranium enrichment and research and development plan that Iran is required to submit to the IAEA as part of its initial declaration under the Additional Protocol to Iran's comprehensive safeguards agreement. ⁹⁰⁸

The JCPOA also imposes restrictions on both Iran's uranium enrichment research and development activities and its research and development of more advanced uranium enrichment centrifuges. The JCPOA states that Iran must conduct its uranium enrichment research and development activities in a manner that does not accumulate enriched uranium, and that for 10 years, Iran will only conduct uranium enrichment research and development activities with uranium using the IR-4, IR-5, IR-6, and IR-8 centrifuges specified by the JCPOA. ⁹⁰⁹ The JCPOA specifies that for 10 years, Iran may continue testing a single IR-4 centrifuge machine; one IR-4 centrifuge cascade of up to 10 IR-4 centrifuge machines; a single IR-5 centrifuge machine; and single IR-6 and IR-8 centrifuges and their immediate centrifuge cascades, and that Iran may commence testing of up to 30 IR-6 and IR-8 centrifuge machines after 8.5 years. ⁹¹⁰ The JCPOA also states that for 10 years, Iran will recombine the enriched and depleted streams from the IR-6 and IR-8 centrifuge cascades in a manner that precludes the withdrawal of enriched

⁹⁰⁷ JCPOA, *supra* note 881, at paras. 1-2, 4, & Annex I, sec. K, para. 63.

⁹⁰⁸ Id

⁹⁰⁹ *Id.* at para. 3 & Annex I, sec. G, para. 32.

⁹¹⁰ *Id.* at Annex I, sec. G, paras. 35-38.

uranium and depleted uranium materials, subject to IAEA verification. ⁹¹¹ Additionally, the JCPOA states that for 15 years, Iran will only conduct testing of uranium enrichment centrifuges with uranium at the Natanz Pilot Fuel Enrichment Plant (PFEP) and will only conduct mechanical testing of centrifuges at the PFEP and the Tehran Research Center. ⁹¹² To adapt the Natanz PFEP for uranium enrichment research and development and centrifuge research and development activities, Iran will remove all centrifuges from the Natanz PFEP except those needed for testing, and will store all excess centrifuges in Hall B of the Natanz FEP under continuous IAEA monitoring. ⁹¹³

2. Restrictions on Iran's Potential Plutonium-Producing Activities

The JCPOA requires Iran to discontinue construction of its heavy-water nuclear research reactor at Arak based on the reactor's original design, and to remove the Arak reactor's existing reactor core (calandria) and render it inoperable such that the reactor core cannot be used for a future nuclear application. The originally designed Arak reactor was a proliferation concern because its spent fuel would have contained plutonium better suited for nuclear weapons than the plutonium produced by light-water moderated reactors. The JCPOA states that Iran will redesign and rebuild the heavy-water nuclear research reactor at Arak based on a design approved by the P5+1 so that the redesigned and rebuilt reactor will not produce weapons-grade plutonium; that the redesigned and rebuilt Arak reactor will use uranium enriched up to 3.67% U-235 as fuel,

⁹¹¹ JCPOA, *supra* note 881, at Annex I, sec. G, para. 39.

⁹¹² *Id.* at Annex I, sec. G., para. 40.

⁹¹³ Id. at Annex I, sec. G, para. 41.

⁹¹⁴ *Id.* at Annex I, sec. B, para. 3.

⁹¹⁵ KERR, *supra* note 881, at 28.

with the fuel design to be approved by the P5+1; and that the redesigned and rebuilt Arak reactor will be used to support peaceful nuclear research and isotope production for medical and industrial purposes. ⁹¹⁶ All spent nuclear fuel from the redesigned and rebuilt Arak reactor will be shipped out of Iran for the lifetime of the reactor, and the redesigned and rebuilt Arak reactor will be operated under IAEA continuous monitoring. ⁹¹⁷ The JCPOA also states that for 15 years, Iran will not construct any additional heavy-water nuclear reactors. ⁹¹⁸

With regard to Iran's retention of nuclear-grade heavy water, the JCPOA states that for 15 years Iran will not maintain a stock of nuclear-grade heavy water "beyond Iran's needs" for the redesigned and rebuilt Arak research reactor and for medical research. "Iran's "needs" for heavy water are defined in the JCPOA as no more than 130 metric tons of nuclear-grade heavy water prior to the commissioning of the redesigned and rebuilt Arak research reactor, and no more than 90 metric tons after the commissioning of that reactor. All excess heavy water will be exported out of Iran and sold on the international market, and Iran will allow the IAEA to monitor both the amount of heavy water it produces and the quantities of its heavy water stocks, including through IAEA visits to its Heavy Water Production Plant (HWPP) as requested. "21"

The JCPOA also states that for 15 years, Iran will not engage in any spent fuel reprocessing or in any reprocessing research and development activities leading to a spent

⁹¹⁶ JCPOA, *supra* note 881, at para. 8 & Annex I, sec. B, paras. 2, 4, 9.

⁹¹⁷ *Id.* at para. 8 & Annex I, sec. B, paras. 11-12.

⁹¹⁸ *Id.* at para. 10; KERR, *supra* note 881, at 2, 29.

⁹¹⁹ JCPOA, *supra* note 881, at para. 10 & Annex I, sec. C, para. 14.

⁹²⁰ Id

⁹²¹ *Id.* at para. 10 & Annex I, sec. C, paras. 14-15.

fuel reprocessing capability, except for the production of medical and industrial isotopes from irradiated enriched uranium targets. 922 Additionally, the JCPOA states that for 15 years, Iran will not develop, acquire, or build facilities capable of separation of plutonium, uranium, or neptunium from spent fuel or from fertile targets, other than for the production of isotopes for medical and industrial purposes. 923 The JCPOA further states that for 15 years, Iran will not produce, seek, or acquire any separated plutonium or highly enriched uranium (defined as uranium enriched to 20% or greater U-235) except for use as laboratory standards. 924

3. Restrictions on Activities That Could Contribute to the Development of a Nuclear Explosive Device

The JCPOA imposes restrictions on certain activities that could contribute to the development by Iran of a nuclear explosive device. The JCPOA states that for 15 years, Iran will not produce or acquire plutonium or uranium metals or their alloys, or conduct research and development on plutonium or uranium (or their alloys) metallurgy or on casting, forming, or machining plutonium or uranium metals. This JCPOA restriction is important because the production of plutonium or uranium metals is a key step in producing nuclear weapons. The JCPOA also states that Iran will not engage in the following specific activities, including any related research and development, since these activities could contribute to the development of a nuclear explosive device: using

922 JCPOA, *supra* note 881, at para. 12 & Annex I, sec. E, paras. 18-19.

⁹²³ *Id.* at para. 12 & Annex I, sec. E, para. 20.

⁹²⁴ *Id.* at Annex I, sec. E, para. 25.

⁹²⁵ *Id.* at Annex I, sec. E, para 24.

⁹²⁶ KERR, *supra* note 881, at 38.

computer models to simulate nuclear explosive devices; using multi-point explosive detonation systems, unless approved by the JCPOA-created Joint Commission (comprised of representatives of each of the JCPOA participants and tasked with monitoring JCPOA implementation)⁹²⁷ for non-nuclear purposes; using explosive diagnostic systems, unless approved by the Joint Commission for non-nuclear purposes; and using explosively driven neutron sources or specialized materials for explosively driven neutron sources.⁹²⁸

4. Transparency, Verification, and Monitoring Commitments

The JCPOA states that Iran will provisionally apply the Additional Protocol to its IAEA comprehensive safeguards agreement and will "seek" ratification and entry into force of the Additional Protocol "consistent with the roles of [Iran's] President and Parliament" starting 8 years from JCPOA Adoption Day (i.e. starting October 18, 2023). Provisional application by Iran of the Additional Protocol, which Iran stopped adhering to in 2006 when the IAEA referred the issue of Iran's nuclear program to the UN Security Council, increases the IAEA's ability to investigate undeclared nuclear facilities and activities within Iran. The JCPOA also states that Iran will fully implement the modified Code 3.1 of Iran's subsidiary arrangement to its IAEA comprehensive safeguards agreement, which requires Iran to provide the IAEA with

⁹²⁷ JCPOA, supra note 881, at Prmbl. Para. Ix & Annex IV.

⁹²⁸ *Id.* at para. 16 & Annex I, sec. T, para. 82.

⁹²⁹ *Id.* at para. 13; Annex I, sec. L, para. 64; & Annex V, sec. D, paras. 19, 22.

⁹³⁰ KERR & KATZMAN, *supra* note 874, at 3; KERR, supra *note* 881, at 6-7.

design information for any new nuclear facilities "as soon as the decision to construct, or to authorize construction of such a facility has been taken, whichever is earlier." ⁹³¹

The JCPOA also commits Iran to implement fully the *Road-Map for Clarification* of *Past and Present Outstanding Issues Regarding Iran's Nuclear Program* (hereinafter the Road-Map), a separate arrangement reached by Iran and the IAEA on July 14, 2015⁹³² which set forth a process to allow the IAEA, with Iran's cooperation, to make a final assessment of the outstanding issues of concern regarding possible military dimensions of Iran's nuclear program that were previously raised by the IAEA in its report of November 8, 2011.⁹³³ Under this Road-Map, Iran committed to provide the IAEA with written explanations and documents and to participate with the IAEA in technical-expert meetings and discussions in order to resolve the outstanding issues, and Iran committed to complete all of its required activities by October 15, 2015.⁹³⁴ On December 2, 2015, the IAEA reported that all the activities contained in the Road-Map were implemented by Iran in accordance with the agreed schedule, which allowed the IAEA to prepare a written final assessment of the outstanding issues of concern regarding possible military dimensions of Iran's nuclear program.⁹³⁵ This closed the IAEA's consideration of these

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⁹³¹ JCPOA, *supra* note 881, at para. 13 & Annex I, sec. L, para. 65; KERR & KATZMAN, *supra* note 874, at 3. ⁹³² Int'l. Atomic Energy Agency [IAEA], *Road-Map for the Clarification of Past and Present Outstanding Issues Regarding Iran's Nuclear Program*, IAEA Doc. GOV/INF/2015/14 (Jul. 14, 2015) [hereinafter Road-Map].

⁹³³ JCPOA, *supra* note 881, at para. 14 & Annex I, sec. M, para. 66; GOV/2011/65, *supra* note 746; Notes 746-806 *supra* and accompanying text.

⁹³⁴ Road-Map, supra note 932, at paras. 1-4, 6.

⁹³⁵ KERR, *supra* note 881, at 13; Int'l. Atomic Energy Agency [IAEA], *Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Program*, IAEA Doc. GOV/2015/68 (Dec. 2, 2015) at paras. 14-20 [hereinafter GOV/2015/68]. The IAEA's final assessment of the outstanding issues of concern regarding possible military dimensions of Iran's nuclear program will be discussed further in Chapter VII.B, *infra*.

outstanding issues and the IAEA is now focused exclusively on monitoring and verifying Iran's implementation of the JCPOA in light of UN Security Council Resolution 2231. 936

The JCPOA states that Iran will allow the IAEA to verify and monitor Iran's implementation of its commitments under the JCPOA. Specific IAEA transparency and monitoring measures that Iran will allow under the JCPOA include the use by the IAEA of IAEA-approved and certified modern technologies such as online enrichment measurement and electronic seals which communicate their status within nuclear sites to IAEA inspectors; the establishment of a long-term IAEA presence in Iran; and an increase in the number of designated IAEA inspectors "to the range of 130-150" within 9 months of JCPOA Adoption Day (i.e. by about July 18, 2016). The JCPOA states that Iran will "generally allow" the designation of IAEA inspectors from nations that have diplomatic relations with Iran. Specific IAEA inspectors from nations that have diplomatic relations with Iran.

The JCPOA further states that for 25 years, Iran will allow the IAEA to monitor the production of uranium ore concentrate and the inventory of uranium ore concentrate produced in Iran, and to verify that all uranium ore concentrate produced in Iran or obtained from any other source is transferred to Iran's uranium conversion facility in Esfahan. ⁹⁴⁰ Iran will also allow the IAEA to conduct continuous monitoring, for 20 years, of all uranium enrichment centrifuge rotor tubes and bellows in all existing and newly

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⁹³⁶ KERR, supra note 881, at 13; Int'l Atomic Energy Agency [IAEA], Joint Comprehensive Plan of Action Implementation and Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2015/72 (Dec. 15, 2015) at paras. 8-9, 13.

⁹³⁷ JCPOA, *supra* note 881, at para. 15 & Annex I, sec. N, para. 67.

⁹³⁸ *Id.* at para. 15 & Annex I, sec. N, paras. 67.1-67.3.

⁹³⁹ *Id.* at Annex I, sec. N, para. 67.3.

⁹⁴⁰ *Id.* at para. 15 & Annex I, sec. O, paras. 68-69.

produced centrifuges. ⁹⁴¹ Iran will declare to the IAEA all locations used for the production of centrifuge rotor tubes or bellows and will permit the IAEA to verify that all centrifuges manufactured by Iran are used only for JCPOA-authorized activities. ⁹⁴² In addition, the JCPOA states that for 15 years, Iran will allow the IAEA regular access, including daily access as requested by the IAEA, to all relevant buildings at Natanz, including all parts of the Natanz FEP and the Natanz PFEP. ⁹⁴³ For 15 years, Iran will also allow the IAEA to verify that all stored uranium enrichment centrifuges and related infrastructure remain in storage and are only used to replace failed or damaged centrifuges as required by the JCPOA. ⁹⁴⁴

Regarding IAEA requests for access to conduct verification and monitoring of undeclared sites in Iran, the JCPOA states that for 15 years, Iran will allow a "reliable mechanism to ensure speedy resolution of IAEA access concerns". 945 In describing this mechanism for IAEA access to undeclared sites, the JCPOA initially states that such IAEA requests for access will be kept to the minimum necessary to effectively implement the IAEA's verification responsibilities under the JCPOA, and that such requests for access will not be aimed at interfering with Iranian military or other national security activities but will be exclusively for resolving concerns regarding Iran's fulfillment of its JCPOA commitments and its other non-proliferation and safeguards obligations. 946 The JCPOA then states that if the IAEA has concerns regarding undeclared nuclear materials

⁹⁴¹ JCPOA, *supra* note 881, at para. 15 & Annex I, sec. R, paras. 79-80.

⁹⁴² Id

⁹⁴³ *Id*. at Annex I, sec. P, para. 71.

⁹⁴⁴ Id. at Annex I, sec. P, para. 70.

⁹⁴⁵ *Id.* at para. 15.

⁹⁴⁶ Id. at Annex I, sec. Q, para. 74.

or activities or activities inconsistent with the JCPOA at locations that have not been declared by Iran under its comprehensive safeguards agreement or the Additional Protocol, the IAEA will first provide Iran with the basis for such concerns and request clarification. 947 If Iran's clarifications do not resolve the IAEA's concerns, the IAEA may then request access to such locations to verify the absence of undeclared nuclear materials and activities or activities inconsistent with the JCPOA at those locations, and the IAEA will provide Iran the reasons for access in writing and will make available to Iran "relevant information". 948 If the IAEA and Iran are unable to reach satisfactory arrangements within 14 days of the IAEA's original request for access, the matter will be presented to the JCPOA Joint Commission, and within 7 days, by a vote of five or more of its eight members, the Joint Commission would advise on the "necessary means" to resolve the IAEA's concerns and Iran would implement the "necessary means" within an additional 3 days. 949 This means that the total time from the IAEA's initial request to Iran for access to an undeclared site until Iran is required to allow such access following a determination by the JCPOA Joint Commission is potentially as much as 24 days. 950

5. Oversight of Iran's Acquisition of Nuclear-Related and Dual-use Items and Technologies

The JCPOA states that for 10 years, Iran will acquire items and technologies for its nuclear program via a JCPOA-established "procurement channel" that was separately

⁹⁴⁷ JCPOA, *supra* note 881, at Annex I, sec. Q, para. 75.

⁹⁴⁸ *Id.* at Annex I, sec. Q, para 76.

⁹⁴⁹ Id. at Annex I, sec. Q, para 78.

⁹⁵⁰ KERR & KATZMAN, supra note 874, at 14.

endorsed by the UN Security Council in Resolution 2231. ⁹⁵¹ To implement this procurement channel, for 10 years the JCPOA Joint Commission, through its Joint Procurement Working Group, will review and make recommendations to the UN Security Council regarding any proposals by states to participate in the supply, sale, or transfer to Iran of nuclear-related and/or dual-use items, materials, equipment, goods, and technology, and any other items that could contribute to reprocessing or enrichment-related or heavy water-related activities inconsistent with the JCPOA. ⁹⁵² The JCPOA Joint Commission's Joint Procurement Working Group will also review and make recommendations to the UN Security Council regarding any proposals by states to participate in the acquisition by Iran of an interest in a foreign commercial activity involving uranium mining and/or the production or use of nuclear-related materials and technologies. ⁹⁵³

States seeking to participate in or to permit their nationals to participate in such nuclear-related acquisitions by Iran will submit proposals to the UN Security Council, which will forward them to the JCPOA Joint Commission for review, and the JCPOA Joint Commission will forward its recommendations to the Security Council within 20 working days (or within 30 working days, upon request by the Joint Commission). The JCPOA Joint Commission's review of state proposals will focus on whether the proposed acquisition activity on behalf of Iran is consistent with the JCPOA and Resolution

⁹⁵¹ JCPOA, *supra* note 881, at para. 17 & Annex IV, sec. 6, paras. 6.1-6.2; S.C. Res. 2231, *supra* note 887, at paras. 7(b), 16-20, & Annex B, para. 2.

⁹⁵² JCPOA, *supra* note 881, at Annex IV, sec. 6, paras. 6.1-6.2; S.C. Res. 2231, *supra* note 887, at paras. 7(b), 16-20, & Annex B, para. 2.

⁹⁵³ JCPOA, *supra* note 881, at Annex IV, sec. 6, para. 6.1.3.

⁹⁵⁴ S.C. Res. 2231, *supra* note 887, at paras. 17, 20 & Annex B, para.2.

2231. 955 The UN Security Council will review the JCPOA Joint Commission's recommendations regarding proposals by states to participate in or to permit their nationals to participate in nuclear-related acquisitions by Iran, and the JCPOA Joint Commission's recommendations will be deemed to be approved unless the Security Council adopts a resolution to reject a JCPOA Joint Commission recommendation within 5 working days of receiving it. 956 As of June 2019, a total of 44 state proposals had been submitted to the UN Security Council for approval via the procurement channel: 29 proposals were approved by the Security Council, 5 were not approved, 9 were withdrawn by the proposing states, and 1 remained under consideration. 957

As an additional measure of transparency regarding Iran's acquisition of nuclear and dual-use items and technology, the JCPOA states that Iran will provide the IAEA access to the locations of intended use of all nuclear-related items, materials, equipment, goods, and technology that are imported by Iran using the procurement channel procedure. The JCPOA also states that Iran will permit the exporting state to verify the end-use of all dual-use items, materials, equipment, goods, and technology that are imported by Iran using the procurement channel procedure.

⁹⁵⁵ S.C. Res. 2231, *supra* note 887, at paras. 17, 20 & Annex B, para.2.

⁹⁵⁶ *Id*. at para. 16.

⁹⁵⁷ U.N. Secretary-General, Seventh Report of the Secretary-General on the Implementation of Security Council Resolution 2231 (2015), U.N. Doc. S/2019/492 (Jun. 13, 2019) at para. 15.

⁹⁵⁸ JCPOA, *supra* note 881, at Annex IV, sec. 6, para. 6.7.

⁹⁵⁹ *Id.* at Annex IV, sec. 6, para. 6.8.

B. The JCPOA's Principal Strengths and Areas of Concern

1. The JCPOA's Three Principal Strengths

Although the JCPOA has its detractors- Israeli Prime Minister Benjamin Netanyahu has called it a "bad mistake of historic proportions" of in my view the JCPOA has at least three principal strengths. First, the JCPOA commits Iran to significant limitations on its uranium enrichment activities, including a two-thirds reduction (from about 19,000 down to 5060) in the total number of Iran's operational uranium enrichment centrifuges for 10 years; a requirement that for 10 years the remaining 5060 operational centrifuges will be limited to first-generation IR-1 machines installed at the Natanz FEP; and a 98 percent reduction, for 15 years, in Iran's total stockpile of low-enriched uranium (LEU), from about 10,000 kilograms (an amount sufficient for as many as eight nuclear weapons, if further enriched) down to no more than 300 kilograms (a fraction of the amount required for even a single nuclear weapon). 961 The JCPOA also commits Iran to limit its level of uranium enrichment to no more than 3.67% U-235 for 15 years; to dilute or transfer out of Iran any uranium that Iran previously enriched to between 5% and 20% U-235; and to convert Iran's separate Fordow FEP into a nuclear, physics, and technology center in which no uranium enrichment may occur and no nuclear material may be stored for 15 years. 962 Taken together, and assuming Iranian compliance, these JCPOA

⁹⁶⁰ Netanyahu Calls Iran Nuclear Agreement a "Bad Mistake of Historic Proportions", FOX NEWS (Jul. 14, 2015), https://www.foxnews.com/world/netanyahu-calls-iran-nuclear-agreement-a-bad-mistake-of-historic-proportions (Accessed Sept. 4, 2019).

