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The Traveler's Guide to Nuclear Weapons, A Journey Through America's Cold War Battlefields, by James M. Maroncelli and Timothy L. Karpin, 2002, 515 pp. (CD-ROM Book), \$29.95, Historical Odysseys Publishers, 2916 NW Bucklin Hill Road, #253, Silverdale, WA 98383-8514; Available at <http://www.AtomicTraveler.com>; ISBN 0-9725051-0-5.

THIS BOOK is a fascinating historical presentation about the United States' nuclear weapons program. Anyone who enjoys reading about the development of the atomic bomb will enjoy it immensely. The compilation covers only a small fraction of the thousands of factories, laboratories, universities, and offices scattered across the country that contributed to the greatest scientific and technical adventure of World War II and the Cold War era. It focuses on those places where the United States conducted fundamental research and design for the atomic bombs, obtained and refined the raw materials, fabricated special equipment used for bomb production, manufactured and assembled bombs, and tested the final product. It is also about the people whose tireless efforts, intellect, and ingenuity made it all happen. Reading this book, one readily sees the enormity of the effort to build the atomic bomb in so short a time.

There are 511 pages of text, 180 historical photographs, and 200 maps and diagrams. Unique to this publication is a section at the end of each of the some 160 facility descriptions, titled "How do I get there?" Here the traveler finds specific directions to that site. Therein lies the reason for the title, *The Traveler's Guide to Nuclear Weapons* (emphasis added). The authors explain that their purpose in including this part was to provide the reader with road maps and directions to some of America's most historical pivotal landmarks of our nuclear history and to encourage them to pay a visit to them. The authors visited many of these sites themselves providing their own anecdotal remarks about them. I found this part to be a refreshing, interesting, and informative approach to book writing. With a traveler's guide the authors provided sufficient historical and technical detail so that the readers could appreciate the significance of the contributions of the workers at each site and how they fit into the overall nuclear weapons complex.

This book is divided into nine chapters. The first chapter provides an excellent overview of the nuclear weapons complex and a brief history of nuclear weapons and their designs. I found that this chapter quite adequately set the stage for the chapters that follow and the timeline to be useful reference. Chapter 2 addresses Einstein's letter to President Roosevelt and the decision to develop the atomic bomb before Germany. It also speaks to the formation of the Manhattan Engineer District Headquarters in Manhattan, NY, and assigning the command to General Leslie Groves in late 1942. Chapter 3 identifies and describes the efforts of 28 companies and facilities that were given the responsibility to mine and mill uranium and thorium and the role each played in that effort. Chapter 4 tells how the United States Government enlisted several independent research laboratories to develop chemical processing methods for transforming tons of uranium and thorium ore into pure metals for reactor fuels and into feed materials for its isotope separation plants. The authors review the operations and responsibilities of some 11 facilities that carried out the various refinement processes. Chapter 5 addresses the enrichment of uranium, hydrogen and lithium. Hundreds of scientists and engineers in private, university and government laboratories worked on and solved the problems of ensuring the necessary isotopic purity of these materials. Chapter 6 identifies the 38 facilities that fabricated the uranium reactor fuel, targets and control elements for the plutonium production reactors in Tennessee, South Carolina, and Washington. Chapter 7 tells the story about operating the giant plutonium production reactors in Tennessee, South Carolina, and Washington and separating the plutonium. The authors identified 10 facilities that were involved in that effort. Chapter 8 is all about the designing, manufacturing and refurbishing the weapons and includes a discussion of each of some 24 activities involved including, of course, the national laboratories at Los Alamos, NM; Livermore, CA; and Albuquerque, NM. Finally chapter 9 is about testing of nuclear weapons in New Mexico (Trinity), Nevada, and the Pacific Ocean. Included in this chapter are also those tests that were conducted under the Plowshare program that studied ways to harness the power of nuclear explosions for constructive purposes.

In my view this CD-ROM book is an indispensable traveler's guide to the nuclear weapons complex not only for the traveler but for the professional historian as well. As a Manhattan Engineer District history buff, I have about 150 books in my library on this subject. *The Traveler's Guide to Nuclear Weapons* is an excellent addition to my collection. I highly recommend it.

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