

FINAL

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**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**

**National Environmental Policy Act; Construction and Operation of Building 4220 at George C. Marshall Space Flight Center**

**AGENCY: National Aeronautics and Space Administration (NASA)**

**ACTION: Finding of No Significant Impact**

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**SUMMARY:** Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Parts 1500 through 1508), and NASA's regulations (14 CFR Part 1216, Subpart 1216.3), and based on the analyses in the Environmental Assessment (EA), the National Aeronautics and Space Administration (NASA) has made a Finding of No Significant Impact (FONSI) with respect to the Proposed Action. The action involves the construction and operation of Building 4220 at NASA's George C. Marshall Space Flight Center (MSFC).

**DATE:** January 2011

**ADDRESSES:** A 30-day public review was held from October 31, 2010 through November 29, 2010 to solicit public comments on the draft EA. The draft EA was also coordinated with federal, state, and local entities through letter correspondence. All comments received on the Draft EA are addressed in the Final EA.

To receive a copy of the Final EA, contact AS10/Mr. Allen Elliott, Manager, Environmental Engineering and Occupational Health Office, NASA Marshall Space Flight Center, AL 35812, phone: (256) 544-0662, e-mail: [Allen.Elliott@nasa.gov](mailto:Allen.Elliott@nasa.gov).

**FOR FURTHER INFORMATION, CONTACT:**

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**SUPPLEMENTAL INFORMATION:**

The purpose of the Proposed Action is to correct inadequacies in the existing administrative infrastructure of the 4200 Complex at MSFC. NASA needs to implement the Proposed Action to be able to adequately carry out administrative functions at MSFC in support of its current and future missions.

Under the Proposed Action, Building 4220 would be constructed on an existing parking lot located just south of Building 4203 in the 4200 Complex at MSFC. The remaining portions of this parking lot would be converted into landscaped green space, except the northeastern portion which would be converted into a service turn-around area for Building 4203. Landscaped green space as well as a service road and handicap parking areas would be constructed on the eastern side of the Building 4220 footprint, which currently consists of sparse trees and mowed grass. An existing parking lot located south of the Building 4220 footprint would serve as the primary parking area for building personnel. Additional parking may be constructed in the eastern part of the 4200 Complex under the Proposed Action if additional parking space is determined to be necessary based on further analysis. The area where additional parking may be constructed is currently a maintained grassy field. Based on the most recent design, Building 4220 would be five stories and approximately 147,104 gross square feet (sq ft) (13,666 gross sq meters), with the first floor being approximately 26,925 sq ft (2,501 sq meters). Building 4220 would include an atrium, offices, conference rooms, break rooms, data/IT rooms, utility rooms/spaces, and a penthouse for rooftop mechanical equipment.

Renovation of existing infrastructure within the 4200 Complex, use of other facilities at MSFC, and lease of offsite facilities were given consideration by NASA as potential alternatives to the Proposed Action. The renovation alternative would have much higher costs than the Proposed Action and would negatively impact administrative and project/program management office functions at MSFC. The use of other facilities at MSFC and lease of offsite facilities would also negatively impact these functions and would not meet the purpose and intent of the Proposed Action. Site options for building within the 4200 Complex are relatively limited due to the relevant constraints of the complex, which primarily are underground utilities and aboveground infrastructure. Constructing Building 4220 in a significantly different location within the complex would involve extensive utility relocations and would not meet building setback distance requirements. Under the No-Action Alternative, Building 4220 would not be constructed.

Based on the findings of the EA, the Proposed Action would have no impact on land use, floodplains, wetlands, listed species, cultural resources, housing, schools, recreation, rail transportation, water transportation, or aviation. The Proposed Action would have minor impacts on air quality, noise levels, topography, soils, surface water, geology, groundwater, vegetation, wildlife, socioeconomics, public and occupational health/safety, utilities, solid waste, traffic flow, and hazardous materials/wastes. The impacts that the Proposed Action would have on these resources would not be significant. The Proposed Action would not have disproportionately high or adverse human health or environmental effects on minority or low-income populations, and would not result in environmental health or safety risks to children. No adverse cumulative impacts would occur when the Proposed Action is combined with past, present, or reasonably foreseeable actions.

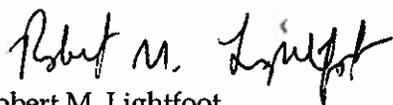
Air emissions and increased noise and traffic levels would be limited to the construction period and would return to current levels after the construction work is completed. Appropriate controls and best management practices would be implemented during construction to minimize fugitive dust and potential indirect impacts to soils and surface waters outside the project area. The vegetated areas that would be impacted consist only of sparse trees and mowed grass. The removal of vegetation for the proposed building and hardscape areas would be offset by the addition of vegetation in the proposed green space areas. Potential impacts on wildlife would be limited to displacement of a small amount of low-quality habitat and noise disturbance during the construction period. To minimize the potential for accidents during construction, workers would wear and use appropriate protective equipment and would follow all applicable Occupational Safety and Health Administration standards and procedures. The Proposed Action would decrease

energy consumption (primarily electricity usage) at MSFC. Although the groundwater within the project area is not expected to be contaminated, any groundwater that is encountered during construction activities would be managed as if it was potentially contaminated. In the event that groundwater discharges to the surface or requires handling during construction, e.g., if dewatering is performed, it would be appropriately managed by the construction contractor in coordination with the MSFC Environmental Engineering and Occupational Health Office and in accordance with all local, state, and federal laws and regulations, as well as with all applicable MSFC management plans and pollution prevention measures. The groundwater would be containerized and then tested to determine if it is contaminated. If the groundwater is determined to be contaminated, it would be properly disposed of at a licensed offsite disposal facility. If the groundwater is not contaminated, it would be released onsite. Construction work would have a minor, short-term, positive impact on the local economy. Direct expenditures for construction-related materials would benefit local suppliers and secondary spending by workers would benefit businesses near MSFC such as gas stations and restaurants. The Proposed Action would allow NASA to eliminate the costs associated with maintaining and operating Building 4202. The addition of Building 4220 to the 4200 Complex would increase operational functionality and reduce facility maintenance and utility costs within the complex. Therefore, the Proposed Action would contribute to NASA's ability to operate its overall infrastructure more cost effectively within a constrained budget.

Under the No-Action Alternative, NASA would continue to incur the high costs and operational inefficiencies associated with maintaining and operating Building 4202. Therefore, the No-Action Alternative would have a minor negative impact on NASA's ability to operate its overall infrastructure more cost effectively within a constrained budget.

After careful review of the EA, NASA has determined that the Proposed Action (Preferred Alternative) would not generate significant controversy or have a significant impact on the quality of the human or natural environment. This analysis fulfills the requirements of the National Environmental Policy Act and Council on Environmental Quality regulations. An Environmental Impact Statement will not be prepared, and NASA is issuing this Finding of No Significant Impact.

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Robert M. Lightfoot  
Director  
George C. Marshall Space Flight Center  
National Aeronautics and Space Administration

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Date Issued: January 2011