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THE VIRTUE OF A PROPORTIONAL RESPONSE: THE UNITED STATES STANCE AGAINST THE CONVENTION ON CLUSTER MUNITIONS

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Mohammed Zayoun, a father of three children, noticed a small metal cylinder marked with red and white warning tape while cutting thyme in a field in Lebanon. Struck with curiosity, Mohammed picked up the cylinder and placed it in his bag. Later that night, Mohammed's four-year-old daughter, Aya, rummaged through her father's bag and found the cylinder. Aya took the cylinder inside their home and gave it to her sixteen-year-old sister, Rasha, who thought it was a bell. The cylinder, an unexploded submunition from a cluster bomb, exploded. Rasha's brother Qassem, and their mother, Alia, were both injured by shrapnel. Rasha lost her lower leg.[1]

"Cluster munitions are available for use by every combat aircraft in the U.S. inventory, they are integral to every Army or Marine maneuver element and in some cases constitute up to 50 percent of tactical indirect fire support. U.S. forces simply cannot fight by design or by doctrine without holding out at least the possibility of using cluster munitions" – Richard Kidd, Director of the Office of Weapons Removal and Abatement, United States Department of State.[2]

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[1] *See* Scott Peterson, *Cluster Bombs: A War's Perilous Aftermath*, CHRISTIAN SCI. MONITOR, Feb. 7, 2007, at World 1, *available at* http://www.csmonitor.com/2007/0207/p01s01-wome.html.

[2] Richard Kidd, Dir., U.S. Dep't of State, Office of Weapons Removal and

"It should be possible to reconcile what is acceptable from a humanitarian point of view with what is militarily necessary and politically feasible in order to prevent the unacceptable humanitarian consequences of cluster-munition use." – Jonas Gahr Store, Minister of Foreign Affairs of Norway.[3]

INTRODUCTION

The Convention on Cluster Munitions (CCM) bans the use, production, and trade of cluster munitions. Cluster munitions are weapons that open in midair to release tens to hundreds of submunitions, or bomblets. The weapon can incapacitate an entire convoy of military vehicles and personnel at once. However, it also has proven to be inaccurate, spreading over large areas that include civilians. Submunitions also tend to have a relatively high failure rate—often landing without detonating, thereby remaining a hazard for nearby and future civilian populations. The imprecision of cluster munitions raises valid humanitarian concerns for its inability to discriminate between military personnel and civilians. In an effort to curtail future civilian casualties, several states negotiated the CCM in a series of conferences dubbed the Oslo Process. On May 30, 2008, participating states endorsed a final draft of the CCM. States were able to sign the CCM beginning on December 3, 2008.

The United States has refused to participate in the Oslo Process because of military and procedural concerns. Its chief objection is that cluster munitions remain an effective weapon in armed conflict. The United States argues that its military strategy relies heavily on cluster munitions, and to remove the weapon from its arsenal would weaken its ability to defend itself and its allies. Despite this objection, the United States has acknowledged that current cluster munitions models create a risk to civilians and should be regulated. However, it refuses to participate in the Oslo

Abatement (WRA), Is There a Strategy for Responsible U.S. Engagement on Cluster Munitions?, Remarks at the Connect US Fund Roundtable Dialogue at the Aspen Institute (Apr. 28, 2008), *in* 30 DISAM J. INT'L SEC. ASSISTANCE MGMT. 1, 117-20 (Sept. 2008), *available at* http://www.disam.dsca.mil/pubs/ Indexes/ v.30_3/Journal%2030-3.pdf.

[3] Jonas Gahr Støre, *Special Comment*, *Cluster Munitions, in* U.N. INST. FOR DISARMAMENT RESEARCH, 4 DISARMAMENT FORUM 3-4 (2006), *available at* http://www.unidir.org/pdf/articles/pdf-art2529.pdf.

Process, arguing that amending the Convention on Certain Conventional Weapons (CCW) is a more appropriate means of regulating cluster munitions.

This article argues that the United States should adopt strict limitations in regards to its use of cluster munitions in lieu of endorsing the CCM. The article aims to demonstrate that the United States would significantly weaken its military capabilities by endorsing the CCM in the near future, and therefore should not do so. However, the United States should develop a better cluster munition weapon and, in the meantime, should set parameters regarding the use of cluster munitions to avoid violating international humanitarian law. Part I provides a description of cluster munitions, including physical components and use in armed conflict. Part II surveys the growing controversy regarding cluster munitions, based on international humanitarian law, which led to the CCM. Part III profiles the development of the Oslo Process, with a focus on the terms of the CCM. Part IV examines the opposition by the United States to a ban on cluster munitions and to the Oslo Process. Part V concludes with a proposal that will decrease civilian casualties caused by United States cluster munitions while putting the United States on a path to endorse the CCM in the future.

I. CLUSTER MUNITIONS

Cluster munitions open in midair and scatter a number of submunitions over an area that can be as large as one to five football fields.[4] The military utility of cluster munitions lies in the weapon's ability to destroy numerous targets at once.[5] Once a submunition hits its impact point, its casing breaks apart into more than 300 pieces of shrapnel that can travel with enough force to pierce armor.[6] The shrapnel escapes from the explosion at 2500

[4] *See, e.g.*, U.N. INST. FOR DISARMAMENT RESEARCH: THE HUMANITARIAN IMPACT OF CLUSTER MUNITIONS, at 1-81, U.N. Doc. UNIDIR/2008/1 (2008), *available at* http://www.unidir.org/ pdf/ouvrages/pdf-1-92-9045-008-D-en.pdf [hereinafter HUMANITARIAN IMPACT]; Thomas Michael McDonnell, *Cluster Bombs over Kosovo: A Violation of International Law*, 44 ARIZ. L. REV. 31, 42 (2002).

[5] Mark Hiznay, *Operational and Technical Aspects of Cluster Munitions*, *Cluster Munitions*, *in* U.N. INST. FOR DISARMAMENT RESEARCH, 4 DISARMAMENT FORUM 15-25 (2006), *available at* http://www.unidir.org/pdf/articles/pdf-art2530.pdf

[6] McDonnell, *supra* note 4, at 46.

meters per second (compared to an automatic rifle bullet that begins its trajectory at 750 meters per second).[7] Whereas singular weapons are aimed at one potential target at a time, the submunitions in a single cluster bomb can impact multiple targets with ferocity at once.[8] Cluster munitions constitute an "economy of force" since they require "fewer platforms (aircraft, artillery tubes, etc.) to deliver fewer munitions to attack multiple targets, thus reducing the logistical burden and the exposure of forces to hostile fire."[9] The terms "cluster munitions" and "cluster bombs" are used interchangeably. However, cluster munitions encompass all forms of delivery, including by air (cluster bomb) and ground (artillery, missiles, and rockets).[10]

Cluster munitions have been used in combat since World War II, when Soviet forces dropped cluster munitions on German tanks and Germany dropped cluster munitions on the port of Grimsby in the United Kingdom.[11] Cluster munitions were first used in large numbers by United States forces in Southeast Asia during the Vietnam War.[12] Early phases of submunitions relied on simple fuses that armed according to the rate of spin of the falling bomblet.[13] The United States estimates that military aircraft released up to 360 million submunitions throughout Southeast Asia.[14]

As military strategy evolved to combat mass armored vehicle formations instead of mass infantry attacks, submunitions also evolved to include a shaped charge that could penetrate armor.[15] To ensure that submunitions landed in a correct position, militaries began to integrate parachute-like decelerating devices to add

[7] *Id.*

[8] *See* Hiznay, *supra* note 5, at 16.

[9] *Id.*

[10] *See, e.g.*, HUMANITARIAN IMPACT, *supra* note 4; Steve Goose, *Cluster Munitions: Toward a Global Solution*, *in* HUMAN RIGHTS WATCH WORLD REPORT 2004: HUMAN RIGHTS AND ARMED CONFLICT, http://www.hrw.org/legacy/wr2k4/12.htm.

