## A Photo-Essay on the Bombing of Hiroshima and Nagasaki

## Hiroshima

**Hiroshima**, Japanese city, situated some 8M km. (500 mi.) from Tokyo, on which the first operational atomic bomb was dropped at 0815 on 6 August 1945. Nicknamed 'Little Boy'—a reference to Roosevelt—the bomb was 3 m. (9 ft. 9 in.) long, used uranium 235, had the power of 12.5 kilotons of TNT, and weighed 3,600 kg. (nearly 8,000 lb.).

Much discussion by a Target committee had preceded the decision to make Hiroshima the first target. To be able to assess the damage it caused, and to impress the Japanese government with the destruction it was expected to wreak, it was necessary to choose a city that had not yet been touched by the USAAF's strategic air offensives. Kyoto was also considered but its unrivalled beauty ruled it out.

The bomb was delivered by a US B29 bomber, nicknamed Enola Gay, from the Pacific island of Tinian. Dropped by parachute it exploded about 580 m. (1,885 ft.) above the ground, and at the point of detonation the temperature probably reached several million degrees centigrade. Almost immediately a fireball was created from which were emitted radiation and heat rays, and severe shock waves were created by the blast. A one-ton (900 kg.) conventional bomb would have destroyed all wooden structures within a radius of 40 m. (130 ft.). Little Boy destroyed them all within a radius of 2 km. (1.2 mi.) of the hypocentre (the point above which it exploded). The terrain was flat and congested with administrative and commercial buildings, and the radius of destruction for the many reinforced concrete structures was about 500 m. (1,625 ft.), though only the top stories of earthquake-resistant buildings were damage or destroyed. Altogether an area of 13 sq. Ikm. (5 sq. mi.) was reduced to ashes and of the 76,000 buildings in the city 62.9% were destroyed and only 8% escaped damage.

Within 1.2 km. (.74 mi.) of the hypocentre there was probably a 50% death rate of the 350,000 people estimated to have been in Hiroshima at the time. Hiroshima City Survey Section estimated a figure of 118,661 civilian deaths up to 10 August 1946 (see Table). Add to this a probable figure of 20,000 deaths of military personnel and the current figure—for people are still dying as a result of the radiation received—is in the region of 140,000. Among those who survived, the long-term effects of radiation sickness, genetic and chromosome injury, and mental trauma have been catastrophic, even unborn children having been stunted in growth and sometimes mentally retarded.

Committee on Damage by Atomic Bombs in Hiroshima and Nagasaki, Hiroshima and Nagasaki:

## Nagasaki

**Nagasaki**, Japanese city on which the second operational atomic bomb was dropped. Nicknamed 'Fat Man' (a reference to Churchill), the bomb, which used plutonium 239, was dropped by parachute at 1102 on 9 August by an American B29 bomber from the Pacific island of Tinian. It measured just under 3.5 m. (11 ft. 4 in.) in length, had the power of 22 kilotons of TNT, and weighed 4,050 kg. (nearly 9,000 lb.). The aircraft's first target was the city of Kokura, now part of Kitakyushu, but as it was covered by heavy cloud the aircraft was diverted to its second target, Nagasaki.

Unlike Hiroshima, Nagasaki lies in a series of narrow valleys bordered by mountains in the east and west. The bomb exploded about 500 m. (1,625 ft.) above the ground and directly beneath it (the hypocentre) was a suburb of schools, factories, and private houses. The radius of destruction for reinforced concrete buildings was 750 m. (2,437 ft.), greater than at Hiroshima where the blast caused by the bomb was more vertical. But because of the topography, and despite the Nagasaki bomb being more powerful, only about 6.7 sq. km. (2.6 sq. mi.) of Nagasaki was reduced to ashes compared with 13 sq. km. (5 sq. mi.) of Hiroshima. Of the 51,000 buildings in the city 22.7% were completely destroyed or burt, with 36.1 % escaping any damage.

Among the 270,000 people present when the bomb was dropped, about 2,500 were labour conscripts from Korea and 350 were prisoners-of-war. About 73,884 were killed and 74,909 injured, with the affected survivors suffering the same long-term catastrophic results of radiation and mental trauma as at Hiroshima.

Committee on Damage by Atomic Bombs in Hiroshima and Nagasaki, Hiroshima and *Nagasaki: The Physical, Medical and Social Effects of the Atomic Bombings* (London, 1981).

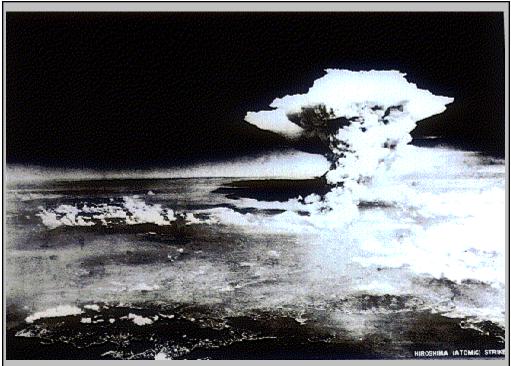


Photo by US Army

The huge atomic cloud 6 August, 1945. A Uranium bomb, the first nuclear weapon in the world, was dropped in Hiroshima City. It was estimated that its energy was equivalent to 15 kilotons of TNT. Aerial photograph from the 80 kilometers away of the Inland Sea, taken about 1 hour after the dropping.



Photo by US Army

The ruins of fire in Kako-machi. The stone monument was left alone.



Photo: Ohmura Navy Hospital A girl with her skin hanging in strips, at Ohmura Navy Hospital on August 10-11.

Melted Sake Bottles--Photo by Hiromi Tsuchiya



The Atomic Shadow--The shadows of the parapets were imprinted on the road surface of the *Yorozuyo* Bridge, 1/2 of a mile south-southwest of the hypocenter. It is one of the important clues for establishing the location of the epicenter. Photo: US Army



The leaves of this Fatsia japonica threw a shadow on an electric pole near the *Meiji* Bridge. Photo: US Army

Nagasaki Journey: The Photographs of Yosuke Yamahata

On August 10, 1945, the day after the bombing of Nagasaki, Yosuke Yamahata began to photograph the devastation. His companions on the journey were a painter, Eiji Yamada, and a writer, Jun Higashi.











Wounded Horse--The bomb not only hurt people but animals (burnt hip skin)