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MAR 09 2001

SUBJECT: Response to Comments on the National Missile Defense
Deployment Final Environmental Impact Statement

The National Missile Defense Joint Program Office made available to the public the Final Environmental Impact Statement (FEIS) for review and comment from December 15, 2000 through January 29, 2001. During the review period comments were received on the document.

We take this opportunity to respond to the public's comments received on the NMD Deployment FEIS. Similar comments were combined, summarized, and a consolidated response was prepared for each substantive comment category.

Copies of the responses to comments are being provided to all individuals and agencies who previously received copies of the FEIS, to information repositories where previous NMD materials and documents are available, and at the BMDO NMD EIS web site, www.acq.osd.mil/bmdolink/html/nmd/html.

Sincerely,

HAROLD V. HOLMES
Deputy for System Deployment

March 7, 2001

Response to comments on the NMD Deployment FEIS

Twenty-three letters with comments on the National Missile Defense (NMD) Deployment Final Environmental Impact Statement (FEIS) were received. This letter serves as a response to those substantive comments. Similar comments were combined and summarized, and consolidated responses provided, rather than responding to each comment individually.

Comments relating to the National Environmental Policy Act (NEPA) process included requests for an extension to the comment period and requests for supplemental analyses to the NMD FEIS to address additional concerns relating to proposed NMD upgrades to existing Early Warning Radars and NMD activities on or near Kodiak Island, Alaska. The end of the comment period was extended from 16 January 2001 to 29 January 2001. BMDO determined that a further extension was not warranted. As discussed below, BMDO will not conduct a supplemental NEPA analysis for its NMD upgrades to the Early Warning Radars. Kodiak Island is not a location associated with potential NMD deployment and therefore is not included in the NMD Deployment EIS. NMD related testing activities on Kodiak are being addressed under separate environmental documentation. Additional environmental documentation will also be prepared for the undersea cable route between Shemya Island and mainland Alaska. The cable is anticipated to follow a deep ocean route south of the Aleutian chain.

A number of comments concerned the relationship between the BMDO NMD Deployment EIS and the EIS being prepared by the Air Force to evaluate its proposal to extend the service life of the existing Early Warning Radars. At the time the UEWRS supplement to the Deployment EIS was started, it was not apparent that the Air Force EIS would be completed prior to the time that BMDO would need to make decisions relating to the NMD upgrades. Consequently, a reevaluation of the scientific literature concerning the effects of radio frequency (RF) emissions and the applicable safety standards, as well as a reassessment of predicted and measured radio frequency emissions from the Pave Paws radars, was included in the Supplement to provide sufficient information to support a BMDO decision. It now appears that the Air Force EIS will be completed within the timeframe required to make decisions on the NMD upgrades. The upgrades proposed in the NMD Deployment FEIS are dependent on the radar remaining operational at its current location. Since the Air Force is the owner and operator of the PAVE PAWS radars with responsibility for their current and future operations, BMDO intends that the NMD upgrades would be contingent on the outcome of the Air Force EIS. As stated in the NMD FEIS, the BMDO does not intend to actually implement the upgrades until completion of the Air Force EIS, which address maintenance and sustainment of the current EWR operations. The BMDO would

reassess its proposed usage of the EWRs in light of the Air Force intentions, at that time, whether to continue its ongoing operations at the existing facilities. This will ensure full compliance with the requirements of the National Environmental Policy Act (NEPA) that the environmental effects of proposals for Major Federal Actions be evaluated prior to commitment of resources to implement the proposals. It is also consistent with guidance in the Council on Environmental Quality Regulations implementing NEPA with respect to reducing paperwork and the adoption of environmental documents prepared by another agency.

A few comments questioned why the NMD Deployment FEIS did not analyze alternative locations for the PAVE PAWS radars. The FEIS analysis assumes that the Clear AFS, Beale AFB, and Cape Cod AFS Early Warning Radars will continue to remain in operation in support of the U.S. Air Force's ongoing early warning and space-tracking missions, and it does not address the construction of new radar facilities elsewhere in the United States. As noted in the FEIS, these three existing EWRs are geographically located in areas of the nation suitable for performance of their proposed NMD mission, and they are readily adaptable to this mission through replacement of interior computer equipment and associated software. The FEIS considered alternatives for siting NMD Upgraded EWR at the decommissioned EWR site at Robbins, Air Force Base, Georgia, the site of the dismantled PAVE PAWS EWR at Eldorado Air Force Station, Texas, and at a prototype PAVE PAWS site at Eglin Air Force Base, Florida. None of these alternatives were carried forward in the FEIS because the locations could not satisfy NMD performance requirements for coverage of approaches to identified regions of the United States.

Numerous comments were received regarding the potential human health impacts of PAVE PAWS radar operations and included requests that additional exposure studies be conducted. These comments have been sent to the Air Force for their consideration in the Air Force SLEP EIS, which will analyze potential health impacts related to the ongoing operation of the PAVE PAWS radars. As noted in the Upgraded Early Warning Radar (UEWR) Analysis (Appendix H) in the NMD Deployment FEIS, the NMD upgrades would involve only interior hardware and software modifications, with no change to the exterior of the radar buildings or to peak or average power levels emitted by the radars. Consequently, the upgrades would not result in any changes to environmental (including health and safety) impacts associated with operation of the radars.

Several comments were received regarding the theory that phased array radiation, such as that emitted by the PAVE PAWS Early Warning Radars, is different than other electromagnetic radiation. These comments question the statistical validity of several studies cited in the NMD Deployment FEIS, the validity of extrapolating research from other forms of radiation to the effects of phased array radiation, and the application of the IEEE standards to phased array radiation. While we acknowledge the theory

giving rise to these comments, we do not believe it is consistent with the overwhelming weight of scientific knowledge in this area. The FEIS relied on multiple references based on long-term studies and extensive peer review. We acknowledge there is a lack of studies examining distinctions between phased array and other types of electromagnetic radiation. However, we attribute this dearth of studies to the longstanding belief in the scientific community that there is no meaningful difference between the different types of electromagnetic radiation. We maintain that the analysis and studies referenced in the FEIS and the extrapolation to the IEEE standards represent the best science available. However, we are forwarding these comments to the Air Force for consideration in their EIS process.

Comments received regarding treaty and foreign policy considerations are not considered appropriate topics for discussion in the NMD Deployment EIS. They raise political and policy issues that are outside the scope of the NEPA process. Although ongoing operation of the PAVE PAWS radars will be addressed by the Air Force in the SLEP EIS, the NMD FEIS does address pilots by reference to existing FAA flight restrictions as shown on sectional aeronautical charts.

One comment concerned the lack of detailed analysis of possible accidents associated with air transportation of Ground Based Interceptors. We believe the NMD Deployment FEIS provides information to the level that is appropriate for the potential for impacts associated with air transportation. As stated in the FEIS, the potential for a major (destruction of the aircraft) cargo aircraft accident is approximately 1 to 3 accidents per 100,000 hours flown. Based on approximately 150 hours of annual flying time for GBI deployment activities and assuming 20 airlift operations, a major aircraft accident might be expected to occur once every 200 to 300 years. Overall, the potential for an aircraft accident while transporting the GBI would have no greater risk than any other commercial or military aircraft cargo flight and thus is considered very remote. In addition, most activities would occur on a military installation, where air traffic and management of explosives occur on a regular basis. The Department of Defense routinely transports missiles and other explosives and has an excellent safety record.

In closing, based on the comments received, we believe that the information presented has not changed the results of the analysis presented in the FEIS. We will ensure all comments are provided to the Air Force for their consideration in the preparation of the SLEP EIS.