[11] Hiznay, *supra* note 5, at 17.

[12] *Id.* at 15-16.

[13] *Id.* at 16.

[14] RAE MCGRATH, CLUSTER BOMBS: THE MILITARY EFFECTIVENESS AND IMPACT ON CIVILIANS OF CLUSTER MUNITIONS 16 (2000), *available at* http://www.landmineaction.org/resources/Cluster_Bombs.pdf.

[15] Hiznay, *supra* note 5, at 16.

stability during freefall.[16] The deceleration process made the spin-fuse device obsolete, so a new generation of submunitions included fuses that armed at the deployment of the parachute and set to detonate at impact.[17] In 1991, allied forces delivered approximately fifty million simple-fuse and parachute-fuse submunitions in Iraq.[18] During NATO operations in Yugoslavia in 1999, NATO sorties dropped over 1500 cluster bombs containing almost 300,000 submunitions.[19] From 2001 to 2002 in Afghanistan, the United States used over 1200 cluster munitions that contained close to 250,000 submunitions.[20]

The newest generations of submunitions include guidance packages that correct for winds, and sensor-fuses that are designed to detect and destroy armored vehicles without producing a wide anti-personnel effect.[21] Sensor-fuse submunitions typically are equipped with self-destruct or self-neutralizing capabilities.[22] However, even these submunitions have been reported to suffer from a significant number of failed explosives.[23] Further, because of the larger size of sensor-fused submunitions, one cluster munition sometimes only can carry two submunitions.[24] In 2003, the United States and United Kingdom delivered approximately two million parachute-fuse and sensor-fuse submunitions in Iraq.[25]

Over fifteen states[26] have used cluster munitions during armed conflicts that have occurred in at least twenty-eight countries.[27]

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[16] *Id.*

[17] *Id.*

[18] *Id.* at 16, 18.

[19] Virgil Wiebe, *Footprints of Death: Cluster Bombs as Indiscriminate Weapons Under International Humanitarian Law*, 22 MICH. J. INT'L L. 85, 95 (2001).

[20] Hiznay, *supra* note 5, at 18.

[21] *Id.* at 16-17.

[22] *Id.* at 17.

[23] HUMAN RIGHTS WATCH, WORLDWIDE PRODUCTION AND EXPORT OF CLUSTER MUNITIONS 4 (Apr. 7, 2005), *available at* http://hrw.org/backgrounder/arms/cluster0405/cluster0405.pdf.

[24] Hiznay, *supra* note 5, at 17.

[25] *Id.* at 18.

[26] These include Eritrea, Ethiopia, France, Georgia, Israel, Morocco, the Netherlands, Nigeria, Russia, Saudi Arabia, Sudan, Tajikistan, United Kingdom, United States, and the former Yugoslavia. *See* Cluster Munition Coalition, The Problem, http://www.stopclustermunitions.org/the-problem/ (last visited Jan. 27, 2010).

[27] These include Afghanistan, Albania, Angola, Azerbaijan, Bosnia and

Thirty-three states have produced over 210 types of cluster munitions, while seventy states are known to stockpile the weapon.[28] A 2004 military report revealed that the United States has stockpiled 5.5 million cluster munitions that include a total of 728.5 million submunitions.[29] The United States stockpile contains more than three submunitions for every person in the United States. A troubling aspect of the global stockpile is that many of the submunitions are of the older generation containing simple or parachute-fuses, which suffer from high failure rates.[30] Four widely stockpiled cluster munitions—the M483/M483A1 DPICM artillery projectiles, the M26 MLRS rocket, the Rockeye bomb, and the CBU-87—have reported failure rates of 14%, 23%, 18%, and 7%, respectively.[31] Of the United States' reported 5.5 million stockpiled cluster munitions, 3.3 million are M483/M482A1 munitions. Combining reported failure rates with the current number of submunitions in the United States stockpile produces a figure of potentially 100 million failed submunitions in the United States arsenal.[32]

II. A GROWING CALL TO BAN CLUSTER MUNITIONS

A. International Humanitarian Law

Proponents for a ban on cluster munitions cite the weapon's innate imprecision and high failure rate as major concerns under principles of humanitarian law. International humanitarian law (IHL) provides the legal framework on which to base a prohibition on cluster munitions. To be clear, no current international law

Herzegovina, Cambodia, Chad, Croatia, Congo, Eritrea, Ethiopia, Georgia, Grenada, Iraq, Israel, Kosovo, Kuwait, Laos, Lebanon, Montenegro, Saudi Arabia, Serbia, Sierra Leone, Sudan, Syria, Tajikistan, Uganda, and Vietnam. *Id. See generally* MCGRATH, *supra* note 14, at 30-42 (presenting a descriptive survey of the historical usage of cluster munitions).

[28] Hiznay, *supra* note 5, at 18.

[29] *Id.*

[30] *Id.* at 19.

[31] *Id.*; HUMAN RIGHTS WATCH, CLUSTER MUNITIONS A FORESEEABLE HAZARD IN IRAQ (Mar. 18, 2003), *available at* http://www.hrw.org/es/reports/2003/03/18/cluster-munitions-foreseeable-hazard-iraq [hereinafter HUMAN RIGHTS WATCH, IRAQ].

[32] *See* Hiznay, *supra* note 5, at 19; HUMAN RIGHTS WATCH, IRAQ, *supra* note 31.

exists that specifically bans cluster munitions.[33] Therefore, cluster munitions are regulated as a weapon in armed conflict under IHL, which includes the Additional Protocol I of the Geneva Conventions (Protocol I).[34] Regardless of whether a state-party has signed Protocol I, many of its provisions constitute customary international law, and therefore apply to any party in armed conflict.[35] There are four principles set forth in Protocol I that are vital to appropriately applying IHL to cluster munitions.[36] The first principle, expressed in Article 48, presents the "rule of distinction":

> In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.[37]

The second principle, expressed in Article 51,[38] presents the "rule against indiscriminate attacks":

> Indiscriminate attacks are prohibited. Indiscriminate attacks are a) those which are not directed at a specific military objective; b) those which employ a method or means of combat which cannot be directed at a specific military objective; or c) those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol; and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction. [Indiscriminate attacks include] an attack by bombardment by any methods or means which treats as a single military objective a number of

[33] Louis Maresca, *Cluster Munitions: Moving Toward Specific Regulation*, *Cluster Munitions*, *in* U.N. INST. FOR DISARMAMENT RESEARCH, 4 DISARMAMENT FORUM 28 (2006), *available at* http://www.unidir.org/pdf/ articles/pdf-art2531.pdf.

[34] Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 48, Dec. 12, 1977, 1125 U.N.T.S. 3 [hereinafter Protocol I].

[35] Virgil Wiebe, *For Whom the Little Bells Toll: Recent Judgments by International Tribunals on the Legality of Cluster Munitions*, 35 PEPP. L. REV. 895, 899 (2008).

[36] *See* Maresca, *supra* note 33, at 28.

[37] Protocol I, *supra* note 34, art. 48; *see also* Maresca, *supra* note 33, at 28.

[38] *See generally* Michael N. Schmitt, *The Principle of Discrimination in 21st Century Warfare*, 2 YALE HUM. RTS. & DEV. L.J. 143, 147-51 (1999) (explaining the indiscriminate and proportionality aspects of Article 51 of Protocol I).

> clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians or civilian objects.[39]

The third principle, also expressed in Article 51, presents the "rule of proportionality":

> [It is prohibited to launch] an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.[40]

The fourth principle, expressed in Article 57, emphasizes the "rule on feasible precautions":

> In the conduct of military operations, constant care shall be taken to spare the civilian population, civilians and civilian objects. [All feasible precautions must be taken to avoid, and in any event to minimize] incidental loss of civilian life, injury to civilians, and damage to civilian objects.[41]

Military commanders look to these principles to set parameters for use of force during armed conflict.[42] The use of a weapon that violates any of the above principles violates IHL. Unfortunately, an application of these principles to the practical effects of cluster munitions indicates that the prevalent types of submunitions and methods of deployment seem to violate IHL.

