

**DEPARTMENT OF DEFENSE
DEPARTMENT OF THE NAVY**

**FINDING OF NO SIGNIFICANT IMPACT FOR UNITED STATES NAVY INSTALLATION AND OPERATION OF
AN/SPY-6 AIR AND MISSILE DEFENSE RADAR SYSTEM AT THE NATIONAL AERONAUTICS AND SPACE
ADMINISTRATION'S WALLOPS FLIGHT FACILITY, ACCOMACK COUNTY, VIRGINIA**

INTRODUCTION:

Pursuant to the Council on Environmental Quality regulations (Title 40 Code of Federal Regulations [C.F.R.] §§ 1500-1508) implementing the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] §§ 4321-4370h), Navy Regulations (32 C.F.R. § 775), and OPNAV M-5090.1, Environmental Readiness Program Manual of 10 January 2014, the Department of the Navy (Navy), with the National Aeronautics and Space Administration (NASA) as a cooperating agency, gives notice that an Environmental Assessment (EA) has been prepared and a Finding of No Significant Impact (FONSI) has been issued. The EA evaluates the potential environmental consequences of the Navy's Proposed Action to install and operate an AN/SPY-6 Air and Missile Defense Radar (AMDR) system in the Navy Surface Combat Systems Center's (SCSC) Building V-003 on Wallops Island at NASA's Wallops Flight Facility (WFF) in Accomack County, Virginia.

PURPOSE AND NEED:

The purpose of the Proposed Action is to allow for the integration and testing of the AN/SPY-6 radar system with the other components of Aegis Weapon System Advanced Capability Build (ACB) 20. Such integration and testing would complement the current testing and evaluation of the system being conducted at Pacific Missile Range Facility Barking Sands, Hawaii which focuses on radar development and evaluation objectives. The Proposed Action would also provide training and life cycle support for the Aegis DDG 51 Flight III program.

The Proposed Action is needed to fulfill specific testing objectives established under the Department of Defense (DoD) Acquisition Program and set forth in DoD Instruction 5000.02. The achievement of those objectives will allow DoD to move on to the next step of the acquisition process, which consists of limited production of the AN/SPY-6 system for the purpose of operational testing and evaluation as well as to establish production capabilities to prepare for full-rate production and deployment aboard Navy ships.

DESCRIPTION OF THE PROPOSED ACTION:

The Proposed Action is to install and operate an AN/SPY-6 radar system in Navy SCSC's Building V-003 at Wallops Island. A four-story addition would be constructed to accommodate the AN/SPY-6 system in the building. The addition would be built above an existing two-story extension of Building V-003, for a total of six stories, and would consist entirely of vertical construction; it would not increase the overall height or footprint of Building V-003. Installation, operation, and testing of the AN/SPY-6 system would begin following the completion of the addition.

The AN/SPY-6 system would be tested for integration with Aegis. The area scanned by the new radar would be defined by azimuths 114.3 and 204.3 degrees from true north. Vertically, the radar array would be situated approximately 60 feet (18 meters) above ground level and would not scan at angles below 0 degree; thus, there would be no electromagnetic exposure at ground level around the facility. Testing would be conducted using targets of opportunity such as Navy or NASA aircraft or rockets, or any targets or projectiles used for other testing or training purposes within the scanning area.

FINDING OF NO SIGNIFICANT IMPACT FOR UNITED STATES NAVY INSTALLATION AND OPERATION OF AN/SPY-6 AIR AND MISSILE DEFENSE RADAR SYSTEM AT THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S WOLLOPS FLIGHT FACILITY, ACCOMACK COUNTY, VIRGINIA

ALTERNATIVES:

Alternatives were developed for analysis based upon the following reasonable alternative screening factors:

1. The location must make use of existing training and testing assets and systems provided that the proposed activities do not interfere with ongoing or planned programs.
2. The location must adequately support integration and testing of the system with Aegis ACB 20.
3. The location must be accessible to testing personnel and teams in a time- and cost-efficient manner.

Alternatives Analyzed: The EA analyzed two action alternatives: Alternative 1 (Preferred Alternative) under which the AN/SPY-6 system would be installed in Building V-003 as described above; and Alternative 2, under which the AN/SPY-6 system would be installed in a new facility to be constructed on the site of Building V-095, which consists of an observation tower and associated facilities, and would be demolished. The EA also analyzed the No Action Alternative, under which the proposed AN/SPY-6 radar system would not be installed at Wallops Island or any other location.

Alternative To Be Implemented: The Navy has decided to implement Alternative 1. Operation and testing of the proposed radar would be similar at either of the alternative sites. While both sites meet all three selection criteria, the Alternative 2 site would make less efficient use of existing assets than Alternative 1, as it would require the demolition of an existing facility; the construction from the ground up of a new facility for the AN/SPY-6 system; and approximately one mile of trenching to extend utilities to the new facility. Therefore, Alternative 1 has been selected for implementation.

ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION:

The following resource areas were addressed in the EA: air quality, water resources, geological resources, terrestrial biological resources, land use, noise, infrastructure and utilities, public health and safety, and hazardous materials and wastes. Anticipated impacts are briefly described below. The following resources were not evaluated in the EA because potential impacts on those resources were considered to be negligible or nonexistent: cultural resources, visual resources, air space, transportation, socioeconomic, environmental justice and protection of children, and aquatic biological resources.

Air quality: There would be no significant impacts to air quality. Accomack County is in attainment for all criteria pollutants regulated under the Clean Air Act (CAA) and the CAA General Conformity Rule does not apply. Construction activities would generate temporary increases in emissions of criteria pollutants. Depending on the pollutant, these emissions (on an annual basis) would range from 0.004 % to 0.5 % of the 250-ton Prevention of Significant Deterioration threshold (which, although not applicable to the Proposed Action, provides a yardstick to assess the intensity of impacts in an attainment area such as Accomack County). Emissions of green-house gases also would be very small, less than 0.2 % of the 25,000 metric -ton carbon dioxide equivalent (CO_{2e}) reporting threshold. Additionally, the emissions would end when construction is complete. In the long term, no new stationary source would be created and the small increase in the volume of Building V-003 would have a negligible effect on emissions associated with the heating and cooling of the building.

Water resources: Impacts on water resources would be negligible to minor; no significant impacts to water resources would occur. No groundwater withdrawal would be required and there would be no direct effect on any bodies of surface water or wetlands. Because most construction activities would take place within an existing building, the potential for direct and indirect impacts to surface waters or wetlands would be negligible. Construction would take place in the 100-year floodplain. However, this

FINDING OF NO SIGNIFICANT IMPACT FOR UNITED STATES NAVY INSTALLATION AND OPERATION OF AN/SPY-6 AIR AND MISSILE DEFENSE RADAR SYSTEM AT THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S WALLOPS FLIGHT FACILITY, ACCOMACK COUNTY, VIRGINIA

is true of all reasonable alternatives and there is no practicable alternative that would meet the Navy's purpose and need. The construction of a vertical addition to an existing building would have no effect on flood levels and floodways.

Geological resources: There would be no significant impacts to geological resources. The geology or topography of Wallops Island would not be changed or otherwise affected. Construction would take place within an existing building, with minimal potential for impacts on soils from increased erosion or sedimentation.

Biological resources: There would be no significant impacts to biological resources. There would be no loss of vegetation or habitat. Construction activities, including noise, could disturb nearby wildlife, but this effect would be minimal given the developed setting and limited duration of these activities. In the long term, operation of the AN/SPY-6 radar would only create a risk of exposure to electromagnetic energy above approximately 60 feet (18 meters) from ground level; thus only flying species (birds and, to a lesser extent, bats) could possibly be exposed. Because of the way the radar operates, exposure would be extremely brief and such exposure is not likely to adversely affect the animals. Thus, impacts would be negligible. For the same reasons, the Proposed Action may affect, but is not likely to adversely affect the following threatened or endangered species: red knot (*Calidris canutus rufa*), piping plover (*Charadrius melodus*), and northern long-eared bat (*Myotis septentrionalis*). The Proposed Action has no potential to affect any other species protected under the Endangered Species Act. The Proposed Action would not adversely affect bald eagles (*Haliaeetus leucocephalus*) protected under the Bald and Golden Eagle Protection Act. The Proposed Action would have no effect on migratory birds; no takes of migratory birds protected under the Migratory Bird Treaty Act would occur.

Land use: There would be no significant impacts on land use. The Proposed Action would result in no changes in land use.

Noise: There would be no significant impacts related to noise. Noise from construction activities would be minor. Construction noise would be partly dampened because it would occur within an existing building. No noise-sensitive receptors (e.g., schools, hospitals, residences) would be affected, as none are located on Wallops Island. Operation of the radar would not generate any noise.

Infrastructure and utilities: There would be no significant impacts to infrastructure and utility systems. Construction activities would have some impacts on stormwater collection, solid waste management, and energy systems. Existing systems would be able to absorb them. In the long term, additional demand for energy and utilities (from the temporary presence of rotating testing staff) would also be easily absorbed.

Public health and safety: There would be no significant impacts on public health and safety. There are no ordnance or fuel storage or handling concerns associated with any of the buildings within the Hazards of Electromagnetic Radiation to Fuel (HERF) and Hazards of Electromagnetic Radiation to Ordnance (HERO) radii associated with the proposed AN/SPY-6 system. With respect to Hazards of Electromagnetic Radiation to Personnel (HERP), measures would be taken to control exposure within the estimated 127-foot-radius (38.7-meter-radius) safety zone for personnel in a controlled environment. Activities would comply with applicable federal and state, NASA, DoD, and Navy occupational safety, health, and environmental regulations to ensure protection of the public and WFF and Navy personnel.

