SPACEPORT CAMDEN
DRAFT ENVIRONMENTAL IMPACT STATEMENT
CAMDEN COUNTY, GEORGIA

VOLUME 2
APPENDICES A THROUGH J
MARCH 2018

Prepared by:
Federal Aviation Administration
Office of Commercial Space Transportation
APPENDIX A   PUBLIC INVOLVEMENT/AGENCY COORDINATION AND CONSULTATION
A PUBLIC INVOLVEMENT/AGENCY COORDINATION AND CONSULTATION

A.1 Public Involvement

A.1.1 Public Scoping

FAA gathered input from the public during the scoping process, which is an early and open process for determining the range of issues to be addressed in the EIS.

Scoping provides an opportunity for the general public, government agencies, and interested groups to learn about the purpose and need, the Proposed Action, and alternatives for implementing the Proposed Action. The scoping process also provides an opportunity for the public to help define the scope of the Draft EIS, the alternatives, and the analyses by suggesting alternative approaches that meet the purpose and need and raising concerns and issues. During the public scoping comment period for this Spaceport Camden EIS, FAA requested input from government agencies, Native American tribes, organizations, interest groups, and the public on issues of concern and alternatives to be analyzed.

Scoping for this Spaceport Camden EIS began with the publication of the Notice of Intent (NOI) to prepare an EIS, open a public scoping period, and hold a public scoping meeting in Camden County, Georgia, on November 6, 2015 (80 FR 68893). The NOI provided the date and time for the public scoping meeting and a summary of the Proposed Action; invited interested agencies, organizations, Native American tribes, and members of the public to submit comments; and formally initiated the public scoping comment period. FAA also notified, by postcard or email, individuals; Federal, State, and local agencies; elected officials; and various groups that were likely to be interested in the Proposed Action and the scoping process. The NOI was also posted on the FAA’s Spaceport Camden EIS website: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport. This appendix contains materials and information from the scoping process, specifically the Scoping Summary Report.

The public scoping comment period was originally scheduled to close on January 4, 2016, but in response to public requests, it was extended to January 18, 2016. The extension was announced by issuing a notice of extension of public scoping comment period in the Federal Register on January 11, 2016 (81 FR 1280), posting a notice on the FAA’s Spaceport Camden EIS website, and sending email notifications to those on the FAA’s Spaceport Camden mailing list.

Two scoping meetings were held for the Spaceport Camden EIS, one for the public and one for agencies with an interest or involvement in the project.

Public Scoping Summary Report

This section presents a copy of the Scoping Summary Report, including the associated appendices that contain the Federal Register NOI, correspondence/communication regarding the scoping meetings, newspaper advertisements, Government-to-Government correspondence and National Historic Preservation Act Section 106 Consultation initiation letters, as well as Agency comments received during the scoping period.
Scoping Summary Report

April 2016

Welcome

PUBLIC SCOPING MEETING
Spaceport Camden Environmental Impact Statement

December 7, 2015 • 5:00 pm to 8:00 pm
Camden County, Georgia
Please sign in!

Scoping is your opportunity to provide comments to help us improve our analysis

Federal Aviation Administration
Office of Commercial Space Transportation
Executive Summary

The Federal Aviation Administration (FAA) is preparing the Spaceport Camden Environmental Impact Statement (EIS) to evaluate the potential impacts of the Camden County, Georgia, Board of Commissioners’ (the County’s) proposal to develop a commercial space launch site (“Spaceport Camden”). Under the Proposed Action presented during the public scoping comment period, the County would construct and operate Spaceport Camden, which would consist of a vertical launch site, a landing zone, a control center complex, and another facility similar to the control center that would include provisions for visitors and viewing launches. The County plans to offer the site for up to 12 vertical launches and up to 12 landings of associated launch vehicle first stages per year. Prior to conducting operations at the proposed Spaceport Camden, the County must obtain a Launch Site Operator License from the FAA. In addition, launch vehicle operators proposing to launch from Spaceport Camden must obtain a launch license(s) from the FAA for the operation of their vehicle(s) from Spaceport Camden. The Spaceport Camden EIS will evaluate the potential direct, indirect, and cumulative environmental impacts that may result from the Proposed Action of constructing and operating Spaceport Camden, including related activities and actions considered connected to the Proposed Action.

