# Mission of the Atomic Heritage Foundation

The Atomic Heritage Foundation (AHF) is a non-profit organization dedicated to the preservation and interpretation of the Manhattan Project and the Atomic Age and their legacy for the 21st century.

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September 11, 2006

Dear Friends:

Preservation of the Manhattan Project has been given a real boost by the Congress with the Manhattan Project National Historic Park Site Study Act and over $4.5 million for preservation efforts to date. The National Park Service has its study well underway and the Department of Energy, State and local governments and historical societies have been advancing their own preservation and heritage tourism plans for the Manhattan Project.

At Hanford, Manager Keith Klein recently announced that the Department has removed the historic B Reactor from its decommissioning list. Instead of being “cocooned” for future demolition, the B Reactor will have a new roof installed. The Atomic Heritage Foundation (AHF) is working closely with the B Reactor Museum Association, Reach Museum, Hanford Communities and others to develop interpretive exhibits for the B Reactor, thanks to a generous $350,000 grant from the M. J. Murdock Charitable Trust.

At Oak Ridge, the City approved a $340,000 grant for the Atomic Heritage Foundation to work with the Oak Ridge Heritage & Preservation Association on the next phase of the preservation of the K-25 plant. The K-25 gaseous diffusion plant is one of three “Signature Facilities” of the Manhattan Project at Oak Ridge. AHF is a founding member of the Partners for K-25 Preservation (PKP) which is dedicated to the K-25 plant’s preservation.

In 1999, one of the first Save America’s Treasures grants was awarded for the preservation of the Manhattan Project properties at Los Alamos. On October 6, 2006, officials representing the Department of Energy, State of New Mexico and its Congressional delegation will be among those commemorating the restoration of the “V Site” properties under this grant. The Atomic Heritage Foundation has orchestrated a three-day series of events with the Los Alamos Historical Society, Los Alamos County and other partners to mark this milestone.

We are most grateful to the Congressional delegations from New Mexico, Washington, Tennessee and Ohio for their vital support. In addition, we are pleased to continue the mission of the Manhattan Project Heritage and Preservation Association (MPHPA) and welcome its members. We are proud of all that has been accomplished and thank our Board Members, Advisory Committee, donors and many partnering organizations for their contributions.

Cynthia C. Kelly

Cynthia C. Kelly
List of Recent Contributors

$250,000 and up
M.J. Murdock Charitable Trust

$50,000 and up
Crystal Trust
National Nuclear Security Administration
Bechtel Jacobs Company

$25,000 and up
Los Alamos County
Los Alamos National Bank
Dorothy and Clay Perkins
Department of Energy

$2,000 and up
K-25 Credit Union
U.S. Enrichment Corporation
Washington Group, Inc.
Bechtel National

Atomic Heritage Foundation to Continue the Mission of MPHPA

On September 25, 2005, Mr. Michael Vickio, President and Executive Director of the Manhattan Project Heritage Preservation Association (MPHPA), passed away after a brief bout with cancer. A tireless worker in the cause of preserving the legacy of the Manhattan Project, he almost single-handedly ran MPHPA, developing an extensive website. The son of two Manhattan Project veterans, Michael was devoted to preserving the history of the Manhattan Project.

In order to continue this important work, the MPHPA Board approached the Atomic Heritage Foundation (AHF). In March 2006, we entered a formal agreement. However, because of some legal and other issues, the transition has not been as smooth as anticipated. The MPHPA Board and the Atomic Heritage Foundation are attempting to reconstruct the MPHPA membership database and its veteran's listings. An updated version of the website, merged with the AHF website, should be launched in September 2006.

We encourage former members of the MPHPA to continue their memberships with AHF. If you were a member of the MPHPA or Children of the Manhattan Project, please e-mail your contact information to ahf@atomicheritage.org or write us at 910 17th St. NW, Suite 408, Washington, DC 20006. You may also register on our website at www.atomicheritage.org or call us at 202-293-0045.

With your help, we can continue to build upon the excellent foundation that Michael and the MPHPA established.
In January, AHF developed a plan for a national traveling exhibit on the Manhattan Project. Working closely with Access Museum Services in Brentwood, TN, the Atomic Heritage Foundation put together a proposal for funding for consideration by foundations and other potential donors.

The exhibition is organized into six areas that proceed in chronological order from the eve of World War II to the present. These areas are **Roosevelt’s Decision**, which presents the major political and scientific developments before World War II that precipitated President Franklin D. Roosevelt’s decision to proceed with the Manhattan Project; **Breaking New Ground**, which discusses the choice of locations for the Manhattan Project facilities; **Wartime Alliance**, on the unprecedented partnership among leading universities, industries, and the government which was critical to the Manhattan Project’s success; **Secrecy: A Community of Workers**, which describes the living and working conditions of the over 125,000 scientists, military personnel, and workers who lived in the “secret cities,” and **Manhattan Project Legacy**, which includes a discussion of Truman’s decision to drop the atomic bombs on Japan and the Cold War arms race.

