

Official American Statements On The Atomic Bombing Of Hiroshima, August 6, 1945

World History

291.⁵¹

A STATEMENT BY THE PRESIDENT OF THE UNITED STATES

August 6, 1945

The White House

Washington, D. C.

Sixteen hours ago an American airplane dropped one bomb on Hiroshima, an important Japanese Army base. That bomb had more power than 20,000 tons of T.N.T. It had more than two thousand times the blast power of the British "Grand Slam" which is the largest bomb ever yet used in the history of warfare.

The Japanese began the war from the air at Pearl Harbor. They have been repaid many fold. And the end is not yet. With this bomb we have now added a new and revolutionary increase in destruction to supplement the growing power of our armed forces. In their present forms these bombs are now in production and even more powerful forms are in development.

It is an atomic bomb. It is a harnessing of the basic power of the universe. The force from which the sun draws its power has been loosed against those who brought war to the Far East.

Before 1939, it was the accepted belief of scientists that it was theoretically possible to release atomic energy. But no one knew any practical method of doing it. By 1942, however, we knew that the Germans were working feverishly to find a way to add atomic energy to the other engines of war with which they hoped to enslave the world. But they failed. We may be grateful to Providence that the Germans got the V-1's and the V-2's late and in limited quantities and even more grateful that they did not get the atomic bomb at all.

The battle of the laboratories held fateful risks for us as well as the battles of the air, land, and sea, and we have now won the battle of the laboratories as we have won the other battles.

Beginning in 1940, before Pearl Harbor, scientific knowledge useful in war was pooled between the United States and Great Britain, and many priceless helps to our victories have come from that arrangement. Under that general policy the research on the atomic bomb was begun. With American and British scientists working together we entered the race of discovery against the Germans.

The United States had available the large number of scientists of distinction in the many needed areas of knowledge. It had the tremendous industrial and financial resources necessary for the project and they could be devoted to it without undue impairment of other vital war work. In the United States the laboratory work and the production plants, on which a substantial start had already been made, would be out of reach of enemy bombing, while at that time Britain was exposed to constant air attack and was still threatened with the possibility of invasion. For these reasons Prime Minister Churchill and President Roosevelt agreed that it was wise to carry on the project here. We now have two great plants and many lesser works devoted to the production of atomic power. Employment during peak construction numbered 125,000 and over 65,000 individuals are even now engaged in operating the plants. Many have worked there for two and a half years. Few know what they have been producing. They see great quantities of material going in and they see nothing coming out of these plants, for the physical size of the explosive charge is exceedingly small. We have spent two billion dollars on the greatest scientific gamble in history—and won.

But the greatest marvel is not the size of the enterprise, its secrecy nor its cost, but the achievement of scientific brains in putting together infinitely complex pieces of knowledge held by many men in different fields of science into a workable plan. And hardly less marvelous has been the capacity of industry to design, and of labor to operate, the machines and methods to do things never done before so that the brain child of many minds came forth in physical shape and performed as it was supposed to do. Both science and industry worked under the direction of the United States Army, which achieved a unique success in managing so diverse a problem in the advancement of knowledge in an amazingly short time. It is doubtful if such another combination could be got together in the world. What has been done is the greatest achievement of organized science in history. It was done under high pressure and without failure.

We are now prepared to obliterate more rapidly and completely every productive enterprise the Japanese have above ground in any city. We shall destroy their docks, their factories, and their communications. Let there be no mistakes; we shall completely destroy Japan's power to make war.

It was to spare the Japanese people from utter destruction that the ultimatum of July 26 was issued at Potsdam. Their leaders promptly rejected that ultimatum. If they do not now accept our terms they may expect a rain of ruin from the air, the like of which has never been seen on this earth. Behind this air attack will follow sea and land forces in such numbers and power as they have not yet seen and with the fighting skill of which they are already well aware.

The Secretary of War, who has kept in personal touch with all phases of the project, will immediately make public a statement giving further details.

