

Chapter 3

Indiscriminate and Especially Injurious Weapons

“The generals love napalm. It has a big psychological effect.”

– US Marine Colonel Randolph Alles¹

The US and the UK have used indiscriminate and especially injurious weapons that are restricted by international conventions or widely considered unacceptable and inhumane. The United States has used incendiary devices – MK-77,² a napalm-type weapon, as well as white phosphorus munitions.³ White phosphorus has been used against ground targets in densely populated civilian areas.⁴ These weapons are extremely cruel – they stick to the flesh and burn victims to death. The US and UK governments initially denied use of these weapons but were later forced to retract.

During the 2003 invasion, the US and the UK also made extensive use of depleted uranium (DU) munitions⁵ and cluster munitions.⁶ Cluster weapons kill and maim indiscriminately when used in populated areas and also leave unexploded bomblets that later cause civilian death and injury. DU weapons, critics argue, can produce long-term negative health effects and several international bodies have called for a moratorium on their use. Both DU and cluster munitions violate prohibitions against weapons that cause unnecessary suffering and indiscriminate harm.

Napalm-type Firebombs

Napalm is an inflammatory mixture of fuel and sticky materials, employed in a firebomb. Originally developed during World War II, napalm was extensively used by the US during the Vietnam War, giving rise to public outcry and criticism. Most countries today refrain from using such firebombs, because they are considered to be especially cruel and indiscriminate. The US armed forces use a modern form of napalm, known as the MK-77 Mod 5.⁷

Napalm-type bombs ignite on impact, creating a fireball. The burning gel sticks to structures and to the bodies of victims, killing them by immolation and asphyxiation. Victims who survive usually sustain extremely severe burns and body trauma. Many die after periods of intense suffering and pain.

During and immediately after the initial military operations in 2003, there were widespread reports that the US had used incendiary bombs in Iraq. Embedded journalists reported that US planes dropped napalm-like weapons at Safwan Hill on the border with Kuwait⁸ and in Southern Iraq.⁹ US Marine pilots and commanders have confirmed that they used napalm near bridges over the Saddam Canal and the Tigris River, south of Baghdad. "We napalmed both those [bridge] approaches... Unfortunately there were people there ... you could see them in the [cockpit] video... They were Iraqi soldiers. It's

no great way to die...," said Colonel Randolph Alles, Marine commander of Air Group 11.¹⁰

The US military first denied allegations that it had used napalm.¹¹ However in August 2003, the Pentagon conceded that it had used Mark-77 bombs.¹² Its earlier denial had relied on a false distinction between napalm and the new Mark-77 firebombs, which are composed of a slightly different fuel mixture (jet fuel instead of benzene and gasoline).¹³ The Pentagon eventually admitted that the two weapons are "remarkably similar,"¹⁴ with identical effects on victims. As the director of the military studies group *GlobalSecurity.org* pointed out: "You can call it something other than napalm but it is still napalm. It has been reformulated in the sense that they now use a different petroleum distillate, but that is it. The US is the only country that has used napalm for a long time."¹⁵

In answer to a question in the House of Commons, UK Armed Forces Minister Adam Ingram explicitly denied that MK-77 firebombs had been used in Iraq.¹⁶ Ingram was later forced to retract his statement,¹⁷ claiming not to have known what US soldiers had reported to the press and the Pentagon had already acknowledged.

Human rights groups consider incendiary bombs to be inhumane. "Incendiaries create burns that are difficult to treat," said Robert Musil, Executive Director of Physicians for Social Responsibility.¹⁸

A legally-binding international convention restricts the use of incendiary weapons in combat and strictly prohibits its use in populated areas. Protocol III of the *UN Convention on Certain Weapons Which May Be Deemed To Be Excessively Injurious Or To Have Indiscriminate Effects* (1980) bans the use of incendiary weapons against civilians or against military targets in areas with a concentration of civilians.¹⁹ Customary humanitarian law also generally bans attacks that are indiscriminate and cause superfluous injury.

