

## HIROSHIMA and the ATOMIC BOMB

The first atomic bomb was dropped over the city of Hiroshima, Japan, on August 6, 1945, at 8:15 A.M. The bomb was nicknamed "Thin Man" due to its appearance. On August 9, 1945, "Fat Man", another atomic bomb was dropped on Nagasaki.

The population of Hiroshima then was 350,000, but it was down to 250,000 due to evacuations because of the likelihood of a B-29 bombing, it is estimated that over 100,000 people were killed in Hiroshima. At least that many more were injured. 40,000 were killed in Nagasaki.

"Thin Man" was equivalent to 20,000 tons of T.N.T. It was carried to the city in a B-29 bomber, nicknamed the Enola Gay, piloted by Colonel Tibbets. Neither he nor his crew fully realized what this bomb was capable of, nor did its creators. Colonel Tibbets and his men took off from Tinian Island in the Pacific where the bomb was prepared for detonation.

"Thin Man" was detonated at a height of 2,000 feet above Hiroshima. 60% of the city was destroyed. A boiling dust cloud called the "tower" or "mushroom" rose 40,000 feet over the city.

Dr. Edward Teller, father of the hydrogen bomb, felt that the Hiroshimans should have been warned or given a demonstration first. He maintains that if the bomb had been detonated at 20,000 feet, minimal lives would've been lost, virtually no property damage would've occurred. As a result, the Japanese would've been scared to death and would have chosen surrender. (At that time, we had no planes capable of flying that high and getting away fast enough.)

The bomb was originally constructed with the idea of wiping out Germany, ending the war, and saving lives. This became the case for Japan once Germany fell, Japan was on the brink of surrender, however, when the bomb was used. No warnings or demonstrations were given to the people of Hiroshima, but because 250 American men were dying in the Pacific daily and estimates predicted 250,000 to 1,000,000 men would die in all, men like President Harry Truman were influenced to use the bomb.

The great scientist, Albert Einstein, who formulated the theory of relativity, wrote the initial letter to President Franklin D. Roosevelt which convinced him to initiate work on the Manhattan Project, the code name for the bomb project. Work on the bomb was conducted in major cities such as New York and Chicago in utmost secrecy. Many brilliant scientists contributed to the bomb's development. One was Dr. J. Robert Oppenheimer, who headed the Los Alamos, New Mexico, team, which designed, developed, and fabricated the A-bomb.

Alamogordo, New Mexico, was the test site of the first atomic explosion on July 16, 1945. The scientists had to be sure their theory would work. The test bomb was positioned on a 100 foot tower in the desert. The tower vaporized when the bomb went off, and everything within a 1 mile radius was destroyed.

Observers of the test were asked to lie on the ground, head away from Zero (blast center) with their eyes covered with their arms. The men put suntan lotion on, even though it was the middle of the night, to protect their exposed skin. They were 20 miles from the test site and saw a blinding flash that seemed to come from the earth itself. This flash was seen as far as Amarillo, 450 miles east of Zero. 200 miles plus from ground Zero, the blast was heard.

"My God, what have we done?"--the crew of the Enola Gay.

### THE DESTRUCTIVE POWER OF THE NUCLEAR BOMB

The bombs dropped on Hiroshima and Nagasaki each had an explosive force equal to nearly 20 kilotons--that is equal to 20,000 tons of TNT.

In Hiroshima estimates are that 78,000 were killed, 84,000 injured and 60,000 houses destroyed. Severe damage to houses occurred as far out as 4.9 miles from the center of the blast. 53% of the patients who received burns at .6 mile died within hours and burned out an area of 4.6 square miles.

The incidence of leukemia in the survivors reached a peak in 1950-52. It is thought that other forms of malignant cancer is attributed to the blast. Babies born to women who were pregnant when exposed to the blast had hands smaller than average size, and some of these suffered severe mental retardation.

Today's bombs are infinitely stronger! For a 10 megaton explosion an area of complete or serious devastation would cover from 115-193 square miles. Forest fires would range up to 12-13 miles from the center of explosion. Half the population would expect to die within the first few days from radioactive fallout.

If a 20 megaton bomb were detonated over Manhattan it would probably kill 6,000,000 of New York's 8,000,000 inhabitants and lead to another 1,000,000 deaths beyond the city limits. The surface explosion of a 20-megaton bomb would form a crater 250-300 feet deep and a half mile in diameter.

400 10-ton megaton bombs aimed at the metropolitan areas of the U.S. would eliminate half of the population of the country. Forests would be destroyed and fires would rage everywhere. The physical damage caused would be 6 times that caused by the bombs of all World War II.

An attack of 20,000 megatons could cover the entire country with fallout, killing 95% of the population. 10,000 megaton attack could wipe out 90% of the population of the Soviet Union.

One 20 kiloton warhead would cost \$11,000,000 (1965). The cost is decreasing rather than increasing as technology becomes increasingly known to many countries, but stockpiling more than enough bombs to wipe out countries is the state called overkill. By a sense of insecurity is maintained. Hence the necessity for nuclear arms limitations.

