



FACT SHEET



50TH ANNIVERSARY OF SPACE AND MISSILES

AIR FORCE SPACE COMMAND PUBLIC AFFAIRS

50 Years of Air Force Space & Missiles

Just as 2003 marked the 100th anniversary of powered flight, 2004 marks 50 years of Air Force Space & Missiles. Air Force spacepower leadership over these five decades was critical to winning the Cold War, to enabling global and theater military operations and was vital to assuring U.S. security and well being in the 21st century.

Early Beginnings – the 1950s

During the 1950s, a U.S. Air Force team of scientists, engineers, contractors, government officials and airmen developed missile and satellite systems that led the nation into outer space, made possible arms control agreements with the Soviet Union and helped win the Cold War. The development of a dedicated Air Force space and missile program in 1954 remains an impressive achievement. On March 1, 1954, visionary RAND Report R-262 recommended the Air Force develop a surveillance satellite program which proposed an electro-optical reconnaissance satellite with a television-type imaging system. The report encouraged the Air Force to foster competition among industry to develop a high-resolution system based on long focal length, panoramic camera technology.

As U.S. leaders' Cold War concerns grew about the reported Soviet lead in ballistic missile development, the deliberations of another panel also grew the fledgling missile program. It was the recommendation of the Strategic Missile Evaluation Committee, nick-named the "Teapot Committee," that the ballistic missile program should be accelerated. The committee focused its efforts on the feasibility of developing major subsystems for the Atlas missile—propulsion, guidance, airframe and warhead. These developments also meant that sufficient launch capability would be available for satellites.

The July 1, 1954 establishment of the Western Development Division (WDD) in a converted schoolhouse in Inglewood Calif. was a beacon of triumph for American ingenuity and prescient leadership. WDD was led by space pioneer Brigadier General Bernard Schriever and a handful of like-minded visionaries. From that division came the Thor, Atlas and Titan rockets, a long-range missile fleet and the first successful satellite programs. It was also the birthplace for U.S. communications, weather and navigation spacecraft as well as the first missile detection program—Missile Detection Alarm System or MIDAS.

Over the next 40 years, these remarkable, albeit fledgling efforts led to space-based reconnaissance, mapping, communications, and the targeting systems used by American warfighters during Operation DESERT STORM, Operation ALLIED FORCE, Operation ENDURING FREEDOM, Operation IRAQI FREEDOM and others. Today, space operations offer unprecedented speed, range, and flexibility in support of global and theater joint operations 24 hours a day from peace through crisis to war.

Air Force Space & Missile Operations Today

Air Force Space Command, created Sept. 1, 1982, is headquartered at Peterson Air Force Base, Colo. AFSPC defends America through its space and ICBM operations—vital force elements in projecting global reach and global power. Spacelift operations at east (Patrick) and west (Vandenberg) coast launch bases provide services, facilities and range-safety control for DoD, NASA and commercial launches. Satellites, and satellite operators, provide essential in-theater secure communications, weather and navigational data for ground, air and fleet operations and missile threat warning. Ground-based radar and Defense Support Program satellites monitor ballistic missile launches worldwide to guard against a surprise attack on North America. Space surveillance radars provide vital information on the location of satellites and space debris for the nation and world. With a readiness rate above 99 percent, America's ICBM team plays a critical role in maintaining world peace and ensuring the nation's safety and security.

Key Milestones in Air Force Space & Missile History

- 10 Feb 1954** Teapot Committee Report urges acceleration of the ICBM program
- 1 Mar 1954** Visionary RAND Report R-262 recommends U.S. Air Force develop a surveillance satellite program
- 1 Jul 1954** The Western Development Division is established in Inglewood, Calif. WDD is considered the birthplace of missile and satellite development.
- 2 Aug 1954** The visionary leaders Brig Gen Bernard Schriever takes command of the WDD
- 15 Oct 1954** The ICBM Scientific Advisory Group recommends the integration of Air Force satellite and missile programs and their assignment to WDD
- 27 Nov 1954** The U.S. Air Force issues Weapon System Requirements No 5 (WS 117L) to develop a reconnaissance satellite program
- 1956** Washington authorizes the AGENA spacecraft
- 4 Oct 1957** The Soviet Union launches Sputnik I, the first earth satellite
- 1958** U.S. Air Force Atlas Missile launches Project SCORE, the first communications satellite
U.S. Air Force issues a requirement for a solid-propellant ICBM that eventually becomes the Minuteman
U.S. Air Force Satellite Control Facility comes on line, beginning the Air Force's role as DoD Executive Agent for satellite control
- 1959** The first U.S. Air Force satellite, Discoverer I, is launched
First 1st Atlas ICBM test launch; construction of Early Warning Network around North America begins
- 1960** Strategic Air Command's first operational Atlas ICBM complex is on alert at F.E. Warren AFB, WY
U.S. Air Force orbits its first MIDAS Early Warning satellite, and launches Discoverer XIII and XIV
- 1962** First successful test launch from Cape Canaveral of an operationally-configured Titan I ICBM
Strategic Air Command's first strategic Titan missile squadron becomes operational at Lowry AFB, CO
- 1963** Ballistic Missile Early Warning System (BMEWS) becomes operational in Yorkshire, England
- 1965** Defense Meteorological Satellite Program—DMSP--begins providing weather data from space
- 1970's** U.S. Air Force continues to improve missile warning and approves full-scale development of the NAVSTAR Global Positioning System, including a nuclear detonation package
- 1982** U.S. Air Force activates Air Force Space Command to consolidate operational space activities
- 15 Nov 1985** U.S. Space Command, a Unified Command, is formed to meet the needs of combat operations worldwide
- 1986** U.S. Air Force begins to deploy the Peacekeeper, its first new ICBM since the 1960s
- 1988** U.S. Air Force Space Launch Program has successful Atlas, Titan, Scout, and Delta missions
- 1989** The first Titan IV rockets into space carrying a DSP Satellite to Geosynchronous orbit
- 1991** In Operation DESERT STORM, the United States uses its space assets extensively for the first time. Space-based weather, communications, navigation, and early warning are all integrated into theater operations. U.S. Air Force Chief of Staff, General Tony McPeak calls the Persian Gulf War "The First Space War"
- 1993** The constellation of 24 Global Positioning Satellites is flying for the first time
Responsibility for ICBM forces transfers to Air Force Space Command
Drawing on its Gulf War experience, AFSPC opens the Space Warfare Center at Falcon AFB

- 1994** Air Force Space Command launches the first MILSTAR Satellite, beginning a new era in military satellite communications
- 11 Jan 2001** Release of the Congressionally-chartered Space Commission sets the stage for significant organizational and mission changes for AFSPC
- 1 Oct 2001** AFSPC assumes responsibility of the Space & Missile Systems Center at Los Angeles AFB
- 19 Apr 2002** AFSPC becomes a separate, four-star command and is assigned as lead for all U.S. military space programs.