White Phosphorous

White Phosphorus is a wax-like incendiary agent used for signaling, smoke-screening, and incendiary purposes. The US regularly used white phosphorus in Vietnam. "WP" or "Willie Pete" as it is often known to soldiers, is commonly exploded in the air and used to illuminate the night sky, to destroy the enemy's equipment or to limit its vision.²⁰ It has also been used in Iraq as an incendiary weapon against human targets, a use generally considered to be contrary to international humanitarian law.

When exposed to oxygen, WP ignites with a bitter, garlic-like smell and burns until the oxygen supply is cut off.²¹ It burns the skin of the victims through their clothes, resulting in deep injuries and in abdominal pain, jaundice, necrosis of bones and multi-organ failure (mainly liver and kidneys), after which very few survive.²²

Like napalm, the use of WP against human beings was initially denied by the US

government. A documentary broadcast by Italian State television *RAI* revealed that US troops used WP against ground targets during initial combat in 2003 and in the battle of Falluja in November 2004. The film showed Falluja residents describing "a rain of fire fell on the city" and it presented footage of civilian bodies burned and melted,²³ later identified through the cemetery registry under the supervision of US authorities.²⁴ At the time of the US-led assault on the city, the *Washington Post* reported that "some artillery guns fired white phosphorus rounds" and said "insurgents reported being attacked with a substance that melted their skin, a reaction consistent with white phosphorus burns. Kamal Hadeethi, a physician at a regional hospital, said, 'The corpses of the mujaheddin which we received were burned, and some corpses were melted.'"²⁵

In a letter to the *Independent*, US Ambassador in the UK Robert Tuttle rejected the claims, affirming that "US forces participating in Operation Iraqi Freedom continue to use appropriate lawful conventional weapons against legitimate targets."²⁶ The Pentagon explained that WP was used only for providing illumination at night and for the creation of smokescreens.²⁷

However, US military publications contradicted this State Department public relations effort. The May/June 2004 edition of *Infantry Magazine* reported that WP was used to attack directly, rather than just to provide a screen.²⁸ A further military report in *Field Artillery Magazine* confirmed that WP "proved to be an effective and versatile munition... [as] a potent psychological weapon against the insurgents... We fired 'shake and bake' missions at the insurgents, using WP to flush them out...."²⁹ A number of other reports backed up the fact that white phosphorus was used deliberately in populated areas.³⁰

As the *New York Times* recalled in an editorial in November 2005, "in fact, one of the many crimes ascribed to Saddam Hussein was dropping white phosphorus on Kurdish rebels and civilians in 1991" – one of the reasons invoked for the Iraq war.³¹

A US Army manual clearly states that "it is against the law of land warfare to employ WP against personnel targets."³² International law, including Protocol III of the UN *Convention on Certain Weapons Which May Be Deemed To Be Excessively Injurious Or To Have Indiscriminate Effects* (1980), bans the use of incendiary weapons against civilians or against military targets in populated areas.³³ So the US military were breaking their own rules as well as violating international law when they attacked a city using this frightful incendiary substance.

Depleted Uranium

Depleted Uranium is a toxic and weakly radioactive waste product from the process of uranium enrichment, used in a range of weapons to penetrate the armor of tanks and other armored vehicles at a great distance.³⁴

According to the *Guardian*, experts have calculated that Coalition forces used between 1,000 and 2,000 tons of depleted uranium anti-tank shells during the March 2003

invasion and the immediately subsequent fighting.³⁵ A United Nations Environment Program report tallies with this assessment.³⁶

Leading health experts have stated that powder from exploded DU weapons may cause long-term negative effects on human health.³⁷ While the US military insists that DU does not pose a health threat, many US and UK veterans from the 2001 Gulf War have suffered from unexplained illnesses including fatigue, sleep disorders and memory loss (referred to as ‘Gulf War Syndrome’). On December 19, 2005, the US Department of Veterans Affairs made a settlement award to a family of a veteran who had died from metastatic appendix cancer, on the basis that the cancer was medically related to exposure to DU during the veteran’s service.³⁸ In Iraq, increases in cancers and birth defects have been reported in areas where DU munitions had been used.³⁹

Veterans, medical organizations and international bodies such as the World Health Organization⁴⁰ have called for scientific studies on the precise effects of DU on the human body.

