

FINDING OF NO SIGNIFICANT IMPACT

Name of Action: Dover Air Force Base Digital Airport Surveillance Radar

The Department of Defense (DoD) proposes to construct a Digital Airport Surveillance Radar (DASR) system at Dover Air Force Base (AFB) in Delaware. This proposed action is part of the DoD National Airspace System (NAS) Program, which involves the replacement of analog air traffic control systems with state-of-the-art digital air traffic control equipment on U.S. Army, U.S. Navy, and U.S. Air Force (USAF) bases throughout the country. The implementation of the NAS program, which also includes the installation of DoD Advanced Automation Systems (DAAS) and Voice Communications Switching Systems (VCSS) at DoD bases, was previously evaluated in a programmatic Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) (1995).

The EA for Dover AFB addresses the site-specific impacts of locating a DASR system on Dover AFB, and evaluates the consequences of the DASR system construction on both the natural and man-made environments. The DAAS and VCSS components of the NAS program at Dover AFB will be located within existing buildings, and impacts are anticipated to be minor. The primary consequences of the DASR system evaluated in the EA relate to the construction and operation of an ASR-11 radar system on Dover AFB to replace the existing AN/GPN-20 radar.

The ASR-11 will improve system reliability, provide additional weather data, reduce maintenance cost, improve performance, and provide digital data input to proposed new digital automation system air traffic controller displays. While the existing AN/GPN-20 at Dover AFB was installed in April 1983, the proposed new ASR-11 will take advantage of the significantly increased capabilities of digital technology. The proposed new DASR system will serve to accurately locate aircraft, in terms of range, azimuth, and latitude; provide information regarding aircraft identification code; identify emergency conditions; and report six discreet weather precipitation levels.

Three alternative sites (Site 2, Site 5, and Site 8) were evaluated for location of the ASR-11. As described below, each of the three alternative DASR sites would be generally acceptable from an environmental perspective. However, impacts associated with land use and aesthetic resources would be anticipated at Sites 2 and 8, and impacts associated with historic resources may be expected at Site 5.

Site 2 is located in an area designated for outdoor recreation. No significant adverse impacts associated with utilities, transportation, noise, air quality, geology, surface water, groundwater, biological resources, or cultural resources would be anticipated if Site 2 were selected as the preferred alternative. However, the existing obstacle course would need to be relocated adjacent to the ASR-11. The construction of the ASR-11 at Site 2 would require 950 linear feet of trenching to connect to a power supply and 950 feet to connect to communication links. Finally, the site is located approximately 400 feet southeast of an off-base, private residential neighborhood. The proposed radar would be visible from these houses and would thus cause a change in visual character. According to 1990 census data, the income of 40 percent of the population within this census tract is below the federal poverty level, potentially raising the issues of environmental justice. While a low income population group does reside adjacent to alternative Site 2, no

adverse human health and environmental impacts are anticipated to occur as a result of operation of the ASR-11. Therefore, the DASR program at Dover AFB is consistent with Executive Order #12898.

Site 5 is located in an area classified as aircraft operations, and the construction and operation of the DASR facility would generally be compatible with land use. No significant adverse impacts associated with land use, socioeconomics, utilities, transportation, noise, air quality, geology, surface water, groundwater, biological resources, or hazardous waste would be anticipated if Site 5 were selected as the preferred alternative. Electric power supply can be extended from a high voltage distribution box located less than 100 feet to the south. Telephone and fiber optic communication can be extended from an existing communications manhole located 200 feet of the site. The new radar would be visible from Building 1301 which is on the National Register of Historic Places. However, the existing radar is visible from Building 1301, therefore the construction of the new radar would not be anticipated to result in substantial changes in the visual setting of the historic building.

