SYNOPSIS

DEVELOPMENT AND DEPLOYMENT OF U.S. ATOMIC BOMB 1942-1945

Purpose

This exhibit helps to document the story of the development and subsequent deployment of the first atomic bombs, by the use of postal history and thematic elements.

Importance

The deployment of these atomic bombs brought a sudden and immediate end to World War Two and averted a land invasion of Japan planned for November 1945, with an estimate of up to one million Allied military casualties.

Evolution of exhibit

This exhibit is an extension of a power point presentation on the U.S. Atomic Bomb that this exhibitor gave at three National APS shows. However not owning my own "Hanford" cover, until then were only two known, an exhibit was not possible. However in 2018 a Hanford correspondence came on the market, and I was now able to add my own Hanford covers to my collection and develop it into a one frame exhibit. It was shown three times as one frame but information from additional research requires a second frame for a more complete story.

Rarity

Postal history material and original documents related to the research and delivery of the U.S. atomic bombs before 1946 is *very scarce and even rare* because the entire project was a major under-cover secret from its inception. Mail to and from Oak Ridge, Hanford and Los Alamos was heavily censored, which secrecy also extended to the monitoring of telephone calls, telegrams, and even to tracking personal leaves of scientists from work. All mail to and from these three entities used undercover (secret) postal box addresses. Except for the major scientists at Los Alamos, all other employees including those at Oak Ridge and Hanford, did not know the true purpose of their work until after the public disclosure following the Hiroshima bombing. Even the select crew members of the Enola Gay B-29 Hiroshima mission were not told by Flight Commander Colonel Paul Tibbets until the day of the mission to Japan that they were carrying an atomic bomb. *Consequently little was saved in the absence of knowledge of its historic significance* during the early development (research) years. As a result the *early covers and original documents from 1942-1945 remain very scarce and elusive*.

Philatelic Documentation

Over a dozen manufacturing and research companies and several Universities contributed to the early "development" of the bombs but this mail and correspondence has essentially been lost to history. Mail to and from *Oak Ridge and Hanford* is also very uncommon because the personnel involved had no knowledge of the significance of their work. Contemporary covers from the flight crews of B-29's "Enola Gay" and "Bockcar" are also uncommon.

Two exceptions are:

- (1) Los Alamos Covers (except for a couple uncommon P.O.boxes) are numerous and dozens are in both collector hands and also some dealer stocks from time to time
- (2) later dated autographed covers signed at 509th Composite Group reunions from the 1960's through 1990's are numerous, including many dozens signed by Colonel Paul Tibbets

SYNOPSIS (continued)

DEVELOPMENT AND DEPLOYMENT OF U.S. ATOMIC BOMB 1942-1945

Research sources (in addition to a collection of over 20 books, numerous periodicals, and two personal interviews with surviving participants)

National Archives, Washington D.C. Trinity Test, Alamogordo references;

USS Sutton ship Log, Portsmouth Naval Base

Harry S. Truman Library - Atomic Bomb Collection

Los Alamos National Laboratory Research Library; personal visit

Library of Congress: Historic Photo Collection

Norwegian National Archives.

National Museum of Nuclear Science, Albuquerque, N.M., personal visit

Development outside of the United States.

The fact that Germany and Japan had advanced nuclear production bordering on weapons grade atomic materials is mostly unknown and almost totally absent in the written history. Only recently have the facts become known when 126,000 barrels of radioactive uranium waste were discovered in East Germany in 2011. Also almost unknown is that Japan's nuclear scientists exploded a large nuclear test in North Korea only days before their surrender. (by mid 1944 both Axis countries had lost control of the skies, thus preventing bomb delivery by airplanes, but Japan had planned to outfit kamikaze planes with nuclear bombs, except they ran out of time.)

Addenda

German Submarine U-234** loaded with war materials initially bound for Japan and at sea when Germany surrendered - *delivered refined* <u>Uranium Oxide and Proximity Fuses</u> to the U.S. Navy on 16 May 1945- <u>limited philatelic items</u>, only collateral material shown but an important adjunct to the U.S. Atomic bomb story that is not well known.

The B-29 "BOCKSCAR"; of Nagasaki Mission; was Captain Frederick Bock's plane but was flown instead by commander Major Charles Sweeney. Captain Fred Bock piloted the GREAT ARTISTE, the B-29 carrying instruments flying alongside BOCKSCAR NOTE: Exhibitor JOE BOCK (Same Last Name but NO RELATIONSHIP

** German super sized submarine **"U-234"** and refined Uranium Oxide labelled **"U-235"** is an ironic nomenclature coincidence

Postal historian and well known philatelic writer Ken Lawrence covered this subject in his comprehensive four part article titled " *Postal history and postal historians of the atomic bomb*" in Linns, Sept. 2016- February 2017.

DEVELOPMENT AND DEPLOYMENT OF THE US. ATOMIC BOMB 1942-1945

Purpose

This exhibit tells the story of the development and delivery of the first three U.S. atomic bombs which resulted in the surrender of the Japanese Empire on 2 September 1945, effectively ending, WWII. The exhibit uses postal history and thematic elements.

Exhibit Outline

Frame One

Introduction Einstein's warning
Research Manhattan Project
Development Uranium Supply

Oak Ridge Engineer Works Hanford Engineer Works Los Alamos, New Mexico

Other Develop. Germany and Japan

Frame Two

Testing Alamogordo, New Mexico

(first atomic bomb)

Training Wendover, Utah

Cuba vicinity

Tinian, Mariana Islands

Deployment "Enola Gay", Hiroshima, Japan

(B-29, second atomic bomb)

"Bock's Car", Nagasaki, Japan

(B-29, third atomic bomb

Aftermath Japanese formal surrender



Nagasaki Atomic bomb 9 August 1945 (Library of Congress photo A59450)

Importance

The deployment of these atomic bombs effectively ended WWII, and averted a planned land invasion of Japan by Nov. 1945, with an estimate of a million or more Allied military casualties.

Significant Items are highlighted in maroon

Earliest recorded Oak Ridge Engineer Works cover
US.S. Indianapolis cover dated within 4 months of bomb delivery and sinking afterwards
Wendover, Utah cover from a Nagasaki mission (Bockscar) crew member 509th
Composite Group member cover from training near Cuba
Hiroshima Mission (Enola Gay) cover from crew member
Nagasaki Mission (Bockscar) cover from crew member