Scoping is a required component of the EIS process and is conducted in accordance with the National Environmental Policy Act (NEPA); Council on Environmental Quality (CEQ) Regulations (Title 40 of the Code of Federal Regulations, Parts 1500-1508 [40 CFR Parts 1500-1508]); the Environmental Quality Improvement Act of 1970, as amended (Title 42 United States Code, Section 4371 et seq.); executive orders; FAA Order 1050.1F, Environmental Impacts: Policies and Procedures; and other applicable FAA orders, directives, and guidance. Scoping is an open process for determining the range of issues to be addressed in the EIS and identifying potential significant issues related to a Proposed Action, including environmental concerns, from government agencies and the public.

This Scoping Summary Report provides an overview of the activities conducted and the comments received during the public scoping comment period for the Spaceport Camden EIS, which began with issuance of the Notice of Intent (NOI) to prepare an EIS, Open a Public Scoping Period, and To Hold a Public Scoping Meeting in Camden County, Georgia (80 Federal Register 68893) on November 6, 2015. The NOI provided the date and time for the public scoping meeting and a summary of the Proposed Action; invited interested agencies, organizations, Native American tribes, and members of the public to submit comments; and formally initiated the public scoping comment period. The FAA also notified, by postcard or email, individuals; Federal, State, and local agencies; elected officials; and various interest groups that were likely to be interested in the Proposed Action and the scoping process. The public scoping comment period was originally scheduled to close on January 4, 2016, but in response to public requests, the period was extended by the FAA an additional 14 days (81 Federal Register 1280).

The FAA held a public scoping meeting on Monday, December 7, 2015, from 5:00 p.m. to 8:00 p.m. at the Camden County Public Services Authority Recreation Center located at 1050 Wildcat Drive in Kingsland, in Camden County, Georgia. The public scoping meeting began with an open-house poster session from 5:00 p.m. to 6:00 p.m., during which members of the public could speak to FAA representatives and view posters about the proposed project, the Spaceport Camden EIS, and the NEPA process. After the open house, the FAA began the formal meeting with a brief presentation about the proposed project and the licensing and NEPA processes, followed by the public comment session. Speakers were called during the comment session in the order in which they signed up to speak.

A total of 909 comment submissions were received during scoping; this total includes 770 comment submissions received during the time the public scoping comment period was officially opened (November 6, 2015 to January 18, 2016). Table ES-1 summarizes the number of comment submissions
provided through the various methods available to the public. All comments received during the scoping period are being given equal consideration in the preparation of the draft EIS.

Table ES-1. Comment Submission Method Summary

<table>
<thead>
<tr>
<th>Method of Submitting Comments</th>
<th>Total Number of Comment Submissions Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Comments at Scoping Meeting</td>
<td>45</td>
</tr>
<tr>
<td>Oral Comments at Scoping Meeting</td>
<td>53</td>
</tr>
<tr>
<td>Electronic (Email)</td>
<td>770</td>
</tr>
<tr>
<td>U.S. Mail</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>909</td>
</tr>
</tbody>
</table>

* Duplicate comment submissions provided via different methods were only counted once.

b A total of 125 comment submissions were received prior to the scoping comment period and 14 comment submissions were received after the conclusion of the scoping comment period.

The potential impacts from the Proposed Action and alternatives on the environmental impact categories (or resource areas) listed in Paragraph 4-1 of FAA Order 1050.1F are not listed in FAA Order 1050.1F, Paragraph 4-1 will be analyzed, as relevant.
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## ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAA</td>
<td>Clean Air Act</td>
</tr>
<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>DoD</td>
<td>U.S. Department of Defense</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>FAA</td>
<td>Federal Aviation Administration</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>NHPA</td>
<td>National Historic Preservation Act</td>
</tr>
<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent</td>
</tr>
<tr>
<td>NPCA</td>
<td>National Parks Conservation Association</td>
</tr>
<tr>
<td>NPS</td>
<td>National Park Service</td>
</tr>
<tr>
<td>NRHP</td>
<td>National Register of Historic Places</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
</tbody>
</table>
1.0 Introduction

