

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE (93-WFF-06)

National Environmental Policy Act; Finding of No Significant Impact

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact for the Pegasus Expendable Launch Vehicle Program at Goddard Space Flight Center/Wallops Flight Facility, Wallops Island, Virginia

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 (CEQ) 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) for proposed launch of the Pegasus Expendable Launch Vehicle (ELV) at Goddard Space Flight Center/Wallops Flight Facility (GSFC/WFF) at Wallops Island, Virginia. The Pegasus ELV is an Orbital Sciences Corporation (OSC) ongoing commercial space vehicle program designed as a small class ELV that is launched from underneath a carrier aircraft. Activities proposed at GSFC/WFF include site preparation, Pegasus systems assembly, satellite systems assembly, Pegasus ELV and L-1011 carrier aircraft mating, L-1011 aircraft operations, and Pegasus ELV launch from the L-1011. Site preparation would involve some modification to existing roads on a portion of GSFC/WFF; modification to two buildings, construction of a force main; installation of telephone, control, and fiber optic cables; and construction of a footbridge. NASA assumes a projected launch rate of approximately 12 per year. NASA has determined that this program will not significantly affect the quality of the human environment.

DATE: NASA will proceed with this project immediately following the first day of publication of this FONSI. NASA has decided not to reopen the comment period at this time based upon prior issuance of a 30-day comment period on the Environmental Assessment (EA) for the proposed action.

ADDRESS: Address all inquiries about the Pegasus ELV program EA to Ms. Pamela Whitman, Goddard Space Flight Center, Wallops Flight Facility, Code 205.3, Wallops Island, Virginia, 23337; or Mr. Jay Brown, Goddard Space Flight Center, Wallops Flight Facility, Code 832.3, Wallops Island Virginia, 23337.

Interested Parties may request single copies of the supporting Environmental Assessment (EA) prepared for the Pegasus ELV Program at GSFC/WFF from the above address. Copies are also available for review at:

Goddard Space Flight Center/Wallops Flight Facility, Public Affairs Office, Wallops Island, Virginia; the Eastern Shore Public Library, Accomac, Virginia; and NASA Headquarters Information Center, Room 1H23, Two Independence Square, SW, Washington, DC.

FOR ADDITIONAL INFORMATION CONTACT: The Wallops Flight Facility Public Affairs Office at (804) 824-1579.

SUPPLEMENTARY INFORMATION: NASA has reviewed the EA and determined that it adequately and accurately describes the environmental impacts from the proposed implementation of the Pegasus ELV program at GSFC/WFF. NASA hereby incorporates this EA by reference into this FONSI; page references herein refer to the EA. The EA for the Pegasus ELV Program at GSFC/WFF includes input from Federal and Commonwealth of Virginia regulatory agencies and members of the affected public. Copies of the EA were provided to the Commonwealth of Virginia Department of Environmental Quality's (DEQ) Office of Public and Intergovernmental Affairs during the public comment period. The DEQ concurred with NASA's decision to issue a FONSI for this project.

The EA identifies potential impacts that may occur during implementation of the proposed action. The EA addresses impacts associated both with construction of Pegasus ELV support facilities and Pegasus ELV launch operations. Aircraft activity levels at GSFC/WFF would not increase substantially as a result of this project. Actual launch of the Pegasus ELV would occur over open water somewhere over the Atlantic Ocean.

The purpose of the proposed project is to provide an East Coast based launch facility for the Pegasus ELV. Pegasus ELV missions currently originate on the West Coast and, with one exception, all missions have been launched over the Pacific Ocean. The Pegasus ELV has had four successful launches, to date, with preparation and launch activities occurring at other launch locations.

GSFC/WFF considered the following alternatives for the proposed action: Use of ground based, vertical launch vehicles such as the Scout, Conestoga, or Taurus launch systems, continued use of West Coast sites for Pegasus ELV staging operations; and use of Kennedy Space Center (KSC), Florida, as an alternate East Coast staging site.