A Sub-Commission of the UN Human Rights Commission⁴¹ authorized a working paper on human rights and “weapons of mass destruction, or with indiscriminate effect, or of a nature to cause superfluous injury or unnecessary suffering.” The 2002 report included DU as such a weapon. The author refers to a number of incidents and reports “showing the deaths and serious illnesses related to inhalation of depleted uranium - the key medical effects being cancers of those exposed and birth defects of children born of those who have inhaled depleted uranium” and qualifies DU weapons of “deadly and indiscriminate.”⁴²

Though DU weapons are usually used against military targets, the munitions leave a chemical and radioactive residue that can contaminate air and pollute groundwater as in Bosnia and Herzegovina.⁴³

In 2001, after NATO’s use of DU weapons in Kosovo, the Council of Europe demanded a ban on the production, testing and sale of DU weapons, claiming that “effects on health and quality of life will be long-lasting, and future generations will likewise be affected.”⁴⁴ Carla Del Ponte, Chief Prosecutor for the UN International Tribunal for the former Yugoslavia, has said that the use of DU weapons could be investigated as a possible war crime.⁴⁵ In 2005, the UN Environment Program released a report stating that Iraq has 311 sites contaminated with DU.⁴⁶ At the same time, the European Parliament has reiterated its call for a moratorium on the use of DU as a weapon, with a view to introduce a total ban, using as a legal basis the Nuclear Non-Proliferation Treaty (1968), the Biological and Toxin Weapons Convention (1972), the Chemical Weapons Convention (1993) and the Comprehensive Test Ban Treaty (1996).⁴⁷

In light of the possible consequences for human health, the use of Depleted Uranium probably contravenes well-established principles of humanitarian law, including those found in the Geneva Conventions and their Protocols, and UN guidelines relative to the protection of civilians, prevention of unnecessary human suffering and of damage to the

environment.

Cluster Munitions

Cluster munitions contain hundreds of “bomblets” or sub-munitions designed to explode on impact. Cluster ordnance can be dropped from the air or fired from the ground, initially exploding in the air and releasing the sub-munitions that disperse to strike ground targets. Some do not detonate (between 5%-30% depending on the type),⁴⁸ leaving unexploded bomblets that threaten civilians for decades after a conflict. Coalition forces and Iraq government forces used both air and surface-launched cluster munitions during the 2003 operations.

When hitting victims, cluster munitions blast by successive waves due to their fragmentation effect. Fragments penetrate the body, creating small often internal injuries. “Fragments travel through the skin and muscles and hit a bone, sending pressure waves into the body and causing internal bleeding.”⁴⁹ About 30% of the victims die from their wounds.⁵⁰

During the 2003 air campaign, US and British forces reportedly dropped thousands of cluster munitions “in many populated areas throughout Iraq, including Baghdad, Basra, Hillah, Kirkuk, Mosul, Nasiriyah and other cities and towns.”⁵¹ According to an in-depth investigation by *USA TODAY*, the US used 10,782 cluster weapons, and the UK used almost 2,200 from late March to early April 2003.⁵² The US Air Force also confirmed the use of 63 CBU-87 cluster munitions between May 1, 2003 and August 1, 2006,⁵³ containing a total of 12,726 bomblets.⁵⁴ While claiming to limit “collateral damage,” the Coalition dropped close to two million sub-munitions, many targeted at residential neighborhoods, killing or wounding more than 1,000 civilians.⁵⁵