His statement will give facts concerning the sites at Oak Ridge near Knoxville, Tennessee, and at Richland near Pasco, Washington, and an installation near Santa Fe, New Mexico. Although the workers at the sites have been making materials to be used in producing the greatest destructive force in history they have not themselves been in danger beyond that of many other occupations, for the utmost care has been taken for their safety.

The fact that we can release atomic energy ushers in a new era in man's understanding of nature's forces. Atomic energy may in the future supplement the power that now comes from coal, oil, and falling water, but at present it cannot be produced on a basis to compete with them commercially. Before that comes there must be a long period of intensive research.

It has never been the habit of the scientists of this country or the policy of this Government to withhold from

the world scientific knowledge. Normally, therefore, everything about the work with atomic energy would be made public.

But under present circumstances it is not intended to divulge the technical processes of production or all the military applications, pending further examination of possible methods of protecting us and the rest of the world from the danger of sudden destruction.

I shall recommend that the Congress of the United States consider promptly the establishment of an appropriate commission to control the production and use of atomic power within the United States. I shall give further consideration and make further recommendations to the Congress as to how atomic power can become a powerful and forceful influence towards the maintenance of world peace.

B STATEMENT BY THE SECRETARY OF WAR

August 6, 1945

War Department

Washington, D. C.

The recent use of the atomic bomb over Japan, which was today made known by the President, is the culmination of years of herculean effort on the part of science and industry working in cooperation with the military authorities. This development which was carried forward by the many thousand participants with the utmost energy and the very highest sense of national duty, with the greatest secrecy and the most imperative of time schedules, probably represents the greatest achievement of the combined efforts of science, industry, labor, and the military in all history.

The military weapon which has been forged from the products of this vast undertaking has an explosive force such as to stagger imagination. Improvements will be forthcoming shortly which will increase by several fold the present effectiveness. But more important for the long-range implications of this new weapon is the possibility that another scale of magnitude will be evolved after considerable research and development. The scientists are confident that over a period of many years atomic bombs may well be developed which will be very much more powerful than the atomic bombs now at hand. It is abundantly clear that the possession of this weapon by the United States even in its present form should prove a tremendous aid in the shortening of the war against Japan.

The requirements of security do not permit of any revelation at this time of the exact methods by which the bombs are produced or of the nature of their action. However, in accord with its policy of keeping the people of the nation as completely informed as is consistent with national security, the War Department wishes to make known at this time, at least in broad dimension, the story behind this tremendous weapon which has been developed so effectively to hasten the end of the war. Other statements will be released which will give further details concerning the scientific and production aspects of the project and will give proper recognition to the scientists, technicians, and the men of industry and labor who have made this weapon possible.

I

The chain of scientific discoveries which has led to the atomic bomb began at the turn of the century when radioactivity was discovered. Until 1939 work in this field was world-wide, being carried on particularly in

the United States, the United Kingdom, Germany, France, Italy and Denmark.

Before the lights went out over Europe and the advent of war imposed security restrictions, the fundamental scientific knowledge concerning atomic energy from which has been developed the atomic bomb now in use by the United States was widely known in many countries, both Allied and Axis. The war, however, ended the exchange of scientific information on this subject and, with the exception of the United Kingdom and Canada, the status of work in this field in other countries is not fully known, but we are convinced that Japan will not be in a position to use an atomic bomb in this war. While it is known that Germany was working feverishly in an attempt to develop such a weapon, her complete defeat and occupation has now removed that source of danger. Thus it was evident when the war began that the development of atomic energy for war purposes would occur in the near future and it was a question of which nations would control the discovery.

A large number of American scientists were pressing forward the boundaries of scientific knowledge in this fertile new field at the time when American science was mobilized for war. Work on atomic fission was also in progress in the United Kingdom when the war began in Europe. A close connection was maintained between the British investigations and the work here, with a pooling of information on this as on other matters of scientific research of importance for military purposes. It was later agreed between President Roosevelt and Prime Minister Churchill that the project would be most quickly and effectively brought to fruition if all effort were concentrated in the United States, thus ensuring intimate collaboration and also avoiding duplication. As a consequence of this decision, a number of British scientists who had been working on this problem were transferred here in late 1943, and they have from that time participated in the development of the project in the United States.

