

FINDING OF NO SIGNIFICANT IMPACT

GROUND BASED RADAR (GBR) FAMILY OF STRATEGIC AND THEATER RADARS ENVIRONMENTAL ASSESSMENT (EA)

AGENCY: Department of Defense, United States Army

ACTION: Finding of No Significant Impact

DESCRIPTION OF PROPOSED ACTION: The proposed activities constitute the testing of the GBR project as a part of the defense acquisition process. Phase I of the testing will consist of fabrication and testing of both the Theater Missile Defense (TMD)-GBR and GBR-Test (GBR-T) at various Raytheon Company facilities in Massachusetts. Phase II will consist of installation, integration, and testing of the TMD-GBR at site R-409 on White Sands Missile Range (WSMR), New Mexico. In addition, GBR-T will be installed and tested on Building 1500 at U.S. Army Kwajalein Atoll (USAKA) in the Republic of the Marshall Islands. Phase III will consist of functional technology validation testing against target missiles. The TMD-GBR will be tested at sites R-409 and LC-39 on WSMR and at site IFC-25 located adjacent to WSMR on Fort Bliss. The successful completion of the activities will demonstrate TMD-GBR and GBR-T capabilities to integrate hardware and software, prove discrimination capabilities, and validate the functional technology against target missiles. The above actions have been addressed in the GBR Family of Strategic and Theater Radars EA, May 1993, which is incorporated by reference. In addition, in 1989, an environmental assessment for testing a similar ground based radar at Kwajalein Island, Kwajalein Atoll resulted in a Finding of No Significant Impact.

ALTERNATIVES CONSIDERED: Alternatives considered in the GBR Family of Radars EA in addition to the proposed actions include the following: alternative test ranges; alternative sensors including existing ground based sensors, space-based sensors, ship-borne sensors, airborne sensors, and other ground-based sensing techniques; alternative siting locations (five sites for TMD-GBR and one site for GBR-T); and the No Action Alternatives which would defer the testing activities while continuing with sensor concept exploration activities.

ANTICIPATED ENVIRONMENTAL EFFECTS: The environmental consequences of TMD-GBR and GBR-T activities were determined to be not significant at the Raytheon Company facilities as well as the test sites at WSMR, Fort Bliss and USAKA. Kwajalein Island, Kwajalein Atoll is listed in the National Register of Historic Places. Potentially significant impacts could result from ground disturbing construction activities for facilities, utilities and infrastructure at each test range. These impacts will be mitigated by implementing preconstruction archaeological

surveying, testing, and monitoring of selected sites prior to and during construction. The operation of the GBR will result in the generation of electromagnetic radiation (EMR). Potentially significant EMR impacts to public health and safety will be mitigated to a level of no significant impact by implementing operational safety measures, identifying safety zones for TMD-GBR only, utilizing a separate safety computer and EMR monitoring sensors for GBR-T only, and coordinating with range air control. Plant and wildlife species, including endangered and threatened species, will not be significantly affected by the activities due to the previously disturbed nature of the test sites and the low EMR/power density values on the ground near the radars. The power densities on the ground for the GBR-T will not exceed 5 milliwatts per square centimeter averaged over 6 minutes within 2 kilometers of the radar and 1 milliwatt per square centimeter averaged over 6 minutes for distances beyond 2 kilometers. These power densities are within the American National Standards Institute (ANSI) standards for health and human safety. A separate safety computer will be utilized to calculate EMR fields, and ensure that ANSI safety standards are not exceeded. Sensors will also be installed to measure EMR fields, and ensure that safety standards are not exceeded. An EMR safety zone is not required for the GBR-T because ANSI standards will be met on the ground at all locations at USAKA. For the TMD-GBR, a 100 meter safety zone will be established in front of the radar antenna to meet the ANSI health and human safety standard (5 milliwatts per square centimeter averaged over 6 minutes). The GBR will have no significant effects on electroexplosive devices, electronic medical devices, existing radars, and communications equipment since appropriate mitigation measures associated with range operations will be followed. Ground water resources will not be significantly affected by any of the test activities. Potentially significant housing and office space impacts at USAKA, WSMR and Fort Bliss will be mitigated by the dedication of housing units to GBR project personnel and modification of existing structures for housing, office, and operations and maintenance space.

CONCLUSIONS: Based on the environmental impact analyses found in the GBR Family of Radars EA, which are hereby incorporated by reference into this Finding of No Significant Impact (FNSI), it has been determined that implementation of the proposed testing activities will not have significant individual or cumulative impacts on the quality of the natural or the human environment. Because there would be no significant environmental impact resulting from implementation of the proposed activities, an Environmental Impact Statement is not required and will not be prepared.

DEADLINE FOR RECEIPT OF WRITTEN COMMENTS: There is a 15-day waiting period from the date of appearance of this FNSI in the Federal Register for the public to comment prior to implementation of the proposed testing activities.

POINT OF CONTACT: Persons wishing to comment may obtain a copy of the EA or inquire into this FNSI by writing to: Deputy Commander, U.S. Army Space and Strategic Defense Command, ATTN: Mr. Kenneth R. Sims, CSSD-EN-V, P.O. Box 1500, Huntsville, AL 35807-3801. Verbal comments and questions regarding the EA and FNSI may be directed to Mr. Sims at (205) 955-5075.

William S. Chen

6/18/93

WILLIAM S. CHEN
Major General, U.S. Army
Program Executive Officer
Missile Defense

Date