

National Aeronautics and Space Administration



Ames Research Center
Moffett Field, California 94035

March 10, 2022

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Attn: Mr. Mark Beason

Subject: Section 106 Consultation for the Arc Jet Complex Security Fence Project at NASA Ames Research Center, Moffett Field, Santa Clara County, California

Dear Ms. Polanco:

The National Aeronautics and Space Administration (NASA) requests initiation of consultation under Section 106 of the National Historic Preservation Act (NHPA) of 1966 for the Arc Jet Complex Security Fence Project (project or undertaking) located at Ames Research Center (ARC) at Moffett Field, Santa Clara County, California. NASA ARC proposes to replace and improve existing security fencing surrounding the Arc Jet Complex and its related facilities. As the lead federal agency, NASA ARC has determined that this project constitutes an undertaking under Section 106 of the NHPA (54 United States Code Section 306108), as amended.

The project area is located between Walcott Road and Hunsaker Road on the west side of Mark Avenue on the Ames Campus at the Arc Jet Complex, which is listed in the National Register of Historic Places (NRHP) (see Figures 1 through 3 in Appendix A of the enclosed technical memorandum). The Arc Jet Complex is composed of Buildings N234 and N238 and the Steam Vacuum System (SVS). The Arc Jet Complex is powered by the 60-megawatt (MW) Power Supply Substation, which is adjacent to the complex to the northwest (directly west of Building N238).

NASA ARC retained AECOM to conduct a technical study for this project. The study was conducted by cultural resources professionals who meet the Secretary of the Interior's professional qualifications standards (48 Federal Register 44738). The technical memo prepared by AECOM, dated March 9, 2022, which includes a description of the undertaking, the Area of

Potential Effects (APE), identification efforts, and an assessment of potential effects resulting from the undertaking, is enclosed for your review. For further details on the following summary, see the enclosed memorandum.

No previously identified archaeological resources were identified in the APE, and the APE is not within an area of heightened archaeological sensitivity. Ground disturbance for the undertaking would be limited, and based on utility mapping, it appears the area has been previously heavily disturbed. Due to the proposed scope and lack of archaeological sensitivity, no archaeological historic properties would be affected by the undertaking.

The APE has been previously surveyed for built environment resources and includes one historic property, the Arc Jet Complex, which was listed in the NRHP in 2017. Built in 1962–64, the Arc Jet Complex is significant at the national level for its contributions in the areas of science and engineering related to arc jet research and development that occurred at this complex. The property is listed under Criterion A for its association with advancements in arc jet technology and research and development of Thermal Protection Systems (TPS) for NASA’s spaceflight programs, including the exceptional role of the 60 MW Interaction Heating Facility arc jet in developing and refining TPS for the Space Shuttle Program (SSP). The property is also listed under Criterion C for its design and engineering that allowed for significant innovations in arc jet technology. The period of significance is 1962 to 2011; from the year Building N-234 and the SVS were constructed to the end of the SSP. The property is also listed under Criteria Consideration G for properties that have achieved significance within the past 50 years in relation to its exceptional significance within the context of the SSP.

Effects Assessment

The project does not propose to directly alter or demolish any of the contributing features of the NRHP-listed Arc Jet Complex. The existing chain-link fencing that will be removed is not a character-defining feature and does not contribute to the significance of the Arc Jet Complex. Although the project will introduce new chain-link fencing in proximity to contributing features of the Arc Jet Complex, including the SVS plenum and the Cooling Towers, the new fencing will not visually impact the historic property in a manner that would diminish the Arc Jet Complex’s integrity. Existing chain-link fencing is commonly observed around the facility and new chain-link fencing will not detract from any visible character-defining features of the Arc Jet Complex that contribute to its significance as a scientific facility focused on arc jet research and development. Due to the scale and nature of the project, no adverse effects on the Arc Jet Complex are anticipated. Therefore, the undertaking would result in no adverse effect on historic properties.

Finding of Effect

Based on the assessment conducted by qualified cultural resources professionals, NASA ARC has made a finding of No Adverse Effect for this undertaking.

Consultation Efforts

No Federally Recognized Tribes are associated with the geographical boundaries of NASA ARC or this undertaking. As part of a previous archaeological study of the entire ARC property, a Sacred Lands File search and a list of Native American tribes and representatives with a known

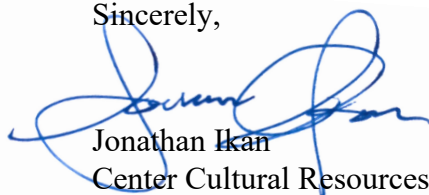
interest in the area were requested from the Native American Heritage Commission (NAHC). The NAHC responded on July 28, 2021, indicating that the Sacred Lands File search was negative and provided a list of 11 non-federally recognized Native American representatives who may have additional information regarding cultural resources in the vicinity of the ARC property. Since then, NASA ARC has consulted with these representatives on undertakings that have had the potential to affect cultural resources at known sites and in areas with high sensitivity for prehistoric archaeological resources. These representatives have not provided any additional information regarding known sacred lands or previously undocumented archaeological resources. Due to the highly disturbed nature of the project site, NASA ARC has not consulted with the non-federally recognized Native American representatives on this undertaking. In the event that an inadvertent discovery of prehistoric archaeological resources or human remains of Native American origin are encountered, NASA ARC will consult with these representatives.

NASA ARC has not identified additional consulting parties for this Section 106 review but is making these findings available to the public via the NASA ARC Historic Preservation Office website (<https://historicproperties.arc.nasa.gov/section106.html>).

The purpose of this letter is to request the initiation of Section 106 consultation and to request the State Historic Preservation Officer's (SHPO's) concurrence on NASA's determinations of eligibility pursuant 36 CFR 800.4(c)(2), and NASA's finding of No Adverse Effect for this undertaking pursuant 36 CFR 800.5(b). NASA ARC requests the SHPO's response within 30 days of receipt of this letter, as specified in 36 CFR 800.5(c).

Please contact me at jonathan.d.ikan@nasa.gov or at (650) 604-6859 with any questions.

Sincerely,



Jonathan Ikan
Center Cultural Resources Manager



Ames Research Center, MS 213-8
Moffett Field, California 94035

cc:

HQ/EMD/Dr. Rebecca Klein, Ph.D., RPA

Enclosures

Memorandum on the Arc Jet Complex Security Fence Project, dated March 9, 2022 (AECOM)