

# 50 Years of Excellence in Space and Missile Defense

## The year that was-1957

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1957 is significant as it marks the beginnings of this command. On Oct. 3, 1957, the Army Ordnance Corps created the Redstone Anti-Missile Missile Systems Office. This was the first organization with the specific mission to develop ballistic missile defenses.

As we currently support the global war on terror and face the threat posed by the proliferation of ballistic missiles and emerging nuclear powers, the world in 1957 was different yet familiar. There was a distinct and recognizable enemy — the Soviet Union — which sought to spread its communist doctrine around the world through all available means. Advances were made in missile technology by our adversaries, putting the nation at risk and new nations were entering the “nuclear club.”

In 1957, the world saw two super powers — the United States and the Soviet Union — engaged in an evolving Cold War. Europe had been divided by the Iron Curtain for over a decade. The Cold War had spread to the Mideast, and in January, President Dwight D. Eisenhower expanded the Truman Doctrine and offered aid to those countries that resisted aggression from communist nations.

In April 1957, Great Britain, citing economic factors, announced plans to phase out combat aircraft and replace them with missiles. Later that year, Britain became the third member of the nuclear club, exploding a hydrogen bomb over the Pacific.

In May 1957, the Soviets announced their first successful test of an intercontinental ballistic missile — the R-7 (known as the SS-6 in the West). Three months later, on Oct. 4, this missile was used to place the world’s first man-made satellite, Sputnik I, into orbit. The 184-pound aluminum payload, a radio beeper transmitted for 21 days before the batteries failed.

This achievement was followed on Nov. 3 by the launch of Sputnik II, which carried a dog, Laika, into space. The 1,119-pound satellite remained in orbit until April 1958. The weight of this second satellite demonstrated a new threat — the potential to launch a nuclear weapon.

By the end of the year, the “Space Race” had begun in earnest.

In the United States, national defense was a key issue. In July, the Distant Early Warning or DEW line, a series of radars in the arctic region of Canada and Alaska, became operational. The DEW line would detect incoming Soviet bombers and missiles. Soon thereafter, the United States and Canada ratified an agreement to form the North American Air Defense Command (NORAD).

By the end of the year, the Strategic Air Command had placed its B-52 bombers on 24-hour alert in the event of a possible attack by the Soviet Union. At the same time the Security Resource Panel of the Science Advisory Committee, formed to review active and passive measures to protect the civil population in the event of a nuclear attack issued the Gaither Report. Included in the recommendations is the construction of more American missiles and nuclear fallout shelters and the development of an area defense against ICBMs at the earliest possible date. The report, which also credited the Soviet Union with a substantial lead in long-range ballistic missiles, gave rise to the so-called “missile gap” argument.

It is in this environment that the foundation is made for what will become the U.S. Army Space and Missile Defense Command. In February 1957, the Deputy Chief of Staff for Logistics would formally establish the Nike-Zeus project. The next phase in the Nike anti-aircraft series, Nike-Zeus was to be an anti-ICBM system based upon an improved nuclear-tipped solid-propellant Nike-Hercules missile combined with both long and short range radars. A joint Army-Air Force committee reviewed the ballistic missile defense missions in April 1957. The committee, headed by Hector Skifter, recommended that the Army continue the terminal defense system (Zeus) and the Air Force oversee the early warning system.

In addition to the Zeus, the Army would develop the target track radar and the local acquisition radar. A directive by Secretary of Defense Neil McElroy would confirm these proposals in January 1958.

In the interim, on Oct. 3, 1957, the



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Downtown Huntsville circa 1950.

Army Ordnance Corps established the first ballistic missile defense program office — the Redstone Anti-Missile Missile Systems Office (RAMMSO) — under the Army Ballistic Missile Agency, at Redstone Arsenal. As designed at that time, the Nike-Zeus was to be developed in a three-phased deployment.

Phase I would see the development of a local control system and an anti-missile missile limited to approximately 100,000 feet altitude and approximately 70 nautical miles range. In Phase II, the anti-missile missile would be equipped with a jet-head extending the range to 500,000 feet altitude. The third phase missile would have a fully-active seeker which further extended range capabilities approximately 200 nautical miles.

Following the launch of the Sputnik in October, the Army published a space program recommendation which included a new requirement for the Nike-Zeus program — to serve as an anti-satellite system.

The events of 1957 and the Nike-Zeus are but the beginnings for a long tradition of Army excellence in missile defense. A tradition which has grown and evolved from the Nike-Zeus Project Office, the Nike-X Project Office, the Sentinel System Command, the Safeguard System Command, the Ballistic Missile Defense System Command, the Strategic Defense Command, the Space and Strategic Defense Command, the Space and Missile Defense Command, and finally the Space and Missile Defense Command/U.S. Army Forces Strategic Command.



U.S. Army Photo

The NIKE-ZEUS Project was to be an anti-ICBM system.



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Intersection of Martin and Patton Roads, 1960.