The Federal Aviation Administration (FAA) is preparing the Spaceport Camden Environmental Impact Statement (EIS) to evaluate the potential impacts of the Camden County, Georgia, Board of Commissioners’ (the County’s) proposal to develop a commercial space launch site (“Spaceport Camden”). Under the Proposed Action presented during the public scoping comment period, the County would construct and operate Spaceport Camden, which would consist of a vertical launch site, a landing zone, a control center complex, and another facility similar to the control center that would include provisions for visitors and viewing launches. The County plans to offer the site for up to 12 vertical launches and up to 12 landings of associated launch vehicle first-stages per year. Prior to conducting operations at the proposed Spaceport Camden, the County must obtain a Launch Site Operator License from the FAA. In addition, launch vehicle operators proposing to launch from Spaceport Camden must obtain a launch license(s) from the FAA for the operation of their vehicle(s) from Spaceport Camden. The Spaceport Camden EIS will evaluate the potential direct, indirect, and cumulative environmental impacts that may result from the Proposed Action of constructing and operating Spaceport Camden, including related activities and actions considered connected to the Proposed Action.

Scoping is a required component of the EIS process and is conducted in accordance with the National Environmental Policy Act (NEPA); Council on Environmental Quality (CEQ) Regulations (Title 40 of the Code of Federal Regulations, Parts 1500-1508 [40 CFR Parts 1500-1508]); the Environmental Quality Improvement Act of 1970, as amended (Title 42 United States Code, Section 4371 et seq.); executive orders; FAA Order 1050.1F, Environmental Impacts: Policies and Procedures; and other applicable FAA orders, directives, and guidance. Scoping is an open process for determining the range of issues to be addressed in the EIS and identifying potential significant issues related to a Proposed Action, including environmental concerns from government agencies and the public. The scoping process helps the FAA identify issues that will be analyzed in depth in the Spaceport Camden EIS, identify any other environmental reviews and consultation requirements necessary for the Proposed Action, and assign responsibilities among lead and cooperating agencies for inputs to the EIS. Scoping also serves to identify issues not requiring detailed analysis and issues that have been addressed by prior environmental review, set the temporal and geographic boundaries of the EIS, determine reasonable alternatives, and identify available technical information. During the public scoping comment period, the FAA requested input from government agencies, Native American tribes, organizations, interest groups, and the public on issues of concern and alternatives to be analyzed.

This Scoping Summary Report provides an overview of the activities conducted and the comments received during the public scoping comment period for the Spaceport Camden EIS, which began with issuance of the Notice of Intent (NOI) to prepare an EIS, Open a Public Scoping Period, and To Hold a Public Scoping Meeting in Camden County, Georgia (80 Federal Register 68893) on November 6, 2015. The public scoping comment period was originally scheduled to close on January 4, 2016, but in response to public requests, the period was extended by the FAA an additional 14 days. This extension was announced by:

- Issuing a Notice of Extension of Public Scoping Comment Period in the Federal Register on January 11, 2016 (81 Federal Register 1280);
- Posting a notice on the FAA Spaceport Camden website that the comment period was extended: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/; and
- Sending email notifications to those on the FAA’s Spaceport Camden mailing list.
Copies of the Federal Register notices are provided in Appendix A to this Scoping Summary Report. Copies of the email notifications are provided in Appendix B.

2.0 Scoping Process

Scoping provides an opportunity for the general public, government agencies, and interested groups to learn about the Purpose and Need, the Proposed Action, and alternatives for implementing the Proposed Action. The scoping process also provides an opportunity for the public to help define the scope of the draft EIS, the alternatives, and the analyses through suggesting alternative approaches that meet the Purpose and Need and raising concerns and issues.

The NOI to prepare an EIS, Open a Public Scoping Period, and To Hold a Public Scoping Meeting in Camden County, Georgia was published on Friday, November 6, 2015, in the Federal Register. The NOI provided the date and time for the public scoping meeting and a summary of the Proposed Action; invited interested agencies, organizations, Native American tribes, and members of the public to submit comments; and formally initiated the public scoping comment period. The FAA also notified, by postcard or email, individuals; Federal, State, and local agencies; elected officials; and various interest groups that were likely to be interested in the Proposed Action and the scoping process. As discussed in Section 1.0, the public scoping comment period was extended by 14 days. Copies of the postcard and email notifications are provided in Appendix B to this Scoping Summary Report.