The exhibit will examine the Manhattan Project’s complex legacy from multiple perspectives. Peaceful applications include atomic energy, nuclear medicine, materials science and high speed computing. More problematic are issues related to the proliferation of nuclear weapons and disposal of nuclear waste.

Over fifteen museums nationwide have expressed interest in hosting the exhibit, which will be shown for three to six months at a time and will travel around the country over a period of five years.
Enshrouded in secrecy, scientists worked on the world’s first atomic bombs at Los Alamos, New Mexico as part of the top-secret Manhattan Project. Known as Site Y, the laboratory had taken over the Los Alamos Boys Ranch School in early 1943. However, in the summer of 1944, prospects for the Manhattan Project’s success were bleak. There were insufficient amounts of enriched uranium and plutonium, serious problems with the plutonium bomb design, and time was running out.

To address the bomb design problems, the laboratory reorganized and recruited engineers, physicists, mathematicians and explosives experts to work on an experimental implosion bomb. Over one thousand men came from the Army Corps of Engineers’ newly formed Special Engineer Detachment or SED.

The new implosion bomb used high explosive lenses to create a supersonic shock wave to crush a plutonium core. At the “V Site,” scientists assembled the high explosive lenses for the Trinity device, or “Gadget.” The “V-Site” was a secret site surrounded by “no peek” fences. Only those assigned to work there were allowed inside. Earthen mounds were constructed to contain possible explosions.

Of the hundreds of buildings hastily constructed between 1943 and 1945, just over 50 concrete and temporary wooden structures remain. Most of these buildings were abandoned after the war and left standing under ponderosa pines in remote areas of the Lab. In the 1990s, they were slated for...
demolition.

In 1999, the Save America's Treasures program awarded a $700,000 matching grant to preserve some of the Manhattan Project properties at Los Alamos. Unfortunately, the Cerro Grande fire of May 2000 swept through the “V Site,” leaving the asbestos-shingled High Bay Building unscathed but reducing the other properties to concrete slabs and charred remains.

Together with the Los Alamos Historical Society, Los Alamos County and other partners, the Atomic Heritage Foundation has organized three days of events in October 2006 to commemorate the restoration of the V-Site. Beginning on Thursday, October 5, a reunion and reception will be held for Manhattan Project veterans and their families. Throughout the day on Friday, guided bus tours will provide visitors insight into the Manhattan Project and life at Los Alamos during World War II.

Visitors will also have a chance to tour J. Robert Oppenheimer’s house, explore the Bradbury Science Museum and Los Alamos Historical Society Museum, meet award-winning authors at a book signing, and attend the dedication ceremony of the V-Site with the New Mexico Congressional delegation and other leaders. Friday evening will be a special reception and gala dinner at the historic Fuller Lodge, once the social center for the Manhattan Project.

On Saturday, October 7, there will be a day-long symposium, “Legacy of the Manhattan Project: Creativity in Science and the Arts.” Pulitzer-Prize winning author Richard Rhodes, opera composer John Adams, documentary film producer Jon Else, novelist Joseph Kanon, and many other leading historians, scientists, and veterans of the Manhattan Project will engage audiences in how the Manhattan Project has inspired creativity in science and the arts.

Proceeds from the events will go towards the preservation of the Manhattan Project history and properties at Los Alamos.

Fuller Lodge was once the center of social life in Los Alamos.

Invitees Include: Richard Rhodes, Michael Anastasio, Joseph Kanon, Jon Else, John Adams, Tom Hunter.
“K-25: A Monumental Achievement”

Events in Oak Ridge, TN

Events on June 15 and 16, 2006 presented by the Atomic Heritage Foundation and the Oak Ridge Heritage & Preservation Association focused on the history and preservation of the K-25 gaseous diffusion plant. The K-25 site, a “Signature Facility” of the Manhattan Project, was built during World War II to produce enriched uranium for the atomic bomb. The mission and existence of K-25 plant and the other Manhattan Project operations at Oak Ridge were kept top-secret during the war, a fact that is commemorated annually during Oak Ridge’s “Secret City” Festival.

The theme of the events, “K-25: A Monumental Achievement,” recognized the incredible speed and success with which the K-25 plant achieved its mission and helped to end the war.

On Thursday afternoon, Manhattan Project veterans and their families enjoyed a reunion at Oak Ridge’s DoubleTree Hotel. Sponsored by the K-25 Federal Credit Union, the session was dedicated to the memory of Michael Vickio, founder of the Manhattan Project Heritage and Preservation Association (see page 4). Reunion attendees had an opportunity to speak about their experiences at Oak Ridge and met with other Manhattan Project veterans.