Hazardous materials and wastes: There would be no significant impacts related to hazardous materials and wastes. Construction activities would involve the use of hazardous substances and generate hazardous wastes. Such materials would be handled, stored, and disposed of in accordance with

FINDING OF NO SIGNIFICANT IMPACT FOR UNITED STATES NAVY INSTALLATION AND OPERATION OF AN/SPY-6 AIR AND MISSILE DEFENSE RADAR SYSTEM AT THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S WALLOPS FLIGHT FACILITY, ACCOMACK COUNTY, VIRGINIA

applicable federal, state, and local regulations, policies and procedures, including those promulgated and enforced by NASA and the Navy. The generation of hazardous wastes during construction activities would not exceed the Navy's capacity to manage and dispose of these wastes. If determined necessary, structures and equipment would be surveyed for lead-based paint or asbestos-containing materials. Structures and equipment determined to contain such substances would be removed by a qualified contractor and disposed of in accordance with applicable federal, state, and local regulations. In the long term, there would be a small permanent increase in the quantity of hazardous substances used to maintain the expanded facility, and resulting wastes. Additional hazardous materials and wastes would be handled, stored, and disposed of in accordance with applicable NASA and Navy policies and procedures.

Cumulative impacts: Based on the intensity or duration of the anticipated impacts, the Proposed Action has no potential to result in cumulatively significant impacts when considered along with relevant past, present, and reasonably foreseeable future projects at WFF.

OTHER ENVIRONMENTAL CONSIDERATIONS:

Consistent with Section 7 of the Endangered Species Act, the Navy obtained from the U.S. Fish and Wildlife Service (USFWS) a list of threatened, endangered, and candidate species that may occur in the vicinity of the project and assessed potential effects on these species. In an email dated October 19, 2015, the USFWS concurred with the Navy's finding that the Proposed Action would either have no effect or is not likely to adversely affect threatened and endangered species.

In compliance with Section 106 of the National Historic Preservation Act, the Navy consulted with the Virginia State Historic Preservation Office to assess the potential effects of the Proposed Action on historic properties listed or eligible for listing in the National Register of Historic Places. In a memorandum dated August 28, 2015, the Virginia State Historic Preservation Office concurred that no historic properties would be affected by the Proposed Action and no further consultation was needed.

The Navy determined that the Proposed Action would be fully consistent with the applicable enforceable policies of Virginia's Coastal Zone Management Program. In accordance with 15 C.F.R. 930.39, the Navy prepared a federal consistency determination for review and concurrence under the Virginia Coastal Zone Management Program. By letter dated January 17, 2017, the Virginia Department of Environmental Quality concurred with the consistency determination.

PUBLIC OUTREACH:

The Draft EA was made available for public review from March 1 through April 3, 2017. A Notice of Availability was published in the *Eastern Shore News* on March 1, 2017; the *Chincoteague Beacon* on March 2, 2017; and the *Eastern Shore Post* on March 3, 2017. The notice provided information on how to obtain a copy of the draft document for review and a point of contact to submit comments. The draft EA could be downloaded from the following locations:

- http://www.navsea.navy.mil/Portals/103/Documents/SCSC/IO%20SPY6%20Radar%20SCSC_V5d_Dec16_Optimized.pdf
- <https://sites.wff.nasa.gov/code250/documents.html#cat2>

Hard copies of the draft EA were made available for review at the following repositories: NASA WFF Visitor Center at Building J-20, Wallops Island, VA; Chincoteague Island Library, at 4077 Main Street, Chincoteague Island, VA; and Eastern Shore Public Library, at 23610 Front Street, Accomac, VA.

No comments were received.

FINDING OF NO SIGNIFICANT IMPACT FOR UNITED STATES NAVY INSTALLATION AND OPERATION OF AN/SPY-6 AIR AND MISSILE DEFENSE RADAR SYSTEM AT THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S WALLOPS FLIGHT FACILITY, ACCOMACK COUNTY, VIRGINIA

FINDING:

Based on the information gathered and the analyses presented during preparation of the EA, the Navy finds that the implementation of the Proposed Action (by means identified in Alternative 1, the Preferred Alternative) would not significantly affect the quality of the human environment. Therefore, an EIS will not be prepared.

Likewise, in accordance with its NEPA policy and procedures (14 C.F.R. Subpart 1216.3), NASA has reviewed the contents of the Navy's EA and concludes that the EA adequately describes the Proposed Action, the potential environmental effects of the Proposed Action, and in all other respects meets NASA's requirements for an EA. Accordingly, by way of the signature below, NASA hereby adopts the AN/SPY-6 EA as its own and also finds that preparation of an EIS is not required.


A copy of the EA and FONSI can be obtained from:

- Ms. Jill Jester, Code 1000
Public Affairs Officer
Surface Combat Systems Center Wallops Island
Building R30, 30 Battlegroup Way
Wallops Island, Virginia 23337

or downloaded from the following NAVSEASYSKOM website:

- <http://www.navsea.navy.mil/Home/SCSC.aspx>

3 Oct 2017
Date


S. H. Smoot
By Direction
NAVSEASYSKOM

17 AUGUST 2017
Date


William A. Wrobel
Director
Wallops Flight Facility