According to Human Rights Watch, “[g]round-launched cluster strikes caused hundreds of civilian casualties across Iraq [including in the cities of] al-Hilla, al-Najaf, Karbala, Baghdad, and Basra. ... The targeting of residential neighborhoods with these area effect weapons represented one of the leading causes of civilian casualties in the war.”⁵⁶

Amnesty International describes scenes at al-Hilla’s hospital, where “bodies of the men, women and children - both dead and alive - brought to the hospital were punctured with shards of shrapnel from cluster bombs.” A doctor reported that almost all patients were victims of cluster bombs. “Injured survivors told reporters how the explosives fell ‘like grapes’ from the sky, and how bomblets bounced through the windows and doors of their homes before exploding.”⁵⁷

A significant number of the bomblets do not explode when reaching their target.⁵⁸ According to a Department of Defense report submitted to the US Congress in 2000, “these sub-munitions have a failure rate of 16 percent. Thus, the typical volley of twelve MLRS rockets would likely result in more than 1,200 dud sub-munitions scattered randomly in a 120,000 to 240,000 square meter impact area.”⁵⁹ Unexploded bomblets remain on the ground long after the end of conflicts, presenting a long term threat to

civilians. They will eventually explode when children pick them up or when farmers accidentally hit them with a tool. Like landmines, cluster bombs need to be located and destroyed one by one. Despite joint efforts by the Coalition Provisional Authority, the UN, and NGOs, unexploded munitions continue to wound and kill Iraqi civilians, or anyone else passing through areas where cluster bombs have been used.⁶⁰

Because they kill indiscriminately – both in space and in time – cluster bombs are particularly controversial weapons and arguably violate international law principles protecting civilians (including Article 48 of Protocol I of the 4th Geneva Convention). They also violate law principles that prohibit indiscriminate attacks and the infliction of unnecessary suffering, as well as principles requiring feasible precaution to minimize injury and death to civilians.

Many humanitarian and human rights organizations including the International Committee of the Red Cross, Human Rights Watch, Amnesty International, and Landmine Action, have repeatedly called for a ban on the use of cluster munitions in civilian areas including against military targets within built up areas. In a moving plea to the UN Security Council, Under Secretary General for Humanitarian Affairs Jan Egeland demanded a moratorium on the use of cluster bombs, whose use, he argued, “by anyone, anywhere in the world ... is immoral.”⁶¹ Iraq is one of the most contaminated areas, along with Afghanistan, Cambodia, Laos, Kosovo and Vietnam.

Conclusion

International Humanitarian Law sets clear standards for the conduct of military operations and limits permissible means and methods of warfare. These standards prohibit the use of weapons that do not distinguish between military targets and civilians, and inflict indiscriminate harm or unnecessary suffering. Yet Coalition forces have repeatedly used indiscriminate and especially injurious weapons, such as white phosphorus, napalm, cluster munitions and depleted uranium that have disproportionate effects far beyond their intended military objectives. These weapons are widely considered unacceptable and inhumane.

¹ James W. Crawley, “Officials Confirm Dropping Firebombs on Iraqi Troops” *San Diego Union-Tribune* (August 5, 2003)

² Iraq Analysis Group, *Fire Bombs in Iraq: Napalm by Any Other Name* (March/April 2005)

³ Jason E. Levy, “TTPs for the 60mm Mortar Section” *Infantry Magazine* (May/June 2004) and Captain James T. Cobb, First Lieutenant Christopher A. LaCour and Sergeant First Class William H. Hight, “The Fight for Fallujah” *Field Artillery* (March/April 2005)

⁴ Rai News 24, “Fallujah: La Strage Nascosta” [Fallujah: The Hidden Massacre] (November 2005)

⁵ Scott Peterson, “Remains of Toxic Bullets Litter Iraq” *Christian Science Monitor* (May 15, 2003)

⁶ Human Rights Watch, *Off Target: The Conduct of the War and Civilians Casualties in Iraq* (December 2003)