Friday morning bus tours offered a unique glimpse into the history of the K-25 site. The buses also passed by the site of the “lost city” of Happy Valley, a community built for over ten thousand K-25 construction workers and their families. The outstanding tour guides who shared their knowledge and experiences included Jo Ellen Iacovino and Sheila Rowan, former Happy Valley residents; Rick Howard, project manager for Bechtel Jacobs on the K-25 / K-27 project; and Manhattan Project veteran Bill Wilcox and D. Ray Smith, members of the Oak Ridge Heritage Preservation Association.

The tours and main program of the “K-25: A Monumental Achievement” were sponsored by Bechtel Jacobs. The program was held on Friday afternoon at the...

Prior to the events, members of the Atomic Heritage Foundation, the Oak Ridge Heritage Preservation Association, Bechtel Jacobs Company and several other organizations discussed alternative approaches to preserving K-25 and its history. Kem Hinton of Tuck Hinton Architects presented five possible strategies for the North End building and footprint of the K-25 site. Each plan includes an interpretive center with interactive exhibits that will help visitors understand what the K-25 process entailed, its role in history and legacy for today. Other possible components include history markers along a walkway in the courtyard, mile-long mural walls, and commemorative plaques.

Members of the organizations involved in the preservation of K-25 will continue to evaluate the merits of each potential plan during the coming months with the goal of choosing an approach that will provide the most authentic and memorable experience for future visitors to K-25.

On Saturday, the Atomic Heritage Foundation continued its efforts to capture oral histories. The filming of several notable Manhattan Project veterans was sponsored by the U.S. Enrichment Corporation.

### K-25 Preservation Continues

The Atomic Heritage Foundation has worked throughout the year to develop concrete plans for the preservation of the K-25 site in Oak Ridge. Together with the Oak Ridge Heritage and Preservation Association and others, AHF joined the Partnership for K-25 Preservation (PKP) to lead the movement for the preservation of K-25.

Congress appropriated $500,000 in FY 2006 for the preservation and interpretation of Manhattan Project facilities at Oak Ridge, and the PKP has worked with the City of Oak Ridge to develop a plan to use these funds. As a result, $340,000 will go toward revitalizing the K-25 overlook, developing plans and models for the future of the K-25 site itself, and creating a K-25 registry, in which the contributions of six decades of workers will be recorded.

In a Memorandum of Agreement signed in March 2004, the U.S. Department of Energy (DOE) committed to preserving the North End of the “U”-shaped K-25 building. However, each of the half-mile-long “legs” of the building will be demolished. The DOE agreement includes provisions for future visual markers to represent the original height and span of the building.
In December 2005, the Atomic Heritage Foundation received a grant for up to $350,000 from the M. J. Murdock Charitable Trust to be used for the development of exhibits on the B Reactor, a documentary film and educational materials on the history of the Hanford site and its role in the top-secret Manhattan Project. The exhibits at the B Reactor will be developed under the direction of the Atomic Heritage Foundation in collaboration with the B Reactor Museum Association, the Hanford Reach National Monument Heritage and Visitor Center, Columbia River Exposition on History, Science and Technology, and other partners. The goal is to provide the public insight into the construction and operation of the B Reactor and its significant role in the Manhattan Project.

Located twenty-five miles from downtown Richland on the Hanford Reservation, the B Reactor has been open to the public by arrangement since the mid-1970s.

In the past, a number of Manhattan Project veterans served as informative guides. With the number of veterans available to give tours decreasing, the new exhibits will create a series of vignettes or short video presentations in which Manhattan Project veterans and other experts explain different aspects of the reactor. In addition, engaging panels and audio recordings will enhance the visitor's understanding of the facility and its history.

The world’s first plutonium production reactor, the B Reactor has been designated a “Signature Facility of the Manhattan Project” by the Department of Energy. Operating until 1968, the B Reactor produced the plutonium for the first atomic test at Alamogordo, NM, for the “Fat Man” bomb that was dropped on Nagasaki, as well as a significant portion of the plutonium in America’s nuclear arsenal.

The B Reactor museum work will be completed by 2008 to commemorate the 65th anniversary of the Manhattan Project at Hanford.
The Atomic Heritage Foundation is currently working on a biographical film entitled, “The Uncommon Man: Crawford H. Greenewalt.” For over sixty years, Greenewalt was a key figure in a remarkable revolution in American science and industry. During his life-long career with the DuPont Company, he built the foundation for DuPont’s success in global markets today.

As one of DuPont’s leading chemical engineers, Greenewalt became involved with the Manhattan Project during World War II. He directed operations at Hanford where he oversaw the design and construction of the B Reactor. During his tenure as President of DuPont (1948-1962), Greenewalt supervised construction and operation of the Savannah River Site nuclear processing plant, built by DuPont after receiving a personal request from President Harry Truman at the outset of the Cold War. In recognition of his contributions, DuPont awarded Greenewalt the company’s highest scientific and technical honor, the Lavoisier Medal, in 1991.