Advertisements announcing the public scoping meeting were placed in The Brunswick News and the Tribune & Georgian newspapers in the 2 weeks preceding the public scoping meeting (Table 1). The Brunswick News and the Tribune & Georgian provide service to the potentially affected communities in proximity to the proposed project. The newspapers determined the placement of the notices. The advertisements summarized the Proposed Action; provided the time, date, and location of the public scoping meeting; and described the methods for submitting scoping comments. Copies of the advertisements as they appeared in print are provided in Appendix C to this Scoping Summary Report.

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Publication Date</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Brunswick News</td>
<td>November 28, 2015</td>
<td>2A</td>
</tr>
<tr>
<td></td>
<td>December 5, 2015</td>
<td>4A</td>
</tr>
<tr>
<td>Tribune &amp; Georgian</td>
<td>November 26, 2015</td>
<td>5A</td>
</tr>
<tr>
<td></td>
<td>December 3, 2015</td>
<td>6A</td>
</tr>
</tbody>
</table>

In December 2015, the FAA mailed letters to the leaders of the following Native American tribes, initiating formal government-to-government consultation: Chickasaw Nation, Choctaw Nation of Oklahoma, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlooc Tribal Town. In January 2016, the FAA mailed National Historic Preservation Act (NHPA) Section 106 consultation letters to the Georgia State Historic Preservation Officer, the Tribal Historic Preservation Officers of the aforementioned tribes, and the Cherokee of Georgia Tribal Council, Georgia Tribe of Eastern Cherokee, and the Lower Muscogee Creek Tribe. The FAA also emailed a NHPA Section 106 consultation letter to the Chair of the Gullah Geechee Commission. See Appendix D to this Scoping Summary Report for copies of these letters.
3.0 Public Scoping Meeting

The FAA held a public scoping meeting on Monday, December 7, 2015, from 5:00 p.m. to 8:00 p.m. at the Camden County Public Services Authority Recreation Center located at 1050 Wildcat Drive in Kingsland, in Camden County, Georgia. Meeting attendees were welcomed at the entrance of the Recreation Center and were asked to fill out scoping meeting sign-in cards. Members of the public who wished to speak during the public comment portion indicated their intention to speak when they registered. Speakers were then called during the comment session in the order in which they signed up to speak.

3.1 Format and Public Meeting Materials

The public scoping meeting began with an open-house poster session from 5:00 p.m. to 6:00 p.m., during which members of the public could speak to FAA representatives and view posters about the proposed project, the Spaceport Camden EIS, and the NEPA process. Posters provided information on the NEPA process and environmental impact categories (or resource areas); an overview of the Proposed Action, activities, and facilities; the FAA licensing and permitting process; and the public involvement process. These and other materials presented at the public scoping meeting can be found on the FAA Spaceport Camden website: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

After the open house, the FAA began the formal meeting with a brief presentation about the proposed project and the licensing and NEPA processes, followed by the public comment session. During the poster session and after the public comment session, FAA project team representatives were available to explain the proposed project and alternatives, answer questions about the project, and describe the environmental impact analysis process and related timeline. Representatives from the Spaceport Camden Project were also present to answer questions about the proposed project.

Handouts about the Proposed Action, the NEPA process, how to provide comments, and other relevant information were available in various locations in the meeting and poster session rooms, and handouts of the posters were available at each poster table. Comment forms and pens were available for attendees to fill out and submit comments at the public scoping meeting, or the comment forms could be taken home and mailed to the FAA after the meeting. A court reporter was present during the open house to record oral comments for those who did not wish to speak publically at the
meeting and to record the public comment session (see the FAA Spaceport Camden website for the transcript of the public comment session:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/).

3.2 Attendance
A total of 460 individuals signed in at the public scoping meeting. Attendees included members of the public, representatives of Federal and State elected officials, city government agencies, and the community groups shown in Table 2.

