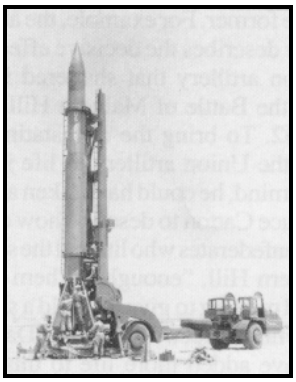
Nuke..."End of Mission, Out"

by Major Michael L. Kirk

At 0831 hours Pacific Daylight Time on 25 May 1953, the United States Army Field Artillery fired the world's first atomic artillery projectile. Nineteen seconds later, the 280-mm projectile detonated 500 feet above Frenchman Flats in Nevada. The resulting explosion was the equivalent of 15,000 tons of TNT. With this explosion, the US Army proved its ability to employ surface-fired nuclear weapons in support of maneuver forces on a modern battlefield.

Three generations of Field Artillerymen continued this mission until it ended in September of 1991.



Corporal Missile

During this 39-year period, a succession of special weapons entered the Army's inventory, ranging from atomic demolition mines emplaced by the Engineers and Special Forces to the Nike Hercules missile fired by the Air Defense Artillery. In the 1960s, the Infantry had a weapon called the Davy Crockett that fired a sub-kiloton (sub-KT) warhead.

But the Field Artillery received the preponderance of nuclear weapons, both artillery-fired atomic projectiles and missile systems. These included the 280-mm, 8-inch and 155-mm projectiles and the Corporal, Little John, Lacrosse, Honest John, Sergeant, Pershing and Lance missiles. Two more missile systems, the Redstone and Jupiter, were initially development by the Army and later moved into the space program.

The Field Artillery School, Fort Sill, Oklahoma, began training soldiers on nuclear weapons in 1952 when the Mark 9 280-mm projectile entered the inventory. The Mark 9 was the first artillery-fired projectile and was the round fired by "Atomic Annie" at Frenchman's Flats in 1953. In 1956, the W19 warhead replaced the Mark 9 warhead, increasing the yield delivered by the 280-mm projectile. From 1952 to 1991, three more artillery-fired, nuclear projectiles and five missile systems entered the Field Artillery's inventory, and thousands of artillerymen received training on nuclear systems at Fort Sill.

The Corporal was the first missile system to enter the Army's inventory in 1953. It was a single-stage, liquid propellent missile capable of delivering the 10- to 60-KT W7 warhead to a range of 60 miles. This missile remained in the stockpile until 1967.

In 1954, the Honest John missile entered the inventory. It delivered a 10- to 60-KT warhead and also had a conventional capability. The Honest John was transported on a modified 5-ton truck or special trailer launcher and was armed with the same W7 warhead as the Corporal. In 1958, the more efficient W31 warhead replaced the W7 and remained in service until the Honest John was replaced by the Lance missile system in 1974.

The next special weapon to come into the Army's inventory was the M442 8-inch artillery projectile. It was a major advance in technology because its W33 warhead was packaged for easier handling and transport. This warhead delivered a 10-KT burst at ranges up to 18 kilometers.

Many present day Field Artillerymen can remember long hours spent in the back of M109 vans or in bunkers at lonely warhead detachments performing technical operations on nuclear rounds, including the M442, during Army training and evaluation programs (ARTEPs) or nuclear surety inspections (NSIs). The M442 projectile was still in use when the Army received "End of Mission."

The Sergeant was the next missile to enter Army service in 1962. It was a solid propellant missile and could deliver a W52 warhead up to 75 miles. The Sergeant was retired from service in 1977.

In 1963, the M454 155-mm nuclear projectile entered the Army's inventory and increased the number of nuclear-capable delivery units. This projectile, armed with its W48 warhead, provided a sub-KT capability to a range of approximately 16 kilometers. The M454 could be fired by the M114, M109 series and M198 howitzers. It also remained in the Army's inventory until End of Mission.

The Pershing I entered service in 1963 and was armed with a W50 warhead. This system was the forerunner of two more versions of the Pershing system, the PIa and the PIb. In 1983, the Pershing II, armed with the W85 warhead, entered service and gave the Army a long-range strike capability. With launchers based in Germany, the Pershing II could strike deep into the Soviet Union. It was one of the Soviets' primary systems for elimination in the Intermediate-Range Nuclear Forces (INF) Treaty and is credited as one of the systems that aided immensely in ending the Cold War.

The next system to enter the Army's inventory was the Lance missile system. Lance was a liquid propellent, guided missile capable of delivering its W70 warhead at ranges exceeding 100 kilometers. The Lance replaced the Honest John and gave corps commanders the ability to deliver up to a 100-KT weapon deep into the enemy's rear area. Lance also had an enhanced radiation capability and, like Honest John, could fire a conventional warhead.

