



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

### BRIEF HISTORY OF THE AIR FORCE NUCLEAR WEAPONS CENTER

Activated on 31 March 2006, AFNWC is the Air Force Materiel Command (AFMC) center of excellence for Nuclear Materiel Management (NMM). The Center is charged with delivering nuclear capabilities Warfighters use every day to deter and assure. AFNWC is also responsible for synchronizing NMM across AFMC and the Air Force as well as with our interagency partners in the National Nuclear Security Administration (NNSA) of the Department of Energy. The Center is composed of elements at 17 locations to include Kirtland Air Force Base, New Mexico; Hill Air Force Base, Utah; Tinker Air Force Base, Oklahoma; Eglin Air Force Base, Florida; and Hanscom Air Force Base, Massachusetts.

Headquartered at Kirtland Air Force Base, New Mexico, the base has a long history of involvement in weapons development and sustainment. The Air Force Nuclear Weapons Center draws its heritage from the Special Weapons Command, later the Air Force Special Weapons Center, based at Kirtland Air Force Base from 1949 to 1976.

#### Special Weapons Command (1949-1952)



On 1 December 1949, in accordance with the order issued on November 22, 1949, Air Force leadership activated the Special Weapons Command, then the ninth major Air Force command, at Kirtland Air Force Base. Brigadier General Howard G. Bunker assumed command on activation. The organization was built around the Air Force agencies which had located at Kirtland Air Force Base following World War II to determine the employment of emerging weapon systems. Upon activation the Special Weapons Command was responsible for all United States Air Force participation in the Atomic Energy Program.



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

On 29 July 1947, the Commanding General of the Army Air Forces established the Air Force Tactical and Technical Liaison Committee at Kirtland Air Force Base, then under Air Materiel Command jurisdiction, as a field extension of the Atomic Energy Division, later Special Weapons Group, of the Air Staff. The Air Force Tactical and Technical Liaison Committee became the United States Air Force Field Office for Atomic Energy on July 1, 1948.

Throughout this period, the personnel of the office maintained scientific and technical liaison with members of the Armed Forces Special Weapons Project (predecessor to today's Defense Threat Reduction Agency) at adjacent Sandia Base, New Mexico, and the Atomic Energy Commission at Sandia and Los Alamos laboratories. With activation of the Special Weapons Command, the United States Air Force Field Office for Atomic Energy was discontinued and the personnel, including Brigadier General Bunker, formed the initial cadre of the Special Weapons Command.

### **Air Force Special Weapons Center (1952-1976)**



Indian Springs AFB 1950s

The Air Force redesignated Special Weapons Command as the Air Force Special Weapons Center on 1 April 1952, and was assigned to the newly activated Air Research and Development Command. During the 1950s, Air Force Special Weapons Center personnel and aircraft participated in atmospheric nuclear tests in Nevada and the far Pacific. On July 1, 1952, Indian Springs (today Creech) Air Force Base, Nevada, was transferred to the control of the Air Force Special Weapons Center.

By the mid-1950s, the Air Force had established a large scientific and technical presence at

Kirtland Air Force Base such as biophysicists who deliberately flew through nuclear clouds to determine radiation hazards and engineers who launched sounding rockets to study the effects of high- altitude explosions and physicists who studied the nature of the recently discovered Van Allen radiation belts around the Earth.



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

In 1958 Air Force Special Weapons Center scientists began to simulate the effects of explosions in order to strengthen missiles, missile sites, and aircraft against possible attack. The Air Force Weapons Laboratory at Kirtland Air Force Base was created from elements of the Special Weapons Center Research Directorate in 1963 and thus the Special Weapons Center gave up much of its research and development work. The Air Force Special Weapons Center continued however with its test and evaluation mission and as Kirtland's host organization.



Operation HARDTACK 1958



BANE BERRY Underground Test Dec 1970

The Air Force Special Weapons Center assumed management of Air Force Systems Command's test and evaluation facilities at Holloman Air Force Base, New Mexico, during the summer of 1970. One year later, on 1 July 1971, Kirtland Air Force Base merged with the Manzano and Sandia Bases to create the large military complex that is now Kirtland Air Force Base.