Table 2. Elected Officials, Agencies, and Community Groups at the Public Scoping Meeting

<table>
<thead>
<tr>
<th>Attendee</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jared Downs</td>
<td>on behalf of U.S. Senator Johnny Isakson</td>
</tr>
<tr>
<td>Representative Jeff Jones</td>
<td>Georgia House of Representatives, District 167, Brunswick</td>
</tr>
<tr>
<td>Representative Jason Spencer</td>
<td>Georgia House of Representatives, District 180, Woodbine</td>
</tr>
<tr>
<td>Kenneth E. Smith</td>
<td>Mayor, Kingsland</td>
</tr>
<tr>
<td>Louise V. Mitchell</td>
<td>City of Woodbine Council (Mayor Pro-tem)</td>
</tr>
<tr>
<td>Steve Howard</td>
<td>Camden County Administrator</td>
</tr>
<tr>
<td>Michael J. Fender</td>
<td>Camden County Board of Commissioners, Director of Finance and Budget</td>
</tr>
<tr>
<td>Charles Clark</td>
<td>Camden County Board of Commissioners, District 2 Commissioner</td>
</tr>
<tr>
<td>Jimmy Starling</td>
<td>Camden County Board of Commissioners, Chairman and District 3 Commissioner</td>
</tr>
<tr>
<td>Gary Blount</td>
<td>Camden County Board of Commissioners, District 4 Commissioner</td>
</tr>
<tr>
<td>Al Crane</td>
<td>Charlton County Board of Commissioners</td>
</tr>
<tr>
<td>Julie T. Martin</td>
<td>Brunswick City Commission</td>
</tr>
<tr>
<td>Linda Williams</td>
<td>St. Marys City Council</td>
</tr>
<tr>
<td>Elaine Powierski</td>
<td>St. Marys City Council</td>
</tr>
<tr>
<td>Rachel Baldwin</td>
<td>Camden County Chamber of Commerce</td>
</tr>
<tr>
<td>Douglas Cooper</td>
<td>Camden County Chamber of Commerce</td>
</tr>
<tr>
<td>Amy Hendricks</td>
<td>Camden County Chamber of Commerce</td>
</tr>
<tr>
<td>Gary Straight</td>
<td>Camden County Chamber of Commerce, St. Marys Downtown Development Authority</td>
</tr>
<tr>
<td>M.H. Woodside</td>
<td>Brunswick-Golden Isles Chamber of Commerce</td>
</tr>
<tr>
<td>Michael B. Johnson</td>
<td>Brunswick-Golden Isles Chamber of Commerce</td>
</tr>
<tr>
<td>Missy Nev</td>
<td>Brunswick-Golden Isles Chamber of Commerce</td>
</tr>
<tr>
<td>Mike Henley</td>
<td>Brunswick-Golden Isles Chamber of Commerce</td>
</tr>
<tr>
<td>Brittany Miller</td>
<td>Camden County Joint Development Authority</td>
</tr>
<tr>
<td>James Coughlin</td>
<td>Camden County Joint Development Authority</td>
</tr>
<tr>
<td>Teira Cole</td>
<td>Camden County Joint Development Authority</td>
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<tr>
<td>Charlie Smith, Jr.</td>
<td>Camden County Joint Development Authority</td>
</tr>
<tr>
<td>Mel Baxter</td>
<td>Brunswick and Glynn County Development Authority</td>
</tr>
<tr>
<td>Shavona Williams</td>
<td>Glynn County Airport Commission</td>
</tr>
<tr>
<td>John J. Holman</td>
<td>City Manager, City of St. Marys</td>
</tr>
<tr>
<td>Sandra Bayson</td>
<td>City Administrator, City of Woodbine</td>
</tr>
<tr>
<td>Kyle Tibbo</td>
<td>City Administrator, City of Woodbine</td>
</tr>
<tr>
<td>Ken Kessler</td>
<td>Planning &amp; Zoning Director, City of Kingsland</td>
</tr>
<tr>
<td>Jeffrey S. Adams</td>
<td>Community Development Director, City of St. Marys</td>
</tr>
</tbody>
</table>

4
3.3 Media

Representatives from seven television, radio, and print media organizations attended the public scoping meeting. Table 3 lists the media organizations present at the meeting (media sign-in sheets can be found on the FAA Spaceport Camden website: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/).