⁹⁶¹ KERR, *supra* note 881, at 18; Kahl, *supra* note 895; Dennis Ross, Opinion, *Iran Nuclear Deal Leaves U.S. With Tough Questions*, WASH. POST (Jul. 14, 2015), https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215f593">https://www.washingtonpost.com/opinions/iran-deal-leaves-us-with-tough-questions/2015/07/14/7f76e3b0-2807-11e5-b77f-eb13a215/07/14/7f76e3b0-2807-11e5-b77f-eb13a215/07/14/7f76e3b0-280

 $^{^{962}}$ Kahl, supra note 895; Notes 900-901, 903 supra and accompanying text.

limitations on Iran's uranium enrichment activities would appear to restrict significantly Iran's ability to accumulate a large stockpile of enriched uranium, and as previously noted⁹⁶³, U.S. officials believe that the JCPOA effectively extends the amount of time that Iran would need to produce enough weapons-grade highly enriched uranium (HEU) for one nuclear weapon to a minimum of one year, for a period of at least 10 years.⁹⁶⁴

The JCPOA's second principal strength is that it commits Iran to significant limitations on its potential plutonium-producing activities. The JCPOA states that the core of Iran's existing heavy-water research reactor at Arak will be removed and rendered inoperable, and that the Arak reactor will be redesigned and rebuilt so that it will not produce weapons-grade plutonium. All spent nuclear fuel from the redesigned and rebuilt Arak reactor will be shipped out of Iran for the lifetime of the reactor, and for 15 years Iran will not construct any additional heavy-water reactors. The JCPOA also states that for 15 years, Iran will not engage in any spent fuel reprocessing activities; will not develop, build, or acquire any facilities capable of separating plutonium from spent nuclear fuel; and will not produce, seek, or acquire any separated plutonium. Once again, taken together and assuming Iranian compliance, these JCPOA limitations on Iran's potential plutonium-producing activities would appear to block Iran from producing or acquiring any weapons-grade plutonium for use as fissile material in a nuclear weapon.

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⁹⁶³ Note 896 *supra* and accompanying text.

⁹⁶⁴ Kahl, *supra* note 895; Ross, *supra* note 961.

⁹⁶⁵ *Id.*; Notes 914-916 *supra* and accompanying text.

⁹⁶⁶ Kahl, *supra* note 895; Ross, *supra* note 961; Notes 917-918 *supra* and accompanying text.

⁹⁶⁷ Kahl, *supra* note 895; Ross, *supra* note 961; Notes 922-924 *supra* and accompanying text.

The JCPOA's third principal strength is that it commits Iran to implement significant additional transparency measures regarding Iran's nuclear program, including extensive monitoring and verification by the IAEA of Iran's compliance with the JCPOA. The JCPOA states that Iran will provisionally apply the Additional Protocol to its IAEA comprehensive safeguards agreement (and will seek its formal ratification and entry into force after 8 years), thereby increasing the IAEA's ability to investigate undeclared nuclear facilities and activities within Iran, and that Iran will fully implement the modified Code 3.1 of its subsidiary arrangement to its safeguards agreement, which will require Iran to provide the IAEA with design information for any new nuclear facilities that Iran decides to construct. 968 The JCPOA also commits Iran to allow IAEA verification and monitoring at virtually every link in Iran's nuclear supply chain, including IAEA monitoring of Iran's uranium ore mines and mills for 25 years; IAEA monitoring of Iran's manufacture and assembly of uranium enrichment centrifuges for 20 years; IAEA verification of Iran's stored excess centrifuges and related infrastructure for 15 years; regular IAEA access- including daily access as requested by the IAEA- to all of Iran's uranium enrichment activities at the Natanz FEP for 15 years; and IAEA monitoring of Iran's operation of the redesigned and rebuilt Arak reactor, of Iran's Heavy Water Production Plant, and of Iran's stocks of heavy water for 15 years. 969 Additionally, for 10 years all acquisitions by Iran of nuclear-related and dual-use items and technologies must be approved in advance by the UN Security Council via a JCPOAestablished procurement channel, and Iran will provide the IAEA with access to the

⁹⁶⁸ Kahl, *supra* note 895; Ross, *supra* note 961; Notes 929-931 *supra* and accompanying text.

⁹⁶⁹ Kahl, *supra* note 895; Ross, *supra* note 961; Notes 917, 921, 940-944 *supra* and accompanying text.

locations of intended use of all nuclear-related items and technologies that are acquired by Iran through this procurement channel. Taken together, and assuming Iranian compliance, the JCPOA's extensive transparency, verification and monitoring commitments have significantly decreased the possibility that Iran could successfully conceal a covert nuclear weapons program, especially one that involves the diversion of nuclear materials from Iran's declared nuclear facilities that are now under IAEA monitoring. The procurement channel of the procurement of the p

2. The JCPOA's Four Principal Areas of Concern

Despite the JCPOA's three principal strengths, the JCPOA's critics- notably including Israeli Prime Minister Benjamin Netanyahu- have also identified at least four principal areas of concern with the JCPOA. First, while the JCPOA commits Iran to implement significant limitations on its nuclear program, many of the JCPOA's critical limitations begin to lapse in as early as 8 years, and virtually all of the JCPOA's critical limitations will lapse in 10-15 years. For example, after 8 years, Iran will be able to manufacture and store advanced IR-6 and IR-8 uranium enrichment centrifuges that are up to 17 times more efficient than the IR-1s that Iran is currently operating, and after 10 years Iran will be able to begin using these advanced centrifuges for uranium enrichment and will have no limit on the number of centrifuges spinning at its Natanz FEP. 973

Additionally, after 15 years, Iran will be able to enrich uranium to levels above 3.67% U-

⁹⁷⁰ Kahl, supra note 895; Notes 951-958 supra and accompanying text.

⁹⁷¹ Kahl, *supra* note 895; Ross, *supra* note 961; KERR, *supra* note 881, at 48.

⁹⁷² Iran Deal Timeline, BIPARTISAN POL'Y. CTR (Sept. 3, 2015), https://bipartisanpolicy.org/library/iran-deal-timeline/ (Accessed May 20, 2019) [hereinafter Iran Deal Timeline].

⁹⁷³ Iran Deal Timeline, *supra* note 972; Notes 898, 907-908, 910 *supra* and accompanying text.

235; Iran will no longer be required to limit its stockpile of low-enriched uranium to only 300 kilograms; Iran may re-start uranium enrichment activities at the separate Fordow FEP; and Iran will be able to conduct unlimited research and development on uranium enrichment and on the development of even more advanced centrifuges. Because the JCPOA thus appears to permit Iran to build as large a uranium enrichment program as Iran wants after 15 years, critics of the JCPOA assess that by year 16, Iran's breakout time (the amount of time required to produce enough highly-enriched uranium for use as fissile material in one nuclear weapon) will be reduced to just three weeks, down from one year, thereby allowing Iran to become a threshold nuclear weapon state. The JCPOA's apparent concession to Iran of the ability to construct an industrial-sized nuclear enrichment program after 15 years has led Israeli Prime Minister Netanyahu to assert that the JCPOA actually "paves Iran's path to a nuclear arsenal".
976

The second principal concern regarding the JCPOA is that it fails to address Iran's ballistic missile delivery capability and provides Iran with "up front" sanctions relief that has enabled Iran to increase its funding and support of anti-Israel terrorist organizations.

The U.S. was unable to convince its P5+1 partners to include within the JCPOA any restrictions on Iran's ballistic missile program, and although UN Security Council Resolution 1929, adopted in 2010, had "decided" under Article 41 of Chapter VII of the

⁹⁷⁴ Iran Deal Timeline, *supra* note 972; Notes 900-901, 903-905, 909-912 *supra* and accompanying text.

⁹⁷⁵ Ross, *supra* note 961; Iran Deal Timeline, *supra* note 972; Eric Edelman & Ray Takeyh, Opinion, *On Iran, Congress Should Just Say No*, WASH. POST (Jul. 17, 2015), https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/oniran-congress-should-just-say-no/2015/07/17/56e366ae-2b30-11e5-bd33-395c05608059">https://www.washingtonpost.com/opinions/opinion

⁹⁷⁶ Edelman & Takeyh, *supra* note 975; Benjamin Netanyahu, Prime Minister of Israel, Remarks at the United Nations General Assembly (Sept. 27, 2018) [hereinafter Netanyahu 2018 Speech], https://gadebate.un.org/sites/default/files/gastatements/73/il en.pdf (Accessed Sept. 5, 2019).

UN Charter that Iran "shall not undertake any activity related to ballistic missiles *capable* of delivering nuclear weapons" (emphasis added), the UN Security Council resolution that endorsed the JCPOA (Resolution 2231) simply "calls upon" Iran not to engage in any activity related to "ballistic missiles designed to be capable of delivering nuclear weapons" (emphasis added). 977 Iran has continued and even accelerated its ballistic missile program activities since the JCPOA and Resolution 2231 went into effect, and has asserted that Resolution 2231 is only a non-binding appeal and that even if it was legally binding, Resolution 2231's purported restrictions are inapplicable because Iran has never "designed" its ballistic missiles to be capable of delivering nuclear weapons. 978 In addition, by stipulating that all UN, U.S., and EU sanctions on Iran's nuclear program were to be lifted "up front" after Iran completed the initial nuclear program limitations required by the JCPOA for JCPOA Implementation Day⁹⁷⁹, the JCPOA allowed Iran, aside from being able to resume its sales of oil, to regain access to as much as \$150 billion in frozen accounts, all of which enabled Iran to increase its funding and support of Hezbollah, Hamas, PIJ, and IRGC-controlled Shiite militias in Syria. 980 Israeli Prime Minister Netanyahu has stated that by providing Iran with billions of dollars' worth of sanctions relief, the JCPOA has "fueled Iran's campaign of carnage and conquest

⁹⁷⁷ Einhorn & Van Diepen, *supra* note 820, at 21-22; S.C. Res. 2231, *supra* note 887, at para. 7(b) & Annex B, para. 3.

⁹⁷⁸ Einhorn & Van Diepen, *supra* note 820, at 22.

⁹⁷⁹ Notes 890-893 *supra* and accompanying text.

⁹⁸⁰ Ross, *supra* note 961; Netanyahu 2018 Speech, *supra* note 976; Benjamin Netanyahu, Prime Minister of Israel, Remarks at the United Nations General Assembly (Oct. 1, 2015) [hereinafter Netanyahu 2015 Speech], https://gadebate.un.org/sites/default/files/gastatements/70/IL EN.pdf (Accessed Sept. 5, 2019).

throughout the Middle East" and has made war between Iran and Israel more rather than less likely. 981

The third principal concern regarding the JCPOA is that it places too many limitations on the IAEA's ability to gain access to undeclared sites within Iran in order to verify that no undeclared nuclear materials or activities, or activities inconsistent with the JCPOA are present at those sites. As discussed above ⁹⁸², the JCPOA establishes a process for IAEA inspections of undeclared sites in which the IAEA must first provide Iran with the basis for its suspicions regarding an undeclared site and ask for clarification, and this is followed by a period of up to 24 days in which Iran, the IAEA, and the JCPOA Joint Commission may negotiate to resolve the IAEA's access request. 983 Critics have pointed out that requiring the IAEA to give Iran its evidence for wanting to inspect undeclared sites essentially places the "burden of proof" on the IAEA to convince Iran to grant them access, rather than placing the burden on Iran to show that it is not conducting unauthorized nuclear activities at the site(s) in question, and that requiring the IAEA to give Iran its evidence could also chill intelligence sharing between the IAEA and national intelligence services. 984 Critics have also pointed out that a 24-day delay for the IAEA to gain access to an undeclared site could provide Iran with ample time to dispose of any evidence of unauthorized nuclear activities, particularly small-scale activities such as

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984 Misztal, *supra* note 983.

⁹⁸¹ Netanyahu 2018 Speech, supra note 976; Netanyahu 2015 Speech, supra note 980.

⁹⁸² Notes 945-950 *supra* and accompanying text.

Blaise Misztal, *Iran Deal Limits Inspectors' Access to Suspicious Sites*, BIPARTISAN POL'Y. CTR. (Jul. 17, 2015), https://bipartisanpolicy.org/blog/delayed-inspections-jcpoa-provisions-for-iaea-access-to-suspicious-sites/ (Accessed May 20, 2019); Michael R. Gordon, *Verification Process in Iran Deal is Questioned by Some Experts*, N.Y. TIMES (Jul. 22, 2015), https://www.nytimes.com/2015/07/23/world/middleeast/provision-in-iran-accord-is-challenged-by-some-nuclear-experts.html (Accessed Sept. 5, 2019).

weaponization work at a hidden nuclear weapons research lab. 985 Additionally, critics have noted that in the event that Iran, the IAEA, and the JCPOA Joint Commission are unable to resolve the IAEA's request for access to an undeclared site within 24 days, the issue would likely then be addressed via the JCPOA's separate dispute resolution process, which would potentially provide Iran another 30 days before it would face the prospect of the issue being raised to the UN Security Council. 986 A 54-day head start would give Iran plenty of time to dispose of any evidence of unauthorized nuclear activities, to include sanitizing a site of radioactive residue that would be a tell-tale sign of the presence of unauthorized nuclear material. 987

The fourth principal concern with the JCPOA is that it does not require Iran to provide the IAEA with full and complete responses to the issues the IAEA raised in its November 8, 2011 report⁹⁸⁸ regarding possible military dimensions of Iran's nuclear program. Although as discussed above⁹⁸⁹, the JCPOA does commit Iran to fully implement the separate *Road-Map for the Clarification of Past and Present Outstanding Issues Regarding Iran's Nuclear Program* by providing the IAEA with documents and written explanations and participating with the IAEA in technical-expert meetings and discussions, critics of the JCPOA have argued that Iran can easily meet these commitments by providing at least some perfunctory answers to the IAEA and that neither the quality of Iran's answers nor the IAEA's satisfaction with them are required

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⁹⁸⁵ Misztal, supra note 983; Gordon, supra note 983.

⁹⁸⁶ JCPOA, *supra* note 881, at paras. 36-37; S.C. Res. 2231, *supra* note 887, at paras. 10-13; Misztal, *supra* note 983.

⁹⁸⁷ Misztal, *supra* note 983.

⁹⁸⁸ GOV/2011/65, *supra* note 746.

⁹⁸⁹ Notes 932-935 supra and accompanying text.

by the JCPOA. 990 Critics of the JCPOA have also argued that providing the IAEA with full and complete knowledge regarding the possible military dimensions of Iran's nuclear program is essential to assist the IAEA in guiding its verification and monitoring efforts of Iran's JCPOA compliance, and to build trust regarding Iran's intent to fulfill its JCPOA commitments, and that this is particularly important in light of Iran's past record of failing to declare the existence of nuclear sites as required by the NPT; denying the IAEA access to suspected military nuclear facilities like the one at Parchin; and ignoring previous UN Security Council resolutions that required Iran to cease enriching uranium. 991

The critics' concern regarding the JCPOA's failure to require Iran to provide the IAEA with full and complete responses regarding possible military dimensions of Iran's nuclear program appears to have been substantiated by the IAEA's December 2, 2015 *Final Assessment on Past and Present Outstanding Issues Regarding Iran's Nuclear Program* (hereinafter Final Assessment). While the IAEA's Final Assessment stated that Iran had met the JCPOA's minimum procedural requirements of providing the IAEA written explanations and documents and attending meetings related to outstanding issues with Iran's nuclear program, it appears that Iran provided the IAEA with minimum substantive cooperation in completing the Final Assessment.

 ⁹⁹⁰ Jessica Michek, *Iran Deal and Possible Military Dimensions*, BIPARTISAN POL'Y. CTR (Aug. 25, 2015), https://bipartisanpolicy.org/blog/iran-deal-and-possible-military-dimensions/ (Accessed May 20, 2019).
 ⁹⁹¹ *Id.*; KERR & KATZMAN, *supra* note 874, at 18; Blaise Misztal, *Does Iran's Past Matter?*, BIPARTISAN POL'Y. CTR. (Jun. 21, 2016), https://bipartisanpolicy.org/blog/iran-nuclear-past/ (Accessed May 20, 2019).
 ⁹⁹² GOV/2015/68, *supra* note 935; Blaise Misztal, *IAEA Report Reveals Iran Obeys Letter of Deal, Not Spirit*, BIPARTISAN POL'Y. CTR. (Dec. 4, 2015), https://bipartisanpolicy.org/blog/iaea-report-iran-deal/ (Accessed May 20, 2019).

⁹⁹³ GOV/2015/68, *supra* note 935, at paras. 15-18; Misztal, *supra* note 992.

to the outstanding issue of whether Iran constructed an explosives firing chamber at its Parchin military complex in 2000 and used it to conduct hydrodynamic experiments to monitor the compressive shock of the simulated core of a nuclear explosive device, the IAEA's Final Assessment noted that the information Iran provided to the IAEA "does not support Iran's statements on the purpose of the building", and that the extensive clean-up activities undertaken by Iran since February 2012 at the Parchin location had "seriously undermined the IAEA's ability to conduct effective verification." ⁹⁹⁴ Iran also failed to provide the IAEA with additional substantive information on several other outstanding issues, such as whether Iran in 2002-2003 planned and undertook preparatory experimentation relevant to testing a nuclear explosive device, and whether Iran had developed a prototype fuzing, arming, and firing system to enable a payload from a Shahab-3 ballistic missile to explode in the air above a target or upon impact with the ground. 995 Despite Iran's lack of substantive cooperation, the IAEA's Final Assessment determined that a range of activities relevant to the development of a nuclear explosive device were conducted in Iran prior to the end of 2003 as a coordinated effort, and that some activities took place after 2003 that were not part of a coordinated effort; that the exploding bridgewire (EBW) detonators and multipoint initiation (MPI) technology developed by Iran had characteristics relevant to a nuclear explosive device; that Iran conducted computer modeling of a nuclear explosive device prior to 2004 and between 2005 and 2009; and that the IAEA has no credible indications of activities in Iran

⁹⁹⁴ GOV/2015/68, *supra* note 935, at paras. 47-57; Misztal, *supra* note 992.

⁹⁹⁵ GOV/2015/68, *supra* note 935, at paras. 66-68, 73-75; Misztal, *supra* note 992.

relevant to the development of a nuclear explosive device after 2009. However, while the IAEA's Final Assessment certainly suggests that Iran was engaged in activities related to the development of a nuclear weapon, Iran's overall lack of substantive cooperation with the IAEA's Final Assessment prevented the IAEA from making more definitive conclusions, and JCPOA critics worried that Iran might eventually demonstrate a similar lack of substantive cooperation with its commitments under the JCPOA.

C. Iran's Compliance With Its JCPOA Commitments Through May 2019

Since JCPOA Implementation Day occurred on January 16, 2016, the IAEA has verified and monitored Iran's implementation of its nuclear-related commitments under the JCPOA. ⁹⁹⁸ In a series of reports covering the period of January 16, 2016 to May 31, 2019 the IAEA has repeatedly stated that Iran has fully complied with all of its JCPOA

⁹⁹⁶ GOV/2015/68, *supra* note 935, at paras. 22-24, 36-46, 58-62, 76-85; Misztal, *supra* note 992.

⁹⁹⁷ Misztal, *supra* note 992.

