



AUGUST 29, 1949 : SOVIETS EXPLODE ATOMIC BOMB

At a remote test site at Semipalatinsk in Kazakhstan, the USSR successfully detonates its first atomic bomb, code name "First Lightning." In order to measure the effects of the blast, the Soviet scientists constructed buildings, bridges, and other civilian structures in the vicinity of the bomb. They also placed animals in cages nearby so that they could test the effects of nuclear radiation on human-like mammals. The atomic explosion, which at 20 kilotons was roughly equal to "Trinity," the first U.S. atomic explosion, destroyed those structures and incinerated the animals.

According to legend, the Soviet physicists who worked on the bomb were honored for the achievement based on the penalties they would have suffered had the test failed. Those who would have been executed by the Soviet government if the bomb had failed to detonate were honored as "Heroes of Socialist Labor," and those who would have been merely imprisoned were given "The Order of Lenin," a slightly less prestigious award.

On September 3, a U.S. spy plane flying off the coast of Siberia picked up the first evidence of radioactivity from the explosion. Later that month, President Harry S. Truman announced to the American people that the Soviets too had the bomb. Three months later, Klaus Fuchs, a German-born physicist who had helped the United States build its first atomic

bombs, was arrested for passing nuclear secrets to the Soviets. While stationed at U.S. atomic development headquarters during World War II, Fuchs had given the Soviets precise information about the U.S. atomic program, including a blueprint of the "Fat Man" atomic bomb later dropped on Nagasaki, Japan, and everything the Los Alamos scientists knew about the hypothesized hydrogen bomb. The revelations of Fuchs' espionage, coupled with the loss of U.S. atomic supremacy, led President Truman to order development of the hydrogen bomb, a weapon theorized to be hundreds of times more powerful than the atomic bombs dropped on Japan.

On November 1, 1952, the United States successfully detonated "Mike," the world's first hydrogen bomb, on the Elugelab Atoll in the Pacific Marshall Islands. The 10.4-megaton thermonuclear device instantly vaporized an entire island and left behind a crater more than a mile wide. Three years later, on November 22, 1955, the Soviet Union detonated its first hydrogen bomb on the same principle of radiation implosion. Both superpowers were now in possession of the so-called "superbomb," and the world lived under the threat of thermonuclear war for the first time in history.

Article Details:

August 29, 1949 : Soviets explode atomic bomb

Author

History.com Staff

Website Name

History.com

Year Published

2010

Title

August 29, 1949 : Soviets explode atomic bomb

URL

<http://www.history.com/this-day-in-history/soviets-explode-atomic-bomb>