

DECLASSIFIED
Authority NLE 2010-35 #3
By MMK NLDDE Date 1/3/11

Air Defense Radars

~~SECRET~~

B ✓

THE WHITE HOUSE
WASHINGTON

August 1, 1958



MEMORANDUM FOR DR. KILLIAN

SUBJECT: Radar Coverage of Continental U.S. at Altitudes above 70000 feet.

1. Operational ground-based radars in Continental U.S. are designed to detect targets below approximately 70000 feet. No coverage exists above approximately 100000 feet at present.
2. The altitude limitation of U.S. radar was deliberate and was incorporated in the design of the equipment. Increasing altitude coverage increases the required power proportionately, so that for reasons of economy it was considered desirable to limit altitude coverage to that required by the assumed threat.
3. Production is beginning on one radar (the AN-FPS-7) which can detect a target six feet in diameter at a range of 220 miles and an altitude of 200000 feet. Other radars of equal or greater capability are being developed as in the Frequency Diversity Program of the A.F. (AN-FPS-24, 27, 35). According to present planning the installation of these radars will provide contiguous coverage around continental U.S. by the end of FY-61.
4. Unless unusual measures are taken it is improbable that the planned schedule will be met. Except for the AN-FPS-7, present contracts for the radars call for delivery of less than three of any one type. This implies completion of development, production and installation in less than three years.
5. The DEW line is limited to detection altitudes lower than 70000 feet. No program exists to increase this altitude limit at present.

Recommendation

1. Priority should be given to at least one radar to supplement the AN-FPS-7. The A.F. frequency diversity program should be expedited. This program will provide an effective detection capability up to 200000 feet.

THE DIVISION OF CLASSIFICATION, U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, HAS DETERMINED THAT THIS DOCUMENT CONTAINS NO RESTRICTED DATA OR FORMERLY RESTRICTED DATA. EISA HAS NO OBJECTION TO ITS DECLASSIFICATION.

W. E. Bradley

W. E. Bradley

MMK
REVIEWED BY

OCT 9 1975 ~~SECRET~~
DATE

K-2407-1



~~SECRET~~
A. F. Frequency Diversity Program

Coverage above 100000 feet
Obtained by radar installations during FY 60



Electrostatic reproduction made
for preservation purposes by the
Eisenhower Library for replacement
of a deteriorating manuscript item.

~~SECRET~~



~~SECRET~~

A. F. Frequency Diversity Program

Coverage above 100000 feet
Obtained by radar installations during FY 61

Electrostatic reproduction made
for preservation purposes by the
Eisenhower Library for replacement
of a deteriorating manuscript item.