⁹⁹⁸ Int'l. Atomic Energy Agency [IAEA], Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2016/8 (Feb. 26, 2016). ⁹⁹⁹ Id.; IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2016/23 (May 27, 2016); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2016/46 (Sept. 8, 2016); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2016/55 (Nov. 9, 2016); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/INF/2016/13 (Dec. 6, 2016); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2017/10 (Feb. 24, 2017); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2017/24 (Jun. 2, 2017); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2017/35 (Aug. 31, 2017); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2017/48 (Nov. 13, 2017); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2018/7 (Feb. 22, 2018); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2018/24 (May 24, 2018); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2018/33 (Aug. 30, 2018); IAEA, Verification and Monitoring in the Islamic Republic

commitments and that Iran has not diverted nuclear material from any of its declared nuclear facilities. Since these fifteen IAEA reports are virtually identical in their assessments of Iran's compliance with its JCPOA commitments, I will now summarize the IAEA's overall reporting on Iran's compliance with the JCPOA during this period using the IAEA's quarterly report dated May 31, 2019¹⁰⁰⁰ as an exemplar.

With regard to Iran's JCPOA commitments on the enrichment of uranium, the IAEA reported that Iran only enriched uranium at the Natanz FEP and used no more than 5060 first generation IR-1 centrifuges installed at the Natanz FEP for the enrichment of uranium as required by the JCPOA. Iran did not enrich uranium above the JCPOA limit of 3.67% U-235 and Iran's total stockpile of low enriched uranium did not exceed the JCPOA limit of 300 kilograms. Iran maintained no more than 1044 IR-1 centrifuges at the separate Fordow FEP, and did not conduct any uranium enrichment there and no nuclear material was present at the plant. All centrifuges and associated enrichment infrastructure remained under continuous IAEA monitoring as required by the JCPOA, and Iran continued to grant the IAEA regular access to all relevant buildings at Natanz and Fordow, including daily access upon IAEA request. Additionally, Iran conducted uranium enrichment research and development using only the centrifuges

of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2018/47 (Nov. 12, 2018); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2019/10 (Feb. 22, 2019); IAEA, Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015), IAEA Doc. GOV/2019/21 (May 31, 2019) [hereinafter GOV/2019/21].

¹⁰⁰⁰ GOV/2019/21, supra note 999.

¹⁰⁰¹ GOV/2019/21, *supra* note 999, at paras. 10-11.

¹⁰⁰² *Id.* at paras.11-13.

¹⁰⁰³ *Id.* at para. 14.

¹⁰⁰⁴ *Id.* at para. 15.

specified in the JCPOA, and no enriched uranium was accumulated from Iran's enrichment research and development activities. ¹⁰⁰⁵

With regard to Iran's JCPOA commitments to limit its potential plutonium-producing activities, the IAEA reported that during this period Iran did not pursue the construction of the Arak heavy-water research reactor based on its original design, and Iran did not carry out any activities related to the reprocessing of spent fuel at any of its declared nuclear facilities. ¹⁰⁰⁶ In addition, Iran's total stockpile of heavy water did not exceed the JCPOA limit of 130 metric tons, and Iran continued to allow the IAEA to monitor the quantities of Iran's heavy water stocks and the amount of heavy water produced at Iran's Heavy Water Production Plant (HWPP). ¹⁰⁰⁷

Regarding Iran's JCPOA commitments for transparency, verification, and monitoring, the IAEA reported that Iran continued to provisionally apply the Additional Protocol to its IAEA comprehensive safeguards agreement and that in accordance with the Additional Protocol, the IAEA was able to access all sites and locations in Iran which it needed to visit- to include "complementary access" to undeclared sites- in order to execute its JCPOA verification and monitoring responsibilities. ¹⁰⁰⁸ Iran also continued to permit the IAEA to verify and monitor various aspects of Iran's nuclear supply chain as required by the JCPOA, including Iran's production of uranium ore concentrate; the transfer of uranium ore concentrate to Iran's Uranium Conversion Facility at Esfahan;

¹⁰⁰⁵ GOV/2019/21, *supra* note 999, at para. 19.

¹⁰⁰⁶ *Id*. at paras. 7, 9.

¹⁰⁰⁷ *Id*. at para. 8.

¹⁰⁰⁸ *Id*. at para. 24.

and Iran's manufacture of centrifuge rotor tubes, bellows, and rotor assemblies.¹⁰⁰⁹ The IAEA also reported that Iran continued to permit IAEA verification and monitoring of Iran's other JCPOA nuclear-related commitments, such as Iran's commitment not to engage in activities that could contribute to the development of a nuclear explosive device.¹⁰¹⁰

These official IAEA reports indicate that during the period of January 16, 2016 to May 31, 2019 Iran complied fully with all of its nuclear-related commitments under the JCPOA, and virtually all official statements from the P5+1 and the EU through April 2018 appeared to agree with the IAEA's assessment that Iran was in compliance with the JCPOA. However, Israeli Prime Minister Benjamin Netanyahu challenged this assessment in late April 2018 when he publicly announced that agents from Israel's intelligence service had broken into a warehouse in a commercial district of Tehran and had stolen a significant portion of what he described as Iran's secret nuclear archive: thousands of pages of documents, videos, and plans that documented years of previous work by Iran on nuclear weapons, warhead designs, and production plans. The stolen cache of documentation, most of which was at least 15 years old, showed that Iran had operated a secret nuclear weapons program, the so-called Project AMAD, from 1999-

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¹⁰⁰⁹ GOV/2019/21, *supra* note 999, at paras. 20-23.

¹⁰¹⁰ *Id.* at para. 25.

¹⁰¹¹ KERR & KATZMAN, *supra* note 874, at 19.

David E. Sanger & Ronen Bergman, How Israel, in Dark of Night, Torched Its Way to Iran's Nuclear Secrets, N.Y. TIMES (Jul. 15, 2018), https://www.nytimes.com/2018/07/15/us/politics/iran-israel-mossad-nuclear.html (Accessed Jul. 2, 2019); Bernard Avishai, Why Netanyahu Really Wanted Trump to Scuttle the Iran Deal, THE NEW YORKER (May 10, 2018), https://www.newyorker.com/news/daily-comment/why-netanyahu-really-wanted-trump-to-scuttle-the-iran-deal (Accessed Jan. 7, 2019); Robert Einhorn, Israeli Intelligence Coup Could Help Trump "Fix" the Iran Deal, BROOKINGS INST. (May 4, 2018), https://www.brookings.edu/blog/order-from-chaos/2018/05/04/israeli-intelligence-coup-could-help-trump-fix-the-iran-deal/ (Accessed Jun. 24, 2019).

2003, and that despite Iranian insistence that its nuclear program was for peaceful purposes, Iran had worked in the past to systematically assemble everything it needed to produce nuclear weapons. 1013 For example, the documentation detailed the challenges of integrating a nuclear weapon into a warhead for the Shahab-3 ballistic missile; proposed sites for possible underground nuclear tests; showed that Iran conducted more highexplosive tests related to nuclear weapons development than were previously known; and described plans to build an initial batch of five nuclear weapons. 1014 While it may be argued that the documentation from Iran's secret nuclear archive simply confirms the IAEA's December 2015 Final Assessment that Iran engaged in coordinated efforts to develop nuclear weapons-related capabilities prior to 2003- which appears to be the IAEA's position regarding this documentation from Iran's nuclear archive- Prime Minister Netanyahu has stated that the fact that Iran went to such lengths to preserve what they had learned and that Iran concealed the secret nuclear archive's contents from the IAEA at an undeclared site is evidence of Iran's future intent to resume its efforts to develop nuclear weapons. 1015

On September 27, 2018, during his remarks before the UN General Assembly, Prime Minister Netanyahu again challenged the IAEA's assertion that Iran was complying with the JCPOA, and expressed frustration that despite the fact that Israel had shared the documentation on Iran's secret nuclear archive with the IAEA, the IAEA had taken no action to pose any questions to Iran or to request access to potential new nuclear sites

¹⁰¹³ Sanger & Bergman, *supra* note 1012; Avishai, *supra* note 1012.

¹⁰¹⁴ Sanger & Bergman, *supra* note 1012.

¹⁰¹⁵ *Id.*; Einhorn, *supra* note 1012; KERR, *supra* note 881, at 36-37.

discussed in Iran's secret nuclear archive. ¹⁰¹⁶ Prime Minister Netanyahu then disclosed that Israel had discovered a second undeclared Iranian nuclear site located in the Turquz Abad district in Tehran, which he described as a "secret atomic warehouse for storing massive amounts of equipment and material from Iran's secret nuclear weapons program". ¹⁰¹⁷ Prime Minister Netanyahu stated that since Israel had raided Iran's secret nuclear archive earlier in 2018, Iran had been "desperately" trying to clean out the secret atomic warehouse site in Turquz Abad, and that Iran had recently removed 15 kilograms of radioactive material from the site and "spread it around Tehran in an effort to hide the evidence". ¹⁰¹⁸ Prime Minister Netanyahu challenged the IAEA to "go inspect this atomic warehouse immediately before the Iranians finish clearing it out." ¹⁰¹⁹

Recent media reports indicate that in March 2019, following the IAEA's examination of the materials from Iran's secret nuclear archive that Israel had provided to the IAEA almost a year earlier, the IAEA finally inspected the Iranian warehouse site in the Turquz Abad district of Tehran that Prime Minister Netanyahu had described in September 2018 as a secret atomic warehouse. The IAEA's inspection of the Iranian warehouse site in Turquz Abad- which Iran said was a carpet-cleaning facility- included the taking of

¹⁰¹⁶ Netanyahu 2018 Speech, supra note 976.

¹⁰¹⁷ *Id.*; Kelsey Davenport, *Israel Claims Secret Nuclear Site in Iran*, ARMS CONTROL TODAY (Nov. 2018), https://www.armscontrol.org/act/2018-11/news/israel-claims-secret-nuclear-site-iran (Accessed Jan. 7, 2019).

¹⁰¹⁸ Netanyahu 2018 Speech, *supra* note 976; Davenport, *supra* note 1017.

Bret Stephens, Opinion, What Was Iran Hiding in Turquz Abad?, N.Y. TIMES (Sept. 5, 2019), https://www.nytimes.com/2019/09/05/opinion/iran-israel.html (Accessed Sept. 5, 2019); Shemuel Meir, IAEA Chief's Death Could Spell the End of the Iran Nuclear Deal, +972 MAG. (Aug. 9, 2019), https://972mag.com/netanyahu-iran-nuclear-deal-iaea/142716/ (Accessed Aug. 31, 2019); Diplomats: IAEA Inspects Iran "Warehouse" Netanyahu Pointed To, ASHARQ AL-AWSAT (Apr. 4, 2019), https://aawsat.com/english/home/article/1665146/diplomats-iaea-inspects-warehouse-netanyahu-pointed (Accessed Apr. 5, 2019) [hereinafter ASHARQ AL-AWSAT].

environmental samples, and the IAEA's analysis of those samples apparently detected radioactive particles or traces of uranium, which could corroborate Prime Minister Netanyahu's claim regarding the purpose of the warehouse. ¹⁰²¹ Media reports indicate that the IAEA has posed follow-up questions to Iran regarding the suspicious warehouse site in Turquz Abad, but that Iran has so far refused to answer the IAEA's questions regarding what material was stored at the warehouse and where it might be now. ¹⁰²² While it is possible that whatever radioactive material was present at the undeclared warehouse site in Turquz Abad was left over from the secret nuclear weapons development work that Iran did over 15 years ago, Iran's actions to clean out the site and Iran's failure to respond to the IAEA's questions do not inspire confidence in Iran's continued compliance with the JCPOA or in Iran's continued assertions that it has no intention of developing nuclear weapons. ¹⁰²³

D. The U.S. Withdrawal from the JCPOA

After taking office in January 2017, U.S. President Donald J. Trump initially continued the Obama Administration's policy of waiving all U.S. nuclear-related economic sanctions against Iran in accordance with U.S. commitments under the JCPOA ¹⁰²⁴, but he expressed ongoing dissatisfaction with the terms of the JCPOA and more generally with Iran's behavior, stating that the Iranian regime "continues to fuel

¹⁰²¹ Stephens, *supra* note 1020; Meir, *supra* note 1020; ASHARQ AL-AWSAT, *supra* note 1020; Francois Murphy, *U.S. Says Iran's Failure to Address IAEA Concerns "Unacceptable"*, REUTERS (Sept. 10, 2019), https://www.nytimes.com/reuters/2019/09/10/world/middleeast/10reuters-iran-nuclear-iaea.html (Accessed Sept. 11, 2019).

Stephens, *supra* note 1020; Murphy, *supra* note 1021; Laurence Norman, *Iran Stalls U.N. Probe Into Nuclear Site*, WALL ST. J. (Sept. 3, 2019) at A6.

Stephens, *supra* note 1020; Meir, *supra* note 1020; Murphy, *supra* note 1021; Norman, *supra* note

¹⁰²⁴ Note 892 *supra* and accompanying text.

conflict, terror, and turmoil throughout the Middle East and beyond." President Trump expressed particular concern with the fact that the JCPOA's principal limitations on Iran's nuclear program would expire in 10-15 years; that the JCPOA failed to limit either Iran's ballistic missile program or Iran's other malign activities such as sponsoring anti-Israel terrorist organizations; and that the JCPOA did not allow immediate access by IAEA inspectors to undeclared sites within Iran. On January 12, 2018, President Trump announced that unless an agreement was reached with the UK, France, and Germany to fix the terrible flaws in the Iran nuclear deal" the U.S. would withdraw from the JCPOA, and although U.S. officials subsequently held several meetings with their UK, French, and German counterparts to attempt to develop a supplemental agreement to the JCPOA that would address the sunsetting of restrictions on Iran's nuclear program, Iran's ballistic missiles, and strengthened IAEA inspections, they were unable to reach agreement on a path forward that would satisfy President Trump's demands.

On May 8, 2018, President Trump announced that the U.S. would no longer participate in the JCPOA and would reimpose all U.S. nuclear-related sanctions on Iran that had previously been waived or suspended in accordance with the JCPOA. In explaining his decision to withdraw from the JCPOA, President Trump stated that the JCPOA's 10-15 year sunset provisions were "totally unacceptable"; that the JCPOA's

¹⁰²⁵ KERR & KATZMAN, *supra* note 874, at 22-23; Jean Galbraith et al., *President Trump Withdraws the United States from the Iran Deal and Announces the Reimposition of Sanctions*, 112 AM. J. INT'L. L. 514, 515 (2018) [hereinafter Galbraith].

¹⁰²⁶ KERR & KATZMAN, supra note 874, at 23; Galbraith, supra note 1025, at 515.

¹⁰²⁷ KERR & KATZMAN, *supra* note 874, at 23-24; Galbraith, *supra* note 1025, at 515-516.

¹⁰²⁸ KERR & KATZMAN, *supra* note 874, at 24; Galbraith, *supra* note 1025, at 517; White House Fact Sheet, President Donald J. Trump is Ending United States Participation in an Unacceptable Iran Deal (May 8, 2018), https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-ending-united-states-participation-unacceptable-iran-deal/ (Accessed Jan. 7, 2019).

IAEA inspection provisions were inadequate to "prevent, detect, and punish cheating"; and that the JCPOA failed to address Iran's development of ballistic missiles that could deliver nuclear warheads. President Trump also stated that although the U.S. was withdrawing from the JCPOA, the U.S. would work with its allies to negotiate a new, comprehensive, and lasting agreement with Iran that would resolve the Iranian nuclear threat, but that if Iran continued its aspirations for a nuclear weapons capability it would "have bigger problems than it has ever had before". President Trump then signed a presidential memorandum ordering the U.S. Secretary of State to take all appropriate steps to cease the participation of the U.S. in the JCPOA, and, along with the U.S. Secretary of the Treasury, to begin taking steps to reimpose upon Iran all U.S. nuclear-related sanctions that were previously lifted or waived in connection with the JCPOA. 1031

As a follow-on to President Trump's decision to withdraw the U.S. from the JCPOA, U.S. Secretary of State Michael R. Pompeo announced on May 21, 2018 that the U.S. would henceforth apply "unprecedented financial pressure" on the Iranian regime until the regime discontinues Iran's destabilizing behavior, and he outlined a list of twelve specific changes in Iran's behavior that would be required for the U.S. to end its economic sanctions and re-establish full diplomatic and commercial relationships with

Galbraith, *supra* note 1025, at 517; President Donald J. Trump, Remarks on the Joint Comprehensive Plan of Action to Prevent Iran from Obtaining a Nuclear Weapon and an Exchange with Reporters, 2018 DAILY COMP. PRES. DOC. 310 (May 8, 2018).

¹⁰³¹ KERR & KATZMAN, *supra* note 874, at 24; Galbraith, *supra* note 1025, at 517-518; Presidential Memorandum, Ceasing U.S. Participation in the JCPOA and Taking Additional Action to Counter Iran's Malign Influence and Deny Iran All Paths to a Nuclear Weapon (May 8, 2018), https://www.whitehouse.gov/presidential-actions/ceasing-u-s-participation-jcpoa-taking-additional-action-counter-irans-malign-influence-deny-iran-paths-nuclear-weapon/ (Accessed Sept. 8, 2019).

Iran. 1032 The specific changes in Iran's behavior outlined by Secretary Pompeo as necessary for a new and comprehensive agreement with the U.S. included the following: Iran must provide the IAEA with a full account of the prior military dimensions of Iran's nuclear program and permanently and verifiably abandon such work in perpetuity; Iran must stop all enrichment of uranium, close its heavy water reactor at Arak, and never pursue plutonium reprocessing; Iran must provide the IAEA with unqualified access to all sites throughout the entire country; Iran must end its proliferation of ballistic missiles and halt further launching or development of nuclear-capable missile systems; Iran must end its support to Middle East terrorist groups, including Hezbollah, Hamas, and PIJ; Iran must withdraw all forces under Iranian command throughout the entirety of Syria; and Iran must end its threatening behavior against its neighbors, including its threats to destroy Israel. 1033 The Trump Administration's position is that while the U.S. remains open to reaching a new, more comprehensive deal with Iran that forever blocks Iran's path to nuclear weapons and addresses the entire range of Iran's malign activities, until Iran makes the twelve specific behavior changes outlined by Secretary Pompeo the U.S. will be relentless in exerting pressures on the Iranian regime. 1034

On August 6, 2018, President Trump issued Executive Order (E.O.) 13846 to implement his May 8, 2018 decision to reimpose the U.S. nuclear-related sanctions on Iran that had previously been lifted or waived in accordance with U.S. commitments

 1032 KERR & KATZMAN, supra note 874, at 24; Galbraith, supra note 1025, at 521; Robert Einhorn & Richard Nephew, Constraining Iran's Future Nuclear Capabilities, BROOKINGS INST. (Mar. 2019) at 11, https://www.brookings.edu/wp-content/uploads/2019/03/FP 20190321 nuclear capabilities WEB.pdf (Accessed Jun. 24, 2019).

ioss KERR & KATZMAN, supra note 874, at 24-25; Galbraith, supra note 1025, at 521; Einhorn & Nephew, supra note 1032, at 11-12. Einhorn and Nephew, supra note 1032, at 12.

under the JCPOA. 1035 E.O. 13846 reimposed and strengthened U.S. nuclear-related sanctions on Iran in two different groups. 1036 The first group of sanctions, which went into effect on August 7, 2018, targeted the purchase or acquisition of U.S. dollar banknotes by the Iranian government; Iran's trade in gold and precious metals; the sale, supply, or transfer to or from Iran of graphite, raw, or semi-finished metals such as aluminum and steel, coal, and software for integrating industrial processes; transactions related to the purchase or sale of Iranian rials; the purchase, subscription to, or facilitation of the issuance of Iranian sovereign debt; and Iran's automotive sector. 1037 The second group of sanctions, which went into effect on November 7, 2018, targeted Iran's energy sector; petroleum-related transactions, including the purchase of petroleum, petroleum products, or petrochemical products from Iran; Iran's port operators and shipping and shipbuilding sectors; and transactions by foreign financial institutions with the Central Bank of Iran and other Iranian financial institutions, to include the provision of specialized financial messaging services and/or the provision of underwriting services, insurance, or reinsurance. 1038 Overall, the U.S. sanctions reimposed on Iran were a robust combination of primary and secondary sanctions on U.S. and foreign entities that do business with Iran's energy and financial sectors, and U.S. secondary sanctions on foreign entities that do business with Iran were a particularly powerful tool that

¹⁰³⁵ Exec. Order No. 13846, Reimposing Certain Sanctions With Respect to Iran, 83 Fed. Reg. 38939 (Aug. 7, 2018); U.S. Dept. of Treasury, *Frequently Asked Questions Regarding Executive Order of August 6, 2018, "Reimposing Certain Sanctions With Respect to Iran"*, https://www.treasury.gov/resource-center/fags/Sanctions/Pages/fag_iran.aspx (Accessed Jan. 8, 2019) [hereinafter FAQs].

