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Perspective

A Brief Outline on Strategic Nuclear Weapon

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DESCRIPTION

A strategic nuclear weapon is one that is intended to be used on targets in settled territory far from the battlefield as part of a strategic plan, such as military bases, military command centres, arms industries, transportation, economic, and energy infrastructure, and densely populated areas such as cities and towns, which frequently contain such targets. In contrast, a tactical nuclear weapon is intended for use in battle as part of an attack with and often near friendly conventional forces, possibly on contested friendly territory. Strategic nuclear weapons have significantly higher yields, typically ranging from 100 kilotons to destructive yields in the low megaton range for use in enemy nations' interiors far from friendly forces to maximize damage, particularly to buried hard targets such as a missile silo or wide area targets such as a large bomber or naval base.

Strategic nuclear weapons database

Mark 14 nuclear bomb: The Mark 14 nuclear bomb was a strategic thermonuclear weapon developed in the 1950s that was the first solid-fuel staged hydrogen bomb. It was a test design, with only five units produced in early 1954. It was tested during the Castle Union nuclear test in April 1954 and had a yield of 6.9 Mt. The bomb is frequently referred to as the TX-14 (for "experimental") or EC-14 (for "Emergency Capability"). It has also been referred to as the "Alarm Clock" device, despite the fact that it has nothing to do with the earlier design by Edward Teller known as the Sloika in the Soviet Union.

Mark 15 nuclear bomb: The Mark 15 nuclear bomb, or Mk-15, was a 1950s American thermonuclear bomb, the country's first relatively lightweight (7,600 lb (3,400 kg)) thermonuclear bomb. From 1955 to 1957, 1,200 Mark 15 bombs were manufactured. Mod 1, Mod 2, and Mod 3 were the three production variants. From 1955 to 1965, the design was in use.

Mark 16 nuclear bomb: The Mark 16 nuclear bomb was a large thermonuclear bomb (hydrogen bomb) designed after the Ivy Mike, the first thermonuclear device ever tested. The Mark 16 is more properly known as the TX-16/EC-16 because it was only available in Experimental/Emergency Capability (EC) variants. The TX-16 was the only deployed thermonuclear bomb to use cryogenic liquid deuterium fusion fuel, similar to that used in the Ivy Mike test device. The Ivy Mike design was weaponized in the TX-16.

Mark 17 nuclear bomb: The US deployed the first mass-produced hydrogen bombs, the Mark 17 and Mark 24. In their "primary" stages, the two differed. They were introduced in 1954 and were phased out by 1957.

Mark 21 nuclear bomb: The Mark 21 nuclear bomb was a thermonuclear gravity bomb developed by the United States in 1955. It was based on the TX 21 "Shrimp" prototype, which exploded during the Castle Bravo test in March 1954. While the majority of Operation Castle tests were designed to evaluate weapons for immediate stockpile or that were already available for use as part of the Emergency Capability Program, Castle Bravo was designed to test a design that would drastically reduce the size and cost of the first generation of air-droppable atomic weapons (the Mk 14, Mk 17 and Mk 24).

Mark 24 nuclear bomb: The Mark 24 nuclear bomb was an American thermonuclear bomb design based on Castle Yankee, the third American thermonuclear bomb test. The Mark 24 bomb was the same size and weight as the Mark 17 nuclear bomb, which used a very similar design concept but unenriched Lithium.

B41 nuclear bomb: The B-41 (also known as the Mk-41) was a thermonuclear weapon used by the US Strategic Air Command in the early 1960s. With a maximum yield of 25 megatons of TNT, it was the most powerful nuclear bomb ever developed by the United States (100 petajoules). The B-41 was the United States' only three-stage thermonuclear weapon.

B61 nuclear bomb except Mod-4 and Mod-10: The Cold War's end, the B61 nuclear bomb became the primary thermonuclear gravity bomb in the United States Enduring Stockpile. It is a strategic and tactical nuclear weapon with a low to intermediate yield and a two-stage radiation implosion design.

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