William Golden, advisor to President Harry Truman on the National Science Foundation and defense research, worked closely with Greenewalt. “I remember calling on Crawford Greenewalt in March 1951 to explore DuPont’s policies with respect to research and development,” he said. “I was very impressed.”

Richard E. Heckert, former CEO of DuPont, also discussed Greenewalt’s successes. “At the time, DuPont was one of the largest, most highly regarded corporations in the United States,” he recalls. “It was a real tribute to Crawford to have been appointed president at only forty-five years old.”

The film delineates Greenewalt’s extraordinary life and achievements. It includes insights from Greenewalt himself, as well as family members, former colleagues and historians. Additional interviewees include Irénée du Pont, Jr.; Judge Arlin Adams; Dr. Ruth Patrick; Nancy Greenewalt Frederick; and historians Robert Norris and Richard Rhodes.

“Greenewalt was a man of vision and courage, unafraid to tackle large, difficult tasks—an uncommon man in many respects.”
Richard E. Heckert, former CEO of DuPont.
The Atomic Heritage Foundation is producing a documentary film called “Atomic Restoration.” The film highlights six Manhattan Project properties that are the Los Alamos National Laboratory’s candidates for preservation: the “V Site;” “Little Boy” or Anchor Ranch site; Concrete Bowl; Quonset Hut where the “Fat Man” components were tested; Louis Slotin Accident Building; and the Pond Cabin.

In addition, the documentary will feature the wartime home of J. Robert Oppenheimer. These seven properties could be the core of a potential National Historic Park Site for the Manhattan Project at Los Alamos.

The documentary will feature Richard Rhodes, author of The Making of the Atomic Bomb, and include recordings of J. Robert Oppenheimer, Philip Morrison, and Hans Bethe. Los Alamos National Laboratory’s John Isaacson and Ellen McGehee as well as Los Alamos veterans Stirling Colgate, Gordon Knobeloch, and Dick Malenfant; John Rhoades, Director of the Bradbury Science Museum; Nancy Bartlit and Larry Campbell of the Los Alamos Historical Society; and Helene Suydam, long-time resident of the Oppenheimer home, all contributed to the film.

The documentary film was made possible by contributions from Dorothy and Clay Perkins and the Los Alamos Historical Society with support from the Los Alamos National Laboratory. The film will be premiered as part of the October 2006 events at Los Alamos, NM.
Atomic Heritage Foundation

Publications and Productions

All AHF products are available at www.atomicheritage.org, by calling 202-293-0045 or e-mailing info@atomicheritage.org.

Hanford’s Secret Wartime Mission
This documentary film tells the story of the Manhattan Project at Hanford, WA where the world’s first plutonium production facilities were built. The film highlights the determination, commitment and scientific ingenuity of those that worked on this project. DVD $19.95.

Race for Atomic Power
“Race for Atomic Power” is the title of a book and documentary film that complement the Foundation’s exhibits at the Museum of Idaho in Idaho Falls. The book and DVD chronicle the remarkable story of the development of peaceful nuclear energy under the Atomic Energy Commission at what is now the Idaho National Laboratory. Book: $9.95; DVD $19.95.

Remembering the Manhattan Project
This is a two-part book, the first of which is a collection of the papers presented at the Atomic Heritage Foundation’s Symposium on the Manhattan Project on April 27, 2002. The second half outlines the Atomic Heritage Foundation’s recommendations for the preservation of the remaining Manhattan Project properties. Book: $45.

Nuclear Pioneers
This documentary tells the history of the Experimental Breeder Reactor–I, the first nuclear reactor built by the Atomic Energy Commission at the National Reactor Testing Station in Idaho. With first-hand accounts, the film explains what went into creating the world’s first reactor to produce usable quantities of electricity and create more fuel than it consumed. VHS $14.95; DVD $19.95

Oppenheimer and the Manhattan Project
This book provides a spectrum of interpretations of J. Robert Oppenheimer’s life and scientific achievements. The talks compiled in this volume were given at the 2004 seminar “Oppenheimer and the Manhattan Project,” held in Los Alamos, NM. Contributors include Senator Jeff Bingaman, authors Richard Rhodes, Kai Bird and Robert S. Norris, and several distinguished friends and former colleagues of Oppenheimer. Hardcover $42; Paperback $18.
Cover Photograph: An artist’s sketch of the future of the K-25 site in Oak Ridge, TN with a restored entry portal in the foreground and the North End portion of the K-25 plant behind.

Credit: Access Museum Services, LLC of Brentwood, Tennessee.

Special Offer: Coffee mugs with this picture are available at www.atomicheritage.org.