⁷ Iraq Analysis Group, *op.cit.*

⁸ “Dead Bodies Are Everywhere” *Sydney Morning Herald* (March 22, 2003)

⁹ Martin Savidge, “Protecting Iraq's Oil Supply” *CNN* (March 22, 2003)

¹⁰ Crawley, *op.cit.*

¹¹ *Sydney Morning Herald*, *op.cit.*

12 Crawley, *op.cit.*

13 GlobalSecurity.org, *MK-77750lb Napalm*.

14 Crawley, *op.cit.*

15 Cited in "US Admits It Used Napalm Bombs in Iraq" *The Independent* (August 10, 2003)

16 British Parliament, Written Answers to Questions. *Defense Minister Adam Ingram Denies US Use of Firebombs* (January 11, 2005)

17 British Parliament, Written Answers to Questions. *Defense Minister Adam Ingram Admits US Use of Firebombs* (June 28, 2005)

18 Crawley, *op.cit.*

19 The US remains one of a small number of non-signatories to this Protocol. The Protocol has been signed by 94 countries, making it a widely accepted rule of international law. Because the Coalition acts under a mandate of the UN Security Council, the highest international law standards should apply.

20 Globalsecurity.org. *Incendiary Weapons: White Phosphorus*.

21 *Ibid.*

22 US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR) *White Phosphorus*

23 Rai News 24, *op.cit.*

24 Marc Wells, "An Interview with Sigfrido Ranucci, Director of The Hidden Massacre" *World Socialist Website* (December 14, 2005)

25 Jackie Spinner, Karl Vick and Omar Fekeiki, "US Forces Battle Into Heart of Fallujah" *Washington Post* (November 10, 2004)

26 "US Forces Used 'Chemical Weapon' in Iraq" *The Independent* (November 16, 2005)

27 US Department of Defence, Office of the Assistant Secretary of Defence (Public Affairs) *News Briefing with Secretary of Defense Donald Rumsfeld and Gen. Peter Pace* (November 29, 2005)

28 Jason E. Levy, "TTPs for the 60mm Mortar Section" *Infantry Magazine*. (May/June 2004)

29 Captain James T. Cobb, First Lieutenant Christopher A. LaCour and Sergeant First Class William H. Hight: "TF 2-2 IN FSE AAR: Indirect Fires in the Battle of Fallujah" *Field Artillery Magazine* (March-April 2005) p. 5

30 "Violence Subsides for Marines in Fallujah" *North County Times* (April 10, 2004)

31 "Shake and Bake" *New York Times* (November 29, 2005)

32 Army's Command and General Staff College at Fort Leavenworth, KS. *The Battle Book*. ST 100-3 (July 1999)

33 It can be objected that white phosphorus is not "primarily designed" to cause incendiary effects and therefore does not come under Protocol III of the CCW. However, if it is deliberately employed to cause such effects, this amounts to a legalistic evasion of Protocol III, and in any case such use is contrary to the fundamental principles forbidding infliction of unnecessary suffering and indiscriminate harm.

34 Globalsecurity.org, *Military: Depleted Uranium*

35 Paul Brown, "Uranium Hazard Prompts Cancer Check on Troops" *Guardian* (April 25, 2003)

36 United Nations Environment Programme. *Assessment of Environmental "Hot Spots" in Iraq* (November 2005)

37 The Royal Society, *The Health Hazards of Depleted Uranium Munitions* (2001)

38 In the Appeal of David L. Larson, in the case of Janet E. Larson, Docket No. 01-05 766, XSS 001 56 2047 (December 19, 2005)

39 Larry Johnson, "Iraq Cancers, Births Defects Blames on US Depleted Uranium" *Seattle Post Intelligencer* (November 12, 2002); Robert Collier, "Iraq Links Cancers to Uranium Weapons" *San Francisco Chronicle* (January 13, 2003)