FAQs, supra note 1035, at questions 597, 606-607; Alexandria ter Avest, Notes & Comment, An Attempt to Negate Iranian Sanctions: How Special Purpose Vehicles May Be the EU's Last Hope to Keep the JCPOA Alive, 23 N.C. BANK. INST. 181, 184 (Mar. 2019).

¹⁰³⁷ FAQs, *supra* note 1035, at question 606; Avest, *supra* note 1036, at 185.

¹⁰³⁸ FAQs, *supra* note 1035, at question 607; Avest, *supra* note 1036, at 185.

essentially forced foreign entities to choose between doing business with Iran or doing business with the much larger financial institutions and markets of the U.S. 1039

In accordance with the National Defense Authorization Act for Fiscal Year 2012¹⁰⁴⁰, the U.S. President may waive the imposition of U.S. sanctions on foreign entities purchasing petroleum and petroleum products from Iran for 180 days in order to allow those foreign entities additional time to make significant reductions in their purchases of Iranian oil, and on November 5, 2018 the Trump Administration issued waivers to allow seven countries- China, Greece, India, Italy, Japan, South Korea, and Turkey- and Taiwan to continue to purchase oil from Iran at reduced levels without incurring U.S. sanctions. 1041 U.S. Secretary of State Pompeo described the oil waivers as "temporary allotments to a handful of countries", and noted that 20 nations had already eliminated oil imports from Iran, thereby reducing Iran's oil exports by more than one million barrels per day. 1042 Secretary Pompeo also stated that the U.S. would continue to push the remaining seven countries and Taiwan to zero out their imports of Iranian oil, and on May 2, 2019 the U.S. did not renew the sanctions waivers that it had issued in November 2018, which resulted in a further significant reduction in Iran's oil exports from an estimated 2.5 million barrels per day in April 2018 to as little as 100,000 barrels

¹⁰³⁹ Galbraith, *supra* note 1025, at 518; Avest, *supra* note 1036, at 181, 186; Michael Herzog, *Where Next for the Iran Nuclear Deal? A View From Israel*, BRITAIN ISRAEL COMMUNICATIONS & RESEARCH CENTRE BRIEFING (Jun. 27, 2018), http://www.bicom.org.uk/analysis/where-next-for-the-iran-nuclear-deal-a-view-from-israel-by-michael-herzog/ (Accessed Jun. 7, 2019).

National Defense Authorization Act for Fiscal Year 2012, Pub. L. No. 112-81, sec. 1245(d) (2012); FAQs, supra note 1035, at question 615.

¹⁰⁴¹ Einhorn & Nephew, *supra* note 1032, at 14; Avest, *supra* note 1036, at 185; Kelsey Davenport, *Iran Vows to Resist U.S. Sanctions*, ARMS CONTROL TODAY (Dec. 2018),

https://www.armscontrol.org/act/2018-12/news/iran-vows-resist-us-sanctions (Accessed Jan. 7, 2019). Davenport, *supra* note 1041.

per day by the end of July 2019.¹⁰⁴³ This significant reduction in Iranian oil exports due to the reimposed U.S. sanctions has further exacerbated Iran's pre-existing economic problems: the inflation rate in Iran has risen from 23.8 percent in 2018 to 35 percent currently, and Iran's economy contracted by 1.5% in 2018 and is projected to contract by another 3.6% to 5.5% in 2019.¹⁰⁴⁴ Iran has also suffered rising unemployment, higher food prices, bank collapses, wildcat strikes, and a currency that lost more than 60% of its value in 2018.¹⁰⁴⁵

The UK, France, and Germany- the three European states that participated with the U.S. in the JCPOA negotiations (hereinafter the E3) - strongly opposed the U.S. withdrawal from the JCPOA, and have attempted to moderate and circumvent the reimposed U.S. sanctions on Iran, both to protect their own companies from U.S. secondary sanctions and to shield Iran from economic pressure that could lead Iran to walk away from the JCPOA. ¹⁰⁴⁶ In June 2018, the E3 requested that the U.S. grant wideranging exceptions to the reimposed U.S. sanctions on Iran that would allow European companies to deal with Iran without penalty, but the U.S. rejected their request, and in January 2019 the E3 announced the creation of the Instrument in Support of Trade Exchanges (INSTEX), a mechanism aimed at facilitating trade with Iran by creating a

Davenport, *supra* note 1041; James Phillips, *U.S. Must Lead Strong Multinational Response to Iran's Extortion Strategy*, HERITAGE FOUNDATION (Aug. 16, 2019), https://www.heritage.org/middle-east/report/us-must-lead-strong-multinational-response-irans-extortion-strategy/ (Accessed Aug. 17, 2019); Clyde Russell, *Iran's Crude Exports Are Down, But Estimates of How Much Vary Wildly*, REUTERS (Aug. 1, 2019), https://www.cnbc.com/2019/08/01/reuters-america-rpt-column-irans-crude-exports-are-down-but-estimates-of-how-much-vary-wildly-russell.html (Accessed Aug. 1, 2019).

¹⁰⁴⁶ KERR & KATZMAN, *supra* note 874, at 25; Einhorn & Nephew, *supra* note 1032, at 16; Avest, *supra* note 1036, at 187; Phillips, *supra* note 1043.

barter system that theoretically would not be subject to U.S. sanctions because no money would be exchanged across borders. 1047 However, it appears that INSTEX, which according to the E3 was finally "up and running" on June 28, 2019, will focus initially on barter trade in humanitarian goods (food, medicines) that are not subject to U.S. sanctions on Iran, and it is highly unlikely that such E3-Iran barter trade in humanitarian goods will provide a significant financial boost to Iran. 1048 Recent media reports indicate 1049 that France, with UK and German support, has proposed to offer Iran a \$15 billion letter of credit to compensate Iran for oil sale revenues lost due to the reimposed U.S. economic sanctions, but unless the Trump Administration explicitly indicates that they will support this proposed letter of credit- which is unlikely- it is not clear that any European banks would risk incurring U.S. sanctions by extending credit to Iran. Therefore, while the E3 remain committed to preserving the JCPOA and to ensuring that Iran realizes the economic benefits it expected to receive from complying with the JCPOA, it is unlikely that any amount of governmental encouragement will persuade major European banks and businesses to engage with Iran and run the risk of being cut out of the U.S. market and the U.S. dollar-led international financial system. 1050

¹⁰⁴⁷ KERR, *supra* note 881, at 61; Einhorn & Nephew, *supra* note 1032, at 16; Avest, *supra* note 1036, at 194-196; Phillips, *supra* note 1043; Frances Coppola, *Europe Circumvents U.S. Sanctions on Iran*, FORBES (Jun. 30, 2019), https://www.forbes.com/sites/francescoppola/2019/06/30/europe-circumvents-u-s-sanctions-on-iran/#4b7c30df2c8d (Accessed Jul. 1, 2019).

¹⁰⁴⁸ KERR, *supra* note 881, at 61; Einhorn & Nephew, *supra* note 1032, at 16; Avest, *supra* note 1036, at

KERR, supra note 881, at 61; Einhorn & Nephew, supra note 1032, at 16; Avest, supra note 1036, at 194-196; Phillips, supra note 1043; Coppola, supra note 1047.

David E. Sanger, Steven Erlanger, & Adam Nossiter, France Dangles \$15 Billion Bailout for Iran in Effort to Save Nuclear Deal, N.Y. TIMES (Sept. 2, 2019),

https://www.nytimes.com/2019/09/02/world/middleeast/iran-france-nuclear-deal.html (Accessed Sept. 3, 2019).

¹⁰⁵⁰ Einhorn & Nephew, supra note 1032, at 16-17, 45.

After the U.S. withdrew from the JCPOA in May 2018, Iranian officials rejected renegotiating the JCPOA or negotiating a new agreement, but stated that Iran would remain committed to the JCPOA if the remaining JCPOA participants continued to abide by their JCPOA commitments. In particular, Iranian officials stated that Iran would continue to abide by its JCPOA commitments if the remaining JCPOA participants and the international community ensured that Iran received the economic benefits that Iran expected to receive from the JCPOA, especially revenue that Iran expected to derive from selling Iranian oil to EU countries. In expressed dissatisfaction, however, with the E3's efforts to establish INSTEX, and after the U.S. decision on May 2, 2019 not to renew U.S. sanctions waivers to allow seven countries and Taiwan to continue purchasing Iranian oil In Iranian announced on May 8, 2019 that it would begin to breach some of its JCPOA commitments within 60 days unless the remaining JCPOA participants- especially the E3 and the EU- found a way to protect Iran from the effects of U.S. sanctions on Iran's oil and banking sectors.

On July 1, 2019, Iran announced and the IAEA subsequently verified that Iran had breached two of its commitments under the JCPOA: Iran had enriched uranium to a level of up to 4.5% U-235, which exceeded Iran's JCPOA commitment to enrich uranium to no more than 3.67% U-235, and Iran had accumulated a total stockpile of low enriched uranium (LEU) that slightly exceeded the JCPOA's LEU stockpile limit of 300

¹⁰⁵¹ KERR, supra note 881, at 62.

¹⁰⁵² *Id*. at 63.

¹⁰⁵³ Note 1047 *supra* and accompanying text.

¹⁰⁵⁴ KERR, *supra* note 881, at 64; Phillips, *supra* note 1043; Ariane M. Tabatabai, *Can Anyone Save the Iran Nuclear Deal Now?*, RAND CORP. (May 10, 2019), https://www.rand.org/blog/2019/05/can-anyone-save-the-iran-nuclear-deal-now.html (Accessed May 20, 2019).

kilograms. ¹⁰⁵⁵ Iranian officials stated that these two breaches of Iran's JCPOA commitments were easily reversible and that they could be reversed "within hours" if progress was made in providing Iran with relief from U.S. sanctions. ¹⁰⁵⁶ Iranian officials also stated that if the remaining JCPOA participants, particularly the Europeans, did not fulfill their commitments to provide Iran with tangible relief from U.S. sanctions within another 60 days, then Iran would take a third step to breach its commitments under the JCPOA. ¹⁰⁵⁷ When no such tangible sanctions relief was forthcoming within Iran's 60-day deadline, Iran announced on September 7, 2019 that it would no longer adhere to the JCPOA's limitations on uranium enrichment research and development, to include the JCPOA's limits on development and testing of more rapid and advanced centrifuges, and Iranian officials stated that 20 IR-4 centrifuges, 20 IR-6 centrifuges, and a cascade of IR-8 centrifuges had accordingly been prepared for testing. ¹⁰⁵⁸ It thus appears that Iran intends to breach its JCPOA commitments one by one, every 60 days, unless and until it receives a substantial economic payoff from the E3 and EU to compensate Iran for the

¹⁰⁵⁵ Int'l. Atomic Energy Agency [IAEA], *Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015)*, IAEA Doc. GOV/INF/2019/8 (Jul. 1, 2019); IAEA, *Verification and Monitoring in the Islamic Republic of Iran in Light of United Nations Security Council Resolution 2231 (2015)*, IAEA Doc. GOV/INF/2019/9 (Jul. 8, 2019); *IAEA to Hold Special Meeting on Iran on 10 July*, AGENCE FRANCE-PRESSE (Jul. 5, 2019), https://news.yahoo.com/iaea-hold-special-meeting-iran-10-july-174257915.html (Accessed Jul. 5, 2019) [hereinafter AFP]; Jon Gambrell, *Iran Breaches Key Uranium Enrichment Limit in Nuclear Deal*, ASSOC. PRESS (Jul. 8, 2019), https://apnews.com/6759b954fcf3492abcfb90a982a85b95 (Accessed Jul. 8, 2019).

¹⁰⁵⁶ AFP, *supra* note 1055.

¹⁰⁵⁷ Gambrell, supra note 1055.

Parisa Hafezi & Dominique Vidalon, *Iran Further Breaches Nuclear Deal, Says It Can Exceed 20% Enrichment*, REUTERS (Sept. 7, 2019),

https://www.nytimes.com/reuters/2019/09/07/world/middleeast/07reuters-iran-nuclear.html (Accessed Sept. 7, 2019); Frank Jordans & Liu Zheng, *UN Atomic Watchdog Confirms Iran Installing New Centrifuges*, ASSOC. PRESS (Sept. 9, 2019), https://www.nytimes.com/aponline/2019/09/09/world/europe/ap-eu-iran-nuclear.html (Accessed Sept. 9, 2019).

effects of U.S. sanctions, and that because the E3 and EU are unable to provide Iran the sanctions relief it is seeking, the JCPOA may soon unravel entirely. 1059

E. Assessment: Impact of the JCPOA on the Iranian Nuclear Threat to Israel

While there are several legitimate areas of concern with the JCPOA- most notably that the JCPOA's principal limitations on Iran's nuclear program will expire in 10-15 years and that the JCPOA fails to address Iran's ballistic missile delivery capability- I believe that overall the JCPOA has significantly reduced the Iranian nuclear threat to Israel. As discussed above, the JCPOA commits Iran to significant limitations on its uranium enrichment activities, including a two-thirds reduction in the total number of Iran's operational uranium enrichment centrifuges; a requirement that the remaining 5060 operational centrifuges will be limited to first-generation IR-1 machines; a 98 percent reduction in Iran's total stockpile of low-enriched uranium (LEU), down to no more than 300 kilograms (a fraction of the amount required for even a single nuclear weapon); and a requirement for Iran to limit its level of uranium enrichment to no more than 3.67% U-235, all of which increases the amount of time that Iran would need to produce enough weapons-grade highly enriched uranium (HEU) for one nuclear weapon to a minimum of one year, for a period of at least 10 years. 1060 The JCPOA also commits Iran to redesign and rebuild its heavy water research reactor at Arak so that it will not produce plutonium; commits Iran not to engage in any spent fuel reprocessing activities; and commits Iran to allow extensive IAEA verification and monitoring of Iran's entire nuclear supply

¹⁰⁵⁹ Phillips, *supra* note 1043.

Notes 961-964 supra and accompanying text.

chain. 1061 Most importantly, the IAEA has confirmed that for over three years (January 2016 to May 2019) Iran fully complied with its commitments under the JCPOA 1062, and the U.S. intelligence community's most recent assessment in January 2019 stated that Iran "... is not currently undertaking the key nuclear weapons-development activities we judge necessary to produce a nuclear device." 1063 Accordingly, I concur with the view of Robert Einhorn, former Special Advisor for Nonproliferation and Arms Control in the U.S. Department of State (2009-2013), who has stated that as long as Iran continues to meet its JCPOA commitments the JCPOA effectively blocks Iran's pathways to nuclear weapons in the near and medium terms. 1064 I also concur with retired Israeli Defense Force (IDF) Major General Isaac Ben-Israel, the former head of the IDF/Ministry of Defense Research and Development Directorate, who has stated that as long as Iran continues to comply with the JCPOA, "... Iran does not currently pose a nuclear threat to Israel." 1065

Having asserted that the JCPOA has significantly reduced the Iranian nuclear threat to Israel for at least the near and medium terms, I emphasize that this assertion is based on continued good faith compliance by Iran with all of its commitments under the JCPOA, and I acknowledge that unfortunately there are at least three valid reasons for Israel to be

¹⁰⁶¹ Notes 965-971 *supra* and accompanying text.

¹⁰⁶² Notes 998-1011 *supra* and accompanying text.

¹⁰⁶³ Worldwide Threat Assessment of the U.S. Intelligence Community, Hearing Before the S. Sel. Comm. On Intelligence, 10 (Jan. 29, 2019) (Statement of Daniel R. Coats, Director of National Intelligence), https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf (Accessed May 28, 2019); KERR, supra note 881, at 46.

¹⁰⁶⁴ Einhorn & Nephew, supra note 1032, at 2, 28.

¹⁰⁶⁵ Zev Chafets, Opinion, *Israel Has Little to Fear From Iran*, BLOOMBERG NEWS (Sept. 3, 2019), https://www.bloomberg.com/opinion/articles/2019-09-03/isaac-ben-israel-says-netanyahu-is-exaggerating-the-iran-threat (Accessed Sept. 3, 2019).

concerned about Iran's continued compliance with the JCPOA. First, in response to the U.S. withdrawal from the JCPOA and reimposition of U.S. nuclear-related sanctions on Iran's oil and banking sectors, Iran has breached three of its JCPOA commitments (enriching uranium to levels above 3.67% U-235, accumulating a stockpile of more than 300 kilograms of LEU, and commencing enrichment research and development using advanced centrifuges) during the period of July to September 2019, and has indicated that it will continue such breaches every 60 days unless the E3 and EU provide Iran with sufficient financial compensation to offset the effects of the U.S. sanctions, a requirement that the E3 and EU are unlikely to be able to meet. While these three breaches have been relatively minor 1067, further and/or more significant breaches by Iran of its JCPOA commitments may cause the JCPOA to collapse entirely.

The second valid reason for Israel to be concerned about Iran's continued compliance with the JCPOA is that the materials stolen by the Israeli intelligence service from Iran's secret nuclear archive in early 2018 appear to confirm that despite Iran's repeated denials, Iran actively pursued a nuclear weapons capability in the 1999-2003 time period, to include development of warhead designs for its Shahab-3 ballistic missile and plans to build an initial batch of five nuclear weapons. The nuclear archive materials thus damage the credibility of Iran's repeated claims that it has never pursued a nuclear weapons capability, and Israeli Prime Minister Netanyahu has asserted that the reason

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 $^{^{1066}}$ Notes 1028-1045 & 1054-1059 supra and accompanying text.

¹⁰⁶⁷ John Irish, *Nuclear Deal Parties Not Ready to Trigger Dispute Mechanism Against Iran- EU's Mogherini*, REUTERS (Jul. 15, 2019), https://www.nytimes.com/reuters/2019/07/15/world/middleeast/15reuters-mideast-iran-eu-mogherini.html (Accessed Jul. 15, 2019) ("The remaining parties to the Iran nuclear deal do not see Tehran's breaches as significant non-compliance and have not indicated any intent to trigger the accord's dispute mechanism").

Notes 1012-1015 supra and accompanying text.

Iran did not destroy its secret nuclear archive and/or its undeclared atomic warehouse in Turquz Abad¹⁰⁶⁹ is that Iran ". . . hasn't abandoned its goal to develop nuclear weapons. In fact, it planned to use both of these sites in a few years when the time would be right to break out to the atom bomb."¹⁰⁷⁰

The third valid reason for Israel to be concerned about Iran's continued compliance with the JCPOA is that as previously noted, all of the JCPOA's principal limitations on Iran's nuclear program expire in 10-15 years, and upon the expiration of these JCPOA limitations Iran will be able to build an industrial-sized uranium enrichment capability and to accumulate enough LEU to become a threshold nuclear weapon state if it wishes to do so. ¹⁰⁷¹ This means that even if Iran returns to full compliance with its JCPOA commitments and stays in full compliance until those commitments expire in 10-15 years, upon their expiration Israel will be faced with the prospect that Iran, a country whose most senior leaders have publicly proclaimed that their goal is to destroy Israel ¹⁰⁷²; a country that actively sponsors anti-Israel terrorist organizations like Hezbollah, Hamas, and PIJ ¹⁰⁷³; a country that is attempting to establish an additional military front against Israel in Syria ¹⁰⁷⁴; and a country that has actively and secretly pursued a nuclear weapons capability in the past and already has a ballistic missile delivery capability ¹⁰⁷⁵, may again decide to pursue the development of nuclear weapons. In view of this, the JCPOA may

 $^{^{1069}}$ Notes 1016-1023 supra and accompanying text.

¹⁰⁷⁰ Netanyahu 2018 Speech, *supra* note 976.

Notes 972-976 supra and accompanying text.

 $^{^{1072}}$ Notes 531-573 supra and accompanying text.

¹⁰⁷³ Notes 574-689 *supra* and accompanying text.

Notes 690-723 *supra* and accompanying text.

¹⁰⁷⁵ Notes 740-872 *supra* and accompanying text.

simply have postponed for 10-15 years the existential threat posed to Israel by a nucleararmed Iran.

