



The Soviet Union detonated its first atomic bomb on August 29, 1949. Its name, to the Russians, was "First Lightning" (RDS-1). Its name, to the Americans, was "Joe 1" (after Joseph Stalin, leader of the USSR). Its design was similar to "Fat Man"—the plutonium bomb which the US dropped on Nagasaki in August of 1945. Click on the photographic image for a better view.

The USSR also has historical footage of its first atomic bomb explosion.

The following describes [more details about this weapon](#), including where it was detonated:

*RDS-1, also known as Izdeliye 501 (device 501) and First Lightning was the USSR's first nuclear bomb. The United States named the bomb Joe-1, in reference to Joseph Stalin.*

*It was a plutonium implosion-device, like The Gadget (Trinity) and Fat Man, and it had a similar yield. The bomb designers had a more sophisticated design, but it was rejected due to the known reliability of the Fat Man type design, and was later tested on RDS-2.*

*Houses, a bridge and a metro were constructed to test the effects of the weapon. Also, 1.500 animals were brought, as well as 50 aircraft.*

*The resulting data showed that the explosion was 50% more destructive than the estimation by the engineers.*

*The bomb surprised the Western Powers. The US estimated that the USSR would not have atomic devices until 1953, and the UK estimated not until 1954.*

*The bomb was detonated on a tower at Semipalatinsk Test Site, Kazakh SSR, Soviet Union (now Kazakhstan).*

Within a month, the US Air Force had [detected radioactive fission products](#). President Truman announced, to the world, America's belief that the Soviets had detonated a bomb. On the 29th of September, 1949, he said:

*We have evidence that within recent weeks an atomic explosion occurred in the USSR.*

Truman's announcement was as much a surprise for the Soviets as the bomb explosion itself was for the Americans.

The Cold War thus intensified when both the US and the USSR possessed nuclear weapons before 1950.

Credits:

Soviet image of the detonation of RDS-1 (on August 29, 1949). Online, courtesy U.S. National Archives.

PD

<http://www.awesomestories.com/asset/AcademicAlignment/Nuclear-Detonation-First-by-the-USSR>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/Nuclear-Detonation-First-by-the-USSR>