Because of growing budget restrictions, the Air Force Special Weapons Center was inactivated on April 1, 1976. The Center's weapons related missions transferred to the Air Force Weapons Laboratory. Kirtland host responsibilities transferred to the Air Force Contract Management Division which had relocated from Los Angeles, California, in 1972.



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

### Air Force Nuclear Weapons Center (2006-Present)

On 3 February 2006, Chief of Staff of the Air Force General T. Michael Mosley approved the establishment of the Air Force Nuclear Weapons Center. The new organization grew out of the basic mission of the Air Armament Center's Nuclear Weapons directorate to consolidate and unify nuclear weapons and related support systems sustainment, modernization, and acquisition support under a single organization. The action followed a recognition by Air Force leadership that focus on the nuclear mission had diminished and the Air Force nuclear enterprise was fragmented.



498 ARSW Loading Exercise Dec 2006

On 1 June 2009, AFNWC achieved initial operating capability and on 1 October 2009 they reached full operational capability. In April 2010, the 526 ICBMSG inactivated at Hill AFB and in its place the ICBM Systems Division stood up at the Utah base and would later be designated the ICBM Systems Directorate. Less than two years later the 498th Nuclear Systems Wing (formerly ARSW redesignated on 1 April 2009) inactivated at Kirtland, but the Air Force Nuclear Weapons Center stood up the Nuclear Capabilities Directorate to consolidate a wide range of nuclear

AFNWC initially activated on 1 March 2006 with two wings assigned related to the nuclear enterprise, the 377th Air Base Wing and the 498th Armament Systems Wing (ARSW), both located at Kirtland AFB, New Mexico. On 30 May 2008, the 526th Intercontinental Ballistic Missile Systems Group (ICBMSG), Hill AFB, Utah was reassigned to the center. With the activation of AFNWC the organization inherited the bulk of the Air Force inventory of non-deployed nuclear weapons through the 498 ARSW and numerous mature ICBM sustainment programs through the 526 ICBMSG.



First Standard PDM Completion Apr 17



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

sustainment and analysis functions including nuclear certification. As the organizational structure of AFNWC changed its responsibilities within nuclear sustainment, modernization, and acquisition broadened. The nuclear enterprise experienced a slow increase during the period for modernization of the force while complying with the New START Treaty.

As sustainment and modernization of the nuclear enterprise expanded the role and mission of the Air Force Nuclear Weapons Center expanded with increased support for several major programs



Loading F-15E B61 Test Aug 2017

as well as ongoing sustainment programs. Some of those projects included the B61-12 Life Extension Program (LEP) to refurbish, reuse, or replace all of the bomb's nuclear and non-nuclear components to extend the service life of the B61 by at least 20 years. The Long-Range Stand-off modernization of the Air Launched Cruise Missile (ALCM) conceived a new weapon capable of penetrating and surviving advanced air defense systems from significant stand-off range to strike

strategic targets in support of the Air Force global attack core function. The Ground Based Strategic Deterrent (GBSD) replacement program focused on designing, developing, producing, and deploying a replacement for the current Minuteman III weapon system. GBSD promised to deliver a low technical risk, affordable total system replacement of Minuteman III (MM III) to meet ICBM operational requirements thru 2075

In 2015, the Air Force Nuclear Weapons Center reorganized its structure, realigning responsibilities, authorities, and accountability to better serve the Nuclear Enterprise. The center organized into three execution directorates, one for ICBM systems, one for air-delivered systems, and a third focused on nuclear technology and interagency engagement. The two new directorates were the Air Delivered Capabilities Directorate and the Nuclear Technology and Interagency Directorate responsible for providing intelligence support to AFNWC, analyzing the full spectrum of weapons effects to support acquisition programs and inform tactics and procedures, and assessing current and future nuclear systems to identify and mitigate potential vulnerabilities. The existing ICBM Systems Directorate established a Ground Based Strategic Deterrent Division, ensuring seamless evolution from MM III sustainment activities to the future Ground-Based Strategic Deterrent System.