This chapter concludes Part 2 of the dissertation, which began an examination of whether the customary international law requirement that a threat of attack must involve a high degree of temporal imminence in order to justify anticipatory defensive action by a state is adequate to address contemporary security threats such as WMD, terrorism, and cyber armed attacks. To begin to examine this question, Part 2 discussed as a case study the facts regarding the existential threat posed to Israel by the Islamic Republic of Iran. Part 2 first demonstrated that Israel's perceived existential threat from Iran is reasonable in view of Iran's specific threats to destroy Israel; Iran's state sponsorship of anti-Israel terrorist organizations, particularly Hezbollah, Hamas, and Palestinian Islamic Jihad; Iran's attempt to establish an additional military front against Israel in Syria; and Iran's pursuit of a nuclear weapons capability, including Iran's continuing development and operation of ballistic missiles such as the Shahab-3/3M that are capable of delivering nuclear weapons to attack Israel. Part 2 then examined the impact of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear threat to Israel, and concluded that although Iranian compliance with all of its JCPOA commitments through May 2019 has significantly reduced the threat, Israel has valid concerns regarding Iran's continued compliance with the JCPOA because Iran has begun to breach its JCPOA commitments to protest the reimposition of U.S. nuclear-related sanctions on Iran; because Iran's past pursuit of a nuclear weapons capability appears to have been confirmed by the materials stolen by Israel from Iran's secret nuclear archive; and

because the JCPOA's principal limitations on Iran's nuclear program will all expire in 10-15 years, thereby enabling Iran to build an industrial-sized uranium enrichment capability and become a threshold nuclear weapon state if it chooses to do so. Having concluded in Part 2 that the JCPOA may simply have postponed for no more than 10-15 years the existential threat posed to Israel by a nuclear-armed Iran, Part 3 of the dissertation will argue that the customary international law requirement of a high degree of temporal imminence to justify anticipatory defensive action by states is not adequate to address the Iranian nuclear threat to Israel, and after examining alternate approaches offered by states and legal scholars regarding the imminence requirement, will propose a new multi-part test to guide state decision-making in determining whether a threat of attack is imminent.

PART 3: THE INTERNATIONAL LEGAL RIGHT TO USE ARMED FORCE IN ANTICIPATORY DEFENSE: CASE STUDY ANALYSIS AND RECOMMENDATIONS

CHAPTER VIII. PART 3: THE STRICT TEMPORAL IMMINENCE
STANDARD IN CUSTOMARY INTERNATIONAL LAW IS
INADEQUATE TO ADDRESS THE IRANIAN NUCLEAR THREAT
TO ISRAEL

As discussed in Part 2 of the dissertation, Israel's perceived existential threat from Iran is reasonable in view of Iran's specific threats to destroy Israel; Iran's state sponsorship of anti-Israel terrorist organizations, particularly Hezbollah, Hamas, and Palestinian Islamic Jihad; Iran's attempt to establish an additional military front against Israel in Syria; and Iran's pursuit of a nuclear weapons capability, including Iran's continuing development and operation of ballistic missiles such as the Shahab-3/3M that are capable of delivering nuclear weapons to attack Israel. Although Iran's compliance with the JCPOA has significantly reduced the threat that Iran will acquire a nuclear weapons capability, Part 2 of the dissertation also demonstrated that Israel has several valid reasons to be concerned about Iran's continued compliance with the JCPOA, and that the JCPOA may simply have postponed for no more than 10-15 years the existential threat to Israel posed by a nuclear-armed Iran.

Israel's perceived existential threat from a nuclear-armed Iran has led senior Israeli officials, including Israeli Prime Minister Benjamin Netanyahu and former Defense Minister Ehud Barak, to consider authorizing an Israeli military strike against Iran's nuclear facilities in order to eliminate the threat. ¹⁰⁷⁶ The prospect of an Israeli military strike on Iran's known nuclear facilities raises the issue of whether such a strike would be lawful under the customary international law right of anticipatory defense, which permits anticipatory defensive action by states that is necessary to avert a threatened armed attack that is temporally imminent as defined in the Caroline formulation ("instant, overwhelming, leaving no choice of means and no moment for deliberation"). In this chapter I will argue that the strict temporal imminence standard that is required in customary international law to justify anticipatory defensive action by states is inadequate to address the Iranian nuclear threat to Israel, and that given the seriousness of the threat Israel faces from Iran, a lower showing of temporal imminence for the use of force in anticipatory defense is justified because Israel cannot afford to allow the threat of Iran's use of nuclear weapons against it to become so immediate that Israel has no opportunity for effective defense, and Israel certainly cannot afford to wait for an actual Iranian armed attack with nuclear weapons to occur.

A. Imminence in the Context of New Threats

The strict requirement in the customary international law of anticipatory defense that a threat of armed attack must be temporally imminent in order for states to respond with armed force has been re-considered by some states and scholars due to the advent of new and more serious threats to international peace and security, particularly the threats

¹⁰⁷⁶ Slager, *supra* note 492, at 312-313.

Underlying the inherent right of self-defense and the right of anticipatory defense in customary international law is the concept that states have a right to use armed force to defend themselves effectively, because as Professor Matthew Waxman has explained, "[t]he basic policy behind international self-defense doctrine is to promote global order by permitting states sufficient leeway to respond to expected threats". In this regard, while the requirement of a high degree of temporal imminence to justify a forceful defensive response before an armed attack occurs makes sense in a traditional scenario of aggression such as conventional troops mobilizing to attack across a border, it may preclude states from taking effective anticipatory defensive action against new and different threats such as WMD proliferation- especially nuclear weapons- and global terrorism.

WMD arsenals in the hands of aggressor states significantly increase the gravity of the threat to potential victims, because such weapons have the capacity to destroy a nation before it ever has a chance to defend itself. Also, because WMD can be used with little warning, once the aggressor's intention to attack does become temporally imminent it may be too late for the victim state to employ effective defensive measures. Additionally, WMD-armed aggressor states may be more tempted to

¹⁰⁷⁷ Murphy, supra note 133, at 715; Matthew C. Waxman, The Use of Force Against States That Might Have Weapons of Mass Destruction, 31 MICH. J. INTL. L. 1, 11-12 (2009).

¹⁰⁷⁸ Waxman, *supra* note 1077, at 7.

¹⁰⁷⁹ Anthony Clark Arend, *International Law and the Preemptive Use of Military Force*, THE WASH. QTRLY. 89, 98 (2003).

¹⁰⁸⁰ Id

¹⁰⁸¹ Slager, *supra* note 492, at 290; Waxman, *supra* note 1077, at 11-12.

¹⁰⁸² Slager, *supra* note 492, at 290; Arend, *supra* note 1079, at 98; Waxman, *supra* note 1077, at 11-12.

employ unlawful coercion to achieve their goals given the diminished likelihood of military counteraction or unfavorable escalation. Similarly, global terrorist organizations use tactics that make it all but impossible to detect a terrorist attack until it is well underway or even finished, and terrorist attacks could be exponentially more dangerous if an aggressor state were to provide such global terrorist groups with a WMD capability. As a consequence, it can reasonably be argued ... that it would make more sense to target known WMD facilities or known terrorist camps or training areas ... in advance of an imminent attack if the goal is to preserve the state's right to effective ... defense. 1085

B. The Strict Temporal Imminence Standard May Not Allow Israel an Effective Right of Anticipatory Defense Against the Iranian Nuclear Threat

The strict requirement of temporal imminence in the customary international law right to use force in anticipatory defense is inadequate to address the "wicked problem" of the Iranian nuclear threat to Israel described in Part 2 of this dissertation *supra*, because it may not allow Israel an effective right of anticipatory defense against an Iranian threat that involves both the pursuit of a nuclear weapons capability and state sponsorship of terrorist groups that are dedicated to Israel's destruction. With regard to Iran's continued, active state sponsorship of the anti-Israel terrorist organizations Hezbollah, Hamas, and Palestinian Islamic Jihad, the necessity for Israeli defensive

¹⁰⁸³ Waxman, *supra* note 1077, at 9-10, 12.

¹⁰⁸⁴ Arend, *supra* note 1079, at 98; Waxman, *supra* note 1077, at 10-11.

¹⁰⁸⁵ Arend, *supra* note 1079, at 98.

¹⁰⁸⁶ The term "wicked problem" refers to a problem that is difficult or impossible to solve because no single solution exists. Horst W. J. Rittel & Melvin W. Webber, *Dilemmas in a General Theory of Planning*, 4 POLICY SCIENCES 155, 160-163 (1973).

action against Iran already exists. 1087 As previously noted, Iran not only funds, trains, equips, and supplies Hezbollah, Hamas, and Palestinian Islamic Jihad for the purpose of attacking Israel, but Iran appears to approve and provide IRGC participation in Hezbollah's military operations, which have included direct attacks on Israeli personnel, Embassies, and facilities overseas and direct Iranian involvement in Hezbollah's 2006 war against Israel. 1088 Therefore, Iran is already involved in a pattern of continuing armed aggression against Israel through Iran's state sponsorship of armed attacks on Israel by these international terrorist organizations, and this continuing indirect aggression is further aggravated by Iran's specific threats, voiced by its most senior leaders, to destroy both Israel and the Jewish people and to "wipe Israel off the map". 1089 Such Iranian threats are also, in and of themselves, a violation of the prohibition of aggression set forth in Article 2(4) of the UN Charter. 1090 Iran's continuing indirect aggression against Israel is also demonstrated by its attempt to establish an additional military front against Israel in Syria using the IRGC, Hezbollah, and thousands of Shiite militia fighters organized and operated under Iranian command, which has already led to several direct, low-level armed confrontations between Iran and Israel. 1091

In addition to Iran's overt threats to destroy Israel, its continued state sponsorship of terrorist attacks against Israel, and its attempt to establish an additional military front against Israel in Syria, Israel also faces the potential existential threat of Iran's acquisition

Notes 574-689 supra and accompanying text.

¹⁰⁸⁸ Id

¹⁰⁸⁹ Notes 531-573 *supra* and accompanying text.

¹⁰⁹⁰ Moore, *supra* note 305, at 911.

Notes 690-723 supra and accompanying text.

of a nuclear weapons capability. 1092 Although Iran's major declared nuclear facilities, including those at Natanz, Fordow, Esfahan, and Arak are now subject to IAEA monitoring pursuant to the JCPOA, several of these facilities were not declared by Iran until after the IAEA learned of their existence by other means, and Iran's previous failure to cooperate with the IAEA extended beyond the construction and operation of undeclared nuclear facilities to include Iran's failure to allow the IAEA to visit and inspect undeclared sites; failure to allow the IAEA to take verification samples of the heavy water at Arak; clean-up of suspect sites at Parchin and Lavasan-Shian to thwart effective IAEA verification; and failure to engage fully with the IAEA on resolution of outstanding questions and issues regarding possible military dimensions of Iran's nuclear program. 1093 In my view, Iran's past deception and lack of full cooperation with the IAEA strongly suggests that Iran was in fact pursuing a covert nuclear weapons capability, and when combined with the extensive evidence compiled by the IAEA and by Israel of Iran's plans to develop an initial batch of five nuclear weapons; Iran's experimentation and testing of nuclear warhead capabilities; and Iran's already-existing Shahab-3/3M ballistic missile delivery capability 1094, I believe it may be reasonable for Israel to conclude, in a macro-assessment, that they may face the existential threat of armed aggression by a nuclear-capable Iran, and that this threat is serious enough to warrant consideration by Israel of the potential use of force in anticipatory defense against Iran's nuclear facilities to protect the "major value" of Israel's right to survive as an independent, Jewish state.

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¹⁰⁹² Notes 724-872 *supra* and accompanying text.

¹⁰⁹³ Id

Notes 655-675, supra and accompanying text.

Of course, if the strict temporal imminence requirement of the customary international right of anticipatory defense is applied to these facts, Israel may not lawfully strike the Iranian nuclear facilities because there is no clear evidence that Iran has yet developed any nuclear weapons or that Israel is faced with a temporally immediate threat of an Iranian nuclear attack. However, given the seriousness of the threat Israel faces from a nuclear-armed Iran, I believe that Israel could potentially have a valid international legal basis to use armed force in anticipatory defense against Iran even though there is not yet a temporally imminent threat (in the strict Caroline sense of "no moment for deliberation") of Iran using nuclear weapons to attack Israel. Iran's ongoing, indirect armed aggression against Israel through terrorist proxies, combined with the reasonable likelihood that Iran is actively pursuing a nuclear weapons capability, poses such a catastrophic threat to Israel's existence that a lower showing of threat immediacy against a potential nuclear attack by Iran is justified, because Israel cannot afford to allow the threat of Iran's use of nuclear weapons against it to become temporally imminent, and Israel certainly cannot afford to wait for an actual Iranian armed attack with nuclear weapons to occur. For the customary international law of the jus ad bellum to require Israel to wait for the Iranian nuclear threat to develop to the point of an immediate threat of a nuclear attack would be contrary to the core self-defense principle that states have a right to use defensive force effectively. 1095 Therefore, since the threat Israel faces is one involving an aggressor state pursuing nuclear weapons, and since that same aggressor state is one of the world's main sponsors of terrorism, I believe that the strict temporal imminence requirement set forth in the customary international law right of anticipatory

¹⁰⁹⁵ Note 1078, *supra* and accompanying text.

defense may preclude Israel from taking effective action to avert the threat unless the imminence requirement is interpreted more flexibly to allow anticipatory defensive action based on less temporal threat immediacy. Additionally, I believe Israel can reasonably argue that the use of force in anticipatory defense may be the only effective way to eliminate the threat ("no choice of means"), if Iran continues to breach its JCPOA commitments, ramps up its uranium enrichment program, and ceases to allow IAEA verification and monitoring of its nuclear program as required by the JCPOA.

In view of the foregoing, I concur with Professor John Norton Moore and Professor Jane Stromseth that what is needed is a more tailored concept of imminence under the customary international law right of anticipatory defense that can, for example, take account of the seriousness of the threat posed by WMD (particularly nuclear weapons) to justify a lower showing of immediacy of the threatened armed aggression. Having said that, the challenge becomes how exactly to tailor the legal concept of imminence to balance the need of individual states for effective anticipatory defense against armed aggression involving WMD and/or terrorism with the need to preserve critical international legal norms against the unlawful use of force in international relations. The next chapter will examine efforts by some states and scholars to articulate a revised standard of imminence under the customary international law right of states to anticipatory defense against a threat of imminent attack.

Moore, supra note 305, at 956-957, 957 n. 226; Jane E. Stromseth, Agora: Future Implications of the Iraq Conflict: Law and Force After Iraq: A Transitional Moment, 97 AM. J. INT'L. L. 628, 635-636 (2003).

Arend. supra note 1079, at 98, 101.

CHAPTER IX. PART 3: EFFORTS TO ARTICULATE A REVISED STANDARD OF IMMINENCE

In response to concerns that the customary international law right of anticipatory defense must allow states to defend themselves effectively against modern threats such as WMD and terrorism before it is too late to do so, during the past twenty years some states and scholars have articulated various proposals for a revised standard of imminence. 1098 As a starting point, Professor Noam Lubell has noted that there are significant inconsistencies in the English language definition of the word "imminent", in that the Oxford English dictionary defines an "imminent" event as one which is "about to happen"; the Cambridge dictionary defines it as "coming or likely to happen very soon"; and the Merriam-Webster dictionary defines an "imminent" event as one that is "ready to take place" or is "hanging threateningly over one's head". 1099 Professor Lubell assesses that "... the first of these might be read as describing a definite impending event, while the second definition introduces the notion of 'likely'- that is, not definite and might not occur- and the third definition remains equivocal, since something that is 'ready to take place' tells us nothing as to the certainty or timing of its future occurrence." 1100 Professor Lubell asserts that in view of these dictionary definitions, the requirement of imminence has, in the context of the right of anticipatory defense, both a temporal aspect that refers

¹⁰⁹⁸ Deeks, *supra* note 15, at 673.

¹⁰⁹⁹ Lubell, *supra* note 509, at 702.

¹¹⁰⁰ Id

to a threat being immediate and a likelihood or certainty aspect that refers to a threat being specific and identifiable. 1101

Although the ICJ has not taken a definitive position on the international legal right of states to take anticipatory defensive action against a threat of imminent armed attack¹¹⁰², it has discussed the meaning of imminence in the context of the international law of state responsibility. In its Judgment in the 1997 Case Concerning the Gabcikovo-Nagymaros Project¹¹⁰³ the ICJ considered whether Hungary's environmental concerns regarding continued construction of a system of locks along the Danube River constituted a "grave and imminent peril" to the environment that was sufficient to justify Hungary's unilateral suspension of its construction obligations under a bilateral treaty between Hungary and Slovakia. 1104 In this context, the ICJ stated that "imminence" was synonymous with "immediacy" or "proximity" and that it goes far beyond the concept of "possibility", so that the "grave and imminent peril" to the environment alleged by Hungary must have been a threat to Hungary's environmental interests at the actual time. 1105 However, the ICJ explained that "... a 'peril' appearing in the long term might be held to be 'imminent' as soon as it is established, at the relevant point in time, that the realization of that peril, however far off it may be, is not thereby any less certain and inevitable."106 While the Gabcikovo-Nagymaros case did not involve the use of force in anticipatory defense, the ICJ's explanation of the meaning of imminence appears to

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¹¹⁰¹ Lubell, *supra* note 509, at 702.

¹¹⁰² Notes 329-353 *supra*, and accompanying text.

¹¹⁰³ Case Concerning the Gabcikovo-Nagymaros Project (Hung. v. Slovk.), Judgment, 1997 I.C.J. Rep. 7 (Sept. 25).

¹¹⁰⁴ *Id.*, 1997 I.C.J. Rep. at 39, para. 49.

¹¹⁰⁵ *Id.*, 1997 I.C.J. Rep. at 42, para. 54.

¹¹⁰⁶ Id

delink imminence from the strict requirement of temporal immediacy, and it also appears to validate Professor Lubell's assertion that imminence also includes the concept of likelihood or certainty. 1107

This chapter will discuss the efforts by some states and scholars over the past twenty years to articulate a revised standard of imminence for the customary international law right of states to use armed force in anticipatory defense against imminent threats of attack. In my view, these efforts by states and scholars to articulate a revised standard of imminence can be grouped into four different approaches: 1) those that favor retaining temporal imminence as a requirement for anticipatory defense but who assert that other factors should also be added to the assessment by a defending state of whether a threat of attack is imminent ("imminence plus"); 2) those that favor eliminating temporal imminence altogether as a requirement for anticipatory defense, particularly in the context of the new threats posed by WMD and terrorism; 3) those that favor a "totality of the circumstances" standard for evaluating whether a threat of attack is imminent, in which the temporal imminence of the threat is only one of multiple factors to be assessed and leaving prioritization of these factors to the defending state; and 4) those that favor a "last window of opportunity" standard that focuses on the last opportunity of the defending state to take effective anticipatory defensive action to avert the threatened attack. After discussing in greater detail the views of the states and scholars in these four categories, the chapter will conclude with an overall assessment of their merits, as a

¹¹⁰⁷ Lubell, *supra* note 509, at 703.

prelude to my own proposal for a new multi-part test for evaluating imminence in Chapter X of the dissertation.

A. Imminence Plus

A notable group of legal scholars favors retaining temporal imminence as a requirement for the use of force by states in anticipatory defense, but asserts that other key factors, such as the seriousness and probability of the threatened attack, should also be added to the assessment by a defending state of whether a threat of attack is imminent. For example, Professor John Norton Moore has stated that the imminence of a threat relates primarily to the immediacy of the threat, but that it may also take account of the seriousness of the threat, and that as such, "... threats rooted in high risk of use of weapons of mass destruction, particularly nuclear weapons, may qualify as imminent based on a lower showing of immediacy." ¹¹⁰⁸ Professor Sir Christopher Greenwood has similarly argued that in assessing what constitutes an imminent armed attack, states must now take into account two factors- the gravity of the threat and the method of delivery of the threat- that did not exist at the time of the Caroline incident. 1109 Professor Greenwood asserts that the gravity of the threat posed by WMD is so horrific that such attacks can reasonably be treated as imminent in circumstances where an attack by conventional means would not be so regarded, and that the method of delivery of the threat must also be considered because it is far more difficult to determine the time scale within which an attack by terrorist means would materialize. 1110 Nevertheless, Professor Greenwood

¹¹⁰⁸ Moore, *supra* note 305, at 956.

¹¹⁰⁹ Greenwood, *supra* note 21, at 15.

