What are cluster weapons?

Henry Michaels
5 April 2003

Cluster weapons are packed with small bombs, or bomblets, known as submunitions, designed specifically to cause the greatest possible number of human casualties. They can be bombs dropped from high-flying B-52s or low-flying jet fighters. They can also be guided missiles fired from hundreds of kilometers away, artillery canisters lobbed from a distance or shells fired from tanks at closer range.

Those dropped from bombers are the most notorious for being inaccurate, and therefore likely to kill and maim indiscriminately. Bomblets are released after the canister is dropped from a plane and begins to spin. The submunitions spread over a large area and either explode instantly, ignite after a delay, or fail to explode until touched by a person—often a child.

Despite the evidence of terrible civilian casualties in Iraq, the Pentagon boasts that the cluster bombs it is dropping belong to a new generation of "smart" versions, which are "tank-killing" but "civilian-friendly." In reality, the new bombs are simply more lethal and terrifying.

According to the US military's Central Command in the Gulf the new CBU-105 Wind Corrected Munitions Dispenser releases 40 mini-charges designed to pierce armour plate on impact. The Air Force has ordered 5,000 of these "Sensor-Fused Weapons" (SFW) from the US-based manufacturer Textron Systems, each costing $260,000.

One version of the SFW bomb contains 202 bomblets. Another consists of 10 "submunitions" packed into a 1,000-pound canister that can be dropped from aircraft at 200 to 20,000 feet. Each submunition contains four hockey-puck-shaped warheads, a total of 40 per SFW. It floats down toward the target area on a parachute, and then releases its warheads.

Each warhead has a sensor that searches for the "heat signature" of a tank or other vehicle. The 40 warheads can scan an area equal to about seven football fields.

David Ochmanek, a senior defense analyst with the Rand Corporation, told one US newspaper the weapons were "potentially revolutionary" because they could spread over vast areas and home in on armored vehicles, while being engineered to avoid accidental or post-war civilian casualties.

Even military experts doubt these claims. "Cluster bombs have a very bad reputation, which they deserve," said Colin King, author of Jane's Explosive Ordnance Disposal guide and a British army bomb disposal officer in the 1991 Gulf War.

Cluster bombs generally have a dud rate of about 10-25 per cent, King told the BBC. He said the United States was dipping into its stockpiles of what he called the worst cluster bomb in existence, the BLU-97. "Some will just kill you," he said. "This will kill everyone within 20 meters of you."

King said the yellow, soda can-sized bomblet has two fuses—one set to detonate on impact, and a second to detonate if an unexploded bomb is disturbed on the field. It is a triple-threat weapon, meant to disable armour, kill combatants and start fires. The bomb throws fragments that can penetrate more than a half centimetre of steel.

"If you pick it up and drop it, there is a good chance it will go off," he said. "It caused massive problems in Kosovo, it caused massive problems in the Gulf, it caused weapons problems in Afghanistan and it's going to causing massive problems in the Gulf again."

During the first Persian Gulf War, between January 17 and February 28, 1991, the United States and its allied coalition used a total of 61,000 air-dropped cluster munitions, releasing 20 million submunitions. Human Rights Watch said ordnance experts in Kuwait were still finding roughly 200 cluster bombs per month from the 1991 Gulf War.

A similar disaster is unfolding in Iraq. Human Rights Watch has calculated that a typical B-52 dropping a full

load of 45 cluster bombs, each containing 650 submunitions, could produce an average of 1,700 unexploded submunitions, even assuming a low “dud” rate of 5 percent.

In the Vietnam War, American forces dropped some 285 million submunitions on Cambodia, Vietnam and Laos, according to Pentagon estimates. In August 2000, a quarter of a century after the war ended, one of these bomblets exploded and killed six children in the central province of Binh Dinh.

During Israel’s 1982 siege of West Beirut, its air force dropped cluster bomblets manufactured for the US Navy across several areas of the city, especially in the Fakhani and Ouzai districts, causing severe civilian injuries.

Other cluster weapons are also being used in Iraq. The *Washington Post* reported on March 29 that a US Multiple Launch Rocket System (MLRS) fired 18 Army Tactical Missile Systems (ATACMS) in support of a helicopter attack by units of the 101st Airborne Division on March 28. The payload of an ATACMS is 300 or 950 M74 submunitions, with a reported failure rate of 2 percent.

Human Rights Watch has identified footage of the use of the MLRS by artillery units of the 3rd Infantry Division. Another standard M26 warhead for the MLRS contains 644 M77 dual-purpose grenades, which have an official failure rate of 16 percent. A typical volley of 12 MLRS rockets could result in more than 1,200 dud submunitions scattered randomly in a 120,000 to 240,000 square meter impact area.

According to a recent Human Rights Watch briefing paper, the US has stockpiles of more than one billion submunitions, classified as either bomblets, grenades, or mines. They may be antipersonnel (APERS), antimateriel (AMAT), antitank (AT), dual-purpose (DP), incendiary, or chemical.

The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (Ottawa Treaty), which came into force on 1 March 1999, forbids the development, production, acquisition, stockpiling, retention or transfer of anti-personnel weapons. Neither the US nor Iraq are parties to the treaty. The UK and Australia, the only other two countries with combat troops in Iraq, have ratified the treaty. The Ottawa treaty has been ratified by 131 states and signed by 146.