

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE 93-LaRC-3

National Environmental Policy Act; Finding of No Significant Impact; Repairs to the Unitary Plan Wind Tunnel Shell at Langley Research Center

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500 - 1508), and NASA's Procedures for Implementing NEPA (14 CFR Subpart 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the proposed repairs to the Unitary Plan Wind Tunnel shell at the Langley Research Center, located in the City of Hampton, Virginia. The existing Unitary Plan Wind Tunnel is used for supersonic study of military airplanes, missiles, and spacecraft.

DATE: Comments in response to this notice must be received in writing within 30 days of (first date of publication in local newspaper).

ADDRESS: Comments should be addressed to Tricia Romanowski, Environmental Engineer, Environmental Engineering Branch, SSQRD, M/S 429, 5 Hunsaker Loop, NASA/Langley Research Center, Hampton, Virginia 23681; Telephone (804) 864-7020.

The Environmental Assessment (EA) prepared for the proposed repairs to the Unitary Plan Wind Tunnel shell which supports this FONSI may be reviewed at:

Hampton Public Library, Main Branch, Reference Department, 4207 Victoria Boulevard, Hampton, Virginia

NASA Headquarters Information Center, Room 1H23, 300 E Street S.W., Washington, DC

A limited number of copies of the EA are available by contacting Tricia Romanowski, Environmental Engineer, at the address or telephone number indicated.

FOR FURTHER INFORMATION CONTACT:

Tricia Romanowski, Environmental Engineer, Environmental Engineering Branch, SSQRD, M/S 429, 5 Hunsaker Loop, NASA/Langley Research Center, Hampton, Virginia 23681; Telephone (804) 864-7020.

SUPPLEMENTARY INFORMATION: NASA has reviewed the EA prepared for the proposed repairs to the Unitary Plan Wind Tunnel shell and has determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. The EA is incorporated by reference in this FONSI.

NASA is proposing to repair defective welds in the Unitary Plan Wind Tunnel shell. Delay in proceeding with the necessary repairs to the tunnel shell may result in continued growth of the known defective welds to their critical flaw size. Under that circumstance, the facility would have to (a) severely limit its annual usage rate, (b) operate at lower pressures, or (c) completely shut down operations. The Unitary Plan Wind Tunnel is the only facility of its type at LaRC, and is the most heavily used tunnel facility at LaRC, averaging 1,000 to 1,200 hours of operation each year. It may not be feasible for this workload to be absorbed by another facility outside LaRC.

The proposed project consists of repairing approximately 1,800 linear feet (550 meters) of defective welds in the tunnel shell. The work includes removal of asbestos insulation, removal of defective weld material, re-welding of the tunnel shell, radiographic examination of the new welds, and re-insulation of the repaired areas. The repairs will be made during the summer months of 1993 and 1994 when the facility is shut down for annual maintenance.

Two alternatives to the proposed repairs were considered: the No-Action alternative (i.e., no replacement of defective welds) and the New-Construction alternative (i.e., construction of a new wind tunnel facility to replace the functions of the Unitary Plan Wind Tunnel). Cancellation of the proposed repairs under the No-Action alternative will not prevent limitations on future facility operation imposed by defective welds in the tunnel shell. The New-Construction alternative will be time- and cost-prohibitive.

The environmental impacts identified as a result of the environmental assessment are as follows. Construction will be interior to the building and will not require ground disturbance. No change will occur in the quantity or quality of domestic wastewater from the facility, which will continue to be discharged to the Hampton Roads Sanitation District under permit. No air emissions will result from project construction. Construction noise will be minimal, and will be evident only in the immediate vicinity of the facility. There will be no change in the air emissions or noise from operation of the Unitary Plan Wind Tunnel. Any hazardous wastes generated during construction will be disposed in accordance with a hazardous waste disposal plan, to be approved by the Contracting Officer prior to construction. Asbestos waste resulting from removal of the tunnel insulation will be managed under an asbestos operational plan, to be approved by the Contracting Officer prior to the removal, and in accordance with

applicable Federal, state, and local regulations. Any lead paint will be managed under a facility-specific lead paint plan to be approved by the Contracting Officer prior to the removal.

The Unitary Plan Wind Tunnel is located in a densely developed area of the Langley Research Center, and is not located in any wetlands or floodplains. No threatened or endangered species or critical habitats will be affected as a result of the project. The proposed repairs to the tunnel shell will not affect the integrity and function of the tunnel facility. The proposed action will not affect Virginia's coastal resources, and will be consistent with the Commonwealth of Virginia's Coastal Resources Management Program. No other matters of potential environmental concern have been identified. Under the planned construction of the repairs, and operation of the Unitary Plan Wind Tunnel after the repairs are complete, no significant effects to the environment are anticipated.

On the basis of the Unitary Plan Wind Tunnel EA and underlying reference documents, NASA has determined that the environmental impacts associated with this project will not individually or cumulatively have a significant effect on the quality of the environment. Therefore, an Environmental Impact Statement (EIS) is not required. NASA will take no final action or authorize construction activities prior to the expiration of the 30-day comment period.

for Belinda H. Adams
H. Lee Beach
Acting Director
NASA/Langley Research Center

5/4/93
Date

Concurrence:

Billie J. McGarvey
Billie J. McGarvey
Director, Facilities Engineering Division
NASA Headquarters

4/29/93
Date