Site 8 is located on land classified as open space between a base playground and firing range. The site was formerly used as a trench and fill landfill (LF-17), and is listed on the base's Installation Restoration Program (IRP). Site 8 is also proximate to two other landfills, LF-16 (to the north) and LF-19 (to the southwest). Previous investigations at LF-7 indicated that volatile organic compounds (VOCs) were present in the groundwater at and downgradient of LF-17, extending beneath LF-19. Excavation at Site 8 would not be anticipated to encounter groundwater, therefore no impacts associated with contact with subsurface contamination are expected. If refuse from the closed landfill were encountered during excavation, such materials would be disposed of properly. No significant adverse impacts associated with socioeconomics, utilities, transportation, noise, air quality, geology, surface water, groundwater, or biological resources would be anticipated if Site 8 were selected as the preferred alternative. Electric power supply can be extended from Pole 235 at Building 1324 located approximately 900 feet northwest of the site. Telephone and fiber optic communication can be extended from an existing underground communication line 170 feet east of the site. Site 8 is adjacent to a base playground, as well as recreational fields, and across the perimeter road from a base family campground. Site 8 is also within view of three historic sites, the John Wesley Cemetery, located 1,500 feet southeast of the site, the Dickinson Plantation, located 4,500 feet southeast of the site, and the St. Jones Neck Homestead/Farm, located 7,500 feet southeast of the site. A red balloon test and photo simulation were conducted to assess potential visual impacts on these resources. Results showed that the radar would be visible from the southwest side of the cemetery, but that views would be consistent with other current views of military activities and facilities. The radar facility would not be a dominant feature or focal point in viewsheds from the Dickinson Plantation and St. Jones Neck Homestead/Farm. Therefore no adverse impacts on cultural resources are anticipated.

Operation of the DASR system is anticipated to have minimal long-term impacts to the natural and human environments. The radar would generate radio frequency radiation (RFR) while operating. However, the RFR generated would be safe to humans at ground level and is not anticipated to pose a harm to the general population. During the DASR system operation, fuel and other hazardous materials may be used at the site, such as engine oil and grease. However, use and disposal of any hazardous

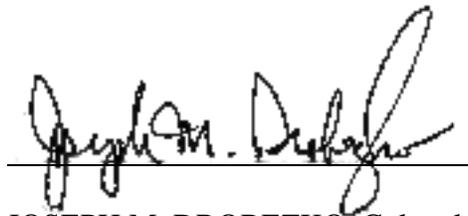
materials would occur in compliance with Dover AFB protocols and guidelines as well as applicable state and federal regulations. Consequently, it is anticipated that operational use of hazardous materials would not adversely affect the natural or human environments.

In summary, construction and operation of the DASR system at Dover AFB at Site 2, Site 5, or Site 8 would result in minimal short-term and long-term impacts to the environment. The Air Force has selected Site 8 as the preferred site for the ASR-11 because of operational considerations.

It is anticipated that few additional mitigation measures would be required during construction and operation of the facility. During the construction period, sheeting or supports of some kind may be used in the areas excavated for the tower footings and utility trenches in order to prevent collapse of these excavated areas. Groundwater levels will be monitored and maintained as necessary. To minimize noise impacts during construction, mufflers would be used on construction equipment and vehicles. In addition, all equipment and vehicles used during construction would be maintained in good operating condition so that emissions are minimized, thus reducing the potential for air quality impacts. Dust will be controlled onsite by using water to wet down disturbed areas. All areas disturbed for the DASR system construction would be seeded with a grass mixture or covered with a geotextile fabric and crushed stone to stabilize the disturbed soils, in order to minimize the potential for erosion and sedimentation.

All hazardous materials used during construction would be handled and disposed of in accordance with Dover AFB policies and protocols and all applicable state and federal regulations. Traffic management measures will be developed to facilitate traffic flow and pedestrian access.

During operation of the DASR system, fuel would be stored in an above-ground storage tank (AST) and some hazardous materials, such as equipment oil or grease, may be used at the site. Similar to the construction period, all hazardous materials used during operation would be used and disposed of in accordance with Dover AFB policies and protocols and all applicable state and federal regulations in order to minimize the potential for media contamination.



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Date