

Glossary of Terms

Arms Control

Any international agreement that limits the type and number of weapons or armed forces. Arms control played a major role in superpower politics during the 1970s and 1980s, and a number of nuclear arms control agreements were signed by the United States and the Soviet Union. These were the Anti-Ballistic Missile Treaty (1972), the First Strategic Arms Limitation Treaty (1972), the Second Strategic Arms Limitation Treaty (1979), the Intermediate-Range Nuclear Forces Treaty (1987), the First Strategic Arms Reduction Treaty (1991) and the Second Strategic Arms Reduction Treaty (1993).

Atomic Bomb

A powerful bomb that derives its explosive force from the sudden release of huge amounts of atomic energy. The United States is the only country to have used atom bombs as weapons of war.

Deployment

The relocation of forces and military related equipment to desired areas of operations. Process of getting weapons and forces in combat-ready positions.

First-Use Strategy

A strategy adopted by a nuclear weapon state whose nuclear weapons, being vulnerable to an attack, must be used before an attack is launched.

Fission Weapons

An ordinary atomic bomb of the kind used in World War II uses the process of nuclear fission to release the binding energy in certain nuclei. The principal materials used for fission weapons are U-235 and Pu-239. These materials are termed "fissile" because they can be split into two roughly equal-mass fragments when struck by a neutron of even low energies. When a large enough mass of either material is assembled, a self-sustaining chain reaction results after the first fission is produced.

Fusion (Thermonuclear) Weapons

A more powerful and more complex weapon than a fission weapon that uses the fusion of heavy isotopes of hydrogen, deuterium, and tritium to release large numbers of neutrons when the fusile (sometimes termed "fusionable") material is compressed by the energy released by a fission device called a "primary." Fusion (or "thermonuclear") weapons derive a significant amount of their total energy from fusion reactions, producing intense temperatures and pressures.

Launch-On-Warning

Retaliatory strikes triggered upon notification that an enemy attack is in progress, but before hostile forces or munitions (bombs) reach friendly soil.

No-First-Use

Policy that nuclear weapons should be dedicated solely to the mission of deterring other nuclear weapons.

Nuclear Delivery Vehicle

The portion of the weapon system that provides the means of delivery of a nuclear weapon to the target. A missile would be an example.

Nuclear Deterrence

A strategic doctrine based on the assumption that a potential aggressor can be dissuaded from provocative action or war by (a) the possession of nuclear forces sufficient to deny the enemy its political-military objectives at any level of conflict ("counterforce deterrence"), or (b) the possession of nuclear forces sufficient to launch a massive urban-industrial retaliatory strike ("countervalue deterrence").

Nuclear Proliferation

The process by which one state after another comes into possession of some form of nuclear weaponry, and with it the potential to launch a nuclear attack on other states.

Warhead

The explosive part of a nuclear weapon system. Warheads consist of nuclear materials, conventional high explosives, and related firing mechanisms.