



## Notable Nuclear Tests: Tsar Bomba

On October 30, 1961, the Soviet Union conducted an atmospheric test of the largest thermonuclear weapon ever created: The Tsar Bomba. Named for its unmatched destructive potential, the “emperor of bombs” yielded a blast of 50 megatons, nearly 2,000 times more powerful than the bomb the United States dropped on Nagasaki.

The bomb was so big, in fact, that the [Tu-95v](#) bomber transporting the device had to be modified [extensively](#) to accommodate it. Scientists were worried that the shockwave from the blast might be inescapable for Andre Durnovstkev, the pilot selected for this special mission. He was given just a [50 percent](#) chance of survival.

Despite being detonated more than 13,000 feet in the air over the Mityushikha Bay near the Arctic Circle, the blast completely leveled the uninhabited village of [Severny](#) almost 35 miles away, and damaged buildings more than [100](#) miles away. Within seconds, the five-mile-wide [fireball](#) incinerated the ground below the blast and created a flare that could be seen from Alaska, Greenland and Norway. The seismic shockwave circled the globe [three](#) times, shattering glass windows in buildings more than [400](#) miles away. [Classified footage](#) of the test was released in 2020.

### Development of Tsar Bomba

During the early years of the Cold War, the United States held a strategic advantage over the Soviet Union, due to the size and scale of their thermonuclear weapons program. Needing a credible deterrent threat, the Council of Ministers of the U.S.S.R. commissioned the creation of a three-stage thermonuclear bomb. The extra stage would theoretically double the projected yield from 50 megatons to 100 by introducing an extra nuclear fission bomb triggered by the thermonuclear explosion. However, these plans, along with plans for a ground explosion, were ultimately scrapped due to worries about possible widespread radiation exposure.

### Aftermath

Leaders from around the world condemned the test. At the United Nations, U.S. Ambassador [Adlai Stevenson](#) referred to the blast as a “a great leap backward towards anarchy and disaster.” Then-U.S. President John F. Kennedy did [not](#) follow suit in developing a larger bomb. Two years later, the United States, Soviet Union and Great Britain signed The Treaty Banning Nuclear Weapons Tests in the Atmosphere, Outer Space, and Under Water, better known as the [Limited Test Ban Treaty](#), prohibiting further testing of this kind. As a result, Tsar Bomba remains the largest thermonuclear bomb ever created and tested.