¹¹¹⁰ Id

contends that despite these concerns, the customary international law requirement of imminence cannot be ignored or rendered meaningless, and that there must therefore be sufficient evidence that the threat of attack exists, which requires evidence of both possession of weapons and an intention to use them.¹¹¹¹

According to Professor Noam Lubell, in order for a threat of armed attack to be imminent there must be a reasonable level of certainty that the attack will occur in the "foreseeable future", and there must also be a specific and identifiable threat of attack, rather than a vague threat of unknown form. 1112 Professor Lubell disagrees with those who would relax these requirements due to the unpredictable nature of terrorism, because allowing for self-defense against "vague unknown threats" would in his view render the international legal right of self-defense open to unconscionable abuse. 1113 However, with regard to the concern of states over WMD attacks, Professor Lubell asserts that the gravity of the threat posed by WMD may influence the decision-making process of states regarding the level of certainty to be demanded, but that this must be kept within the strict confines of a threat of a specific attack. 1114 Professor Lubell also states that the gravity of the threat posed by WMD "... might allow for a slight shift away from demanding that the threatened attack be immediate ... [but it] cannot allow for ignoring non-forcible viable alternatives, and it cannot go beyond the reasonably foreseeable

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¹¹¹¹ Greenwood, *supra* note 21, at 15.

¹¹¹² Lubell, *supra* note 509, at 718-719.

¹¹¹³ *Id*.

¹¹¹⁴ *Id*.

future in a manner which transitions from thwarting a specific approaching attack into action to prevent a generalized threat."¹¹¹⁵

Professors Dapo Akande and Thomas Lieflander describe the imminence requirement as "... a certain pressing quality that a threat must have for anticipatory selfdefense to be lawful." They state that in order to clarify imminence it is necessary first to consider the concept of threat, and that there are four essential components of a threat: 1) the type of threat, i.e., what kind of attack is threatened; 2) the likelihood of the threat, i.e., how probable is it that the attack will occur; 3) the gravity of the threat, i.e., how severe will the attack be; and 4) the *timing* of the threat, i.e., when will the attack occur. 1117 Professors Akande and Lieflander assert that the likelihood and gravity of a threatened attack are genuine elements of the concept of imminence, and that while it seems "on first sight" that imminence also requires that a threat will materialize within a short time frame, the better view is that where a threat is sufficiently probable and severe, the mere fact that it is still temporally remote should not by itself prohibit anticipatory defensive action that is necessary and proportional. 1118 That said, Professors Akande and Lieflander also assert that the temporal aspect of a threat remains important, because it will be difficult to establish that a threat is probable and severe enough to warrant a defensive response if it is still very far away in a temporal sense. 1119 In addition, and more importantly, Professors Akande and Lieflander note that the temporal aspect of a

¹¹¹⁵ Lubell, *supra* note 509, at 719.

Dapo Akande & Thomas Lieflander, *Clarifying Necessity, Imminence, and Proportionality in the Law of Self-Defense*, 107 AM. J. INT'L L. 563, 564 (2013).

¹¹¹⁷ *Id.* at 564.

¹¹¹⁸ *Id*. at 565-566.

¹¹¹⁹ *Id.* at 565.

threat affects the core self-defense requirement of necessity, because where a military option in anticipatory defense will be available for some time because the threat is temporally remote, other options not involving the use of force should be tried first to avert the threat. 1120

B. Eliminate the Imminence Requirement

Another group of legal scholars favors eliminating temporal imminence altogether as a requirement for anticipatory defense, particularly in the context of the new threats posed by WMD and terrorism. One such legal scholar is Professor Abraham Sofaer, who argues that the artificially narrow standard of temporal imminence formulated by U.S. Secretary of State Daniel Webster to resolve the *Caroline* incident is inappropriate to the possibility of an attack with modern technology and advanced weapons of mass destruction, launched by terrorists acting secretly with state support. 1121 Professor Sofaer contends that the current and proper standard for the international legal right of anticipatory defense is necessity, which must be established based on the nature and magnitude of the threat; the likelihood that the threat will be realized unless anticipatory defensive action is taken; the availability and exhaustion of alternatives to using force; and whether the use of force in anticipatory defense is consistent with the terms and purposes of the UN Charter and other international agreements. 1122 Professor Sofaer would thus eliminate as a specific factor for consideration the degree of temporal imminence of the threatened attack.

¹¹²⁰ Akande & Lieflander, supra note 1116, at 565.

¹¹²¹ Abraham D. Sofaer, *On the Necessity of Pre-Emption*, 14 EUR. J. INT'L L. 209, 212, 214, 220 (2003). ¹¹²² *Id* at 220.

Professor Michael W. Doyle similarly argues that the Caroline standard of strict temporal imminence is deeply flawed, and that other factors such as the probability and severity of the threat are far more significant for states evaluating the necessity of using force in anticipatory defense. 1123 In view of the dangers posed by contemporary weapons of mass destruction-particularly nuclear weapons- and the rise of belligerent non-state actors, Professor Doyle asserts that states should assess the following four factors when evaluating whether to use armed force in anticipatory defense: the *lethality* of the attack that the defending state would suffer (lives lost, property damage, etc.); the *likelihood* that the threatened attack will occur; the *legitimacy* of the defending state's proposed action in response (assessed using the concepts of necessity, proportionality, and "appropriate deliberation"); and the *legality* under domestic and international law of the threatening state's actions and the defending state's proposed response. 1124 Temporal imminence of the threatened attack is not among Professor Doyle's factors.

In the specific context of the new threats posed by international terrorism, Colonel William K. Lietzau argues that in the post-9/11 world there is virtually no opportunity for states to determine the "imminent" nature of an impending terrorist attack, and that the strict temporal imminence requirement set forth in the Caroline incident simply does not fit the modern age. 1125 For this reason, Colonel Lietzau asserts that when considering whether to take anticipatory defensive action against an international terrorist organization, a state should consider the likelihood of a future terrorist attack; whether

¹¹²³ DOYLE, *supra* note 198, at 15-18, 43-63.

¹¹²⁵ William K. Lietzau, *Old Laws, New Wars: Jus ad Bellum in an Age of Terrorism*, 8 MAX PLANCK U.N.Y.B. 383, 437, 442, 450 (2004).

the terrorist organization committed a previous attack (which demonstrates a likely intent to attack again); the extent to which any future attack can be forecast; the potential gravity of the anticipated attack; the extent to which the opportunity for peaceful resolution was offered through ultimatum or other means; the extent of international cooperation or recognition of the propriety of the intervention; the extent to which ulterior motives for the intervention may be present; and the quality of evidence from which to draw relevant conclusions. Once again, the temporal imminence of the anticipated attack is not among Colonel Lietzau's required factors for assessment by states contemplating whether to use force in anticipatory defense.

Colonel Guy B. Roberts would also eliminate the requirement of temporal imminence in the specific context of the threats posed to states by the proliferation of WMD. Colonel Roberts argues that in an age in which WMD have the potential to put a state's population at risk of annihilation, an assessment of whether a WMD threat is temporally "imminent" as required under the current anticipatory self-defense paradigm is "irrelevant", and that requiring such temporal imminence in the face of a WMD threat may force a defending state to wait until it is too late. 1127 Colonel Roberts therefore asserts that states should assess six criteria when evaluating whether to use anticipatory defensive force in response to a threat of WMD proliferation. First, a defending state should issue a declaratory statement that WMD acquisition programs or the possession of such weapons, in violation of treaty obligations or international non-proliferation norms,

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¹¹²⁶ Lietzau, *supra* note 1125, at 437, 442, 450.

Guy B. Roberts, *The Counter-Proliferation Self-Help Paradigm: A Legal Regime for Enforcing the Norm Prohibiting the Proliferation of Weapons of Mass Destruction*, 27 DENV. J. INT'L L. & POL'Y 483, 518-527 (1999).

is a threat to the defending state's vital national interests. 1128 Second, the defending state must reasonably determine, by objective evidence, the existence of an illicit WMD program and that past behavior or declaratory statements by the proliferator indicate that the acquired WMD will be used against the defending state's vital national security interests. 1129 The threat must be concrete and persuasive rather than speculative or unsubstantiated, but an attack with WMD need not be imminent. 1130 Third, the defending state must determine that the use of force in anticipatory defense is necessary, in that failure to use force will compromise the defending state's security and will unreasonably increase the possibility of harm to its civilian population. Fourth, the use of defensive force to eliminate the WMD threat must be proportional 1132, and fifth, there must be a reasonable chance that the proposed use of anticipatory defensive force will be successful, in that it will eliminate or significantly degrade the ability of the proliferator to resurrect the illicit WMD program. 1133 Sixth, the use of force in anticipatory defense must be the last resort, in that all other reasonably available means of resolving the situation have been tried and have failed. 1134 Colonel Roberts asserts that if all six of these criteria are satisfied, then the use of force in anticipatory defense to counter a WMD proliferation threat is lawful and legitimate, regardless of whether there is a temporally imminent threat of attack. 1135

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¹¹²⁸ Roberts, *supra* note 1127, at 519.

¹¹²⁹ *Id.* at 520-521.

¹¹³⁰ Id at 520

¹¹³¹ *Id.* at 522.

¹¹³² *Id.* at 524

¹¹³³ Id at 524-525

¹¹³⁴ *Id.* at 525-526.

¹¹³⁵ *Id*. at 526-527.

C. Totality of the Circumstances Standard

A third group of states and legal scholars favors a "totality of the circumstances" standard for evaluating whether a threat of attack is imminent, in which the temporal imminence of the threat is only one of multiple factors to be assessed and which leaves the prioritization of these factors to the discretion of the defending state. Professor Christian Henderson describes this standard as "contextual imminence", in which a state's evaluation of the imminence of a threatened attack turns on the specific facts of each case, and is not triggered by a single factor, but instead by multiple factors that must be weighed together in any decision to resort to force in anticipatory defense. ¹¹³⁶

The U.K.'s Royal Institute of International Affairs (sister institution of the U.S. Council on Foreign Relations), also known as Chatham House¹¹³⁷, supported such a "totality of the circumstances" standard of imminence in Principle "D" of its October 2006 principles on the international legal right of states to use force it self-defense. Principle "D" stated that in the context of contemporary threats, imminence cannot be construed by reference to a temporal criterion only, but must be assessed "having regard to the particular circumstances of each case." Principle "D" also stated that in addition to the temporal imminence of the threat, a defending state that is evaluating whether a threatened attack is "imminent" may also consider factors such as the gravity of the threatened attack; the capability of the threatening state or non-state actor; the nature of the threatened attack; the geographical situation of the defending state; and the past

¹¹³⁶ HENDERSON, *supra* note 19, at 300.

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¹¹³⁷ Notes 486-491 *supra* and accompanying text.

¹¹³⁸ Wilmshurst, *supra* note 487, at 967.

¹¹³⁹ Id

record of attacks by the threatening state or non-state actor. 1140 The comments following Principle "D" explained that the determination of imminence is ". . . for the relevant State to make, but it must be made in good faith and on grounds which are capable of objective assessment."1141

In October 2012, Sir Daniel Bethlehem, the former Legal Adviser to the U.K.'s Foreign and Commonwealth Office (2006-2011), published a set of sixteen principles that he asserted were relevant to the scope of a state's right of self-defense against an actual or imminent armed attack by non-state actors, which included a "totality of the circumstances" standard for evaluating the imminence of a threatened attack. 1142 Bethlehem noted that while "imminence" continues to be a key element of the law relevant to anticipatory defense in response to a threat of attack, there is little scholarly consensus on the meaning of imminence, and the concept of imminence needs to be further refined and developed to take into account the new threats from non-state actors that states face today. 1143 In an attempt to advance the debate regarding the proper definition of imminence, Bethlehem asserted as his "Principle 8" that whether an armed attack may be regarded as imminent ". . . will fall to be assessed by reference to all relevant circumstances, including (a) the nature and immediacy of the threat, (b) the probability of an attack, (c) whether the anticipated attack is part of a concerted pattern of continuing armed activity, (d) the likely scale of the attack and the injury, loss, or damage likely to result therefrom in the absence of mitigating action, and (e) the likelihood that

¹¹⁴⁰ Wilmshurst, *supra* note 487, at 967-968.

¹¹⁴¹ *Id.* at 968.

¹¹⁴² Daniel Bethlehem, *Principles Relevant to the Scope of a State's Right of Self-Defense Against an* Imminent or Actual Armed Attack by Non-State Actors, 106 AM. J. INT'L L. 770 (2012). ¹¹⁴³ *Id.* at 773-774.

there will be other opportunities to undertake effective action in self-defense that may be expected to cause less serious collateral injury, loss, or damage. ¹¹⁴⁴ Bethlehem also asserted that the absence of specific evidence of where an attack will take place or of the precise nature of an attack does not preclude a conclusion that an armed attack is imminent for purposes of the exercise of a right of anticipatory defense, provided that there is a reasonable and objective basis for concluding that an armed attack is imminent. ¹¹⁴⁵

When he published his principles on the international legal right of self-defense in October 2012, Bethlehem stated that the principles had been informed by detailed discussions over recent years with foreign ministry, defense ministry, and military legal advisers from a number of states with operational experience in these matters, but that the principles did not reflect "a settled view of any state." However, within five years the Governments of the U.S., U.K., and Australia publicly and officially endorsed Bethlehem's "totality of the circumstances" standard for evaluating imminence under the international legal right of anticipatory defense. In April 2016, Brian J. Egan, the Legal Adviser to the U.S. State Department, stated during a public address to the American Society of International Law that when considering whether an armed attack is imminent under the *jus ad bellum* for purposes of the initial use of force against a particular non-state actor, the U.S. "analyzes a variety of factors, including those identified by Sir Daniel Bethlehem in the enumeration he set forth . . . in 2012." Pagan's public

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¹¹⁴⁴ Bethlehem, *supra* note 1142, at 775-776.

¹¹⁴⁵ Id at 776

¹¹⁴⁶ *Id.* at 773.

¹¹⁴⁷ Egan Address, *supra* note 515.

endorsement of Bethlehem's "totality of the circumstances" standard for evaluating imminence was confirmed as an official U.S. Government position in December 2016 when U.S. President Barack Obama issued a report intended to explain the domestic and international legal bases for the U.S.'s use of military force overseas, and specifically stated in the report that when considering whether an armed attack is imminent under the jus ad bellum for purposes of the initial use of force against another state or on another state's territory, the U.S. analyzes a variety of factors, including those identified by Bethlehem in 2012. 1148 These official U.S. Government endorsements of Bethlehem's "totality of the circumstances" standard of imminence in 2016 were soon followed in 2017 by similar public addresses by the Attorneys-General of the U.K. and Australia, which stated the official positions of those Governments that the imminence requirement for purposes of the right of anticipatory defense must be assessed by considering numerous different factors, including those articulated by Bethlehem in 2012. 1149 In my view, these public and official endorsements by the Governments of the U.S., the U.K., and Australia, states with consistent participation and significant experience in the field of the jus ad bellum, constitute verbal state practice and opinio juris of an emerging position that for purposes of the international legal right of anticipatory defense, whether

¹¹⁴⁸ U.S. Legal Frameworks Report, *supra* note 517, at 9 n. 48.

Wright Address, *supra* note 518 ("In 2012 Sir Daniel Bethlehem . . . published . . . a series of principles that warrant serious reflection. The one I would like to focus on here is the series of factors he identified should be taken account when assessing imminence . . . It is my view, and that of the U.K. Government, that these are the right factors to consider in asking whether or not an armed attack by non-state actors is imminent and the U.K. Government follows and endorses that approach."); Brandis Address, *supra* note 518 ("Australia agrees with the criteria outlined in 2012 by Sir Daniel Bethlehem . . . In Australia's view, the factors enumerated by Sir Daniel Bethlehem provide an appropriate- if non-exhaustive- framework to assess whether an attack is imminent. Australia agrees with and adopts that formulation. It follows that imminence is not simply a question of timing. The temporal aspect is unquestionably relevant, but it is by no means the sole relevant factor. All the circumstances, including those factors identified by Sir Daniel in particular, may be relevant.").

a threat of attack is imminent must be evaluated based on the totality of the circumstances and not simply on whether the threat is temporally imminent.

D. Last Window of Opportunity Standard

A fourth group of legal scholars favors replacing the temporal imminence requirement of the customary international law of anticipatory defense with a "last window of opportunity" standard that focuses on the last opportunity of the defending state to take effective anticipatory defensive action to avert the threatened attack. For example, Professor Michael N. Schmitt has argued that in the context of responding effectively to threats of attack by non-state terrorist groups, whose defining characteristic is their ability to attack without warning, states may lawfully use force in anticipatory defense when a terrorist group harbors both the intent and means to carry out attacks, there is no effective alternative for preventing them, and the defending state must act now or risk missing the opportunity to thwart the attacks. 1150 Professor Schmitt asserts that it is appropriate to focus on the last viable window of opportunity a state has to defend itself, because in the "shadowy and secret world of transnational terrorism" the window of opportunity to take effective defensive action can close long before a terrorist strike takes place. 1151 Professor Schmitt states that to put it bluntly, "... when the opportunity presents itself, it may be necessary, and lawful, to kill a terrorist that you cannot capture, even though you do not know precisely when and where he or she will strike."1152

¹¹⁵⁰ Michael N. Schmitt, *Responding to Transnational Terrorism Under the Jus Ad Bellum: A Normative Framework*, 56 NAV. L. REV. 1, 18-19 (2008).

¹¹⁵¹ *Id.* at 19.

¹¹⁵² *Id*.

Professor David A. Sadoff also supports replacing the requirement of temporal imminence in the customary international law of anticipatory defense with a "last window of opportunity" standard. Professor Sadoff states that the concept of temporal imminence articulated during the Caroline incident assumes that a "time-gap" exists between the threat posed and the actual attack, during which- if the span is short enougha state would be legally permitted to launch a proactive anticipatory strike, but that to the extent that this time-gap has vanished for certain types of threats, states have no genuine opportunity to satisfy the imminence requirement. ¹¹⁵³ In view of this, Professor Sadoff asserts that the current customary international law requirement that a threat of attack must be temporally imminent should be replaced by a "last window of opportunity" standard that would apply when a defending state knows of a specific threat of attack, and assesses that any additional delay in responding to the threatened attack would seriously compromise its security. 1154 Professor Sadoff states that because the underlying rationale of the imminence requirement is to ensure that the use of military force in anticipatory defense is truly necessary, a "last window of opportunity" standard should be no less suitable, because it similarly minimizes the risk of premature use of force and reflects the absence of any effective alternative. 1155

In the context of anticipatory defense against cyber armed attacks, a majority of the twenty-four international law experts who developed the 2017 Tallinn Manual also rejected the temporal imminence requirement for anticipatory defense and favored

¹¹⁵³ Sadoff, *supra* note 391, at 459-460.

¹¹⁵⁴ Sadoff, *supra* note 391, at 475. *Id*.

replacing it with a "last window of opportunity" standard. 1156 The commentary following Rule 73 in the 2017 *Tallinn Manual* states that under a "last window of opportunity standard", a state may act in anticipatory defense against a cyber armed attack when the attacker is clearly committed to launching an attack and the defending state will lose its opportunity to defend itself effectively unless it acts. 1157 It also states that this "last window of opportunity" may present itself immediately before the threatened attack in question, or, in some cases, long before it occurs, but that the critical question is not the temporal proximity of the anticipatory defensive action to the threatened cyber armed attack, but whether a failure to act at that moment would reasonably be expected to result in the defending state being unable to defend itself effectively when that attack actually starts. 1158 That said, the commentary following Rule 73 in the 2017 Tallinn Manual notes that within the majority of the twenty-four international law experts, a number of the experts took the position that while the "last window of opportunity" standard was a correct statement of the law in principle, it did not amount to a license to dispense altogether with the temporal element of self-defense. 1159 For those experts, the further removed the threatened cyber armed attack is from being effectuated in temporal terms, the less likely it is that the use of armed force in anticipatory defense is the only available option to avert the threat. 1160

After considering each of the four approaches by states and scholars to articulate a revised standard of imminence for the customary international law right of anticipatory

¹¹⁵⁶ TALLINN MANUAL 2.0, supra note 519, at 351.

¹¹⁵⁷ Id

¹¹⁵⁸ Id

¹¹⁵⁹ *Id.* at 352.

¹¹⁶⁰ *Id*.

defense, I agree with those who favor the "imminence plus" approach that the concept of imminence should be broadened to allow states to consider the key factors of the probability and seriousness of the threatened attack in addition to its temporal proximity. In evaluating whether the use of force in anticipatory defense is necessary, as required under customary international law, it is imperative for states to consider the probability and the expected severity of the threatened attack, and I therefore agree with Professors Moore, Greenwood, Lubell, Akande, and Lieflander that where a threatened attack is sufficiently probable and serious it may legitimately be considered to be imminent with a lower showing of temporal immediacy. 1161 That said, I also specifically agree with Professors Lubell, Akande, and Lieflander that the temporal aspect of the imminence requirement remains vital to the determination of whether the use of force in anticipatory defense is truly necessary, because if a threatened attack is still temporally remote then other, peaceful alternatives to eliminate the threat are likely to be available and should be pursued by the defending state prior to a decision to use force. 1162 I believe that Professor Lubell is absolutely correct in his assertion that while the probability and seriousness of a threatened attack may justify a lower showing of temporal immediacy, this lower showing of temporal immediacy cannot go beyond the reasonably foreseeable future and cannot allow a defending state to ignore viable non-forcible alternatives. 1163 For this reason, I do not agree with or support the complete elimination of the temporal imminence requirement from the customary international law of anticipatory defense. 1164

¹¹⁶¹ Notes 1108-1120 *supra* and accompanying text.

