
Part VI:

The Manhattan District in Peacetime

From the time S-1 became public knowledge until the Atomic Energy Commission succeeded it on January 1, 1947, the Manhattan Engineer District controlled the nation's nuclear program. Groves remained in command, intent upon protecting America's lead in nuclear weapons by completing and consolidating the organization he had presided over for three years in challenging wartime conditions. He soon found that peacetime held its own challenges.

According to a plan approved by Stimson and Marshall in late August 1945, Groves shut down the thermal diffusion plant in the K-25 area on September 9 and put the Alpha tracks at Y-12 on standby during September as well. The improved K-25 gaseous diffusion plant now provided feed directly to the Beta units. Hanford's three piles continued in operation, but one of the two chemical separation areas was closed. Los Alamos was assigned the task of producing a stockpile of atomic weapons. Actual weapon assembly was to be done at Sandia Base in Albuquerque, where engineering and technical personnel were relocated with the staff previously stationed at Wendover Field in western Utah.

Operation Crossroads

In July 1946, during Operation Crossroads, the Manhattan Project tested its third and fourth plutonium bombs (Trinity and Nagasaki were the

first two) with a large, invited audience of journalists, scientists, military officers, congressmen, and foreign observers at Bikini Atoll in the Pacific. Shot Able, dropped from a B-29 on July 1, sank three ships and performed as well as its two predecessors from a technical standpoint, though it failed to fulfill its pretest publicity buildup. Shot Baker was detonated from ninety feet underwater on the morning of July 15. Baker produced a spectacular display as it wreaked havoc on a seventy-four-vessel fleet of empty ships and spewed thousands of tons of water into the air. Both Able and Baker yielded explosions equivalent to 21,000 tons of TNT, though Baker introduced the most subtle hazard of the atomic age—radiation fallout.⁶² Able and Baker were the final weapon tests conducted by the Manhattan Project and the last American tests until the Atomic Energy Commission's Sandstone series began in spring 1948.

Superpower Chill

Between August 1945 and January 1947, while Groves fought to maintain the high priority of the atomic program in a peacetime environment, the euphoria that swept the United States at the end of World War II dissipated as Americans found themselves embroiled in a new global struggle, this time with the Soviet Union. The United States held a monopoly on atomic weapons during the sixteen months of Groves's peacetime tenure, but less than three years after the Atomic Energy Commission succeeded the Manhattan Engineer District, the Russians' secret atomic bomb program achieved success with the 1949 test of Joe I (which the Americans named after Joseph Stalin). During the 1950s relations between the two superpowers remained strained, and both added the hydrogen bomb to their arsenals in an attempt to achieve military superiority.

Postwar Planning

The beginning of the Cold War in the late 1940s was linked to the failure of the World War II allies to reach agreements on international controls respecting nuclear research and atomic weapons. Postwar planning in the United States began in earnest in July 1944, when Met Lab scientists in Chicago issued a "Prospectus on Nucleonics," which included plans for atomic research and advocated the creation of an international organization to prevent nuclear conflict. In August the Military Policy Committee