



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Commercial Space Transportation

800 Independence Ave., SW.
Washington, DC 20591

March 2, 2021

Ms. Jennifer Dixon
Environmental Review & Preservation Planning Program Manager
Historic Preservation Division
Department of Community Affairs
60 Executive Park South, NE
Atlanta, GA 30329-2231

**RE: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden County, Georgia.
HP-151117-001**

Dear Ms. Dixon:

Thank you for reviewing the additional information provided by the Federal Aviation Administration (FAA) regarding Spaceport Camden. The FAA recognizes that you need additional information before you can concur with a revised determination of effect.

Your December 21, 2020 letter indicates that the Historic Preservation Division (HPD) requests additional information to understand the change from medium-large launch vehicles to small-lift launch vehicles and asserts that change requires an expansion of the previously established area of potential effect (APE). Please see additional information below, outlined by your area of concern. We will work with you to identify a date/time for a virtual meeting to discuss this additional information and a revised finding of effect.

Vehicle Failure

Camden County has stated in its updated application¹ that it does not propose offering Spaceport Camden to development of or use of experimental vehicles.

Your December 2020 letter states that the probability of failure is higher in smaller vehicles than larger vehicles. Please note that a small-lift vehicle does not have an inherently greater probability of launch failure than a larger vehicle. Probability of failure is based on many factors, including vehicle performance and previous launches and is not the only factor in calculating risk to the public.

¹ 14 CFR 420.29 requires applicants to provide requirements for unproven launch vehicles. Camden County is not applying for unproven vehicle permissions in its application.

On December 18, 2020 we met with your office to provide a launch safety overview. As was discussed in that meeting, the FAA applies two quantitative criteria for limiting risk to the public, known as collective risk and individual risk. Collective risk represents the risk to everyone who may be exposed to a launch operation, while individual risk measures the risk to a single person in the exposed population. Both risk criteria are computed using the probability of failure as well as additional factors about the vehicle including size, debris it may generate as a result of failure, three-dimensional path it follows as it flies, and its speed.

For the small-lift vehicle mission that Camden County has proposed in its site operator license application, the calculated collective risk, expressed as “expected casualties,” is $0.02E-4$. This is less than the regulatory threshold value of $1.0E-4$ and more than a factor of 10 lower than the medium-large vehicle mission that was previously proposed and analyzed. The regulatory threshold for individual risk is $1.0E-6$. Accordingly, no member of the public is allowed to be present in a location where the risk to that person exceeds $1.0E-6$. The only relevant areas associated with the small-lift vehicle mission with a risk at or above $1.0E-6$ are contained entirely within the proposed launch site boundary.

Area of Potential Effect

As a result of the modified application, the FAA assessed the delineation of the 2016 APE to take into account the change in vehicle type, associated infrastructure, and vehicle performance. FAA recommends that the APE for archaeological resources remains the same as the APE that was delineated in 2016 to include the physical footprint of the launch site. Furthermore, FAA recommends the original 5-mile APE for architectural resources remain unchanged as well.

In the May 24, 2016 letter from FAA to the Historic Preservation Division (HPD), FAA provided the following justification for the original 5-mile radius for the architectural APE:

The APE for architectural resources usually covers a greater geographical area than for archaeological resources, because architectural historic properties often rely heavily on other key elements of integrity, including location, setting, workmanship, feeling, design, and association. The primary potential effects for architectural resources include permanent visual effects on the landscape resulting from construction of the facility; the introduction of short-term but incompatible auditory effects on noise sensitive historic properties during operations; and vibration caused by operation of the proposed project. In addition, the architectural APE also captures areas of potential direct effects to built environmental resources. Changes to the visual and audible environment may affect the historic property’s NRHP eligibility.

On June 12, 2016, HPD concurred with the APE determination for the proposed project.

The proposed launch site for small launch vehicles is located in the same location that was previously evaluated in 2018. The current proposed Spaceport Camden launch site would include the same infrastructure proposed and previously analyzed in 2018 including a vertical launch facility, a mission preparation area, and operations facilities.

The noise and operational footprint is smaller for the small-lift vehicle than for the medium-large vehicle considered in the 2018 Draft EIS. As noted above, the project areas associated with a risk at or above

1.0E-6 are contained entirely within the proposed launch site boundary. Therefore, FAA determined the original APE for above-ground historic properties is sufficiently conservative for purposes of the Section 106 process for this project.

Public Participation

Regarding HPD's recommendation that FAA should continue public participation efforts through re-engaging previously consulted organizations, it is FAA's intent to continue to comply fully with our Section 106 obligations under 36 CFR 800.3(e) and 36 CFR 800.3(f). We are reviewing our previous correspondence with consulting parties including newly identified consulting parties. The attachment outlines the Section 106 communication timeline for this project.

The FAA will continue to engage with HPD, ACHP and the other consulting parties as we move into the eventual development of the planned Programmatic Agreement.

If you have any comments or questions regarding this undertaking, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov.

Sincerely,

Daniel P. Murray
Manager, Safety Authorization Division

Attachment

cc: Sarah Stokely, ACHP
Kevin Lang, Little Cumberland Island
Betsy Merritt, NTHP
Beth Byrd, NPS
Queen Quet, Gullah/Geechee Sea Island Coalition