B. Design vs. Effect

Cluster munitions are not *designed* to cause indiscriminate casualties of civilian populations.[43] They are specifically designed to destroy entire columns of military targets with one bomb. However, an appropriate analysis of the application of IHL to

[39] Protocol I, *supra* note 34, arts. 51(4), (5)(a); *see also* Maresca, *supra* note 33, at 28.

[40] Protocol I, *supra* note 34, art. 51(5)(b); *see also* Maresca, *supra* note 33, at 28.

[41] Protocol I, *supra* note 34, art. 57; *see also* Maresca, *supra* note 33, at 29.

[42] *See* MCGRATH, *supra* note 14, at 12.

[43] *See* Goose, *supra* note 10 (stating that "cluster munitions are not inherently indiscriminate: they can be used in such a way as to respect the legal distinction between military targets and civilians").

cluster munitions focuses on the weapon's actual *effect*. An assessment of cluster munitions' legality under IHL examines the practical effect of the weapon as delivered during armed conflict. The typical characteristics of cluster munitions and the manner in which it has been deployed in armed conflict raise serious doubts about the weapon's legality under IHL.

1. Absence of Aiming Mechanism

Cluster munitions are designed to scatter submunitions over a wide dispersal area.[44] After being released from their carrying mechanism, tens to hundreds of submunitions often cover an area of hundreds of square feet.[45] This scattering effect raises concerns under the rules of distinction and against indiscriminate attacks, depending on where the cluster munitions are delivered.[46] The rules of distinction and against indiscriminate attacks may be satisfied if cluster munitions are used to attack a convoy of military vehicles away from population centers. However, the delivery of submunitions to military targets situated in or near populated areas may evidence the attacking party's failure to distinguish between military and civilian forces.[47] When a party willfully uses a weapon without having exercised an effective control over its aim or impact area, that party fails to direct warfare only at combatants and thereby uses the weapon in an indiscriminate manner.

Aside from sensor-fuse submunitions, the absence of guidance during freefall means that the impact area of submunitions remains at the discretion of the aerial release point and prevailing winds. The more elevated the release point and the gustier the wind, the greater the possibility that submunitions will fall or parachute away from the intended impact zone.[48] Such inaccuracy violates the rule against indiscriminate attacks, specifically the prohibition against attacks that "employ a method or means of

[44] HUMAN RIGHTS WATCH, WORLDWIDE PRODUCTION AND EXPORT OF CLUSTER MUNITIONS (Apr. 7, 2005), *available at* http://www.reliefweb.int/rw/lib.nsf/db900sid/EVIU6BCHED/$file/Cluster_Munitions_April_2005.pdf?openelement.

[45] *See* Maresca, *supra* note 33, at 28.

[46] *Id.* at 29.

[47] *Id.*

[48] *See* McDonnell, *supra* note 4, at 49.

combat which cannot be directed at a specific military objective."[49] By its very structure and because of the lack of control during freefall, cluster munitions without sensors or guidance systems cannot effectively discriminate between military targets and civilian objects.[50]

2. Failure Rate

An unexploded submunition creates a lasting potential for civilian casualties far after the official end of armed conflict. It is common for a certain percentage of all munitions to fail during a conflict.[51] However, even a small failure rate can be disastrous when one considers that millions of submunitions have been released during various armed conflicts.[52] If one generously assumes a failure rate of 1%, a release of one million submunitions amounts to ten thousand unexploded bomblets. The most conservative failure rate estimates a range from 2% to 5%, while clearance personnel report failure rates of 10% to 30%.[53]

Submunitions have a relatively high failure rate, and only the most recent models are equipped with automatic or manual self-destruct capabilities. Though military contracts typically include a required reliability rate, the acceptability rating in some contracts has been as high as 5% to 12%.[54] Failed submunitions act as de facto landmines, lying in wait for the foot of a soldier, or the hands of a child, to trigger its fuse.[55] In Laos, for example, an estimated nine to twenty-five million submunitions of those dropped during the Vietnam War failed to explode.[56] These submunitions have caused over 10,000 civilian casualties since the war, with the number rising every year.[57]

[49] Protocol I, *supra* note 34, arts. 51(4), (5)(a); *see also* Maresca, *supra* note 33, at 29.

[50] James G. Stewart, *The UN Commission of Inquiry in Lebanon: A Legal Appraisal*, 5 J. INT'L CRIM. JUST. 1039, 1056 (2007).

[51] Maresca, *supra* note 33, at 27.

[52] HUMANITARIAN IMPACT, *supra* note 4, at 2.

[53] Hiznay, *supra* note 5, at 22.

[54] *Id.* at 20.

[55] *See, e.g.*, HUMAN RIGHTS WATCH, IRAQ, *supra* note 31; *see also* McDonnell, *supra* note 4, at 56.

[56] Hiznay, *supra* note 5, at 17.

[57] *See id.*; *see also* Kevin Bryant, *Cluster Munitions and their Submunitions—A Personal View*, *Cluster Munitions, in* U.N. INST. FOR DISARMAMENT RESEARCH, 4

A variety of outside factors raise the failure rate, such as the age of the submunition or the delivery technique.[58] The level of care exerted by soldiers in the storing and handling of cluster munitions can also impact failure rates.[59] Extreme temperatures, hot or cold, can affect submunition performance.[60] A submunition that lands in mud, sand, or snow has an increased likelihood of failure because of the soft impact.[61] Falling through or getting caught in trees and vegetation can cause submunitions to decelerate and hit the ground without enough force to trigger an explosion.[62]

The relatively high failure rate of submunitions creates concerns regarding the rule against indiscriminate attacks and the rule of proportionality.[63] A known high failure rate of cluster munitions provides an attacking party with knowledge that significant numbers of submunitions will act as de facto landmines until contaminated areas are clear. Even if cluster munitions are delivered specifically to attack a military target, the attacking party cannot guarantee that civilians will not, in time, pass along the same area and accidentally detonate failed submunitions.[64] This "temporal" indiscriminate attack can be especially common if a military convoy is attacked on what is normally used as a public road or courtyard.[65] Unless the attacking party intends to decontaminate failed submunitions, or uses only submunitions with self-destruct capabilities, this scenario raises concerns under Article 51 of Protocol I.[66]

Failed submunitions and the absence of a guidance mechanism

DISARMAMENT FORUM 45-49 (2006), *available at* http://www.unidir.org/pdf/articles/pdf-art2533.pdf (providing a personal account of the humanitarian crisis in Laos from experiences as a British soldier).

[58] *See, e.g.*, Hiznay, *supra* note 5, at 22; MCGRATH, *supra* note 14, at 7.

[59] MCGRATH, *supra* note 14, at 6.

[60] Hiznay, *supra* note 5, at 22.

[61] MCGRATH, *supra* note 14, at 6.

[62] Hiznay, *supra* note 5, at 22.

[63] *See* Protocol I, *supra* note 34, art. 51 (discussing indiscriminate attacks and proportionality).

[64] *See, e.g.*, MCGRATH, *supra* note 14, at 8 (arguing that a child who disturbs a submunition months after the bomb was dropped is "no less a measure of the impact of that attack than if the child had become a casualty after just one day").

[65] *See* Wiebe, *supra* note 19, at 88 (using the term "temporally indiscriminate").

