



Cluster Munitions in the Americas and Caribbean

Prepared by Human Rights Watch

Globally, 34 countries are known to have produced over 210 different types of air-dropped and surface-launched cluster munitions including projectiles, bombs, rockets, missiles, and dispensers. Existing stockpiled cluster munitions contain billions of individual submunitions. Cluster munitions are stockpiled by at least 76 states and have been used in at least 30 countries and disputed territories. According to available information, at least 13 countries have transferred over 50 types of cluster munitions to at least 60 other countries. In the Americas and Caribbean region:

- **Brazil** and the **United States (US)** currently produce cluster munitions; **Argentina** and **Chile** have renounced future production.
- **Brazil, Chile, Cuba, Peru,** and the **US** stockpile cluster munitions; **Argentina, Canada,** and **Honduras** have destroyed their stockpiles or are in the process of destroying their stockpiles.
- **Brazil, Chile,** and the **US** have exported cluster munitions.

Cluster munitions have only been used twice in the hemisphere. British aircraft dropped BL-755 cluster bombs on Argentinean infantry positions near Port Stanley, Port Howard, and Goose Green during the armed conflict in the Falkland Islands (Islas Malvinas) in 1982. In the other instance, US Navy aircraft dropped 21 Mk.-20 Rockeye bombs during close air support operations during the invasion of Grenada in November 1983.

Additionally, there are also reports that a Colombian helicopter used a World War Two era dispenser, more akin to a weapons rack than a modern cluster bomb, to drop several 20 pound (9 kilogram) fragmentation bombs during an attack on the village of Santo Domingo in 1998. These weapons are not considered cluster munitions under the definition in the Wellington Draft Convention.

The US is the world's leading known user, producer, stockpiler, and exporter of cluster munitions. The United States used cluster munitions in Southeast Asia (Cambodia, Laos, and Vietnam) in the 1960s and 1970s, Grenada (1983), Lebanon (1983), Persian Gulf (Iraq, Kuwait, and Saudi Arabia) in 1991, former Yugoslavia (Serbia, Montenegro, and Kosovo) in 1999, Afghanistan in 2001 and 2002, and Iraq in 2003.

Production and Transfer of Cluster Munitions

Four companies produce cluster munitions in **Brazil**. Avribras Aeroespacial SA and Britainite Industrias Quimicas produce the ASTROS family of surface-to-surface rockets with submunition warheads. These weapons have been exported to Iran, Iraq, and Saudi Arabia.¹ The ASTROS multiple launch rocket system was used by Saudi forces against Iraqi forces during the battle of Khafji in January 1991, leaving behind significant numbers of unexploded submunitions.² The company Ares Aeroespacial e Defesa Ltda produces the FZ-100 70mm air-to-surface rockets, akin to the Hydra M261 multipurpose submunitions.³ Additionally, Target Engenharia et Comércio Ltda. produces two types of cluster bombs (BLG-120, BLG-252) for the Brazilian Air Force and reportedly for export.⁴

Chile has renounced future production as a matter of declaratory policy. Industrias Cardeon SA and Los Conquistadores 1700 produced at least eight types of air-dropped cluster bombs.⁵ PM-1 combined effects submunitions delivered by aircraft bombs produced in Chile have been used in Eritrea, Ethiopia, Iraq, and Sudan.⁶ Ferrimar is reported to have developed a submunition warhead for its Rayo 160mm surface-to-surface rocket system.⁷

The **US** is known to have exported or transferred cluster munitions to at least 28 other countries.⁸ The following US companies are associated with the current production of cluster munitions and their submunitions: Aerojet, Alliant TechSystems, General Dynamics, L-3 Communications, Lockheed Martin, Northrop Grumman, Raytheon, and Textron Defense Systems.⁹

In **Argentina**, the Centro de Investigaciones Técnicas y Científicas de las Fuerzas Armadas (CITEFA) developed a prototype 155mm artillery projectile which contained 63 Dual Purpose Improved Conventional Munition (DPICM) grenades equipped with a backup pyrotechnic self-destruct mechanism. According to military officials, this effort did not reach

full scale production and has been dismantled. These weapons were never fielded by the Armed Forces of Argentina. Foreign Ministry and Defense Ministry officials have publicly stated that Argentina will not produce cluster munitions in the future.

Stockpiling of Cluster Munitions in the Americas

At least five countries in the Americas are known to currently stockpile cluster munitions and are detailed in the following table:

Country	Type Stockpiled	Country	Type Stockpiled
Brazil	ASTROS rocket BLG-120 bomb BLG-252 bomb FZ-100 rocket	United States	AGM-154A missile ATACMS missile CBU-87 bomb CBU-97 bomb CBU-99 bomb CBU-103 bomb CBU-105 bomb M26/M26A1 rocket M261 Hydra rocket M30 rocket M483A1 projectile M864/M864A1 projectile M898 projectile M915 projectile M916 projectile RGM/UGM-109D missile Rockeye bomb
Chile	CB-130 bomb CB-250K bomb CB-500 bomb CB-500K bomb CB-500K2 bomb CB-770 bomb Rayo rocket WB-250F bomb WB-500F bomb		
Cuba	KMG-U dispenser RBK bomb		
Peru	Alpha bomb BME-330 bomb RBK bomb		

An October 2004 report to the US Congress by the Department of Defense (DOD) provides details on a stockpile of 5.5 million cluster munitions containing about 728.5 million submunitions.¹⁰ This figure however does not appear to be a full accounting of cluster munitions available to US forces. In particular, the tally does not include cluster munitions that are part of the War Reserve Stocks for Allies (WRSA). Human Rights Watch has previously estimated that the US inventory, including WRSA, totaled about one billion submunitions.