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

On 1 October 2015, under Headquarters United States Air Force Program Action Directive (PAD) 14-06, AFNWC relinquished command authority over the 377th Air Base Wing (377 ABW) along with its host responsibilities at Kirtland Air Force Base transferring the wing's assignment to the Twentieth Air Force of Air Force Global Strike Command (AFGSC). Under this same PAD, the AFNWC Commander was also dual-hatted as the Air Force Program Executive Officer for Strategic Systems (AFPEO/SS), effectively consolidating responsibility for strategic system acquisition and sustainment under a single General Officer. This PAD also transferred elements of the AFNWC Logistics Directorate (AFNWC/LG) to both AFGSC and United States Air Forces in Europe (USAFE). . In 2016, under the direction of PAD 16-01, the center added a fourth



Maj Gen Jack Weinstein, 20 AF/CC, Maj Gen Sandra Finan, AFNWC/CC, 377 ABW Transfer



Strategic Automated Command Control System, Offutt AFB, NE

Global Strike Command on the NC3 Weapon System's technical architecture to inform decisions regarding investment and modernization. They also accepted responsibility for the weapon system's configuration management, system test, system verification, and system certification. Its director was dual-hatted as the Air Force Program Executive Officer for NC3. As the AFPEO/NC3, they were assigned responsibility for a portfolio of programs associated with the NC3 weapon system.

The AFNWC continues to mature in its role as the Air Force and AFMC Nuclear Materiel Manager in direct support of AFGSC and in fulfilling its vision of "Ensuring our Nation's most powerful weapons systems are never doubted, always feared."

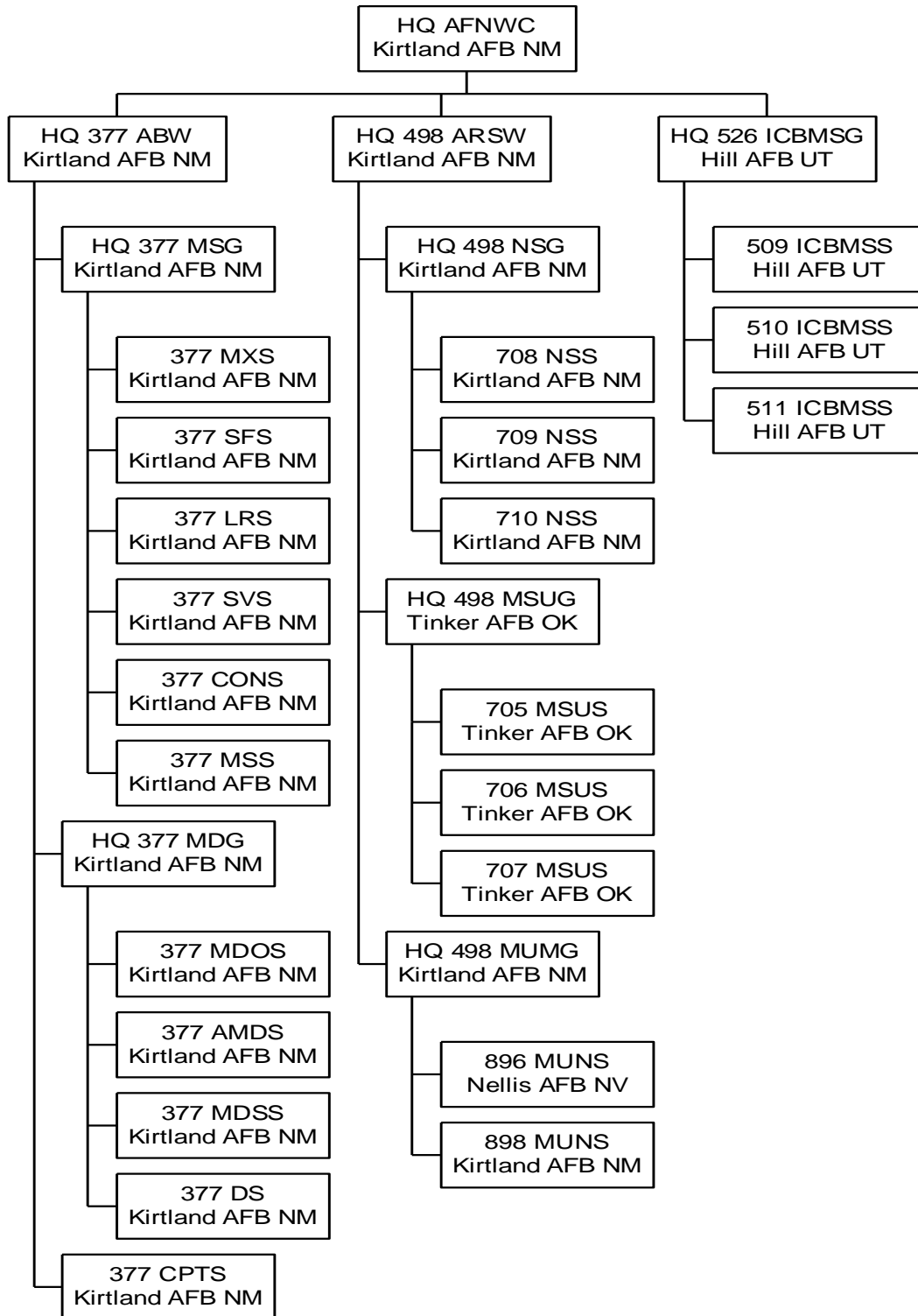
directorate with the activation of the Nuclear Command, Control and Communication (NC3) Integration Directorate located primarily at Hanscom AFB, Massachusetts, and Kirtland AFB. This directorate was also dual-hatted as the AFPEO/NC3 by that same PAD. The new directorate attained initial operational capability in December 2016. The directorate is charged with responsibility for integrating the NC3 Weapon System across the Air Force. The directorate advised the commander of Air Force



# AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

## Air Force Nuclear Weapons Center Organization

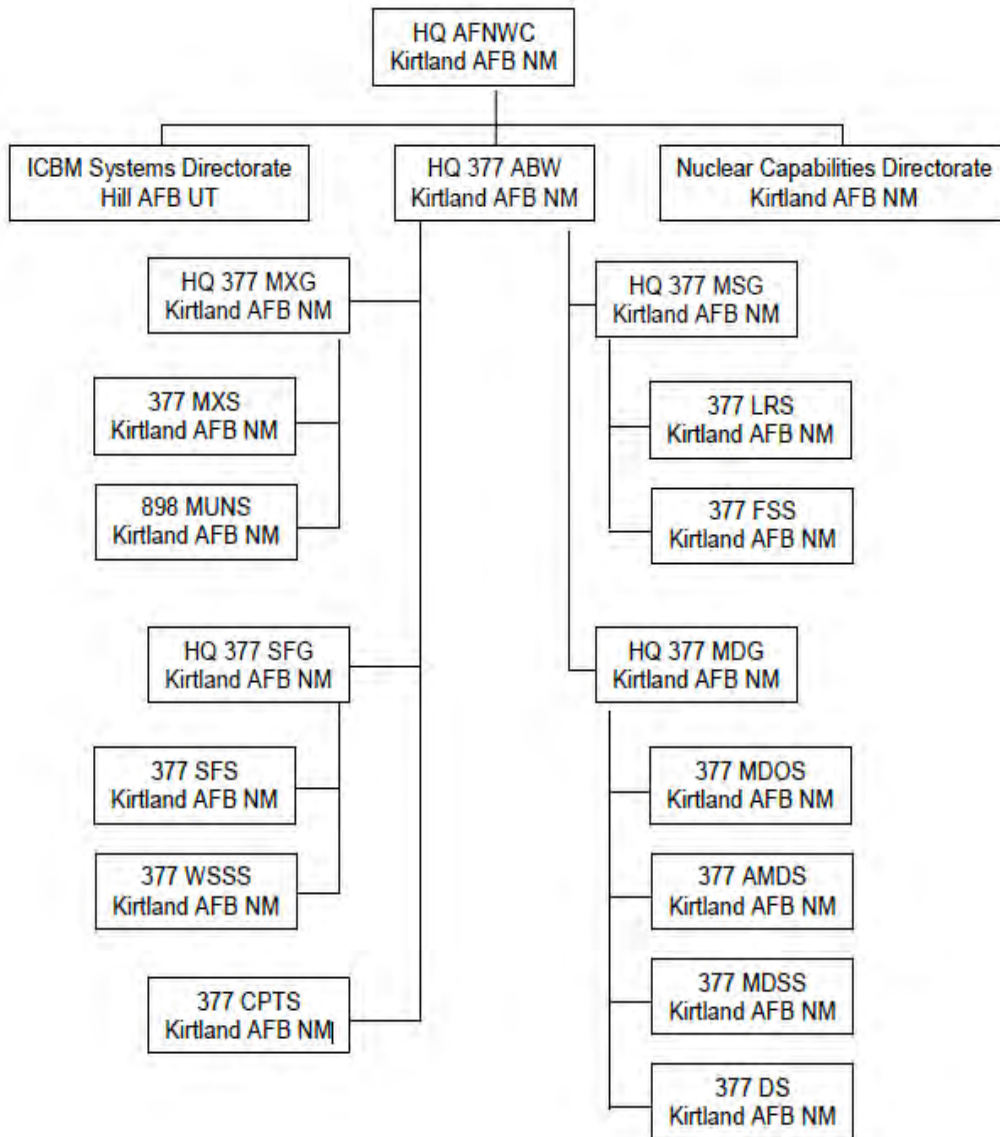