¹¹⁶² Notes 1115, 1119-1120 *supra* and accompanying text.

¹¹⁶³ Note 1115 *supra* and accompanying text.

¹¹⁶⁴ Notes 1121-1135 *supra* and accompanying text.

With regard to the proposed "totality of the circumstances" standard for evaluating whether a threatened attack is imminent 1165, I agree that some of the additional factors proposed by the states and scholars who favor that approach, such as whether the anticipated attack is part of a concerted pattern of continuing armed activity by the threatening state or non-state actor 1166, are legitimate factors for consideration by states, although it is arguable that they are actually part of the required analysis of the probability that the threatened attack will occur. I also agree with the U.K.'s Chatham House that the evaluation by states of whether a threatened armed attack is imminent must be conducted in good faith and should be based as much as possible on grounds that are capable of objective assessment. 1167 However, from a legal rule-making perspective, a potential weakness of the proposed "totality of the circumstances" standard for evaluating imminence is that there is no guidance on how the different factors are to be weighed, which means that the balancing of the various factors by individual states may produce different outcomes in relatively similar cases, thereby leading to a perception of unequal application of the law among states. 1168 Nevertheless, the public and official endorsement of the "totality of the circumstances" approach by the Governments of the U.S., the U.K., and Australia 1169, states with consistent participation and significant

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¹¹⁶⁵ Notes 1136-1149 *supra* and accompanying text.

¹¹⁶⁶ Note 1144 *supra* and accompanying text.

¹¹⁶⁷ Note 1141 *supra* and accompanying text.

Ashley S. Deeks, *Multi-Part Tests in the Jus Ad Bellum*, 53 HOU. L. REV. 1035, 1047-1048 (2016) [hereinafter Deeks MPT]. See also Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175, 1179-1180 (1989) ("[W]hen we decide a case on the basis of what we have come to call the 'totality of the circumstances' test, it is not *we* who will be 'closing in on the law' in the foreseeable future, but rather thirteen different courts of appeals . . . To adopt such an approach, in other words, is effectively to conclude that uniformity is not a particularly important objective with respect to the legal question at issue.").

¹¹⁶⁹ Notes 1147-1149 *supra* and accompanying text.

experience in the field of the *jus ad bellum*, constitutes verbal state practice and *opinio juris* of an emerging position that for purposes of the international legal right of anticipatory defense, whether a threat of attack is imminent must be evaluated based on the totality of the circumstances and not simply on whether the threat is temporally imminent.

The "last window of opportunity" standard that is proposed by some scholars and that was adopted by a majority of the twenty-four international law experts who developed the 2017 *Tallinn Manual*¹¹⁷⁰ correctly focuses on the fact that the international legal right of anticipatory defense must be an effective right, and that for some modern threats such as WMD, terrorism, and cyber armed attacks, states may have no realistic opportunity to comply with the customary international law requirement to postpone anticipatory defensive action until the threatened attack is temporally imminent. While I therefore agree that the "last window of opportunity" for effective defensive action should be another factor in evaluating imminence, I do not agree that this standard should completely replace the temporal aspect of the imminence requirement, because the further removed the threatened attack is in a temporal sense the less likely it will be that the use of force in anticipatory defense is the only available alternative to remove the threat.

This chapter has discussed the efforts by some states and scholars over the past twenty years to articulate a revised standard of imminence for the customary international law right of states to use armed force in anticipatory defense against imminent threats of

 $^{^{1170}}$ Notes 1150-1160 supra and accompanying text.

attack. These efforts have involved four different approaches: 1) those that favor retaining temporal imminence as a requirement for anticipatory defense but who assert that other factors should also be added to the assessment by a defending state of whether a threat of attack is imminent ("imminence plus"); 2) those that favor eliminating temporal imminence altogether as a requirement for anticipatory defense, particularly in the context of the new threats posed by WMD and terrorism; 3) those that favor a "totality of the circumstances" standard for evaluating whether a threat of attack is imminent, in which the temporal imminence of the threat is only one of multiple factors to be assessed and leaving prioritization of these factors to the defending state; and 4) those that favor a "last window of opportunity" standard that focuses on the last opportunity of the defending state to take effective anticipatory defensive action to avert the threatened attack. Informed by my assessment at the end of this chapter of the relative merits of each of these four approaches, I will offer in the next chapter my own proposal for a new multi-part test for use by states in evaluating whether a threatened armed attack is imminent.

CHAPTER X. PART 3: A PROPOSED NEW MULTI-PART TEST TO GUIDE STATES IN EVALUATING THE IMMINENCE OF A THREATENED ARMED ATTACK

In her 2016 law review article titled Multi-Part Tests in the Jus Ad Bellum, Professor Ashley Deeks noted that the words "if an armed attack occurs" in the English language text of Article 51 of the UN Charter have led to debates among states and legal scholars regarding whether and when a state may use force in anticipatory defense before a threatened attack actually occurs. 1171 Professor Deeks also noted that states and legal scholars who believe the UN Charter is a "living instrument" have tended to argue for a relatively flexible interpretation of the right of self-defense in Article 51, while simultaneously worrying that an unduly permissive interpretation could undermine the UN Charter's primary goal of preserving and maintaining international peace and security and could open up a Pandora's box of forcible actions. 1172 The goal of preserving the traditional jus ad bellum framework while ensuring that the UN Charter retains contemporary relevance has led states and legal scholars to propose and/or employ what Professor Deeks calls "Multi-Part Tests" (hereinafter MPTs) in the jus ad bellum that articulate specific elements or factors (often spanning various types of evidentiary questions) against which a state can and must evaluate its contemplated use of force action to assess its legality. 1173 MPTs can be employed to achieve "constrained

¹¹⁷¹ Deeks MPT, *supra* note 1168, at 1037, 1050.

¹¹⁷² *Id.* at 1037, 1051-1052.

¹¹⁷³ *Id.* at 1037.

flexibility" in interpreting the UN Charter and to influence and guide states' decision-making regarding *jus ad bellum* issues such as the use of force in anticipatory defense. 1174

In this chapter, after first discussing in greater detail the different types of MPTs in the jus ad bellum and their functions and critiques, I will propose a new MPT to guide states in evaluating the imminence of a threatened armed attack under the customary international law of anticipatory defense. Specifically, I will propose that a state may regard the threat of an armed attack as imminent if it assesses in good faith, based on clear and convincing, objective evidence, that all four of the following elements are present: 1) capability- the threatening state or non-state actor has the capability to carry out an armed attack against the threatened state; 2) intent- the threatening state or nonstate actor has clearly committed itself to conducting an armed attack against the threatened state and is highly likely to do so; 3) severity- the anticipated armed attack is reasonably expected to result in death and/or serious bodily harm to personnel, significant property damage, and/or compromise of the threatened state's vital national interests; and 4) time- the attack is expected to occur in the near future and there is no reasonable opportunity for the threatened state to pursue alternative, peaceful courses of action to repel the attack, in particular through resort to the UN Security Council.

A. MPTs in the Jus Ad Bellum

Professor Deeks identifies two basic types of MPTs that have been proposed for use within the *jus ad bellum*. The first type of MPT, the "necessary elements test", requires a state to meet all of the listed elements in order for its action to be considered

¹¹⁷⁴ Deeks MPT, *supra* note 1168, at 1037-1038.

lawful, and each element listed within the test is generally crafted to have binary (yes/no) answers. Professor Deeks observes that notwithstanding the relative specificity of a necessary elements test, each element may require a decision-maker to interpret terms within that element while evaluating whether the facts of the particular situation meet all of the requisite elements. Professor Deeks states that an example of a necessary elements MPT within the *jus ad bellum* is the U.K. Government's test for determining when the use of force for humanitarian intervention would be lawful, which requires that all of the following three elements must be met: 1) there must be convincing evidence, generally accepted by the international community as a whole, of extreme humanitarian distress on a large scale, requiring immediate and urgent relief; 2) it must be objectively clear that there is no practicable alternative to the use of force if lives are to be saved; and 3) the proposed use of force must be necessary and proportionate to the aim of humanitarian need and must be strictly limited in time and scope to this aim (i.e., the minimum necessary to achieve that end and for no other purpose). 1177

The second type of MPT identified by Professor Deeks is the "multi-factor test", which requires a state to analyze the extent to which the facts of a particular situation meet each listed factor, but the factors themselves are not amenable to binary yes/no answers. For example, if a factor asks the decision-maker to test the level of threat a state faces, the answer is qualitative. Additionally, strong facts within one factor, such as a severe threat to a state, may compensate for weak facts around another factor, such

¹¹⁷⁵ Deeks MPT, *supra* note 1168, at 1039.

¹¹⁷⁶ Id

¹¹⁷⁷ *Id.* at 1039, 1058.

¹¹⁷⁸ *Id.* at 1039.

¹¹⁷⁹ *Id*.

as lack of certainty about the quality of the state's intelligence. Multi-factor tests thus only require a state to agree on what factors are relevant, not what the specific outcome of each factor's assessment must be before the test is met. Professor Deeks states that an example of a multi-factor MPT within the *jus ad bellum* is Professor Abraham Sofaer's proposal of four factors that a defending state would need to consider when determining whether to use force in anticipatory defense: the magnitude of the threat, the probability that the threatened attack will occur, the exhaustion of peaceful alternatives, and the consistency of the defending state's action with the purposes of the UN Charter.

Although the MPTs proffered to date in the *jus ad bellum* context are not legally binding, Professor Deeks notes that such MPTs can still serve three pragmatic functions in international law. First, MPTs proposed by states and legal scholars provide an opportunity to clarify key issues within the *jus ad bellum*, such as what constitutes an imminent armed attack for purposes of the customary international law of anticipatory defense, and to signal to other states how to analyze such issues in the future. Second, MPTs provide a means for the potential development of the *jus ad bellum*, because proposed MPTs may serve "... like a grain of sand in an oyster, providing a set of concrete ideas and standards around which states may coalesce and ultimately create customary international law." As Professor Deeks correctly observes, in an ideal

¹¹⁸⁰ Deeks MPT, *supra* note 1168, at 1039-1040.

¹¹⁸¹ *Id.* at 1042.

 $^{^{1182}}$ Id. at 1040, 1052. See also notes 1121-1122 supra and accompanying text.

¹¹⁸³ Deeks MPT, *supra* note 1168, at 1044.

¹¹⁸⁴ *Id.* at 1044-1045.

¹¹⁸⁵ *Id.* at 1045.

world it would be possible to reach consensus on amending Article 51 of the UN Charter to provide more certainty in international law regarding key issues such as the right of anticipatory defense, but since UN member states have never enacted substantive amendments to the Charter, MPTs offer a way to help develop *jus ad bellum* rules without formal Charter amendments. Third, MPTs may reduce the likelihood of interstate conflict by putting an intervening state on notice about how other states may interpret the intervening state's actions. An intervening state may use the MPT to evaluate how other states may perceive its actions, and, if its proposed use of force fails to meet a particular MPT, may choose not to act. 1188

Critics of MPTs proposed by states and scholars to address *jus ad bellum* issues may argue that such MPTs, particularly those that involve multiple factors rather than necessary elements, are too indeterminate to offer real guidance to states and can lead to unequal outcomes in relatively similar fact situations. Additionally, those who support a restrictionist interpretation of Article 51 of the UN Charter and who believe that the Charter is relatively clear in rejecting the use of force by states in all but the most narrow circumstances may consider MPTs proposed for *jus ad bellum* issues to be "useless at best and harmful at worst". However, I find these criticisms of MPTs to be unpersuasive. As noted in Chapter V *supra*, I adhere to the counter-restrictionist interpretation of Article 51 of the UN Charter which holds that the English language text

¹¹⁸⁶ Deeks MPT, *supra* note 1168, at 1045-1046, 1046 n. 39, 1061.

¹¹⁸⁷ *Id.* at 1046.

¹¹⁸⁸ Id

¹¹⁸⁹ *Id.* at 1047-1048.

¹¹⁹⁰ *Id.* at 1038, 1064.

of Article 51 is not entirely clear¹¹⁹¹, and I also believe there is a genuine need for further clarification of the meaning of imminence in the customary international law right of states to use armed force in anticipatory defense.¹¹⁹² I therefore agree with Professor Deeks that MPTs proposed by states and legal scholars to clarify key *jus ad bellum* issues can make a valuable contribution to the development of customary international law, especially those MPTs that are both rule-like and closely track the underlying UN Charter or customary international law rule on which they expound.¹¹⁹³ Accordingly, I will now offer a proposed new MPT to guide states in evaluating the imminence of a threatened armed attack under the customary international law of anticipatory defense.

B. Proposed New MPT for Evaluating Imminence

In my view, under customary international law, a state may use armed force in anticipatory defense in circumstances of irreversible emergency to repel an imminent armed attack by a state or a non-state actor. To assist states in evaluating whether a threatened armed attack is imminent, I propose a necessary elements MPT under which a state may lawfully regard the threat of an armed attack as imminent if it assesses in good faith, based on clear and convincing, objective evidence, that all four of the following elements are present: 1) capability- the threatening state or non-state actor has the capability to carry out an armed attack against the threatened state; 2) intent- the threatening state or non-state actor has clearly committed itself to conducting an armed attack against the threatened state and is highly likely to do so; 3) severity- the

¹¹⁹¹ Notes 302-328 *supra* and accompanying text.

¹¹⁹² Notes 1077-1085 *supra* and accompanying text.

¹¹⁹³ Deeks MPT, *supra* note 1168, at 1061.

anticipated armed attack is reasonably expected to result in death and/or serious bodily harm to personnel, significant property damage, and/or compromise of the threatened state's vital national interests; and 4) time- the attack is expected to occur in the near future and there is no reasonable opportunity for the threatened state to pursue alternative, peaceful courses of action to repel the attack, in particular through resort to the UN Security Council.

The first required element of this proposed new MPT is capability, which means that the threatening state or non-state actor has the capability to carry out an armed attack against the threatened state. Evidentiary considerations regarding the capability element would include whether the threatening state or non-state actor possesses both weapons and the means of delivering those weapons to attack the threatened state, and in order to satisfy the capability element the threatened state would have to determine by clear and convincing, objective evidence that the threatening state or non-state actor possesses both. I have adopted the "clear and convincing evidence" standard for this proposed MPT because it is the highest evidentiary standard in civil law, which should prevent misperceptions or abuse by threatened states, and because I also do not believe a jus ad bellum evidentiary standard should be set impractically high. 1194 I consider that evidence of capability is essential to the probability aspect of imminence, in that unless the threatening state or non-state actor possesses both weapons and a means of delivering those weapons then it is highly unlikely that an armed attack is imminent. A logical corollary of this capability element is that the mere possession of weapons alone, even

¹¹⁹⁴ Sadoff, *supra* note 391, at 479-480

illicit weapons of mass destruction (WMD), without evidence of the other required elements of imminence in this proposed MPT, is not sufficient to justify the use of armed force in anticipatory defense. I believe that without clear evidence of intent to utilize WMD to attack a threatened state or to compromise its vital national interests in the reasonably foreseeable future, military strikes against WMD facilities constitute unlawful preventive defense instead of lawful anticipatory defensive actions.

The second required element of this proposed new MPT is intent, which means that the threatening state or non-state actor has clearly committed itself to conducting an armed attack against the threatened state and is highly likely to do so. Evidentiary considerations for the intent element would include an assessment of the history and current political-military situation between the threatening state or non-state actor and the threatened state, and evidence of active plans, preparations, and placement of forces and/or weapons systems by the threatening state or non-state actor to enable it to conduct an armed attack. I believe that evidence of intent to conduct an armed attack is strengthened if the threatening state or non-state actor has previously attacked the threatened state, especially if the threatening state or non-state actor has engaged in or has actively supported transnational terrorist attacks against the threatened state. As with the required element of capability, the element of intent is a key part of the probability aspect of imminence, because without clear and objective evidence of an intention to attack the threatened state it is highly unlikely that an armed attack is imminent.

The third required element of this proposed new MPT is severity, which means that the anticipated armed attack by the threatening state or non-state actor is reasonably

expected to result in death and/or serious bodily harm to personnel, significant property damage, and/or compromise of the threatened state's vital national interests. Evidentiary considerations for the severity element would include whether, if it is not repelled by anticipatory defensive action, the attack is likely to result in loss of human life, significant damage to property, or compromise of vital national interests (i.e., loss of sovereign territory, significant disruption of the threatened state's critical infrastructure via cyber armed attack, etc.), and if so the scale of the expected loss/damage/compromise. I believe that evidence of the severity of the anticipated armed attack may be strengthened by the geographical situation of the threatened state (i.e., small states whose populations are concentrated in a few major cities may have limited capability to recover from armed attacks using WMD and/or ballistic missiles). In my view it is essential to broaden the current customary international law concept of temporal imminence to allow threatened states to consider the severity of the anticipated attack, because in cases in which the probability and severity of an anticipated attack are extremely high, the use of armed force in anticipatory defense should be lawful even with a lower showing of temporal immediacy.

The fourth and final required element of the new proposed MPT is time, by which I mean that the anticipated attack is expected to occur in the near future and there is no reasonable opportunity for the threatened state to pursue alternative, peaceful courses of action to repel the attack, in particular through resort to the UN Security Council. Evidentiary considerations for the time element would include whether the threatening state or non-state actor has completed the necessary actions to conduct an armed attack in

the near future; whether traditional conflict avoidance methods of deterrence and diplomacy have been attempted or are feasible; and whether there is time to pursue nonforcible alternatives to avert the attack, particularly by requesting intervention by the UN Security Council. I believe that evidence that there is no reasonable opportunity to pursue non-forcible alternatives is strengthened when the means of delivery of the threatened armed attack involves transnational terrorist groups or cyber weapons, since both types of attack are immune to traditional deterrence and may be executed with little or no warning. In such cases, I consider that it is lawful for the threatened state to use armed force in anticipatory defense during the "last window of opportunity" to defend itself effectively against the forthcoming armed attack. Additionally, due to the exceptional level of severity posed by a threatened armed attack using WMD, particularly nuclear weapons, I believe that a threatened state may lawfully use force in anticipatory defense against such an attack when it is expected to occur in the "reasonably foreseeable" future instead of the near future. However, even in cases of potential WMD attacks, the threatened state must still meet the capability and intent elements of this proposed new MPT and must also meet in good faith the requirement of the time element for exhaustion of all reasonably available non-forcible alternatives.

C. Application of the Proposed New MPT to the Case Study

Applying this proposed new necessary elements MPT to the case study of the Iranian nuclear threat to Israel discussed in Part 2 of the dissertation, in the event that Iran either engages in further significant breaches of its nuclear-related commitments under the JCPOA or takes action to ramp up its uranium enrichment activities significantly once

the JCPOA's limitations expire in 10-15 years, Israel may again be faced with what it perceives as an existential nuclear threat from Iran due to the resumption by Iran of its past pursuit of a nuclear weapons capability, and this could lead the Israeli government to evaluate whether to use armed force in anticipatory defense against Iran's nuclear facilities (see Appendix A) in order to eliminate the threat. Under the proposed new MPT, Israel would be required to consider first whether the actions taken by Iran had created a situation of irreversible emergency that made it necessary for Israel to use armed force in anticipatory defense to eliminate the threat of an imminent armed attack by Iran. In order to conclude that such an armed attack by Iran was imminent, Israel would have to assess in good faith, based on clear and convincing, objective evidence that all four elements of the proposed new MPT were present: capability, intent, severity, and time.

