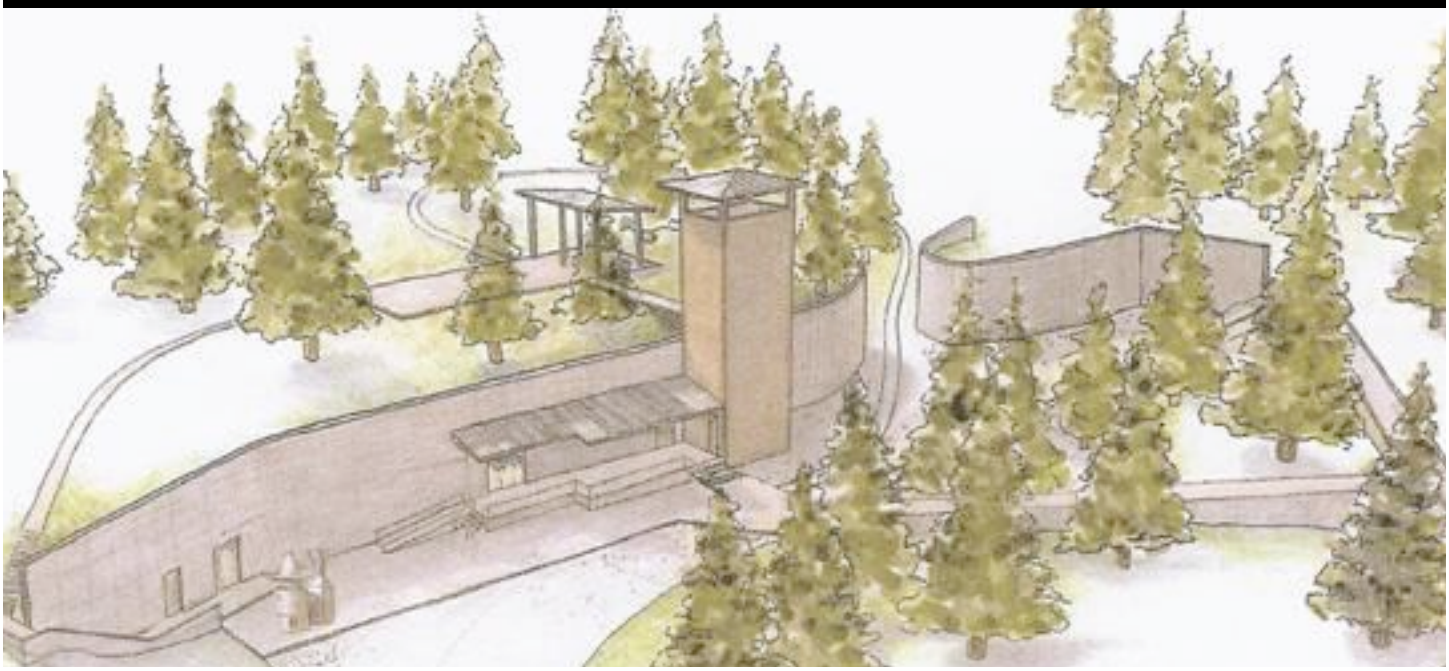

Artist rendition of Little Boy site.

The Manhattan Project 65 Years Later

BY CYNTHIA C. KELLY

INTRODUCTION

This year marks the 65th anniversary of the end of the Manhattan Project, the top-secret effort by the United States to build the world's first atomic bombs. Manhattan Project scientists, engineers and others who believed they had a moral and ethical responsibility over their technological contributions created the Federation of American Scientists (FAS), originally the Federation of Atomic Scientists. FAS sought to ensure that nuclear energy research was directed towards peaceful applications and to prevent the future use of nuclear weapons. Sixty-five years later, the work of FAS continues.

On August 6, 1945, Secretary of War Henry Stimson announced the dropping of the bomb on Hiroshima and declared that the atomic bomb was "the greatest achievement of the combined efforts of science, industry, labor and the military in all history."[1]

More than 85 percent of the public polled at the time supported the dropping of the atomic bomb as it brought an end to a long and devastating war. Dr. Karl Compton said, "It was not one atomic bomb, or two, which brought surrender; it was the experience of what an atomic bomb will actually do to a community, plus the dread of many more, that was effective." [2]

The threat of nuclear weapons persists today, one of the lasting legacies of the Manhattan Project. As J. Robert Oppenheimer said to Los Alamos scientists on November 2, 1945, the atomic bomb arrived in the world with "a shattering reality" that changed the relationship between science and society[3] Pressed into service during the war, scientists not only provided the foundation for atomic weapons but were instrumental in making them.

What about the remains of the Manhattan Project? For decades, the Manhattan Project was enshrouded in secrecy. Production facilities and laboratories were located "behind the fence," where only those with the proper security clearances were allowed. By the early 1990s, hundreds of Manhattan Project properties were slated to be destroyed as part of a nationwide cleanup of the former nuclear weapons facilities. Few members of the public were aware that almost all that remained of this important chapter of history would soon be lost.