[66] *See generally id.* (arguing that unexploded submunitions are de facto landmines and are therefore "indiscriminate killers").

on most models combine to raise concerns regarding the rule of proportionality, which prohibits an attack that causes excessive civilian casualties or damage in proportion to the desired military goal.[67] The past impact on civilians from errant submunitions and over the course of time from unexploded submunitions exhibits a formidable risk of excessive civilian casualties whenever cluster munitions are used.[68] This potential for excessive casualties dictates that only vital military goals should proportionally outweigh the risk inherent in the use of cluster munitions.

Lastly, the rule on feasible precautions requires conflicting parties to minimize danger to civilians from armed conflict.[69] This rule requires parties to take all precautions necessary—from implementing attack strategies that spare the most civilian casualties, to warning civilians of impending danger—to diminish the collateral damage caused during armed conflict.[70] When applied to cluster munitions, this rule dictates that the attacking party needs to consider and take every possible opportunity to ensure that submunitions cause the least possible damage to civilians.[71] This would entail delivering the cluster munitions during optimal weather, at an optimal height, as far away from civilian centers as possible, and having a team ready to clear all unexploded submunitions.[72] However, it is clear—evidenced by the ever-increasing amount of civilian casualties caused by cluster munitions—that warring states have neglected the rule on feasible precautions.

[67] Maresca, *supra* note 33, at 29.

[68] *See supra* Section I (surveying the regarding historical use of cluster munitions in armed conflict); *see also* Maresca, *supra* note 33, at 29 (concluding that "past experience has put users on notice about the long-term dangers that cluster munitions cause civilians").

[69] Protocol I, *supra* note 34, art. 57; *see also* Maresca, *supra* note 33, at 29.

[70] *See generally* MCGRATH, *supra* note 14, at 12.

[71] Michael Slackman, *Israeli Bomblets Plague Lebanon*, N.Y. TIMES, Oct. 6, 2006, at A10, *available at* http://www.nytimes.com/2006/10/06/world/middleeast/06cluster. html (citing an unknown military expert admitting that cluster bombs are "legal if aimed at military targets and are very effective").

[72] *See generally* Maresca, *supra* note 33, at 30 (discussing the variables associated with the use of cluster munitions).

C. Impact on Civilians

The method and quantities by which states have used cluster munitions have created humanitarian emergencies in almost every state that has experienced these weapons. Civilians suffer casualties from cluster munitions from the moment the weapon is dropped up to years, and at times decades, thereafter.

1. Physical and Psychological Impact

In regards to collecting figures on the number of casualties attributed to submunitions, it can be difficult to ascertain whether a submunition or a different type of munition—such as a landmine or other explosive remnants of war (ERW)—caused a victim's injury.[73] In many cases, the victims cannot tell what caused their injury, or recorded casualties do not specify between various forms of ERW.[74] However, submunitions cause specific types of injuries because of the very nature of the weapon.[75] Because of the outward release of shrapnel, victims of submunition explosions often sustain injuries to their upper bodies, including loss of extremities and sight.[76] The outward release of shrapnel also tends to cause injuries to multiple individuals.[77]

A recent study concluded that civilians, especially children, make up the majority of people killed from cluster bombs.[78] Research in twenty-four countries confirmed at least 11,000 casualties, which translates to close to 100,000 casualties worldwide.[79] The study found that over 98% of casualties caused by cluster munitions were civilians, while 75% of those casualties were due to unexploded submunitions.[80] In Kosovo, Cambodia, and

[73] HUMANITARIAN IMPACT, *supra* note 4, at 10.

[74] *Id.*

[75] *See generally* MCGRATH, *supra* note 14, at 19-20 (providing a thorough description of bodily injuries sustained by the explosion of submunitions).

[76] HUMANITARIAN IMPACT, *supra* note 4, at 10 (citing RICHARD MOYES, EXPLOSIVE REMNANTS OF WAR: UNEXPLODED ORDINANCE AND POST-CONFLICT COMMUNITIES 7 (2002)).

[77] *Id.*

[78] Handicap International administered the study. Richard Norton-Taylor, *Civilians Main Cluster Bomb Victims*, GUARDIAN, Nov. 3, 2006, at 24, *available at* http://www.guardian.co.uk/world/2006/nov/03/military.armstrade.

[79] *Id.* The study confirmed casualties in twenty-four countries and used a formula of extrapolation to calculate overall figures. *Id.*

[80] *Id.*

Afghanistan, boys younger than eighteen years of age represented the largest casualty group.[81] Children are likely to suffer the most casualties because the yellow coloring of the bomblets and the attached parachute combine to create a toy-like object. [82]

In addition, states that sustain cluster munition impacts may not have a healthcare infrastructure capable of effectively treating the medical requirements of submunition victims. Families of the victims are often forced to carry the injured for miles over the course of several hours to the nearest medical facility.[83] Even if healthcare is available, families may be too poor to afford medical treatment.[84] The family of Rasha Zayoun, the girl in the opening vignette of this paper, was unable to afford crutches for Rasha for over a month after she lost her leg.[85]

Aside from physical damage, populations victimized by submunitions suffer a severe psychological impact from their ordeal. Victims of physical encounters with submunitions suffer from a variety of emotions, including anger, depression, and vulnerability.[86] Adolescent victims are especially susceptible to an inability to develop independence or trust.[87] The presence of unexploded submunitions also embeds a sense of terror in victims and the overall population. The fear of walking in one's community for fear of triggering an unexploded submunition creates a significant barrier to the restoration of normalcy and peace after an armed conflict.[88]

2. Socioeconomic Impact

Unexploded submunitions also impact a community's ability to redevelop its physical and economic infrastructure. Before structural redevelopment can occur, submunitions must be cleared

[81] *Id.*

[82] *See* Bradley S. Klapper, *Red Cross Steps Up Campaign Against Cluster Bombs, Urges Ban*, INT'L HERALD TRIB., Nov. 6, 2006, *available at* WESTLAW, 11/6/06 APALERTBUS 19:59:54.

[83] HUMANITARIAN IMPACT, *supra* note 4, at 11.

[84] *Id.*

[85] *See* Peterson, *supra* note 1.

[86] HUMANITARIAN IMPACT, *supra* note 4, at 11 (citing Beth Sperber Richie et al., *Resilience in Survivors of Traumatic Limb Loss*, 23 DISABILITY STUDIES Q. 29, 32, (2003)).

[87] HUMANITARIAN IMPACT, *supra* note 4, at 12.

[88] *Id.*

from all public areas. However, unexploded submunitions have been found in houses, schools, hospitals, farms, businesses, and even refugee shelters.[89] Until these areas are cleared, civilians cannot return to work to reestablish the economy.[90] Civilians may not even have safe access to water or other natural resources.[91] Farmers cannot sustain a livelihood or produce food for their communities when agricultural areas are littered with unexploded submunitions.[92] Those desperate for income must brave the presence of unexploded ordnance throughout their crop and farmlands.[93] The loss of income for many civilians reverberates across an economy that is likely still reeling from the presence of an armed conflict.[94]

Unexploded submunitions also impede humanitarian personnel from fulfilling their mission of clearing submunitions or redeveloping the stricken area. Reports suggest that personnel conducting clearance operations have suffered casualties in twenty-nine states and areas.[95] Prior efforts to provide food packets to civilians in Afghanistan have failed because civilians were unable to differentiate the yellow food packets from unexploded submunitions since they were similar in size and color.[96] If the area is considered too dangerous, relief workers are not permitted to enter.[97]

Poor prospects of maintaining a livelihood, along with the apparent danger of surrounding areas, combine to dissuade many civilians from returning to their homes.[98] In Lebanon, the highest

[89] *Id.* at 13.

[90] The Secretary-General, *Report of the Secretary-General on the Protection of Civilians in Armed Conflict*, ¶ 60, *delivered to the Security Council*, U.N. Doc. S/2007/643 (Oct. 28, 2007) (explaining that the impact of cluster munitions include "thousands unable to return to their homes; and devastated livelihoods as fields are rendered unusable, harvests destroyed, and sources of income lost for a generation.").

