Edited Extract from: *Department of Defense Annual Report [FY 1959], July 1, 1958, to June 30, 1959*, (Washington, D.C.: USGPO, 1960)

Annual Report of the Secretary of Defense, The Armed Forces, p. 5:

Continental Defense

Faced with the continuing possibility of surprise attack, further steps were taken during fiscal year 1959 to protect our strategic air forces through wider dispersal, a higher state of alert, and better warning and defense systems….

Construction of a Ballistic Missile Early Warning System (BMEWS), initiated in 1958, was continued as a matter of high priority. Considerable progress had been made by June 30, 1959, in the establishment of the Alaska and Greenland stations, while negotiations for the construction of the third station in the United Kingdom were nearly completed. BMEWS will provide a minimum of 15 minutes' warning of any mass attack on the United States by ballistic missiles.

Annual Report of the Secretary of Defense, Research and Development, p. 18:

Air Defense Missiles

Defense against long-range ballistic missiles has presented scientists with probably the greatest challenge of the missile age--the destruction of weapons traveling more than 5,000 miles in less than 30 minutes with maximum speeds above 15,000 miles per hour. One possible answer to this problem might be provided by the Army's NIKE-ZEUS, which is being developed under highest priority; it will not, however, be placed into production until necessary tests have been satisfactorily completed. Other possible answers to this complex problem are being investigated under the supervision of the Advanced Research Projects Agency (ARPA).

Annual Report of the Secretary of the Army, The Search for Better Weapons, Equipment, and Techniques, pp. 171-173:

Missile Firepower

NIKE-ZEUS

The Army's ZEUS antimissile system is the third generation of the proven NIKE family of air defense surface-to-air guided missiles. It is designed to provide an effective active defense of the United States against ballistic missiles. The Army's ZEUS system is a logical outgrowth and extension of the earlier AJAX and HERCULES systems. Like its predecessors, ZEUS will incorporate a refined command guidance system of operation, which will be designed to kill inter-continental ballistic missiles (ICBMs). To

achieve success in the destruction of targets of this type, many technological advances in automation guidance, propulsion, and radar are required. Progress in all phases of development was achieved on .schedule during the past year.

Design of the missile itself was essentially completed and each stage of the missile motor was fired successfully in static tests. The booster motor, fired many times in tests at Redstone Arsenal, is the most powerful, single solid-propellant motor in existence in the free world today. It has a proven thrust of 450,000 pounds which will provide the ZEUS missile with the ability rapidly to reach extremely high altitudes. At the end of the fiscal year major components of the ZEUS system were being installed at White Sands Missile Range, New Mexico, for various tests. The Army considers the ZEUS program to have progressed to the point where production of the system now can be started.