II

Late in 1939 the possibility of using atomic energy for military purposes was brought to the attention of President Roosevelt. He appointed a committee to survey the problem. Research which had been conducted on a small scale with Navy funds was put on a full-scale basis as a result of the recommendations of various scientific committees. At the end of 1941 the decision was made to go all-out on research work, and the project was put under the direction of a group of eminent American scientists in the Office of Scientific Research and Development, with all projects in operation being placed under contract with the OSRD. Dr. Vannevar Bush, Director of OSRD, reported directly to the President on major developments. Meanwhile, President Roosevelt appointed a General Policy Group, which consisted of former Vice President Henry A. Wallace, Secretary of War Henry L. Stimson, General George C. Marshall, Dr. James B. Conant, and Dr. Bush. In June 1942 this group recommended a great expansion of the work and the transfer of the major part of the program to the War Department. These recommendations were approved by President Roosevelt and put into effect. Major General Leslie R. Groves was appointed by the Secretary of War to take complete executive charge of the program and was made directly responsible to him and the Chief-of-Staff. In order to secure continuing consideration to the military aspects of the program, the President's General Policy Group appointed a Military Policy Committee consisting of Dr. Bush as Chairman with Dr. Conant as his alternate, Lt. General Wilhelm D. Styer, and Rear Admiral William R. Purnell. This Committee was charged with the responsibility of considering and planning military policy relating to the program including the development and manufacture of material, the production of atomic fission bombs, and their use as a weapon.

Although there were still numerous unsolved problems concerning the several theoretically possible methods of producing explosive material, nevertheless, in view of the tremendous pressure of time it was decided in December 1942 to proceed with the construction of large scale plants. Two of these are located at the Clinton Engineer Works in Tennessee and a third is located at the Hanford Engineer Works in the State of

Washington. The decision to embark on large scale production at such an early stage was, of course, a gamble, but as is so necessary in war a calculated risk was taken and the risk paid off.

The Clinton Engineer Works is located on a Government reservation of some 59,000 acres eighteen miles west of Knoxville, Tennessee. The large size and isolated location of this site was made necessary by the need for security and for safety against possible, but then unknown, hazards. A Government-owned and operated city, named Oak Ridge, was established within the reservation to accommodate the people working on the project. They live under normal conditions in modest houses, dormitories, hutments, and trailers, and have for their use all the religious, recreational, educational, medical, and other facilities of a modern small city. The total population of Oak Ridge is approximately 78,000 and consists of construction workers and plant operators and their immediate families; others live in immediately surrounding communities.

The Hanford Engineer Works is located on a Government reservation of 430,000 acres in an isolated area fifteen miles northwest of Pasco, Washington. Here is situated a Government-owned and operated town called Richland with a population of approximately 17,000 consisting of plant operators and their immediate families. As in the case of the site in Tennessee, consideration of security and safety necessitated placing this site in an isolated area. Living conditions in Richland are similar to those in Oak Ridge.

A special laboratory dealing with the many technical problems involved in putting the components together into an effective bomb is located in an isolated area in the vicinity of Santa Fe, New Mexico. This laboratory has been planned, organized, and directed by Dr. J. Robert Oppenheimer. The development of the bomb itself has been largely due to his genius and the inspiration and leadership he has given to his associates.

Certain other manufacturing plants much smaller in scale are located in the United States and in Canada for essential production of needed materials. Laboratories at the Universities of Columbia, Chicago, and California, Iowa State College, and at other schools as well as certain industrial laboratories have contributed materially in carrying on research and in developing special equipment, materials, and processes for the project. A laboratory has been established in Canada and a pilot plant for the manufacture of material is being built. This work is being carried on by the Canadian Government with assistance from, and appropriate liaison with, the United States and the United Kingdom. . . .