[91] HUMANITARIAN IMPACT, *supra* note 4, at 14.

[92] *See* MCGRATH, *supra* note 14, at 7.

[93] *See* Slackman, *supra* note 71, at A10 (interviewing a farmer that claimed that he must harvest his olives and wheat, despite unexploded submunitions, because he would otherwise have no finances for the winter).

[94] HUMANITARIAN IMPACT, *supra* note 4, at 15.

[95] *Id.* at 11.

[96] *See* Elizabeth A. Neuffer, *Afghan Food Drops Found to Do Little Good*, BOSTON GLOBE, Mar. 26, 2002, at A1.

[97] HUMANITARIAN IMPACT, *supra* note 4, at 13-14.

[98] *See* HUMAN RIGHTS WATCH, FATALLY FLAWED: CLUSTER BOMBS AND THEIR

rate of civilian casualties from unexploded submunitions occurred immediately after the conflict ended, as people returning to their homes without knowledge of the apparent danger of submunitions set off the charges.[99] Since the hazard of unexploded munitions remains until they are entirely cleared, civilians' lives may be disrupted for years or decades. Similarly, in Laos, the remaining existence of unexploded munitions from the Vietnam War prevents schools, hospitals, and other infrastructure projects from being built to this day.[100] In Kosovo, the areas contaminated with unexploded submunitions still need to be cleared even seven years after they were dropped.[101]

D. A Movement to Ban Cluster Munitions

The potential for unacceptable humanitarian costs through the use of cluster munitions was recently displayed in the 2006 Lebanon War. During the last week of the 2006 Lebanon War, Israel released numerous cluster munitions into southern Lebanon apparently in response to Hezbollah's use of over 100 cluster rockets.[102] Israeli cluster munitions had a failure rate of close to 70%, leaving up to one million unexploded submunitions in southern Lebanon.[103] Figures by United Nations indicated that thirteen square miles—including 26% of Lebanon's cultivatable land—were contaminated by unexploded submunitions.[104] United Nations officials estimated that one million unexploded submunitions covered an area that inhabited roughly 650,000 residents.[105] Farmers could not harvest until United Nations teams cleared areas of unexploded submunitions, for fear of setting one off.[106]

USE BY THE UNITED STATES IN AFGHANISTAN 20 (Dec. 2002), *available at* http://www.mineaction.org/downloads/1/HRW_fatally%20flawed%20Afghanistan.pdf.

[99] HUMANITARIAN IMPACT, *supra* note 4, at 32.

[100] *Id.* at 14.

[101] *Id.* at 15.

[102] *See* Peterson, *supra* note 1.

[103] *See* Richard Boudreaux, *Israel Criticized for Cluster Bombs*, L.A. TIMES, Feb. 1, 2008, at A8, *available at* http://articles.latimes.com/2008/feb/ 01/world/fg-cluster1; *see also* Peterson, *supra* note 1.

[104] *See* Peterson, *supra* note 1.

[105] *See* Slackman, *supra* note 71, at A10.

[106] *See* Peterson, *supra* note 1.

Israel's government-appointed Winograd Commission found that Israel's use of cluster munitions lacked "operational discipline, control and oversight."[107] The United Nations calculated that fifty-five demining teams would be able to clear most of the failed submunitions by the end of 2007—eighteen months after the Hezbollah-Israeli ceasefire.[108] For many states that advocated for a ban on cluster munitions, the gross abuse of cluster munitions in the 2006 Lebanon War acted as a catalyst towards negotiating an official prohibition.[109]

The Convention on Conventional Weapons (CCW) initially appeared to be the best setting for discussions to regulate cluster munitions. The CCW seeks to protect combatants and noncombatants from certain types of weapons.[110] When the CCW entered into force in 1983, it addressed incendiary weapons, mines, booby-traps, and fragmentary weapons.[111] The CCW has been amended to include Protocol V, a Protocol on Explosive Remnants of War.[112] Though Protocol V standardizes the clearance of unexploded submunitions, it does not establish regulations for the use of cluster munitions during armed conflict.[113]

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[107] Boudreaux, *supra* note 103.

[108] *See* Peterson, *supra* note 1. The United Nations has estimated the clearing effort to cost $40 million. *Id.* Considering that failed submunitions dropped in Laos over thirty years ago still kill and injure civilians to this day, clearing efforts are well worth the cost. *See* Press Release, Int'l Comm. of the Red Cross, Cluster Munitions: ICRC Calls for Urgent International Action (June 11, 2006), http://www.icrc.org/web/eng/siteeng0.nsf/html/ihl-weapon-news-061106?OpenDocument&style=custo_print.

[109] The Secretary-General, *Report of the Secretary-General on the Protection of Civilians in Armed Conflict*, ¶ 61, *delivered to the Security Council*, U.N. Doc. S/2007/643 (Oct. 28, 2007). If the 2006 Lebanon War was a final straw, then the use of cluster munitions during the 2008 South Ossetia War surely provided renewed motivation for states participating in the Oslo Process. *See Russia Accused of Using Cluster Bombs on Civilians*, AGENCE FR.-PRESSE (Geneva), Aug. 26, 2008, http://www.defensenews.com/story.php?i=3692358 (last visited Nov. 15, 2008). Georgian diplomats charged that many Russian cluster munitions remained unexploded on roads and farms, "resulting in civilian casualties on a daily basis." *Id.*

[110] Arms Control Association, *Convention on Certain Conventional Weapons (CCW) at a Glance*, http://www.armscontrol.org/factsheets/CCW (last visited Nov. 15, 2008) [hereinafter ACA,*Convention*]; Nout van Woudenberg, *The Long and Winding Road Towards an Instrument on Cluster Munitions*, 12 J. CONFLICT & SEC. L. 447, 474-75 (2007).

[111] ACA, *Convention*, *supra* note 110.

[112] *Id.*

[113] Arms Control Association, *Cluster Munitions at a Glance*,

States advocating for a prohibition on cluster munitions brought their concerns to the CCW in November 2006 with a proposal to add Protocol VI, a Protocol on Cluster Munitions.[114] However, the CCW requires a "negotiating mandate" among its state parties before negotiations can begin on any proposal.[115] Russia, China, and the United States objected to starting negotiations on cluster munitions, and the mandate was not achieved.[116] The only consensus reached during the meeting was an agreement to assemble a group of experts in June 2007 to study the possibility of a new protocol on cluster munitions.[117]

Frustrated with the slow-moving process, and the blockade on talks from the United States, Russia, and China, a coalition of treaty members led by Norway announced at the November 2006 meeting that they would begin negotiations outside of the CCW process towards a ban on cluster munitions.[118] Even though the United States dropped its objection in June 2007,[119] Russia and China remained steadfast against starting negotiations on cluster munitions.[120] The effort headed by Norway came to be called the Oslo Process.

III. THE CONVENTION ON CLUSTER MUNITIONS

A. The Oslo Process

The Oslo Process consisted of five conferences held over two years by various states towards the negotiation of a prohibition on the use, production, transfer, and stockpiling of cluster munitions

http://www.armscontrol.org/node/3125 (last visited Nov. 15, 2008) [hereinafter ACA, *Munitions*].

[114] *See id.*; *see also* Maresca, *supra* note 33, at 30.

[115] Woudenberg, *supra* note 110, at 475.

[116] *See* ACA, *Munitions*, *supra* note 113; ACA, *Convention*, *supra* note 110.

[117] *See*ACA, *Munitions*, *supra* note 113; ACA, *Convention*, *supra* note 110.

[118] *See* ACA, *Munitions*, *supra* note 113; ACA, *Convention*, *supra* note 110.