The bomb was used twice in 1945. It is understandable how that could happen at that time, how they were useful. It shouldn't happen again!

Bob Lewis, co-pilot of the Enola Gay said many years later: "I feel strongly that if some heads of state could have seen what the crew of the Enola Gay saw that day, they'd redouble their efforts to see that the power of the atom is used for mankind, not against it. If they had seen what we saw, they wouldn't rest until they made sure of it."

The bombs used at Hiroshima and Nagasaki are firecrackers compared to today's bombs. If these are ever used we will deserve what we receive. WE do not refer to any particular nationality. It refers to us all as human beings.

The inscription on the memorial in Hiroshima's Peace Park reads:  
"REST IN PEACE. THE MISTAKE SHALL NOT BE REPEATED."

## HIROSHIMA and NAGASAKI

### Should the bombs been dropped?

#### "AGAINST"

The bombs are inhuman and cause future problems. It wasn't necessary, for Japan was already beaten. All we had to do was continue our conventional bombing and continue plans for the fall and spring invasions of the islands. The damage we had caused to Japanese transportation and production would have been enough to bring them to surrender. Some say that we would not have used the bomb against white people.

General Hap Arnold said conventional bombing alone could end the war. Thirty-four square miles of Tokyo had been burned out, in the first four air raids.

85% of Yokohama was in flames. Osaka and Kobe were obliterated in two weeks. More than 100 square miles of Japan's principal cities were wiped out. Japan lacked severely coal, steel, fuel, manpower. They were faced also with starvation, the food ration had fallen below 1500 calories. Japan had already considered mediation of peace by Switzerland, Sweden, China, or the Vatican. Some preferred Russia, our ally at that time.

General Dwight D. Eisenhower said that Japan was already defeated.

Some scientists felt that we timed the use of the bomb to get us the balance of power in Japan over Russia. Russia had planned to invade Manchuria on August 8, 1945. No U.S. invasion had been planned until November. So why weren't the bombings held off for at least some of that period, in order to explore peace feelers with Japan? We were not losing lives in August (in invasion). And why the second bomb? A number of scientists held a celebration after Hiroshima. After, Nagasaki, there was no celebration.

Admiral Leahy said that not only did he have moral reservations but suspected that the scientists and others in the project wanted to drop the bomb "because of the vast amount of money that had been spent on the project."

#### "FOR"

The bombs were no more inhumane than conventional bombing. The fire-bombs at Tokyo caused more deaths than the nuclear explosions. The shock value of the atomic bomb was one of the factors that knocked Japan out of the war; more people would have been killed by the bloody work of invasion. The argument against using the bomb only against non-whites is not valid because President Roosevelt had asked that the bomb be rushed so that it could be used against the Nazi's. It was not possible to get it ready nor did anyone know just what it could do.

The bomb used at Nagasaki was necessary because the Japanese military did not believe the reports on the first bomb.

When Harry Truman was asked whether the decision had come after considerable soul-searching, he answered, "Hell, no, I made it like"-he snapped his fingers-"that!"

Harry Truman: "Let there be no mistakes about it, I regarded the bomb as a military weapon and never had any doubt that it should be used."

Some of the effects of the A-bomb were mysteries to doctors. People showed the following symptoms: nausea, vomiting, loss of appetite, diarrhea, fever, weakness, purple spots on the body, inflammation and ulceration of the mouth, throat, gums, bleeding from the mouth, nose, gums, throat, rectum, and urinary tract, loss of hair, low white-blood-cell count, and a high rate of leukemia.

Babies in the uterus at the time of the explosion were born with unusually small heads which resulted in physical and mental retardation. Heavily irradiated pregnant women experienced spontaneous abortions or stillbirths. Exposed fathers produced fewer daughters while exposed mothers produced fewer sons. The rate of tumors and cataracts rose significantly.

In Japan the people have a special name for the A-bomb survivors/sufferers. It is hibakusha. These people carry cards identifying them as A-bomb survivors. They receive free medical care paid for by the government. Many of them experience problems, many of which are psychological, due to this label. One woman was afraid to tell her husband she was a hibakusha, so she waited until they had two healthy children first. Then she told him. She felt the presence of children would make the break-up of their marriage less easy. (Hibakusha often stay healthy for years and then become ill due to the effects of radiation. There is also the constant fear of deformed children)

The bombs dropped on Hiroshima and Nagasaki were pounds in size, and their destructive power cannot come near to the power of present-day nuclear warheads.

Even the H-bomb is tons in size and vastly more powerful than the A-bomb. The morality of using such weapons has been hotly debated for years. Some think the A-bomb is an actual deterrent to WW III. No one is a winner in an all-out nuclear war, so this knowledge of total destruction restrains hostile nations from using nuclear bombs. Our job is to remember Hiroshima and Nagasaki and so work for the prevention of a nuclear holocaust in the future.

L. Shapire  
Source: Hiroshima Plus 20  
New York Times