This article tells the story of the Atomic Heritage Foundation's efforts to preserve the most important Manhattan Project properties and to create a Manhattan Project National Historical Park. Founded in 2002, the Atomic Heritage Foundation has spent nearly a decade working to preserve this chapter of American and world history.

[1] Statement of the Secretary of War Henry L. Stimson, August 6, 1945, from Cynthia C. Kelly, ed., *The Manhattan Project*, (New York: Black Dog & Leventhal, 2007), 343.
[2] Dr. Karl Compton as quoted by Stimson, *Ibid*. 388.
[3] J. Robert Oppenheimer, Speech to Los Alamos Scientists, November 2, 1945, *Ibid*. 366.

THE V SITE BUILDINGS OF LOS ALAMOS NATIONAL LABORATORY

At Los Alamos, the original technical buildings around Ashley Pond had been torn down more than forty years ago. By 1997, only fifty Manhattan Project properties scattered in remote parts of the laboratory remained. Most were built to last the duration of World War II and had been abandoned in the mid-1950s. By the mid-1990s, nature had begun its own process of demolition. While the laboratory was required to mitigate the loss of historic properties, preservation was not considered an option. Isolated in space and time, few people even knew these buildings existed.

A cluster of humble wooden buildings called "V Site" are surrounded by ponderosa pines as occasional herds of mule deer trot across the sur-rounding meadows. The central building has high-bay doors that once swung open for the "Gadget," the world's first atomic device tested on July 16, 1945.

In its report to New Mexico's environmental authorities on the V Site buildings, the laboratory condemned the buildings, citing contamination with asbestos shingles and possible residues of high explosive materials. Fortunately, the Advisory Council on Historic Preservation (ACHP), a small federal agency, agreed to take an independent look at the V Site properties.

The council members were struck by the contrast between the simplicity of structures and the complexity of what took place inside them. Designing the world's first atomic bomb was the most ambitious scientific and engineering undertaking in the twentieth century. Yet the buildings put up hastily in the summer of 1944 more closely resembled a common garage or work shed.

Bruce Judd, an architect whose parents had worked on the Manhattan Project at Los Alamos, commented that the V Site properties were "monumental in their lack of monumentality." Who could believe that the world's first atomic bomb was designed and assembled in such an unimpressive structure? The birthplace of the atomic bomb was like the garage in Palo Alto, CA, where Bill Hewlett and David Packard invented one of the world's first personal computers in 1938. Humble.

Somewhat chastened, the Los Alamos National Laboratory management agreed to remove all of the V Site buildings from the demolition list. However, funds for restoration would have to come from some other source.

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Fortunately, Congress had set aside $30 million to commemorate the millennium by preserving significant federal properties that were in danger of being lost. Department of Energy (DOE) Secretary Bill Richardson competed for the new Save America's Treasures grants and the V Site was awarded a $700,000 grant.

Today the V Site gives the Manhattan Project a tangible reality, connecting us to the "galaxy of luminaries" recruited by J. Robert Oppenheimer to build the world's first atomic bombs. When we stand within its walls, we can imagine Oppenheimer and his colleagues inspecting the "Gadget" as it hung from the metal hook above our heads.

SIGNATURE FACILITIES OF THE MANHATTAN PROJECT

Inspired by the restoration of the V Site, in 2000 the DOE listed eight properties as Signature Facilities of the Manhattan Project. The list included the V Site and Gun Site at Los Alamos, the X-10 Graphite Reactor, Beta-3 Calutrons and K-25 Gaseous Diffusion Plant at Oak Ridge, and the B Reactor and T Plant at Hanford. This was a major step forward but did not guarantee the preservation of these facilities.

Having been to Los Alamos, the Advisory Council convened a special task force to go to Oak Ridge and Hanford. In February 2001, the council's report urged the preservation of the Signature Facilities at those sites as well as properties in the communities. Preservation was gaining traction.

In 2003, Congress required the DOE to develop a plan for preserving its Manhattan Project history. Under a cooperative agreement with DOE, the Atomic Heritage Foundation took on the task, beginning with a series of public meetings at Oak Ridge, TN; Los Alamos, NM; and Richland, WA.

The Foundation's report released in 2004 recommended a Manhattan Project national historical park at the three major Manhattan Project sites. The plan also listed properties that were essential to tell the story of the Manhattan Project.

THE MANHATTAN PROJECT NATIONAL HISTORICAL PARK STUDY ACT

In September 2004, Congress passed the Manhattan Project National Historical Park Study Act [PL 108-340] that authorized the National Park Service to study whether to create a Manhattan Project National Historical Park.

