FINDING OF NO SIGNIFICANT IMPACT

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

The Department of Defense (DoD) proposes to construct a Digital Airport Surveillance Radar (DASR) system at Columbus Air Force Base (AFB) in Mississippi. This proposed action is part of the National Airspace System (NAS) Program, developed by the Federal Aviation Administration in cooperation with the DoD to modernize approach control systems in the United States and its territories. DASR is a DoD-lead contract to replace 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 bases throughout the country. The implementation of the NAS program, which also includes the installation of DoD Advanced Automation System digital radar display terminals and Voice Communications Switching Systems at DoD bases, was previously evaluated in a programmatic Environmental Assessment and Finding of No Significant Impact (1995).

The environmental assessment for Columbus AFB addresses the site-specific impacts of locating a DASR system on Columbus AFB, and evaluates the consequences of the DASR system construction on both the natural and man-made environments. The Automation System and Voice Switch components of the NAS program at Columbus AFB would be located within existing buildings, and impacts are anticipated to be minor. The primary consequences of the DASR system evaluated in the environmental assessment involve the construction and operation of a DASR system on Columbus AFB.

The proposed DASR system, designated as model ASR-11, is needed to replace the existing AN/GPN-20 airport surveillance radar at Columbus AFB. 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. The 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 discrete weather precipitation levels.

The No Action alternative would be to continue use of the existing AN/GPN-20 radar. This alternative would deny Columbus AFB the improved system reliability, additional weather data, and improved performance offered by the new DASR system; thus, this alternative was not chosen. Three alternative sites (Site 2, Site 4, and Site 5) were evaluated for location of the ASR-11. All three alternative sites are located to the northeast of the existing airfield, specifically, along the northeastern portion of Perimeter Road. Due to the location of an existing roadway (Perimeter Road) immediately adjacent to the sites, construction of an access road would not be required, regardless of which site is chosen. Walkers and joggers use Perimeter Road as a passive recreation area. Upon recommendation by the United States Fish and Wildlife Service, Columbus AFB conducted a survey for bald eagle nests and activity within 1,500 feet of the candidate sites. Results of the survey indicate that no evidence of bald eagles was found. Site 2 is within a forested area approximately 2,000 feet northeast of the Ground to Air Transmit/Receive (GATR) radio facility. Site 4 lies within an area that is dominated by grasses and shrubs approximately 1,000 feet north of the GATR. Site 5 is located in a

forested area approximately 1,000 feet south-southeast of the GATR. Any of the three sites would be acceptable from an environmental perspective. Due to operational and other base considerations, the USAF has selected Site 5 as the preferred ASR-11 location.

If Site 2 were selected as the preferred alternative, no significant adverse impacts associated with socioeconomics, noise, air quality, soils, surface water, cultural resources, or hazardous waste would be anticipated. Site 2 abuts Perimeter Road approximately 1,800 feet east of Runway 13L/31R. The site is wooded and lies on the opposite side of Perimeter Road from a former landfill that has been designated as an Installation Restoration Program site. Long-term monitoring is in place at the former landfill site and excavation for an ASR-11 at Site 2 is not anticipated to encounter contaminated groundwater. A wetland area is located approximately 150 feet from the site. If Site 2 were chosen, clearing would be required both on the site itself and along the proposed utility corridors. Each of the electric, telephone and fiber optic service connections would be located approximately 1,700 feet from Site 2.

If Site 4 were selected as the preferred alternative, no significant adverse impacts associated with socioeconomics, transportation, noise, air quality, soils, surface water, cultural resources, or hazardous waste would be anticipated. Site 4 is located within a cleared area that is surrounded by tall pine trees adjacent to Perimeter Road. The area was cleared during a previous natural attenuation study performed in conjunction with the Tennessee Valley Authority. A former landfill lies approximately 200 feet to the west of Site 4. Long-term monitoring is in place at the landfill site and excavation for an ASR-11 at Site 4 is not anticipated to encounter contaminated groundwater. Connection to the nearest suitable telephone service would be at a distance of approximately 100 feet, while connections to the nearest electric and fiber optic routes would both occur at a distance of approximately 1,300 feet from Site 4.

If Site 5 were selected as the preferred alternative, no significant adverse impacts associated with socioeconomics, transportation, noise, air quality, soils, surface water, cultural resources, or hazardous materials would be anticipated. Site 5 is located adjacent to Perimeter Road within a wooded area approximately 250 feet west of the base property boundary. The site is bordered to the east by Perimeter Road and to the south by an unnamed gravel/dirt road. Connections to the nearest electric and fiber optic routes would occur at a distance of approximately 1,200 feet, while the nearest suitable connection for telephone would be approximately 30 feet.

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 while operating. However, the radio frequency radiation generated would be safe to humans at ground level and is not anticipated to pose 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 Columbus AFB 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.

It is anticipated that few mitigation measures would be required during construction and operation of the facility. 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 would be controlled onsite by using water to wet down disturbed areas. Efforts would be made to retain a buffer of trees between the site and Perimeter Road to avoid a visual/aesthetic impact. 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. The wetland nearby Site 2 would be protected through the use of erosion and sedimentation control measures during construction. Should dewatering be necessary during installation of tower footings, proper base procedures for discharge of groundwater would be implemented. The proposed DASR facility would incorporate appropriate best management practices, such as vegetative swales or buffer strips, to reduce the effects of stormwater runoff from the site. All hazardous materials used during construction would be handled and disposed of in accordance with Columbus AFB guidelines and all applicable state and federal regulations. Traffic management measures would be developed to facilitate traffic flow and pedestrian access.

During operation of the DASR system, fuel would be stored at an aboveground storage tank and some hazardous materials, such as equipment oil or grease, may be used at the site. Similar to the construction period, all hazardous materials utilized during operation would be used, and disposed of, in accordance with Columbus AFB guidelines and all applicable state and federal regulations in order to minimize the potential for media contamination.

Based on this summary of effects, along with the detailed description of the effects provided in the Environmental Assessment, I have determined that construction of the ASR-11 at Site 5, which is the site that I have selected, will not have a significant impact on the natural or human environment. For this reason, no environmental impact statement needs to be prepared.

Stephen Dean Schmidt

STEPHEN D. SCHMIDT, Colonel, USAF
Commander, 14th Flying Training Wing

3 Feb 03

Date