[119] *See* Eliane Engeler, *U.S. Ready to Negotiate on Cluster Bombs*, MIL. TIMES (Online), June 18, 2007, *available at* http://www.militarytimes.com/news/2007/06/ap_clusterbombs_070618/ (reporting that the United States reversed its objection "due to the importance of this issue, concerns raised by other countries, and our own concerns about the humanitarian implications of these weapons").

[120] ACA, *Munitions*, *supra* note 110.

that cause unacceptable harm to civilians.[121] Forty-nine states attended the Oslo Conference in late February 2007 to begin discussions on provisions and terms.[122] The Oslo Conference attendees pledged to complete a legally binding treaty by 2008 and agreed to develop an international infrastructure to facilitate care to victims, clearance of unexploded submunitions, destruction of stockpiles, and risk education.[123]

The Oslo Conference—along with corresponding conferences in Lima (May 23-25, 2007),[124] Vienna (December 5-7, 2007),[125] and Wellington (February 18-22, 2008)[126]—helped to finalize the terms of the treaty while allowing states to continue debates regarding provisions that remained in dispute. During these conferences, participating states debated three primary issues. The states debated whether the adopted restrictions on cluster munitions would take effect immediately, or whether the treaty would allow a phasing period to give participating states the opportunity to develop alternative weapons.[127] A second issue was whether the treaty would prohibit cluster munitions as a class of weapons or allow for exceptions regarding technologically advanced models.[128]

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[121] Oslo Conference on Cluster Munitions, Declaration, Feb. 22- 23, 2007, *available at* http://www.regjeringen.no/en/dep/ud/selected-topics/Humanitarianefforts/clusterinitiative/conference.html?id=449312 [hereinafter Oslo Declaration].

[122] *See* ACA, *Munitions*, *supra* note 113.

[123] *See* Oslo Declaration, *supra* note 121. *See generally Addressing the Humanitarian Impacts of Cluster Munitions: Key Issues* (Oslo Conference on Cluster Munitions Background Paper, 2007), *available at* http://www.regjeringen.no/upload/UD/Vedlegg/Hum/OsloCCM%20background%20paper%201502.pdf (providing a concise overview of the initial objectives for participants of the Oslo Process).

[124] *See* Cluster Munition Coalition, *CMC Report on the Lima Conference and Next Steps*, http://www.stopclustermunitions.org/wp/wp-content/uploads/2008/05/cmc-report-on-the-lima-conference-23-25-may.pdf.

[125] *See* Cluster Munition Coalition, *CMC Report on the Vienna Conference on Cluster Munitions*, http://www.stopclustermunitions.org/wp/wp-content/uploads/2008/05/report-on-the-vienna-conference-5-7-december.pdf.

[126] *See* Cluster Munition Coalition, *Report from the Wellington Conference on Cluster Munitions*, http://www.stopclustermunitions.org/wp/wp-content/uploads/2008/05/wilpf-report-on-wellington-conference-18-22-february.pdf.

[127] ACA, *Munitions*, *supra* note 113.

[128] *Id.* The debate over the proper definition of cluster munitions continued until at least the Wellington Conference in February 2008. *See* John Duncan, U.K. Ambassador for Multilateral Arms Control and Disarmament, Statement to the Wellington Conference on Cluster Munitions (Feb. 18, 2008), *available at* http://ukunarmscontrol.fco.gov.uk/resources/

Lastly, member states of NATO pushed for a provision that would allow treaty signatories to cooperate militarily with states that were not treaty members.[129]

While the debates lingered, over eighty states pledged to continue with the Oslo Process by conferencing in Dublin in May 2008 to finalize terms to the treaty.[130] By the time the Dublin Conference opened, the number of participating states had grown to 120.[131]

B. An Agreement in Dublin

On May 28, 2008, 111 states agreed to the finalized terms on the Convention on Cluster Munitions (CCM).[132] The last lift of morale towards a final draft of the CCM was provided by the United Kingdom, which announced its intent to sign the CCM after having earlier withdrawn two major cluster munitions from its arsenal.[133] States were able to sign the CCM beginning on December 3, 2008, and 104 states have signed by the end of 2009.[134]

The terms of the CCM exhibit the limitations the treaty sets for the use of cluster munitions, along with the compromises reached by the participating states. The CCM defines a cluster munition as a "conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20

en/pdf/5061551/postgv_cmstmt18Feb208.

[129] *See U.S. Opts Out of Landmark Cluster Bomb Treaty*, ASSOCIATED PRESS, May 30, 2008, http://www.msnbc.msn.com/id/24889155/.

[130] *See* Wellington Conference on Cluster Munitions, Declaration, Feb. 18-22, 2008, *available at* http://www.clustermunitionsdublin.ie/pdf/declaration-well-en_001.pdf.

[131] List of Countries Subscribing to the Declaration of the Wellington Conference on Cluster Munitions, May 23, 2008, *available at* http://www.mfat.govt.nz/downloads/disarmament/Well-Dec-list-of-subscribers-dijibouti&swazi-2305.pdf.

[132] Diplomatic Conference for the Adoption of a Convention on Cluster Munitions, Convention on Cluster Munitions, Dublin, CCM/77, May 30, 2008, *available at* http://www.clustermunitionsdublin.ie/pdf/ ENGLISHfinaltext.pdf [hereinafter CCM]; *see* Engeler, *supra* note 119.

[133] *See* Editorial, *Cluster Bombs, Made in America*, N.Y. TIMES, June 1, 2008, *available at* http://www.nytimes.com/2008/06/01/opinion/01sun1.html.

[134] United Nations Treaty Collection, Status of the Convention on Cluster Munitions, http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVI-6&chapter=26&lang=en (last visited Jan. 10, 2010); Miles A. Pomper, Arms Control Ass'n, *Cluster Munitions Treaty Announced* (June 2008), http://www.armscontrol.org/act/2008_06/Cluster (last visited Nov. 15, 2008).

kilograms."[135] Notably, excluded from this definition are munitions that (in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions) have all of the following characteristics:

> 1. Each munition contains fewer than ten explosive submunitions;
> 2. Each explosive submunition weighs more than four kilograms;
> 3. Each explosive submunition is designed to detect and engage a single target object;
> 4. Each explosive submunition is equipped with an electronic self-destruction mechanism; [and]
> 5. Each explosive submunition is equipped with an electronic self-deactivating feature[.][136]

In essence, the CCM does not set a blanket prohibition on cluster munitions. Instead, it creates a heightened sophistication standard for submunitions.

The CCM also sets an eight-year deadline for member-states to destroy stockpiles of cluster munitions, but provides for a process of requesting an extension in case a state needs additional time.[137] In accordance with the original objectives of participating states, the CCM provides guidelines for clearing unexploded submunitions, providing risk education, establishing a victim assistance program, and enforcing the treaty.[138] The CCM does not provide a sufficient phasing period, as it is set to enter into force six months after thirty states sign and ratify the treaty.[139]

Most notably, the CCM permits state parties to "engage in military cooperation and operations with States not party" to the treaty, a victory for participants who are also members of NATO.[140] The CCM therefore allows parties to engage in military operations and peacekeeping missions with non-state parties (i.e., the United States) who have cluster munitions in their arsenal. Aside from

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[135] CCM, *supra* note 132, art. 2(2).
[136] *Id.* art. 2(2)(c).
[137] *Id.* art. 3(2)-(4).
[138] *Id.* arts. 4, 5, 8.
[139] *Id.* art. 17.
[140] CCM, *supra* note 132, art. 21(3).

the United States, other notable states—and major cluster munition producers—that are unlikely to endorse the CCM are Russia, China, Israel, Egypt, India, Pakistan, and Brazil.[141] Article 21 should also come as a relief to the United States—which has made very clear that it refuses to endorse the CCM—because it allows the United States to continue joint operations with many of its allies who intend to ratify the CCM (most notably, the United Kingdom).