III

From the outset extraordinary secrecy and security measures have surrounded the project. This was personally ordered by President Roosevelt and his orders have been strictly complied with. The work has been completely compartmentalized so that while many thousands of people have been associated with the program in one way or another no one has been given more information concerning it than was absolutely necessary to his particular job. As a result only a few highly placed persons in Government and science know the entire story. It was inevitable, of course, that public curiosity would be aroused concerning so large a project and that citizens would make inquiries of Members of Congress. In such instances the Members of Congress have been most cooperative and have accepted in good faith the statement of the War Department that military security precluded any disclosure of detailed information.

In the appropriation of funds, the Congress has accepted the assurances of the Secretary of War and the Chief of Staff that the appropriations made were absolutely essential to national security. The War Department is confident that the Congress will agree that its faith was not a mistake. Because it has not been possible for Congress to keep a close check on the expenditure of the funds appropriated for the project which to June 30, 1945, amounted to \$1,950,000,000, key scientific phases of the work have been reviewed from time to time

by eminently qualified scientists and industrial leaders in order to be certain that the expenditures were warranted by the potentialities of the program.

The press and radio of the nation, as in so many other instances have complied wholeheartedly with the requests of the Office of Censorship that publicity on any phase of this subject be suppressed.

IV

In order to bring the project to fruition as quickly as possible, it was decided in August 1943 to establish a Combined Policy Committee. . . .

It was early recognized that in order to make certain that this tremendous weapon would not fall into the hands of the enemy prompt action should be taken to control patents in the field and to secure control over the ore which is indispensable to the process. Substantial patent control has been accomplished in the United States, the United Kingdom, and Canada. In each country all personnel engaged in the work, both scientific and industrial, are required to assign their entire rights to any inventions in this field to their respective governments. Arrangements have been made for appropriate patent exchange in instances where inventions are made by nationals of one country working in the territory of another. Such patent rights, interests, and titles as are exchanged, however, are held in a fiduciary sense subject to settlement at a later date on mutually satisfactory terms. All patent actions taken are surrounded by all safeguards necessary for the security of the project. At the present stage of development of the science of atomic fission, uranium is the ore essential to the production of the weapon. Steps have been taken, and continue to be taken, to assure us of adequate supplies of this mineral.

V

Atomic fission holds great promise for sweeping developments by which our civilization may be enriched when peace comes, but the overriding necessities of war have precluded the full exploration of peacetime applications of this new knowledge. With the evidence presently at hand, however, it appears inevitable that many useful contributions to the well-being of mankind will ultimately flow from these discoveries when the world situation makes it possible for science and industry to concentrate on these aspects.

The fact that atomic energy can now be released on a large scale in an atomic bomb raises the question of the prospect of using this energy for peaceful industrial purposes. Already in the course of producing one of the elements much energy is being released, not explosively but in regulated amounts. This energy, however, is in the form of heat at a temperature too low to make practicable the operation of a conventional power plant. It will be a matter of much further research and development to design machines for the conversion of atomic energy into useful power. How long this will take no one can predict but it will certainly be a period of many years. Furthermore, there are many economic considerations to be taken into account before we can say to what extent atomic energy will supplement coal, oil, and water as fundamental sources of power in industry in this or any other country. We are at the threshold of a new industrial art which will take many years and much expenditure of money to develop. . . .

[]

How to cite this article: To cite this article in a bibliography, or to learn about other citation formats, read our help page about citations, or ask your teacher or librarian for help.

[Home](#) | [Online Tutorial](#) | [Educator Tools](#) | [Customer Training Guide](#) | [What's New](#) | [Subscriber News](#) | [Site Contents](#) | [Help](#)
[About World Book](#) | [Customer Service](#) | [Accessibility Statement](#) | [Terms & Conditions](#) | [Privacy Policy](#)



© 2008 World Book, Inc. All rights reserved. **WORLD BOOK** and the **GLOBAL DEVICE** are registered trademarks or trademarks of World Book, Inc.