AFNWC Organizational Structure Sep 2008





# AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

## AFNWC Organizational Structure Sep 2012

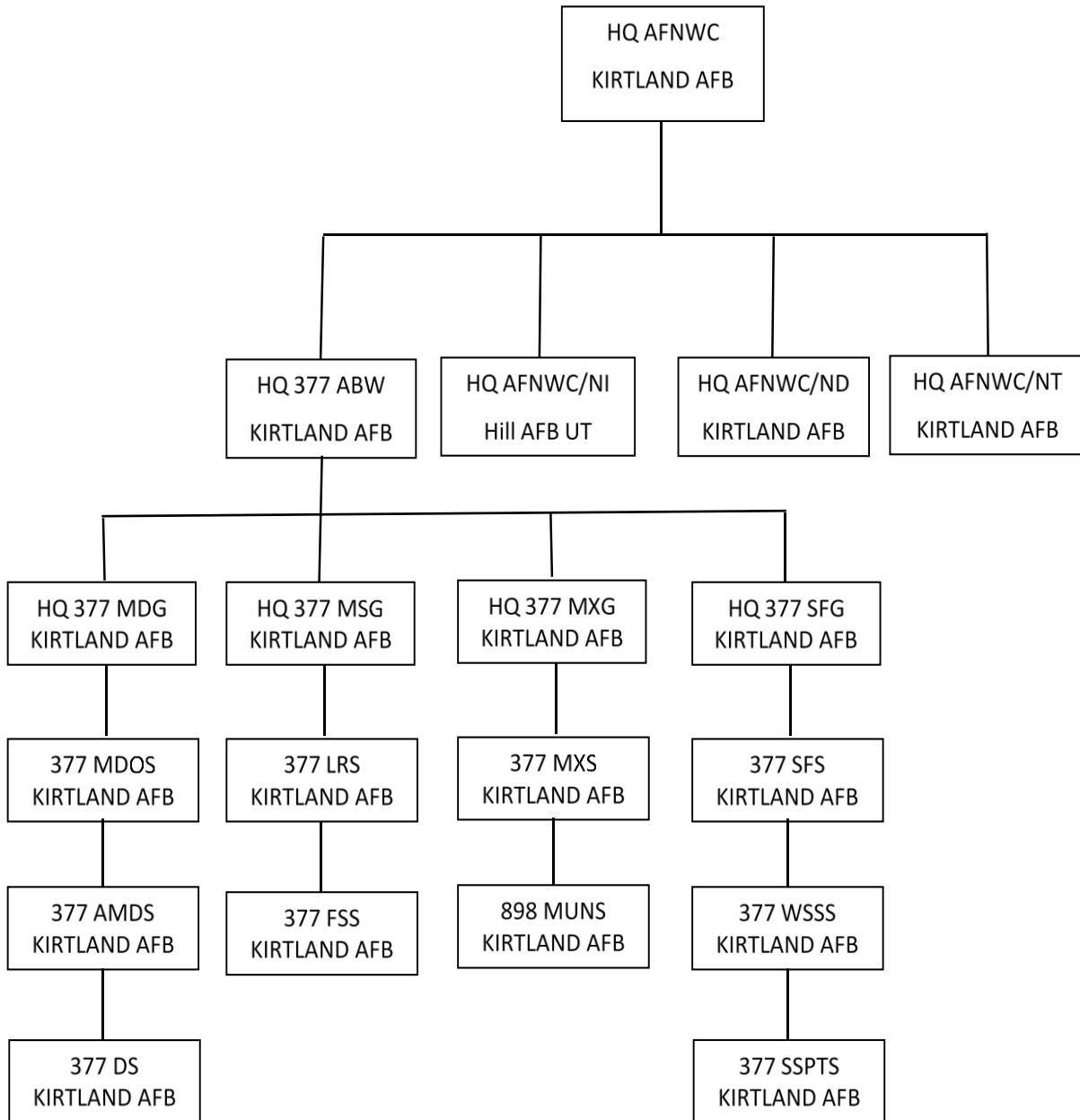






# AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

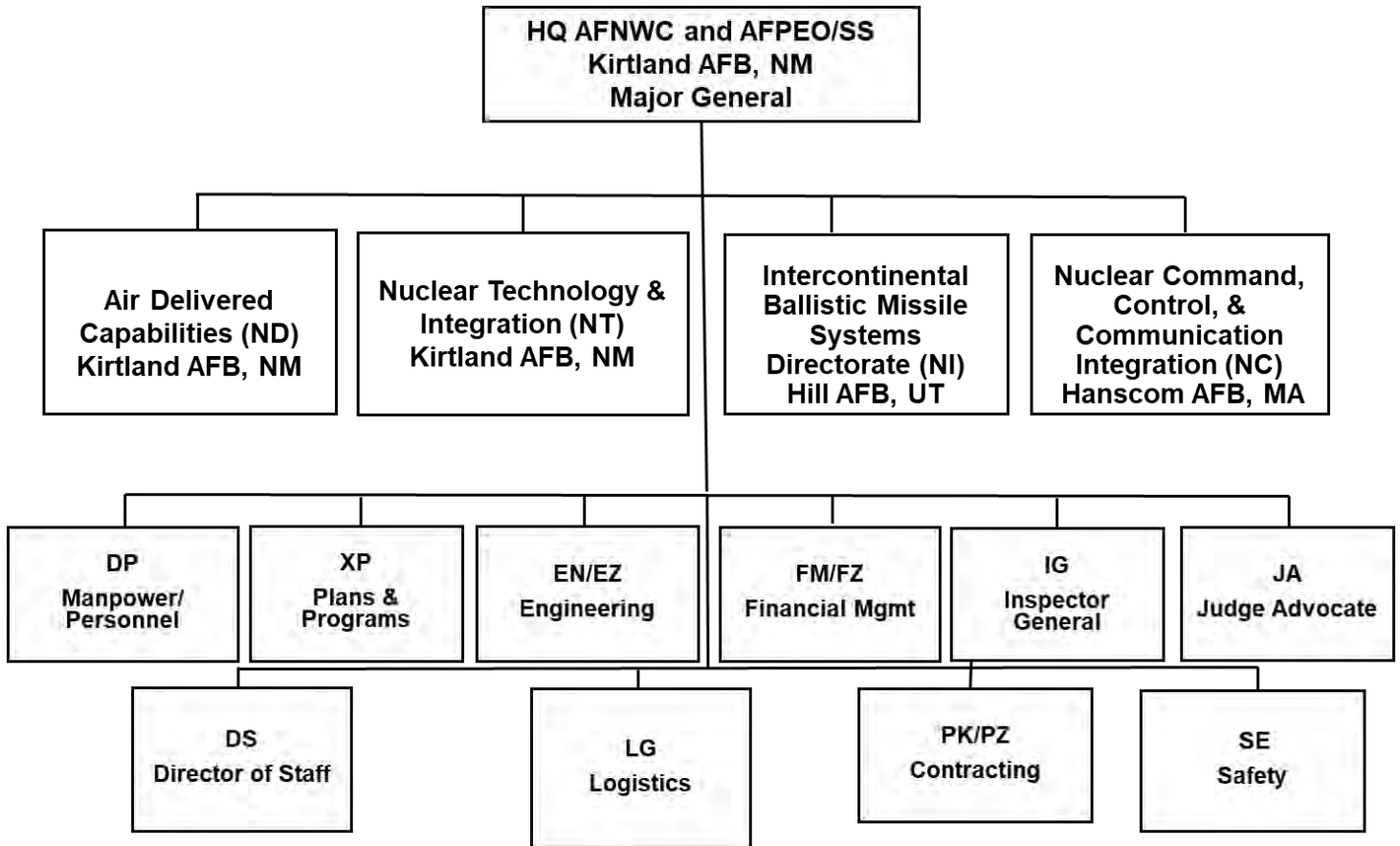
## AFNWC Organizational Structure Sep 2015





# AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

## AFNWC Organizational Structure Sep 2018





## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

### COMMANDERS

#### **Special Weapons Command, Air Force Special Weapons Center**

Major General Howard G. Bunker, 1 December 1949  
Major General John S. Mills, 10 October 1950  
Major General William M. Canterbury, 25 June 1954  
Major General Charles M. McCorkle, 27 July 1959  
Major General John W. White, 2 July 1962  
Colonel Ralph S. Garman, 1 March 1966  
Major General David V. Miller, 1 July 1967  
Colonel James E. Paschall, 23 July 1969  
Colonel Algernon G. Swan, 24 July 1970  
Lieutenant General Thomas W. Morgan, 17 November 1972  
Major General Maurice R. Reilly, 29 August 1975 – 1 April 1976 (AFSWC Inactivated)

#### **Air Force Nuclear Weapons Center**

Colonel Gregory W. Foraker, 31 March 2006  
Colonel Terrence A. Feehan, 7 July 2006  
Brigadier General Everett H. Thomas, 17 April 2008  
Major General Garrett Harencak, 20 January 2011  
Major General Sandra E. Finan, 7 February 2013  
Major General Scott W. Janssen, 1 October 2015  
Major General Shaun Q. Morris, 6 October 2017 – 5 October 2017  
**Major General Shaun Q. Morris, 6 October 2017 – Present**

### ASSIGNMENTS

#### **Special Weapons Command, Air Force Special Weapons Center**

Headquarters United States Air Force, 1 December 1949  
Headquarters Air Research and Development Command, 1 April 1952  
Headquarters Air Force Systems Command, 1 April 1961 – 1 April 1976 (AFSWC Inactivated)

#### **Air Force Nuclear Weapons Center**

Headquarters Air Force Materiel Command, 31 March 2006

### COMPONENTS

#### **Air Force Nuclear Weapons Center**

526th ICBM System Group, 30 May 2008 - 30 Jun 2010  
498th Nuclear Systems Wing, 31 Mar 2006 - 27 Jan 2012  
377th Air Base Wing, 31 Mar 2006 – 1 Oct 2015

### AWARDS

#### **Air Force Nuclear Weapons Center**

Air Force Organizational Excellence Award for periods 1 Jan 2009 to 31 Dec 2010, 1 Jan 2011 to 31 Dec 2012, 1 Jan 2013 to 31 Dec 2014, 1 Jan 2015 to 31 Dec 2015, 1 Jan 2016 to 31 Dec 2016



## AIR FORCE NUCLEAR WEAPONS CENTER HISTORY

### Emblem



### BLAZON

Sable, a globe Azure, edged and grid lined Argent, charged with a nuclear device palewise point to chief Gules, fimbriated of the third, and encircled by three electrons and their orbits in an atomic pattern; all within a diminished bordure Or. Motto: NEVER DOUBTED, ALWAYS FEARED

### SIGNIFICANCE

Ultramarine blue and Air Force yellow are the Air Force colors. Blue represents the sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The earth represents the Area of Responsibility (AOR) assigned to the Air Force Nuclear Weapons Center (AFNWC). Both in a strategic and tactical sense, the AFNWC has a significant role in maintaining a viable nuclear deterrent force structure during times of peace and an overwhelming destructive forces in times of nuclear conflict. The AOR is not bound by any one border but extends to anywhere on earth as requirements dictate. The electrons circling the nucleus (represented by earth) represent the basic structure of the atom that is instrumental to the nuclear detonation. The nuclear device represents the numerous nuclear weapons systems that fall under the responsibility of the AFNWC. The AFNWC responsibilities span the total scope of a system's life – from concept to acquisition to sustainment to retirement. "Nuclear Weapons System" includes the nuclear weapon, delivery system (aircraft, cruise missile, ICBM, etc) and support equipment.

Approved on 9 May 2006. Motto Approved on 12 April 2016.