IV. UNITED STATES POLICY ON CLUSTER MUNITIONS

A. Rationale for Refusal to Endorse the CCM

The United States' refusal to endorse the CCM is two-fold: first, United States argues that the CCW, not the CCM, is the proper venue to establish international restrictions on weapons; second, it maintains that cluster munitions are essential to its national defense and to the defense of its allies and can be used within the parameters of IHL.

The United States insists that an international negotiation on restrictions for cluster munitions should have occurred within the framework of the CCW. It argues that the formation of a treaty outside of the CCW undermines the "framework of the CCW" that has been in place for over twenty years.[142] However, its principal argument is that the CCW has as member-states the world's largest producers of cluster munitions such as Russia, China, and the United States. Any meaningful and lasting agreement on the limitation of a weapon must logically include the participation and approval of major weapon producers and suppliers.

However, history has not always shown this to be the case. In 1995, the CCW took on the challenge of negotiating an agreement for the restriction of anti-personnel landmines.[143] The following year, an impasse occurred between states that preferred a conditional prohibition on landmines and states that advocated for

[141] *See* Eamon Quinn & John F. Burns, *U.K. Drops Opposition to Cluster Bomb Ban*, INT'L HERALD TRIB., May 29, 2008, at 5.

[142] John R. Crook, *Contemporary Practice of the United States Relating to International Law*, 101 AM. J. INT'L L. 478, 501 (2007).

[143] Wiebe, *supra* note 19, at 159.

a complete and total ban.[144] The stalemate motivated several states to develop a landmine treaty outside of the CCW process.[145] This treaty, once entered into force, became known as the Ottawa Treaty.[146] The Ottawa Treaty failed to have the support of the United States, Russia, and China. However, since its inception, more than forty million landmines have been destroyed, and trade in the weapon has ceased.[147] Moreover, the United States has paid more than any other country—$1.2 billion—to neutralize and clear landmines.[148] One cannot deny that overwhelming international cooperation towards a treaty on a certain weapon has a "shaming" effect for the use and trade of that weapon, regardless of the venue in which the treaty was created.[149]

The United States also insists that cluster munitions are an effective weapon "when properly targeted and employed" so long as the risk of collateral damage is considered when using these weapons in armed conflict.[150] Cluster munitions are effective against an array of objects that are normally targeted during combat: aircraft and airfields; battle tanks and other armored trucks; troops; artillery; targets reported to be hidden in wooded areas; hidden targets that cannot be hit by precision weapons, and radio towers.[151] The United States argues that cluster munitions are unique tools against dispersed and moving targets such as troops and armored vehicles.[152] The ability of one pilot to strike several targets minimizes the risk of enemy fire since fewer sorties

[144] *Id.*

[145] *Id.*

[146] Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, *opened for signature* Dec. 3, 1997, 36 I.L.M. 1507 (entered into force Mar. 1, 1999).

[147] *See* Editorial, *Cluster Bombs, Made in America*, N.Y. TIMES, June 1, 2008, at Wk11, *available at* http://www.nytimes.com/2008/06/01/opinion/01 sun1.html.

[148] *Id.*

[149] Sandeep Gopalan, *Alternative Sanctions and Social Norms in International Law: The Case of Abu Ghraib*, MICH. ST. L. REV. 785, 836 (2007).

[150] U.S. DEP'T OF DEF., REPORT TO CONGRESS: KOSOVO/OPERATION ALLIED FORCE AFTER-ACTION REPORT 90 (Jan. 31 2000), *available at* http://web harvest.gov/peth04/20041027022740/www.defenselink.mil/pubs/kaar02072000.pdf.

[151] MCGRATH, *supra* note 14, at 8.

[152] *See, e.g.*, Miles A. Pomper, Arms Control Ass'n, *Cluster Munitions Talks Gain Steam* (Mar. 2008), http://www.armscontrol.org/act/2008_03/ Cluster (last visited Feb. 15, 2010); Maj. Thomas J. Herthel, *On the Chopping Block: Cluster Munitions and the Law of War*, 51 A.F. L. REV. 229, 258 (2001).

are necessary.[153] The removal of cluster munitions from the United States' arsenal would risk the lives of soldiers and coalition partners during armed conflict.[154] Though some may argue that future conflicts will focus mainly on counterterrorism or counterinsurgency efforts, the Pentagon must still be prepared to defend against failed states and to "interact" with a strengthening China and a more aggressive Russia.[155] Cluster munitions remain an integral defense against advancing armies and must remain in the United States' stockpile until more reliable and technologically advanced cluster bombs can fill the arsenal.[156] According to State Department officials, abandoning cluster munitions is simply not tenable from a military standpoint.[157]

The United States disagrees with the notion that cluster munitions inherently violate IHL or should be uniformly banned.[158] Instead, technologically advanced cluster munitions—equipped with self-destruct and guidance capabilities—can significantly reduce the risk to civilians that raises concerns under IHL.[159] Further, military planners can ensure that cluster munitions are not fired in the vicinity of civilian areas.[160] States can also speed up clearance of unexploded submunitions.[161] Even domestic critics of cluster munitions agree that using technology to reduce the percentage of unexploded submunitions and using appropriate rules of engagement to curb the risk of errant munitions would render cluster munitions less likely to create a humanitarian crisis.[162] The United States cannot endorse a general prohibition

[153] Herthel, *supra* note 152, at 258-59.

[154] *See* Engeler, *supra* note 119.

[155] *See Gates Approves New Defense Strategy over Objections of Service Chiefs*, INSIDEDEFENSE.COM, June 16, 2008, at 1, *available at* http://www.afa.org/GatesApproves.pdf.

[156] *See* Stephen Mathias, Head of the U.S. Delegation to the Convention on Certain Conventional Weapons, United States Intervention on Technical Improvements (July 15, 2008), *available at* http://ccwtreaty.state.gov/statements/0715TechImprovements.html.

[157] Alejandro D. Wolff, Deputy U.S. Permanent Representative, U.S. Mission to the U.N., Statement at the Security Council on the Protection of Civilians in Armed Conflict (May 27, 2008), *available at* http://www.state.gov/t/pm/rls/rm/105253.htm.

[158] *See* Crook, *supra* note 142, at 501.

[159] *See* Engeler, *supra* note 119.

[160] Herthel, *supra* note 152, at 264.

[161] Pomper, *supra* note 152.

[162] *See* 145 CONG. REC. S10070-71 (daily ed. Aug. 3, 1999) (statement of Sen.

on an essential weapon in its arsenal when solutions exist that can mitigate the weapon's negative humanitarian impact.

B. Mitigation of Problematic Cluster Munitions

The United States "recognizes the need to minimize the unintended harm to civilians and civilian infrastructure associated with unexploded ordnance from cluster munitions."[163] Cluster munitions have negatively impacted United States forces during military exercises. During the 1991 conflict in Iraq, United States forces, while conducting a night assault on an Iraqi-occupied airport in Kuwait, were held back because they were unable to traverse terrain covered with unexploded submunitions from allied bombing.[164] An investigation of military casualties in Operation Desert Storm found that "soldiers entering . . . battlefields would encounter larger amounts of unexploded submunitions than desired."[165] Procedural manuals from the Pentagon include a reminder to commanding officers to consider the potential risk of unexploded submunitions to soldiers as they enter an area that has previously been bombarded.[166]

The United States is aware of the weaknesses of cluster munitions and has tried to diminish those weaknesses by developing submunitions. During the Iraq War in 2003, the United States, for the first time, used combat cluster submunitions equipped with self-destruct capability.[167] The United States also used a dispenser that corrected any wind interference to increase the accuracy of airdropped submunitions.[168] Sensor-fused weapons

Leahy).

[163] Memorandum from Robert M. Gates, U.S. Sec'y of Def., to the Sec'ys of the Military Dep'ts et al. (June 19, 2008), *available at* http://www.globalsecurity.org/military/library/policy/dod/d20080709cmpolicy.pdf [hereinafter Gates].