In 1981, the 8-inch M753 projectile was brought into the Army's inventory. The M753 was armed with the W79 warhead and also had an enhanced radiation capability. The W79 warhead had selectable yields up to 10 KTs.

Training on all these systems was the responsibility of the Nuclear Weapons Employment Division (NWED) of the Field Artillery School. NWED originally began operations in the basement of Searby Hall. In 1962, it moved into the restricted area of Snow Hall. The

M31 Rocket-Honest John

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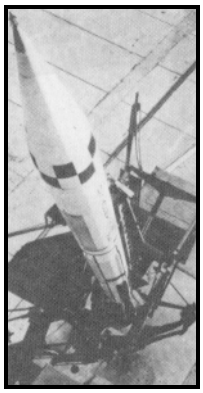
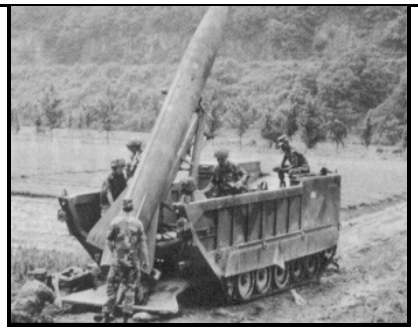


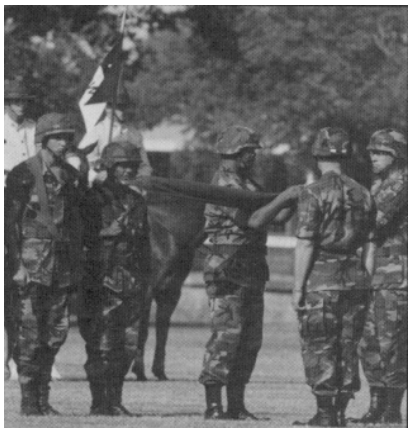
Sergeant

Pershing I



Lance Missile

Pershing II



Kevin Tucker

Eight FA groups cased their colors on 7 July in a ceremony at Fort Sill: all three groups of the Southern European Task Force and the five in the 59th Ordnance Brigade.

"cage" quickly became the focal point of all nuclear-related training at the Field Artillery School. Field Artillerymen passed through the cage learning the proper procedures for assembling, firing and employing all the artillery-fired projectiles.

NWED also provided special weapons training on all missile systems from the Corporal to the Pershing and Lance. Many officers and NCOs attended the Nuclear Weapons Detachment Course. This course prepared them for service with a custodial detachment, or "det," responsible for maintaining and providing special weapons to both American and NATO delivery units. At all times, US personnel were required to maintain positive control and custody of special weapons in their units. In its almost 40-year history, NWED prepared more than 63,500 students to assemble and prepare special weapons for firing.

In addition to those students who received military occupational specialty (MOS)-specific training, NWED instructors also provided information and instruction to thousands of pre-command course (PCC), officer basic course (OBC) and officer advanced course (OAC) students on battery nuclear operations, courier officer duties, special weapons officer duties and the management of a personal reliability program (PRP).

Most artillerymen "sweated out" a NSI by a corps, United States Army Forces Command (FORSCOM), US Army Europe (USAREUR) or even the Defense Nuclear Agency inspection team. At least once a year, every nuclear-capable unit received a NSI or, in the train-up for an inspection, a technical validation inspection (TVI). Redlegs in special weapons detachments and Lance or Pershing units received more than one inspection per year. Many a battery or battalion commander stood on the sideline and watched as his unit went through these critical inspections, knowing his nuclear certification was on the line.

Literally thousands of NSIs were administered to these nuclear-capable units and most passed them successfully. The inspections took place in all types of weather and under a myriad of conditions in Korea, Germany, Italy, Greece, Turkey and, of course, in the continental US (CONUS).

On 27 September 1991, President George Bush announced the United States would retire and destroy its stockpile of surface-to-surface, non-strategic nuclear weapons. This announcement ended the Army's nuclear delivery mission. All units of the Active Army and the Reserve Components began winding down their nuclear mission and turning in their equipment.

The Field Artillery School was part of this closeout and has terminated all nuclear-related courses, except for the Nuclear and Chemical Target Analyst Course. This course remains active to train nuclear planners and analysts at the corps level and above.

Now, on a sunny day at Fort Sill, visitors can walk to the corner of Randolph and Geronimo Roads and see "Atomic Annie" at the Field Artillery Museum. They can also visit Rocket Park across from the Old Post Corral and see the Corporal, Sergeant, Lance and Pershing missiles. Up close, they can see the succession of systems that helped end the Cold War and ensure peace in Europe for almost 40 years.

To three generations of Field Artillerymen—***Job well done.*** *End of mission. Close Station, March Order.*

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