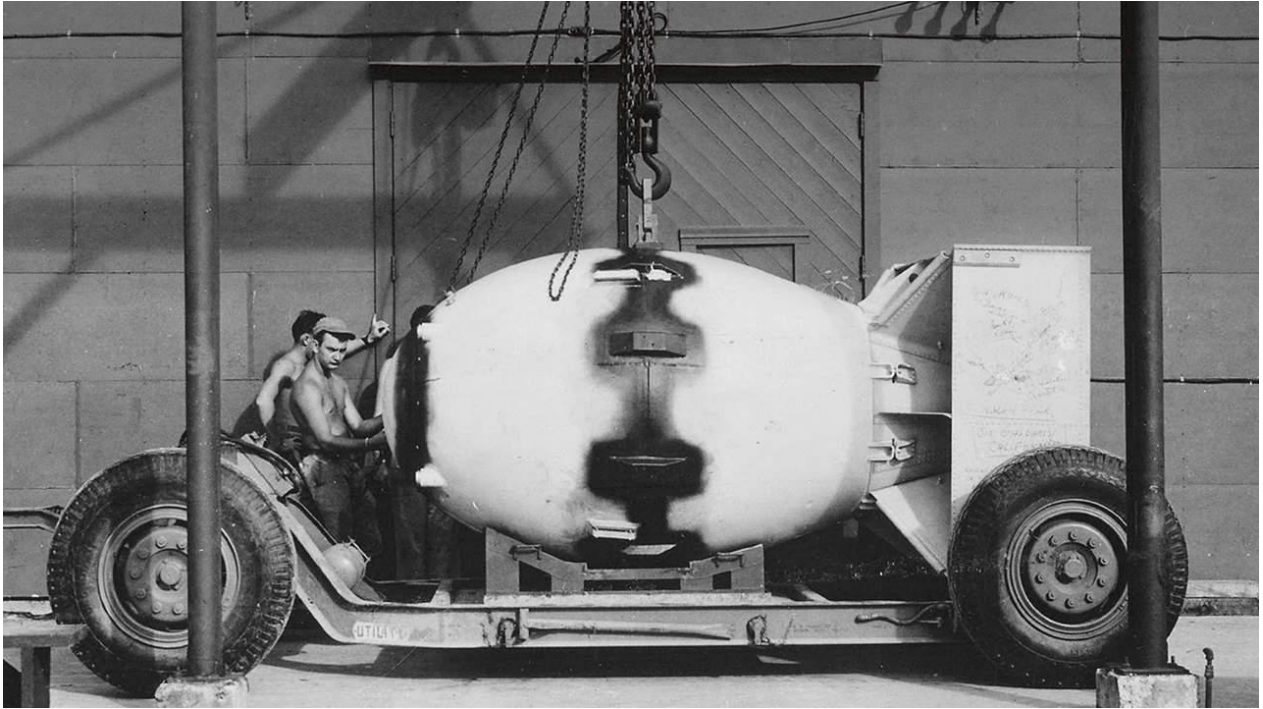


# Dawn of the Nuclear Age: The Manhattan Project [B2]

In una zona remota del deserto del New Mexico gli scienziati e i tecnici più brillanti di un'intera generazione lavorarono senza sosta per creare l'arma più distruttiva mai concepita.



In 1939, US President Franklin D. Roosevelt received a letter from Albert Einstein. The Nobel Prize-winning physicist **warned** him that scientific advancements in Nazi Germany made the construction of “extremely powerful bombs” conceivable. Roosevelt gathered a group of top military and scientific experts, and with the support of British Prime Minister Winston Churchill, a project to make a nuclear bomb began.

## OPPENHEIMER

The Manhattan Project was officially created on 13 August 1942. It was **so named** because its first offices were in Manhattan. General Leslie R. Groves **was appointed** to head the project. He employed a brilliant academic called J. Robert Oppenheimer to direct research and development.

Oppenheimer had little experience, and no Nobel Prize, but he was charismatic and very persuasive.

## PROJECT Y

A top-secret laboratory codenamed Project Y was required for theoretical and experimental work. Oppenheimer suggested it be located on a beautiful, isolated mesa in the mountains of New Mexico. An elite private boys' school there was purchased, and 46,000-acres of land appropriated, displacing Native American and Hispanic communities. By the end of 1943, the secret town of Los Alamos, with a population reaching 75,000, had sprung up out of nowhere.

## RECRUITMENT

Oppenheimer travelled across America to recruit physicists, chemists, metallurgists and explosives experts, luring them and their families with higher than average wages. He insisted that Project Y be an academic rather than a military environment, though the latter provided security. To keep it secret, Los Alamos was self-contained, with schools, a hospital, and even theatres. The town was not mentioned on driving licences, birth certificates or on mail.

## SCIENTIFIC STARS

Oppenheimer's staff included many stars of the scientific community, including Enrico Fermi, Richard Feynman and Seth Neddermeyer. Many female and some African-American scientists and technicians worked there or at other sites. The Manhattan Project had two other main locations: Oak Ridge, Tennessee was home to uranium enrichment plants and a plutonium production reactor, while Hanford, Washington had a full-scale plutonium production plant. Dozens of other sites were scattered across the US and in Canada. At its peak, the project employed some 130,000 workers.

## A NEW TARGET

Late in 1944, Los Alamos began [to shift](#) from research to bomb production, as [the intended target](#) shifted from Germany to Japan. Plutonium and enriched uranium arrived from Oak Ridge and Hanford, and there was enough for at least one atomic bomb of each type. On 16 July 1945, the world's first plutonium atomic bomb was tested in the New Mexico desert. Nicknamed "Gadget", it exploded with 20 kilotons of force and produced a [mushroom cloud](#) that [rose](#) eight miles high and left a crater ten feet [three metres] deep and 1,000 feet [305 metres] wide. The atomic age had begun.

## THE NUCLEAR LEGACY

In the US, the environmental consequences of the Manhattan Project and subsequent [clean-up](#) efforts continue today. In the immediate [aftermath](#) of World War II, it [sparked](#) a nuclear arms race during the Cold War. The Manhattan Project also influenced other nuclear programmes, not only in the Soviet Union, but also in the UK and in France, among other countries. It also contributed to the development of peaceful if controversial nuclear innovations, including nuclear power.

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# Glossary

- **warned** = avvisare
- **was appointed** = incaricare, designare
- **codenamed** = chiamato in codice
- **out of nowhere** = dal nulla
- **wages** = stipendi
- **self-contained** = autosufficiente, autonoma
- **the intended target** = l'obiettivo designato
- **clean-up** = bonifica, pulizia
- **sparked** = innescare
- **purchased** = acquistare
- **scattered** = spargere
- **mushroom cloud** = fungo atomico
- **so named** = chiamato così
- **sprung up** = spuntare, sorgere
- **luring** = attrarre
- **to shift** = spostarsi
- **rose** = alzarsi
- **aftermath** = periodo successivo
- **mesa** = altopiano