

AFNWC TODAY

Activated on March 31, 2006, the Air Force Nuclear Weapons Center (AFNWC), is headquartered at Kirtland Air Force Base, New Mexico. The Center is comprised of five mission execution directorates: the Nuclear Command, Control, and Communications (NC3) Integration Directorate, located at Hanscom AFB, MA; the Intercontinental Ballistic Missiles (ICBM) Systems Directorate located at Hill AFB, UT; and the Air Delivered Capabilities and Nuclear Technology and Integration Directorates, both located at Kirtland AFB, NM. The Center has over 2,000 personnel assigned to 18 locations across the United States and Europe.

HERITAGE

Kirtland AFB has a long history of involvement in weapons development and sustainment. The AFNWC draws its heritage from the Special Weapons Command, later the Air Force Special Weapons Center, assigned to Kirtland AFB.

On December 2, 1942, a group of scientists led by Enrico Fermi demonstrated the first self-sustaining nuclear chain reaction at the University of Chicago. In July 1945, the Manhattan Project team from Los Alamos conducted the Trinity Test, detonating the first atomic bomb in the desert of New Mexico, south of Alamogordo. A little less than a month later, the United States became the first and only nation to use a nuclear weapon in wartime, releasing a bomb called Little Boy on Hiroshima, Japan on August 6, 1945. Just three days later, the U.S. dropped a second bomb called Fat Man on Nagasaki, Japan, changing the course of war forever.

The United States continued to conduct research and design on nuclear weapons, and the testing and production of nuclear warheads accelerated. The Department of Defense recognized the need for a specialized organization to support and manage the testing of those weapons.

The Special Weapons Command, later redesignated the Air Force Special Weapons Center (AFSWC), was established on December 1, 1949 at Kirtland AFB to direct specialized organizations dealing with atomic and other unconventional

weapons. The Special Weapons Center concentrated on the technologies supporting

nuclear weapons development, testing, aircraft technologies, associated munitions, and the compatibility between them.

TESTING

During the 1950s and early 1960s, AFSWC personnel and aircraft participated in atmospheric nuclear tests in Nevada and the far Pacific. These included the first air drop of a U.S. thermonuclear weapon and the firing of the first air-to-air nuclear missile. In all, the Air Force Special Weapons Center was involved in over 300 atmospheric nuclear tests in the Pacific and the test range in Nevada.

Atmospheric testing ended in 1963 with the Atmospheric Test Ban Treaty, but the AFSWC continued support for underground testing and evaluation of nuclear weapons for the Department of Defense until its inactivation in 1976.

REORGANIZATION

In 1992, Strategic Air Command, responsible for all nuclear strike forces, inactivated and the assigned nuclear forces were dispersed between Air Combat Command and Air Force Space Command, while the acquisition and sustainment of Air Force nuclear weapons was spread among several organizations.

In March 2006, the Air Force established the Air Force Nuclear Weapons Center to bridge the gap that existed between nuclear acquisition and sustainment. The Center initially stood up with two assigned wings and one group with missions relating to the nuclear enterprise. As part of a major reorganization of Air Force Materiel Command in 2015, the organizational structure of the AFNWC evolved into four mission execution directorates with realigned responsibilities, authorities, and accountability to better serve the nuclear enterprise.

The four directorates mirrored the sustainment and acquisition priorities for ground based, air launched nuclear weapons, their nuclear surety, security, and threat assessment, and NC3 integration. In May 2020, the ICBM Systems Directorate split into two directorates to better focus on the currently-fielded Minuteman III ICBM and the developing Sentinel ICBM, the replacement for the MMIII. In August 2024, the two Directorates merged back into the ICBM Systems Directorate.

ACQUISITION AND SUSTAINMENT

When Air Force Global Strike Command (AFGSC) activated in August 2009, the two Air Force legs of the nuclear triad were reunited under a centralized command. The AFNWC is authorized a direct support relationship with AFGSC to ensure rapid and accurate communications with our primary customer. AFNWC is the only Center in AFMC authorized to engage in such direct communications with a MAJCOM other than AFMC. The responsibility for synchronizing all nuclear missions across AFMC in direct support of AFGSC is called Nuclear Materiel Management (NMM).

The Center is responsible for sustainment programs for legacy weapon systems that reach back to the 1960s. The B61 bomb first began production in 1966 and has undergone numerous modifications; the AGM-86 Air Launched Cruise Missile program began in 1974; and the Minuteman missile and associated launch facilities first deployed in 1962. While the current Minuteman III ICBM first deployed in 1970, the launch facilities and control centers remain the same facilities constructed in the 1960s, but with multiple sustainment and modernization programs to ensure continued credible capability. NC3 for nuclear forces comprised multiple separate and connected components, many in use since the 1970s.

While the Center managed the sustainment programs to maintain the viability of the legacy nuclear weapons systems, they also pushed ahead with critical acquisition programs to update and replace many of those weapons and their support infrastructure. This includes the Sentinel ICBM program, the Long Range Standoff (LRSO) nuclear cruise missile program, the B61-12 Tail Kit Assembly for the nuclear gravity bomb with the B-2 Spirit and other dual-capable aircraft, and the B61-13 nuclear gravity bomb.

ASSIGNMENTS

*Special Weapons Command (1949-1952)
Air Force Special Weapons Center (1952-1976)
Hq United States Air Force, 1 Dec 1949
Hq Air Research and Development Command, 1 Apr 1952 Hq
Air Force Systems Command, 1 Apr 1961-1 Apr 1976
Air Force Nuclear Weapons Center (2006-present)*

**Air Force Nuclear Weapons
Center Directorates**

ICBM Systems Directorate
Hill AFB, Utah



Air Delivered Capabilities Directorate
Kirtland AFB, New Mexico



Nuclear Technology and Integration Directorate
Kirtland AFB, New Mexico



Nuclear Command, Control, and
Communications (NC3) Integration Directorate
Hanscom AFB, Massachusetts



THE AIR FORCE NUCLEAR WEAPONS CENTER

A Brief History



OFFICE of HISTORY
HEADQUARTERS AIR FORCE NUCLEAR WEAPONS
CENTER
1551 WYOMING BLVD SE-BUILDING 20325

afnwc.ho2@us.af.mil

Current as of 9 February 2026

Background photos: Minuteman III ICBM in silo,
ca. 1989; Trinity Test mushroom cloud, July 16,
1945