Edited Extract from: *Department of Defense Annual Report for Fiscal Year 1962*, (Washington, D.C.: USGPO, 1963)

Annual Report of the Secretary of Defense, Operational Forces, pp. 11-13:

## **Continental Defense**

For the protection of the North American continent against enemy bombers we have in being an extensive warning network and active defense system. We also have the means to detect a ballistic missile attack in sufficient time to warn our strategic retaliatory forces. Our greatest need remains an active defense against ballistic missiles, accompanied by further steps to improve and extend our warning systems and to reduce the vulnerability of existing bomber defenses to ballistic missile attacks....

## Defense Against Ballistic Missiles

Much progress remains to be made in both our passive and active defense against ballistic missile attacks.

For passive defense, we have today the Ballistic Missile Early Warning System (BMEWS), including three stations, of which two--those at Clear, Alaska, and Thule, Greenland--were in service during the past year, while the third--at Fylingdales, United Kingdom is expected to be ready in calendar year 1963. BMEWS is designed to give at least 15 minutes' warning of an impending attack, thus permitting our strategic retaliatory forces on ground alert to take appropriate defensive measures. Our alert problems, however, would be greatly reduced by a warning system that would increase the time interval and provide additional certainty. In support of this requirement, we are continuing exploratory development activities on several promising techniques.

In the field of active defense against ballistic missiles, a notable event occurred on July 19, 1962, when a NIKE-ZEUS intercepted near Kwajalein Island a target vehicle launched by an ATLAS booster from the Pacific coast. This testing program in the Pacific is part of our extensive and continuing effort to develop antimissile systems--an effort that is being pursued as a matter of highest national priority and that is supported with all the funds that can be effectively employed. The NIKE-ZEUS project is making vital contributions in this area, including the development of extremely precise tracking and guidance equipment, while other research projects are exploring alternative methods for terminal-point defense and the feasibility of interception shortly after launching or in midcourse. To assist in countering the threat of submarine-launched missiles, the Navy is developing more effective detection and tracking systems as part of its antisubmarine warfare program.

While progress is being made in these efforts, many problems remain to be resolved. In evaluating the effectiveness of an antimissile system, we must consider not only its intercept capability but also its vulnerability to enemy attack and its ability to overcome countermeasures, realistically evaluated against the penetration aids already available and under development. The degree of effective protection provided must then be balanced against the proportion of our national wealth required for deployment. The answers to these questions will constantly vary as further breakthroughs are made in offensive and defensive capabilities. We know that, based upon today's technology, an airtight defense against inter-continental ballistic missiles (ICBMs) is not feasible--either for us or any other nation. We are continuing, as a matter of highest urgency, our research and development effort to reduce the shortcomings of proposed antimissile systems and to discover new methods for resolving this critical problem.

## Annual Report of the Secretary of the Army, The Army in Review, pp. 102-103:

## Air Defense

Army Continental Air and Missile Defense Forces continued to be limited by the lack of a system to cope with an inter-continental ballistic missile (ICBM) attack.

The NIKE-ZEUS guided missile system is the most advanced system under development in the free world for the interception of enemy ICBMs.

A test model of a NIKE-ZEUS system has been deployed to Kwajalein Atoll, where it has recently made the successful intercept of a special target vehicle launcher by an ATLAS ICBM from California....

During fiscal year 1962, HAWK (Homing-All-the-Way-Killer) demonstrated an antimissile capability by destroying LITTLE JOHN and HONEST JOHN tactical field artillery rockets, and CORPORAL tactical field artillery ballistic missiles. The HAWK, known as the "bullet with a brain," was designed to be effective against low-level, high-speed targets.