<table>
<thead>
<tr>
<th>Television</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBC 12 WTLV First Coast News, Jacksonville</td>
</tr>
<tr>
<td>Radio</td>
</tr>
<tr>
<td>NPR Atlanta, WABE 90.1</td>
</tr>
<tr>
<td>Print Media</td>
</tr>
<tr>
<td>The Brunswick News</td>
</tr>
<tr>
<td>Camden County Press</td>
</tr>
<tr>
<td>Florida Times-Union</td>
</tr>
<tr>
<td>St. Marys Magazine</td>
</tr>
<tr>
<td>Tribune &amp; Georgian</td>
</tr>
</tbody>
</table>

4.0 Scoping Comments

Five methods were available to the public for providing comments:

- submitting written comments at the public scoping meeting;
- providing oral comments during the public scoping meeting;
- providing oral comments privately to the court reporter during the poster session preceding the comment portion of the public scoping meeting;
- submitting comments electronically to FAACamdenSpaceportEIS@Leidos.com; and
- sending written comments by U.S. mail to Ms. Stacey M. Zee, FAA Environmental Specialist for the Spaceport Camden EIS.

The FAA’s written public comment form included the following statement regarding personally identifying information: “Please Note: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.” A good faith effort was made to remove personally identifying information from the comment submissions provided during the public scoping comment period.
Table 4 identifies the number of comment submissions and the method by which they were received.

<table>
<thead>
<tr>
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<td><strong>Total</strong></td>
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</tbody>
</table>

\(^a\) Duplicate comment submissions provided via different methods were only counted once.

\(^b\) A total of 125 comment submissions were received prior to the scoping comment period and 14 comment submissions were received after the conclusion of the scoping comment period.

As indicated in Table 4, a total of 909 comment submissions were received. This total includes 770 comment submissions received during the time the public scoping comment period was officially opened (November 6, 2015 to January 18, 2016). Of these 770 comment submissions, 355 comment submissions were provided as part of a campaign by the National Parks Conservation Association (NPCA). Prior to the initiation of the public scoping comment period, 125 comment submissions were received, 124 of which were from a campaign by the Wild Cumberland Organization. After the close of the public scoping comment period, another 14 comment submissions were received, 10 of which were additional NPCA campaign letters. Comment submissions are posted on the FAA’s Spaceport Camden EIS website at: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Commenters at the public scoping meeting had 2 minutes in which to make their public statements so that everyone who wanted to speak had the opportunity. This time limit was announced in the NOI to allow speakers to prepare in advance. Attendees also had the opportunity to speak to the court reporter during the open house poster session before the formal FAA presentation and comment session. The court reporter captured these oral comments verbatim (the scoping transcript can be found on the FAA Spaceport Camden website: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/). There were 53 oral commenters at the public scoping meeting; 51 spoke during the comment session and two spoke privately to the court reporter.

4.1 Public Mailing List

In addition to providing comments during the public scoping comment period, the public, government agencies, and interested groups were encouraged to continue their participation by requesting their contact information be added to the FAA’s project mailing list on sign-in sheets, comment forms, and the FAA website. In all, 28 commenters specifically requested to be added to the mailing list during the public scoping comment period. Those who attended the public scoping meeting and signed in, and
those who provided comments during the public scoping comment period and provided contact information, were added to the mailing list (unless they expressed a desire not to be added).

4.2 Comments and Issues Analysis

This section describes the number of comment submissions that were received from members of the public (including comments received prior to and after the public scoping comment period), and the range of comment topics.