40 54th World Health Assembly, Provisional Agenda Item 13.10: "Health Effects of Depleted Uranium (Report by the Secretariat)" A54 19 Add. 1 (April 26, 2001)

41 Sub-Commission on the Promotion and Protection of Human Rights

42 Commission on Human Rights: Sub-Commission on the Promotion and Protection of Human Rights, Fifty-fourth Session, Item 6 of the Provisional Agenda: "Human Rights and Weapons of Mass Destruction, or With Indiscriminate Effect, or of a Nature to Cause Superfluous Injury or Unnecessary Suffering" Working Paper Submitted by Y.K.J. Yeung Sik Yuen in Accordance with Sub-Commission Resolution 2001/36. E/CN.4/Sub.2/2002/38 (June 27, 2002)

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- ⁴³ United Nations Environment Program. *Depleted Uranium in Bosnia and Herzegovina* (March 2003)
- ⁴⁴ Parliamentary Assembly of the Council of Europe. *Environmental Impact of the War in Yugoslavia on Southeast Europe, Recommendation 1495 (2001)* (January 24, 2001)
- ⁴⁵ “Use of DU Weapons Could Be War Crime” CNN (January 14, 2001)
- ⁴⁶ UN Environment Program. *Assessment of Environmental ‘Hot Spots’ in Iraq* (November 2005)
- ⁴⁷ European Parliament. *Resolution on Non-Proliferation of Weapons of Mass Destruction: A Role for the European Parliament (2005/2139(INI)), P6_TA-PROV(2005)0439*. Text Adopted by Parliament (November 17, 2005)
- ⁴⁸ Cluster Munitions Coalition, *Technical Analysis of Cluster Munitions*
- ⁴⁹ Medact, *The Question of the Legality of Inhumane Weapons Used During the 2003 Iraq Conflict* Working Paper No. 2
- ⁵⁰ H. Gilbert Husum and T.M. Wisborg, “Save Lives, Save Limbs: Life Support for Victims of Mines, Wars and Accidents” *Third World Network* (2003) quoted in UK Working Group on Landmines, *Cluster Bombs: the Military Effectiveness and Impact on Civilians of Cluster Bombs* (2003) p. 20
- ⁵¹ Landmine Monitor, *Report 2003: Toward a Mine-Free World*
- ⁵² Paul Wiseman, “Cluster Bombs Kill in Iraq, Even After Shooting Ends” *USA Today* (December 16, 2003)
- ⁵³ Letter from the Department of the Air Force, 20th Fighter Wing (ACC), Shaw Air Force Base, South Carolina (August 23, 2006) signed by Mary F. Huff, Base Freedom of Information Act Manager as quoted by the Mennonite Central Committee
- ⁵⁴ Mennonite Central Committee, *Use of Cluster Munitions in Iraq after the Initial Invasion*
- ⁵⁵ Human Rights Watch, *Minimize Civilian Casualties in Iraq* (March 17, 2006); Human Rights Watch, *Off Target: The Conduct of the War and Civilian Casualties in Iraq* (2003); also see Handicap International, *Fatal Footprint: The Global Human Impact of Cluster Munitions* (November 2006)
- ⁵⁶ Human Rights Watch (2003) *op.cit.* p. 85
- ⁵⁷ Amnesty International, *Iraq: Civilians under Fire* (April 8, 2003)
- ⁵⁸ B Rappert and R Moyes, “Out of Balance – The UK Government’s Efforts to Understand Cluster Munitions and International Law” *Landmine Action* (November 2005) p.18
- ⁵⁹ Cited in Human Rights Watch, *US Using Cluster munitions in Iraq* (April 1, 2003)
- ⁶⁰ Medact, *The Question of the Legality of Inhumane Weapons Used During the 2003 Iraq Conflict*, Working Paper No.2
- ⁶¹ Statement by Under-Secretary-General Jan Egeland to the Security Council on the protection of civilians in armed conflict (December 4, 2006)