With regard to the first element of the MPT, capability, Israel would have to determine whether Iran had developed the capability to carry out an armed attack against Israel using nuclear weapons. Determining whether Iran had such a nuclear weapons capability would depend on an objective assessment in good faith by Israel of all available intelligence and other information on whether Iran possessed both nuclear weapons and the means of delivering those weapons to attack Israel. Israel would certainly have to consider all available information on Iran's past efforts to develop a nuclear weapons capability, as well as all available information as to whether Iran had gone beyond simply accumulating low enriched uranium and had proceeded to enrich that uranium to weapons-grade (90% U-235); whether Iran had developed and fielded a

nuclear explosive device or warhead capable of generating a nuclear implosion; whether Iran had taken the further technical actions required to join weapons-grade highly enriched uranium with a nuclear explosive device or warhead; and whether Iran had taken the actions necessary to ensure the reliable delivery of its nuclear weapons to reach Israel, either through the use of Iran's medium-range ballistic missiles or through the proliferation of nuclear weapons to one of Iran's terrorist proxies like Hezbollah. Under the MPT, the mere possession by Iran of weapons-grade highly enriched uranium or even the possession by Iran of completed nuclear weapons in violation of Iran's obligations under the NPT would not be sufficient, in and of themselves, to justify the use of armed force in anticipatory defense without clear and convincing evidence of the other three required elements of imminence as well.

To meet the second element of the MPT, intent, Israel would have to determine whether Iran had clearly committed itself to conducting a nuclear armed attack against Israel and was highly likely to do so. Determining whether Iran intended to conduct a nuclear attack against Israel would depend on an objective assessment in good faith by Israel of all available intelligence and other information on the history and current political-military situation between Iran and Israel, and on evidence of any active plans, preparations, and placement of forces and/or weapons systems by Iran to enable it to conduct a nuclear attack upon Israel. Israel would certainly consider in this regard the fact that Iran's most senior leaders, including Supreme Leader Khamenei, have stated publicly their goal of destroying Israel; that Iran continues to sponsor anti-Israel international terrorist organizations such as Hezbollah, Hamas, and PIJ for the purpose of

attacking Israel; and Iran's attempt to establish an additional military front against Israel in Syria, which has already led to several direct armed confrontations between Iran and Israel. Evidence of Iran's intent to conduct an armed attack against Israel would be strengthened under the MPT by the fact that Iran and its terrorist proxies had previously attacked Israel and by Iran's past and ongoing state sponsorship of terrorist attacks by Hezbollah, Hamas, and PIJ against Israel.

The third element of the MPT, severity, would most likely be easily met since any nuclear armed attack by Iran upon Israel would certainly, if it was not repelled by anticipatory defensive action, result in death and/or serious bodily harm to thousands or even hundreds of thousands of Israeli personnel, catastrophic property damage, and severe compromise of Israel's vital national interests, to include the most significant disruption of Israel's critical infrastructure. Any government, including the Israeli government, could easily conclude that there is no threat more severe than that of a nuclear attack, and under the MPT, evidence of severity of the anticipated nuclear attack by Iran would be strengthened by Israel's geographic situation (i.e., that Israel is a small state whose population is concentrated in a few major cities, which means that Israel may have limited capability to recover from any armed attack that employs WMD and/or ballistic missiles).

To meet the final element of the MPT, time, Israel would have to determine that a nuclear armed attack by Iran was expected to occur in the reasonably foreseeable future and that there was no reasonable opportunity for Israel to pursue alternative, peaceful courses of action to repel the threatened attack, in particular through resort to the UN

Security Council. Determining whether a nuclear attack by Iran upon Israel was expected to occur in the reasonably foreseeable future would depend on an objective assessment in good faith by Israel of all available intelligence and other information on whether Iran had completed the necessary preparatory actions to conduct a nuclear attack upon Israel in the reasonably foreseeable future; whether traditional conflict avoidance methods such as deterrence and diplomacy had been attempted or were feasible; and whether there was time for Israel to pursue reasonable non-forcible alternatives to avert the attack, particularly by requesting UN Security Council intervention. It should be noted that the MPT 's time element ordinarily requires a threatened state to assess whether an armed attack is expected to occur in the near future; however, due to the exceptional severity posed by a threatened armed attack using WMD, particularly nuclear weapons, the MPT states that a threatened state may use force in anticipatory defense against a WMD attack when that attack is expected to occur in the reasonably foreseeable future, as long as the threatened state also meets in good faith the requirement for exhaustion of all reasonably available non-forcible alternatives. It should also be noted that if Israel assessed in good faith based on objective evidence that Iran intended to conduct a nuclear attack upon Israel by delivering nuclear weapons to a terrorist group like Hezbollah, then the MPT would allow Israel to use armed force in anticipatory defense during the last window of opportunity to defend itself effectively against the terrorist group in question.

I believe that the proposed new MPT creates a legal framework that could assist

Israel and other states in making a determination of whether a threatened armed attack is

imminent for purposes of exercising the international legal right of using force in

anticipatory defense. The proposed new MPT would relax the strict temporal imminence requirement that is currently set forth in the customary international law of anticipatory defense, which would allow defending states greater legal latitude in using force against contemporary threats such as WMD and terrorist attacks, but it would also impose a rulebased necessary elements test to guide states on whether it is lawful to use defensive force prior to an actual armed attack. By imposing a necessary elements test for determining imminence, the proposed MPT seeks to balance the two competing values of allowing states an effective right of defense against threatened armed attacks while simultaneously adhering to the well-accepted view that the use of force in preventive defense against speculative threats that may (or may not) occur in the distant future is unlawful in international law. In the tradition of Sir Daniel Bethlehem before me¹¹⁹⁵, I offer this proposed new MPT for review and study by the international legal community in the hope of generating discussion by and feedback from those who have practiced and studied international and national security law. While I fully expect that states such as the U.S., the UK, and Australia may prefer to stick with the totality of the circumstances approach for determining imminence, I hope they will at least consider whether adopting a necessary elements-type test for determining imminence could potentially help convince some restrictionists to accept the existence of an international legal right of anticipatory defense in customary international law.

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¹¹⁹⁵ Bethlehem, *supra* note 1142, at 773-774 ("[T]he sixteen principles set out below are proposed with the intention of stimulating wider debate on these issues. The principles do not reflect a settled view of any state. They are published on my responsibility alone . . . Their intent is to address a strategic and operational reality with which states are faced, and to formulate principles that reflect, as well as shape, the conduct of states in the particular circumstances in question.").

CHAPTER XI. PART 3: CONCLUSION AND

RECOMMENDATIONS

This dissertation has examined the international legal right of a state to use force in anticipatory defense against a threatened attack before the attack occurs, and has examined this issue using as a case study the contemporary security issue of the existential threat posed to Israel by the Islamic Republic of Iran's pursuit of a nuclear weapons capability. Part 1 of the dissertation first discussed the origins of the right of anticipatory defense against a threat of imminent attack in medieval canon law, natural law, and municipal law and then discussed how the classical writers incorporated the right of anticipatory defense into the emerging field of international law. Part 1 then discussed the right of anticipatory defense during the late 18th to mid-20th centuries. including the formulation by U.S. Secretary of State Daniel Webster during the Caroline incident which asserted that to be lawful, anticipatory action by a state in self-defense must meet the elements of necessity, temporal imminence, and proportionality. Part 1 concluded by demonstrating that Webster's formulation of the international legal right of anticipatory defense during the *Caroline* incident became a permissive rule of customary international law through state practice and opinio juris during the late 18th to mid-20th centuries, culminated by its adoption in the Nuremberg Tribunal's judgment and the UN General Assembly's unanimous affirmation of the legal principles set forth in the Nuremberg judgment, and that Article 51 of the UN Charter was not intended to and did not eliminate this pre-UN Charter customary international law right to use force in anticipatory defense to repel a threat of imminent armed attack.

Having demonstrated in Part 1 of the dissertation the continued existence in customary international law of the right of individual states to use force in anticipatory defense against threats of imminent attack in accordance with the Caroline criteria, Parts 2 and 3 of the dissertation then examined whether the customary international law requirement that a threat of attack must involve a high degree of temporal imminence in order to justify anticipatory defensive action by a state is adequate to address contemporary security threats such as WMD, terrorism, and cyber armed attacks. Part 2 began the examination of this question by discussing as a case study the facts regarding the nuclear threat currently posed to Israel by Iran. Part 2 first demonstrated that Israel's perceived existential threat from Iran is reasonable in view of Iran's specific threats to destroy Israel; Iran's state sponsorship of anti-Israel terrorist organizations, particularly Hezbollah, Hamas, and Palestinian Islamic Jihad; Iran's attempt to establish an additional military front against Israel in Syria; and Iran's pursuit of a nuclear weapons capability. including Iran's continuing development and operation of ballistic missiles such as the Shahab-3/3M that are capable of delivering nuclear weapons to attack Israel. Part 2 then examined the impact of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear threat to Israel, and concluded that although Iranian compliance with all of its JCPOA commitments through May 2019 has significantly reduced the threat, Israel has valid concerns regarding Iran's continued compliance with the JCPOA because Iran has begun to breach its JCPOA commitments to protest the reimposition of U.S. nuclearrelated sanctions on Iran; because Iran's past pursuit of a nuclear weapons capability appears to have been confirmed by the materials stolen by Israel from Iran's secret nuclear archive; and because the JCPOA's principal limitations on Iran's nuclear

program will all expire in 10-15 years, thereby enabling Iran to build an industrial-sized uranium enrichment capability and become a threshold nuclear weapon state if it chooses to do so.

Having concluded in Part 2 of the dissertation that the JCPOA may simply have postponed for no more than 10-15 years the existential threat posed to Israel by a nucleararmed Iran, Part 3 of the dissertation then argued that the customary international law requirement of a high degree of temporal imminence to justify anticipatory defensive action by states is not adequate to address the Iranian nuclear threat to Israel. Iran's specific threats to destroy Israel, Iran's state sponsorship of anti-Israel terrorist organizations, Iran's attempt to establish an additional military front against Israel in Syria, and Iran's past and perhaps continuing pursuit of a nuclear weapons capability have created a reasonable perception in the minds of Israel's most senior leaders that Israel faces an existential threat from a nuclear-armed Iran. This existential threat of armed aggression from Iran, which potentially involves either the use of nuclear weapons against Israel or the transfer by Iran of nuclear material to anti-Israel terrorist groups like Hezbollah, poses such a catastrophic threat to Israel's existence that Israel should have the right under customary international law to use force in anticipatory defense based on a lower showing of threat immediacy than that set forth in the Caroline incident, because Israel cannot afford to allow the threat of Iran's use of nuclear weapons against it to become temporally imminent, and Israel certainly cannot afford to wait for an actual Iranian armed attack with nuclear weapons to occur. This interpretation is fully consistent with the core principle of the *jus ad bellum* that states must be permitted an effective right of self-defense.

Part 3 of the dissertation then examined several alternate approaches offered by states and legal scholars regarding the imminence requirement in the customary international legal right of anticipatory defense, and proposed a new necessary elements multi-part test (MPT) to guide state decision-making in determining whether a threat of armed attack is imminent for purposes of the right of anticipatory defense. The proposed new MPT for determining imminence would require a threatened state such as Israel to assess in good faith, based on clear and convincing evidence, that a threatening state or non-state actor has the *capability* to carry out an armed attack against the threatened state; has the *intent* to conduct an armed attack, i.e. has clearly committed itself to attacking the threatened state and is highly likely to do so; is expected to carry out an armed attack of sufficient severity such as to result in death and/or serious bodily harm to personnel, significant property damage, and/or the compromise of vital national interests; and the attack is expected to occur in the near future (or in cases of threatened attacks with WMD, in the reasonably foreseeable future) and there is no reasonable opportunity for the threatened state to pursue alternative, peaceful courses of action to avert the attack, in particular through resort to the UN Security Council. The proposed new MPT would relax the strict temporal imminence requirement that is currently set forth in the customary international law of anticipatory defense, which would allow defending states greater legal latitude in using force against contemporary threats such as WMD and terrorist attacks, but it would also impose a rule-based necessary elements test to guide

states on whether it is lawful to use defensive force prior to an actual armed attack. I recommend that states, particularly those states that support the continued existence in international law of the right to use armed force in anticipatory defense, consider adopting the proposed new MPT for evaluating whether a threatened armed attack is imminent.

Finally, having asserted in the dissertation that states faced with threatened armed attacks by states using WMD and/or attacks by international terrorist organizations should be able to use force in anticipatory defense based on a lower showing of temporal imminence, I am compelled to add that my advocacy of a new standard of imminence does not mean that I believe that Israeli military strike on Iran's nuclear facilities is either a wise or risk-free course of action. Indeed, I believe that the consequences of such an Israeli military strike against Iran's nuclear facilities could potentially be devastating for the region and possibly the world, since Iran has already stated that any such Israeli strike on Iran's nuclear facilities would be followed by Iranian retaliation using ballistic missiles, and that such retaliation would also involve Iranian attacks on U.S. and NATO bases in Turkey. Iranian retaliation would also likely include significant attacks upon Israel by both Hezbollah and Hamas/PIJ, and the existence of such hostilities would likely only harden Iran's resolve to obtain a nuclear weapons capability outside the constraints of the NPT. 1197

In order to obviate the need for Israel to consider conducting military strikes against Iranian nuclear facilities in anticipatory defense, decisive action is needed by the

¹¹⁹⁶ Slager, *supra* note 492, at 314.

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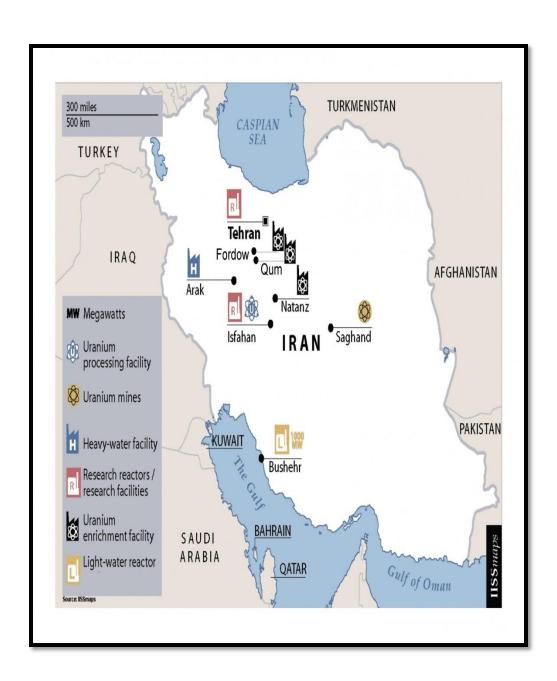
Raas, *supra* note 14, at 9.

remaining JCPOA participants, by the UN Security Council, by the United States, and by the entire international community to deter Iran's most senior leaders from making the final decisions necessary to enable Iran to develop a nuclear weapons capability. In order to bolster deterrence against this threat, I recommend that the remaining JCPOA participants take action to hold Iran accountable for breaching its JCPOA commitments (i.e., advising Iran that continued breaches by Iran of its JCPOA commitments will result in referral of the issue to the UN Security Council for potential "snap back" of the previous UN Security Council resolutions and reimposition of international sanctions). I also recommend that the UN Security Council consider adopting a new resolution calling upon Iran to cease its state sponsorship of Hezbollah, Hamas, and PIJ and to withdraw all of its IRGC, Hezbollah, and Shiite militia forces from Syria, to be followed by significant international sanctions against Iran if Iran fails to comply. Such action by the UN Security Council is essential to address Iran's malign behaviors in sponsoring terrorist organizations and to reduce the strategic threat posed to Israel by Iran's build-up of military forces and infrastructure in Syria. Additionally, I recommend that the U.S. and its allies continue force deployments and other visible military preparations to be ready to use force in collective defense of Israel in the event of a significant Iranian attack against Israel, including a significant attack against Israel by Iran's terrorist proxies, and I recommend that the U.S. also consider issuing a specific and public security guarantee to come to the collective defense of Israel in response to any significant attack upon Israel by Iran. Finally, I recommend that the international community continue to offer Iran expert assistance and other resources to help Iran develop a peaceful but fully verifiable civilian nuclear power program that is in full compliance with all NPT and IAEA

requirements, in return for a permanent and legally binding nuclear agreement to replace the JCPOA. This permanent and legally binding nuclear agreement should retain the JCPOA's current controls on Iran's uranium enrichment program and should allow the IAEA to conduct "anytime anywhere" inspection and monitoring of Iran's nuclear-related facilities, including any undeclared facilities of concern to the IAEA.

To date, neither the remaining JCPOA participants nor the UN Security Council have been able to agree on such decisive measures to deter Iran from pursuing a nuclear weapons capability, and this needs to change and change quickly since Iran's continued breaches of its JCPOA commitments may soon cause the JCPOA to collapse entirely. Unless such decisive actions are taken to bolster deterrence, the Israeli Air Force (IAF) may someday be sent into harm's way again, on a far more dangerous mission to serve as the shield of the Jewish people and the state of Israel against the existential threat of a nuclear-armed Iran. It is my sincere hope that the international political will is found to prevent the IAF from ever getting this future call to arms.

APPENDIX A MAP OF IRAN'S KNOWN NUCLEAR SITES



Source: International Institute of Strategic Studies (IISS), https://www.iiss.org/

APPENDIX B

MAP DEPICTING RANGE OF IRAN'S

SHAHAB-3/3M BALLISTIC MISSILE



Source: The Heritage Foundation, https://www.heritage.org/

APPENDIX C

PROPOSED MULTI-PART TEST ("CIST") FOR DETERMININGWHETHER AN ARMED ATTACK IS IMMINENT IN THE CONTEXT OF THE INTERNATIONAL LEGAL RIGHT OF ANTICIPATORY DEFENSE

Under international law, a state may use armed force in anticipatory defense in circumstances of irreversible emergency to repel an imminent armed attack by a state or a non-state actor. A state may regard the threat of an armed attack as imminent if it assesses in good faith, based on clear and convincing, objective evidence, that all of the following elements are present:

- Capability- the threatening state or non-state actor has the capability to carry out an armed attack against the threatened state.
 - Evidentiary considerations for the "capability" element would include
 whether the threatening state or non-state actor possesses both weapons
 and the means of delivering those weapons to attack the threatened state.
 - The mere possession of weapons alone, even illicit weapons of mass destruction (WMD), without evidence of the other required elements of imminence, is not sufficient to justify the use of armed force in anticipatory defense.

- Intent- the threatening state or non-state actor has clearly committed itself to conducting an armed attack against the threatened state and is highly likely to do so.
 - Evidentiary considerations for the "intent" element would include an assessment of the history and current political-military situation between the threatening state or non-state actor and the threatened state, and evidence of active plans, preparations, and placement of forces and/or weapons systems by the threatening state or non-state actor to enable it to conduct an armed attack.
 - Evidence of intent to conduct an armed attack is strengthened if the threatening state or non-state actor has previously attacked the threatened state, especially if the threatening state or non-state actor has engaged in or has actively supported transnational terrorist attacks against the threatened state.
- Severity- the anticipated armed attack is reasonably expected to result in death and/or serious bodily harm to personnel, significant property damage, and/or compromise of the threatened state's vital national interests.
 - Evidentiary considerations for the "severity" element would include
 whether, if it is not repelled by anticipatory defensive action, the attack is
 likely to result in loss of human life, significant damage to property, or
 compromise of vital national interests (i.e., loss of sovereign territory,
 significant disruption of the threatened state's critical infrastructure via

- cyber armed attack, etc.), and if so the scale of the expected loss/damage/compromise.
- Evidence of severity of the anticipated armed attack may be strengthened by the geographical situation of the threatened state (i.e., small states whose populations are concentrated in a few major cities may have limited capability to recover from armed attacks using WMD and/or ballistic missiles).
- Time- the attack is expected to occur in the near future and there is no reasonable
 opportunity for the threatened state to pursue alternative, peaceful courses of
 action to repel the attack, in particular through resort to the UN Security Council.
 - Evidentiary considerations for the "time" element would include whether the threatening state or non-state actor has completed the necessary actions to conduct an armed attack in the near future; whether traditional conflict avoidance methods of deterrence and diplomacy have been attempted or are feasible; and whether there is time to pursue non-forcible alternatives to avert the attack, particularly by requesting intervention by the UN Security Council.
 - Evidence that there is no reasonable opportunity to pursue alternatives is strengthened when the means of delivery of the threatened armed attack involves transnational terrorist groups or cyber weapons, since both types of attack are immune to traditional deterrence and may be executed with little or no warning. In such cases, the threatened state may use armed

- force in anticipatory defense during the "last window of opportunity" to defend itself effectively against the forthcoming armed attack.
- Oue to the exceptional level of severity posed by a threatened armed attack using WMD, particularly nuclear weapons, a threatened state may use force in anticipatory defense against such an attack when it is expected to occur in the reasonably foreseeable future. However, the threatened state must still meet the "capability" and "intent" elements of the imminence test and must also meet in good faith the requirement of the "time" element for exhaustion of all reasonably available non-forcible alternatives.

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