Concerns raised by commenters about the Proposed Action included the following:

- Disturbance of the natural habitat and visitor experience on Cumberland Island National Seashore;
- Conflict between the Proposed Action and the wilderness designation of portions of the Cumberland Island National Seashore under the Wilderness Act;
- Decreases in tourism and eco-tourism, Cumberland Island visitation, and other local outdoor commerce;
- Impacts on the public and threatened and endangered species from noise, vibration, chemical use and release, and lighting;
- Potential for hazards to the public, land, and wildlife from accidents or failed launches;
- Impacts on Naval Submarine Base Kings Bay, especially from a failed launch or accident;
- The effectiveness of emergency response and preparedness in the event of an accident, including the suitability of the existing road network and water evacuation routes;
- A lack of specific information about the Proposed Action (trajectories, frequency, duration, and vehicle specifications);
- Safety issues with, and lack of precedent for, launches over populated areas and the failure rates of commercial rockets at other launch sites;
- Impacts of evacuations and land and water closures (including closure of the Intracoastal Waterway) on local residents;
- Lowered property values and increased insurance rates;
- Overall reduction in local quality of life;
- Financial liability of Camden County and its residents;
- Impacts on cultural and historic sites from noise and vibration, including those listed on the National Register of Historic Places;
- Potential for vibrations to cause the release of residual hazardous materials from onsite soils;
- Degradation of air quality and the potential for release of toxic fumes during launches;
- Degradation or contamination of groundwater and surface waters;
- Impacts on salt marshes, barrier islands, tidal areas, and other coastal resources; and
- De-confliction of both military and commercial airspace.
Positive impacts of the Proposed Action cited by commenters included the following:
- Ideal setting of site (prior land use, location, isolation, natural buffers);
- Creation of new jobs/high paying jobs;
- Regional economic stimulus;
- Increased tourism; and
- Increased educational opportunities and the retention of graduates with technical degrees.

All comments received during the scoping period are being given equal consideration in the preparation of the draft EIS. The potential impacts from the Proposed Action and alternatives on the environmental impact categories (or resource areas) listed in Paragraph 4-1 of FAA Order 1050.1F will be analyzed as part of the draft EIS. Additional resource areas recommended by commenters which are not listed in FAA Order 1050.1F, Paragraph 4-1 (e.g., airspace; geology and soils; health and safety; transportation) will be analyzed and presented in appendices to the draft EIS.
Appendix A

Federal Register Notices
DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
Office of Commercial Space Transportation; Notice of Intent To Prepare an Environmental Impact Statement (EIS), Open a Public Scoping Period, and To Hold a Public Scoping Meeting in Camden County, Georgia

AGENCY: The Federal Aviation Administration (FAA) is the lead Federal agency. The National Aeronautics and Space Administration and National Park Service are cooperating agencies for this EIS.

ACTION: Notice of intent to prepare an EIS, open a public scoping period, and hold a public scoping meeting.

SUMMARY: This Notice provides information to Federal, State, and local agencies; Native American tribes; and other interested persons regarding the FAA’s intent to prepare an EIS to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site (“Spaceport Camden”). The Camden County Board of Commissioners proposes to construct and operate Spaceport Camden in an unincorporated area of Woodbine, in Camden County, Georgia. The FAA will prepare the EIS in accordance with the National Environmental Policy Act of 1969 (NEPA; 42 United States Code 4331 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations parts 1500–1508), and FAA Order 1650.1F, Environmental Impacts: Policies and
Draft Environmental Impact Statement
Spaceport Camden

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Procedures, as part of its licensing process, the FAA is initiating National Historic Preservation Act Section 106 Consultation to determine the potential effects of the Proposed Action on historic properties. The FAA is also consulting with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act regarding potential impacts on federally-listed threatened and endangered species. Pursuant to the U.S. Department of Transportation Act of 1986, this EIS will comply with the requirements of Section 4(f) of the Act. Additional information is available online at: http://www.faa.gov/about/offices/officea_effc.ops/air/environmental/epa/docs/review/draft_scorp/camden_ spaceport/.

DATES: The FAA invites interested agencies, organizations, Native American tribes, and members of the public to submit comments or suggestions to assist in identifying significant environmental issues and in determining the appropriate scope of the EIS. The public scoping period starts with the publication of this Notice in the Federal Register. To ensure sufficient time to consider issues, comments will be submitted to Ms. Stacey M. Zee, FAA Environmental Specialist, by one of the methods listed below no later than January 4, 2016. All comments will receive the same attention and consideration in the preparation of the EIS.