Early this year, the National Park Service is expected to submit its recommendations to Congress for a park with units at Los Alamos, Oak Ridge and Hanford. Over time, a number of affiliated areas could be created at the University of Chicago, University of California at Berkeley, Wendover Air Force Base in Utah, the Trinity Site at Alamogordo, NM, sites in Dayton, OH, and Tinian Island.

In the meantime, the Atomic Heritage Foundation is continuing its work to preserve key Manhattan Project properties. A top priority is to ensure that at least a portion of the mile-long K-25 plant in Oak Ridge is preserved. In May 2010, the Tennessee Trust for Historic Preservation named the K-25 plant as one of the state's ten most endangered historic sites. The department recently released an expert evaluation that suggests that saving a piece can be done in a cost-effective and safe manner. A decision is anticipated by June 2011

A second preservation priority is the Gun Site at Los Alamos. The Gun Site (TA-8-1) was where Manhattan Project scientists and engineers developed and tested the uranium-based weapon design. Here the "Little Boy" bomb dropped on Hiroshima on August 6, 1945, was assembled. We hope that restoration of the bunker-like buildings and a 45-foot periscope tower will be completed in time for New Mexico's Centennial in 2012.

In 2007, the Atomic Heritage Foundation published an anthology, *The Manhattan Project: The Birth of the Atomic Bomb in the Words of Its Creators, Eyewitnesses, and Historians* (Black Dog & Leventhal).

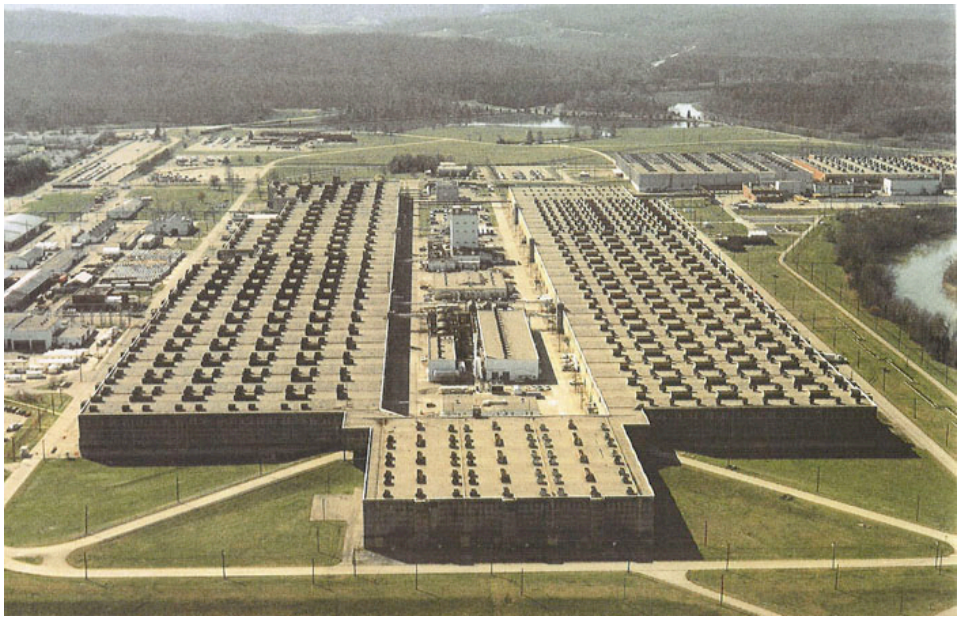
In June 2010, the Foundation produced a Guide to the Manhattan Project Sites in New Mexico that provides an overview of the history and preservation efforts in New Mexico with colorful illustrations and stories. We are now preparing similar guides to the Manhattan Project in Tennessee and Washington to be published this summer.

A NATIONAL TRAVELING EXHIBITION

With the likely designation of a Manhattan Project National Historical Park, the Atomic Heritage Foundation is planning to develop a national traveling exhibition on the Manhattan Project and its legacy. The exhibition will attempt to bridge the gap between the two cultures of science and the humanities, and address the science and engineering challenges as well as the historical, political, social and cultural legacy. Working with FAS and other partners, the exhibition will address the continuing challenges of dealing with nuclear weapons today.

When future generations look back on the 20th century, few events will rival the harnessing of nuclear energy as a turning point in world history. Having some of the authentic properties where the Manhattan Project scientists and engineers achieved this is essential. As Richard Rhodes, Pulitzer Prize winning author of *Making of the Atomic Bomb*, has said, "When we lose parts of our physical past, we lose parts of our common social past as well." With the prospective Manhattan Project National Historical Park, our vision of having some tangible remains from the Manhattan Project to educate and inspire future generations may become a reality. Sixty five years is not too long to wait.

Cynthia C. Kelly is the president of the Atomic Heritage Foundation.



K-25 is a former uranium enrichment facility of the Manhattan Project at Oak Ridge, Tennessee.