Impacts to the human environment associated with this project can be divided into short-term (construction phase) and long-term (operational phase) impacts. The construction phase will last approximately nine months. The EA evaluated impacts on land use, infrastructure, water quality, soils, wetlands and floodplains, air quality, radiation, noise, solid waste, vegetation, wildlife, threatened and endangered species, employment, health and safety, and cultural resources. The following summarizes specific environmental impacts associated with the implementation of the Pegasus ELV Program at GSFC/WFF:

1. **Land Use** Neither construction or operational activities will alter existing land use at GSFC/WFF (pp. 23&24).
2. **Infrastructure** Neither construction or operational activities will alter existing energy or potable water consumption at GSFC/WFF (p. 25). Construction of the force main to the GSFC/WFF wastewater treatment plant (WWTP) will eliminate a potential source of groundwater and/or surface water contamination that results with reliance on septic systems (p. 25).

3. Water Quality Neither construction or operational activities will impact water quality (p. 26). A variety of spill prevention, control, and countermeasure plans will be in place to minimize the likelihood of releases to the environment.
4. Soils Several of the construction activities will occur in highly erodible soil. NASA will minimize soil erosion by ensuring that erosion and sediment controls are used for all construction activities (p. 27). Operational activities will not impact soils at GSFC/WFF.
5. Wetlands and Floodplains No construction phase activities will occur in either the 100- or 500-year floodplains (p. 27). NASA will attempt to avoid any construction in wetlands; however, NASA may have to install cabling through a small portion of wetlands. NASA will work with the appropriate regulatory agencies to ensure that all applicable permits are in place should NASA have to place the cable through the wetland area. Operational activities will not impact wetlands or floodplains (p. 27).
6. Air Quality Construction activities will not impact air quality (p. 28). Operational activities will not alter existing air quality at GSFC/WFF. Emissions from actual launch of the Pegasus ELV will occur over open ocean. The highly localized, short duration air emissions from a Pegasus ELV launch would quickly dissipate and not produce individual or cumulative impacts to air quality at the actual release site.
7. Radiation Neither construction or operational activities will introduce new sources of radiation to GSFC/WFF (p. 29). All radio frequency devices used by the Pegasus ELV program will operate on frequencies authorized for GSFC/WFF.
8. Noise Neither construction or operational noise levels will differ significantly from current noise levels at GSFC/WFF (p. 30).
9. Solid Waste Neither construction or operational activities will produce significant quantities of solid waste (p. 30). NASA will dispose of any hazardous waste generated by Pegasus ELV operations according to DEQ regulations. Pegasus ELV launches will not significantly contribute to the quantity of orbital debris (p. 31).
10. Vegetation Construction activities will disturb some vegetation (p. 31). NASA anticipates that less than 0.25 acres (0.1 hectare) will require tree removal. Operational activities will not impact vegetation.
11. Wildlife Neither construction or operational activities will disturb wildlife in the vicinity of GSFC/WFF (p. 31).
12. Threatened and Endangered Species NASA has identified an active bald eagle's nest on the GSFC/WFF main base (p. 32 & 33). Certain construction and operational activities for the Pegasus ELV program would occur within 0.25 miles of this nest. NASA is currently involved in formal Endangered Species Act (ESA) Section 7 Consultation with the U.S. Fish and Wildlife Service (USFWS). NASA does not believe that implementing this program will impact the bald eagle;

however, NASA will ensure that the ESA Section 7 Consultation process is completed before any construction occurs within 0.25 miles of this eagle's nest.

- 13. Employment Construction activities will create temporary employment opportunities for construction contractors. Actual operational activities will increase employment opportunities at GSFC/WFF. Project personnel will typically be in the area for four weeks prior to a launch and would seek lodging and meals in the immediate vicinity of GSFC/WFF. Media, VIPs, and the public may also visit the GSFC/WFF area to view a Pegasus ELV launch and will also provide a potential source of revenue for the local economy.
- 14. Health and Safety Construction and operational activities will comply with established NASA health and safety guidelines. Neither construction or operational activities will present increased risk to the health and safety of GSFC/WFF employees or the general public.
- 15. Cultural Resources The Virginia Department of Historic Resources has concurred that implementing the Pegasus ELV program at GSFC/WFF will not impact cultural resources.

No other issues of environmental concern have come to NASA's attention. On the basis of the EA for the Pegasus ELV Program at GSFC/WFF and underlying reference documents, NASA has determined that the environmental impacts associated with the mission will not individually or cumulatively have a significant effect on the quality of the human environment. Therefore, an environmental impact statement is not required. Since NASA previously issued a 30-day comment period on the EA for this action, NASA will take final action concerning the proposed activity immediately.


 Director
 Goddard Space Flight Center

10/18/93
 Date