[164] *See* Christopher M. Centner, *Ignorance is Risk: The Big Lesson from Desert Storm Air Base Attacks*, 6 AIRPOWER J. 25, 30 (Winter 1992), *available at* http://www.airpower.Maxwell.af.mil/airchronicles/apj/apj92/win92/centner. htm.

[165] U.S. GEN. ACCOUNTING OFFICE, *Operation Desert Storm: Casualties Caused by Improper Handling of Unexploded U.S. Submunitions*, GAO/NSIAD-93-212 (Aug. 1993), *available at* http://archive.gao.gov/t2pb at5/149647.pdf.

[166] *See* Air Land Sea Application Center, *UXO: Multiservice Procedures for Operations in an Unexploded Ordnance Environment*, at I-1 (July 1996), *available at* http://www.dtic.mil/doctrine/jel/service_pubs/uxo.pdf.

[167] Goose, *supra* note 10.

[168] *Id.*

were also deployed that independently sensed, and then attacked, armored vehicles.[169] The Air Force and Army have both reported on efforts to improve the reliability and guidance mechanisms in their respective cluster munitions.[170] The interest that the United States shows in these new technologies is an encouraging sign that its military hopes to someday move away from older, imprecise, and indiscriminate cluster munitions.

The United States has also taken responsibility by helping to decontaminate areas plagued by its unexploded submunitions. For example, in 1990, the United States agreed to give $850,000 in prosthetic devices for Laotian victims of bombing during the Vietnam War.[171] In 1996, the United States agreed to send military personnel to Laos to assist in the clearing of remaining unexploded submunitions.[172] At the beginning of 2008, the United States announced plans to create a "quick reaction force" that would be tasked with removing unexploded cluster bombs and other ERW from civilian areas.[173] In total, the United States has spent close to $1 billion in clearing submunitions "from East Asia to Southeast Europe to the Middle East."[174]

The effort of the United States to achieve a balance between protecting humanitarian principles and its security interests was most recently displayed in the Pentagon's new policy regarding cluster munitions. New types of cluster munitions being developed by the United States will have a functioning rate of 99% or better.[175] By June 2009, the Pentagon will begin reducing the number of cluster munitions in its arsenal that do not meet the new functioning rate requirement.[176] Unfortunately, the new

[169] *Id.*

[170] *See* Wiebe, *supra* note 19, at 91.

[171] Carmel Capati, *The Tragedy of Cluster Bombs in Laos: An Argument for Inclusion in the Proposed International Ban on Landmines*, 16 WIS. INT'L L.J. 227, 239 (1998).

[172] *Id.*

[173] *See, e.g.*, Jeff Abramson, Arms Control Ass'n, *Quick-Reaction Force Contract Awarded* (Nov. 2008), http://www.armscontrol.org/act/2008_11/ Quick_reaction (last visited Feb. 17, 2010); Pomper, *supra* note 152.

[174] Crook, *supra* note 142, at 501. *See generally* U.S. Dep't of State, United States Clearance of Unexploded Cluster Munitions (Feb. 23, 2007), *available at* http://www.state.gov/r/pa/prs/ps/2007/february/81000.htm (providing a survey of United States assistance in the clearing of unexploded cluster munitions).

[175] *See, e.g.*, Gates, *supra* note 163; Kidd, *supra* note 2.

[176] *See* Lolita C. Baldor, *Pentagon Wants Less Deadly Cluster Bombs*, MIL.

generation of cluster munitions is not scheduled to be available until 2018.[177]

The time and investment that the United States has committed towards developing cluster munitions and clearing unexploded submunitions exhibits a genuine desire to reduce the humanitarian impact of its weapons. It will take an estimated ten years for the United States to begin using more reliable cluster munitions. In the meantime, the United States will have to rely on its current problematic supply.[178] However, the implementation of certain restrictions on the use of these cluster munitions can ensure that the United States upholds IHL.

V. STRATEGY FOR A SOLUTION

As stated by Jonas Gahr Store, the Minister of Foreign Affairs of Norway, "[i]t should be possible to reconcile what is acceptable from a humanitarian point of view with what is militarily necessary and politically feasible in order to prevent the unacceptable humanitarian consequences of cluster-munition use."[179]

The CCM is a valuable addition to international law and a product of a commendable process of international cooperation. However, it would not be practical for the United States to endorse the CCM at this time. There is abundant proof that the United States' military strategy depends on the ability to use cluster munitions during military operations. Considering the position of the United States in the world—as a member of NATO and as the leading force in the global war on terrorism—weakening United States' military capability is tantamount to weakening the military might of the Western world. Even if there is a likelihood that future armed conflicts will revolve around counterterrorism strategies and guerilla warfare, it is practical for any state to stay prepared in the event that a more traditional conflict arises.

In the meantime, the United States must continue making improvements to cluster munitions. Advanced guiding systems and

TIMES (Online), July 8, 2008, *available at* http://www.militarytimes.com/news/2008/07/ ap_clusterbombs_070708/.

[177] *See, e.g.*, Gates, *supra* note 163; Kidd, *supra* note 2.

[178] *See* Kidd, *supra* note 2 (describing the dependency of the United States military on cluster munitions).

[179] Støre, *supra* note 3, at 3-4.

sensor-fuses would provide the military with the ability to target even small submunitions to help ensure that only military targets are impacted when cluster munitions are used. The Pentagon has the available remote technology to enable submunitions to be self-destructible and self-deactivating, which would eliminate the hazard of unexploded submunitions.[180]

A new generation of cluster munitions that includes this available guidance and remote technology will have aiming capabilities and a low failure rate. In essence, this new generation of cluster munitions would satisfy the rules of distinction, proportionality, feasible precautions, and the rule against indiscriminate attacks. Moreover, the addition of this technology would almost certainly bring the United States supply of new cluster munitions into the exception clause (Article 2(2)) of the CCM. Embracing and utilizing this technology may open the door for the United States to willingly enter the CCM.

If the United States becomes involved in armed conflict before its new generation of cluster munitions is available, strict guidelines on the use of cluster munitions can ensure that the United States upholds IHL. Knowing that its current arsenal contains "dumb" submunitions with high failure rates, the United States should adopt a policy that these cluster munitions would not be used on military targets in any vicinity of a population center. By limiting the use of cluster munitions to attacking military targets that are entirely secluded from civilians, the United States would uphold the principles of distinction, proportionality, feasible precautions, and the rule against indiscriminate attacks, even with a weapon with known unreliability. To ensure, however, that civilians are not endangered in the long term, the United States should also adopt a protocol of quickly clearing unexploded submunitions from affected areas in an expedited fashion after a cease fire has been reached. Though this may be a burdensome and costly process, the only other option for the United States—without violating IHL—is to rely solely on precision-guided weapons until the new generation of "smart" cluster munitions is ready for use.

[180] *See* U.S. State Dep't Chronology on Humanitarian Landmine Action (July 14, 2003), *available at* http://usinfo.org/wf-archive/2003/030714/epf113.htm (highlighting that the Pentagon began in the 1970s to replace "dumb" landmines self-destructing and self-deactivating "smart" landmines); *see also* Hiznay, *supra* note 5, at 16, 21.

CONCLUSION

If the United States were to sign the Convention on Cluster Munitions, it would render useless a weapon that is a pillar of its current arsenal. Rather than endorse and ratify a treaty that would substantially weaken its military strength, the United States should wait until it updates its arsenal to include a generation of cluster munitions that satisfy the standards of international humanitarian law and the Convention on Cluster Munitions. In the meantime, however, the United States should refrain from the use of unreliable cluster munitions in any situation where there is a possibility that civilians may be impacted. Following this guidance will prove that it is indeed possible to reconcile humanitarian law with the use of cluster munitions.