A growing number of countries in the Americas have taken national measures to remove from service and destroy stockpiles of cluster munitions. Known examples include:

- Military officials of **Argentina** informed Human Rights Watch in September 2006 that stocks of BLG-66 Beluga and Rockeye air-dropped bombs were destroyed by 2005.

- **Canada** has announced on several occasions that it destroyed its air-dropped Rockeye bombs and is in the process of destroying its stockpile of M483A1 155mm artillery projectiles.
- **Honduras** has told the Cluster Munition Coalition that it has destroyed its stockpiles of air-dropped Rockeye cluster bombs as well as an unidentified type of artillery delivered cluster munition in previous years.

Americas and Caribbean Participation in the Oslo Process

The growing number of countries participating in the Oslo Process from the Americas and Caribbean is an encouraging development. This support for action on cluster munitions has historical precedent. Mexico and Venezuela were among a small group of countries that proposed a ban on antipersonnel cluster munitions at the 1976 conference that preceded the UN Convention on Certain Conventional Weapons (CCW).

A total of 18 governments from the Americas gathered in San Jose, Costa Rica on 4-5 September 2007 in a regional meeting designed to build support for the movement to conclude a new treaty in 2008 prohibiting the use, production, trade, and stockpiling of cluster munitions that cause unacceptable harm to civilians. Only Cuba declined the invitation to participate. Countries from the Americas participating in major international conferences held in Oslo, Lima, Vienna, and Wellington are detailed below.

- Argentina, Canada, Chile, Colombia, Costa Rica, Guatemala, Mexico, and Peru joined the declaration made at the Oslo Conference on Cluster Munitions on 22-23 February 2007, which committed them to “Conclude by 2008 a legally binding international instrument that prohibits the use and stockpiling of cluster munitions that cause unacceptable harm to civilians and secure adequate provision of care and rehabilitation to survivors and clearance of contaminated areas.”
- 14 countries participated in the Lima Conference on Cluster Munitions in May 2007: Argentina, Bolivia, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Mexico, Panama, Paraguay, Peru, and Venezuela.
- 18 countries participated in the Vienna Conference on Cluster Munitions in December 2007: Argentina, Belize, Bolivia, Canada, Chile, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela, and Uruguay.

- 16 countries from the Americas have subscribed so far to the Wellington Declaration (as of 29 April 2008): Argentina, Belize, Canada, Chile, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. Subscribing to the Wellington Declaration affirms the country's "objective of concluding the negotiation of such an instrument prohibiting cluster munitions that cause unacceptable harm to civilians in Dublin in May 2008" and is a prerequisite to full participation in the negotiations.

Countries from the Americas and Caribbean that have not subscribed to the Wellington Declaration (as of 29 April 2008)

Antigua & Barbuda, Bahamas, Barbados, Bolivia, Brazil, Colombia, Cuba, Dominica, El Salvador, Grenada, Guyana, Haiti, Jamaica, St. Kitts & Nevis, St. Lucia, St. Vincent & Grenadines, Suriname, Trinidad & Tobago, United States,

¹ Jane's Ammunition Handbook, Terry J. Gander and Charles Q Cutshaw, eds. (Surry, UK: Jane's Information Group Limited, 2001), pp. 630-631; Jonathan Beaty and S.C. Gwynne, "Scandals: Not Just a Bank You can get anything you want through B.C.C.I. -- guns, planes, even nuclear-weapons technology," Time Magazine, 2 September 1991.

² Human Rights Watch interviews with former explosive ordnance disposal personnel from a Western commercial clearance firm and a Saudi military officer with first-hand experience in clearing the dud dual-purpose bomblets from ASTROS rockets and Rockeye cluster bombs, names withheld, Geneva, 2001-2003.

³ Aeroespacial e Defesa Ltda corporate website, "Cabeza Cargo de Submuniciones," undated, <http://www.ares.ind.br/fz100esp.htm> (accessed 2 April 2008).

⁴ Brazilian Association of the Industries of Defense Materials and Security (ABIMDE), "Product List 2000 to December 2005," undated, <http://abimde.com.br/declaracoesprodutos.htm> (accessed 5 January 2006).

⁵ Jane's Air Launched Weapons, Robert Hewson, ed. (Surrey, UK: Jane's Information Group Limited, 2004), pp. 306-311.

⁶ Rae McGrath, Cluster Bombs: The Military Effectiveness and Impact on Civilians of Cluster Munitions, (London: Landmine Action, 2000), p. 38. The "Iraq Ordnance Identification Guide" produced by the US military documents the presence of the PM-1 submunition in Iraq. Mine Action Information Center, James Madison University, "Iraq Ordnance Identification Guide," 31 August 2006, <http://maic.jmu.edu/research/iraqOIG.htm> (accessed 16 February 2007).

⁷ Jane's Ammunition Handbook, p. 636.

⁸ The 28 countries that received US exports of cluster munitions are: Argentina, Australia, Bahrain, Belgium, Canada, Denmark, Egypt, France, Greece, Honduras, Indonesia, Israel, Italy, Japan, Jordan, South Korea, Morocco, Netherlands, Norway, Oman, Pakistan, Poland, Saudi Arabia, Spain, Thailand, Turkey, the United Arab Emirates, and the United Kingdom.

⁹ American Ordnance, Day and Zimmermann, Ferranti International, Olin Ordnance, and Primex Technologies are past producers, but their current status is not known.

¹⁰ Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), Department of Defense, "Report to Congress: Cluster Munitions," October 2004.