ADDRESSES: Comments, statements, or questions concerning scoping issues or the EIS process should be mailed to Ms. Stacey M. Zee, FAA Environmental Specialist, Spaceport Camden County, Economic Development Office, 1 Century Boulevard, Suite 305, Germantown, MD 20874. Comments can also be sent by email to FAACamdenSpaceportEIS@leidos.com.

SUPPLEMENTARY INFORMATION:

Background

The FAA is preparing an EIS for the Camden County Board of Commissioners to construct and operate Spaceport Camden, a proposed commercial space launch site in an unincorporated area of Woodbine, in Camden County, Georgia. The County will be required to obtain a Launch Site Operator License from the FAA for the operation of the launch site. The EIS will consider the potential environmental impacts of the Proposed Action and the No Action Alternative; however, based on comments received during the scoping period, the FAA may analyze additional alternatives. The successful completion of the environmental review process does not guarantee that the FAA Office of Commercial Space Transportation would issue a Launch Site Operator License to the Camden County Board of Commissioners. The project must also meet all FAA requirements of a Launch Site Operator License. Individual launch operators proposing to launch from the site would be required to obtain a launch license.

Proposed Action

The Proposed Action is for the FAA to issue a Launch Site Operator License to the Camden County Board of Commissioners that would allow the Camden County Board of Commissioners to offer the commercial space launch site, Spaceport Camden, to commercial launch providers to conduct launch operations of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles. Under the Proposed Action, the Camden County Board of Commissioners would construct and operate Spaceport Camden, which would include a vertical launch site, a landing zone, a control center complex, and a facility that includes visitor-viewing areas. Spaceport Camden would accommodate up to 12 vertical launches and up to 12 associated launch vehicle first-stage landings per year. In addition, Spaceport Camden would be up to 12 static fire engine tests and up to 12 wet dress rehearsals per year.

The Camden County Board of Commissioners has signed an option to purchase approximately 4,000 acres of an approximately 12,000-acre industrial site on which to construct the spaceport, and is considering purchasing approximately another 7,600 acres of adjoining property in the same industrial complex. The proposed Spaceport Camden property is located in an unincorporated area of Woodbine, in Camden County, approximately 11.8 miles due east of the town of Woodbine, Georgia. The site is on the coast, surrounded by salt marshes to the east and south, and the Satilla River to the north. The property comprises uplands, salt marshes, and freshwater wetlands. Approximately 300 non-contiguous uplands acres would be used for the launch pad, landing site, control center, and supporting facilities. Each of these facilities would be fenced to provide security and access control, as would the approximately 400 acres of uplands on which these facilities would be located. The remainder of the site, much of which is marshland, would be used as buffer.

The vertical launch facility would be approximately 23 acres in size and would include a launch pad and stand with its associated flame duct; propellant storage and handling areas; vehicle and payload integration facility; storage tanks, lightning protection systems; deluge water systems for local sound and vibration suppression; and other launch-related facilities and systems. The landing area would be approximately 11 acres in size and include a proposed 400-foot by 400-foot concrete pad located roughly in the center of the area, with fuel and oxidizer “off load” tanks, and related infrastructure. The control center complex would be located on the property at a safe distance from the launch and landing areas. The control center complex would house the site administration office, a control room with related equipment, payload processing/deck-out area, and a first responder facility. This complex would be situated in an area of approximately 2.75 acres, and would consist of two buildings with a parking lot between them. There would be a similarly constructed near the main entrance of the property that the launch vehicle service and land at Spaceport Camden, would land in the Atlantic Ocean, either in the water or on a barge.

The potential environmental impacts of all proposed construction and operational activities, including those from launching solid and liquid vertical launch vehicles, will be analyzed in the EIS. The EIS will evaluate the potential environmental impacts associated with air quality; biological resources (including fish, wildlife, and plants); climate; coastal resources; Department of Transportation Act, Section 4(f); hazardous materials, solid waste, and pollution prevention; historical, archaeological, and cultural resources;
land use; natural resources and energy supply; noise and noise-compatible land use; socioeconomics, environmental justice, and children’s health and safety risks; visual effects; water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers). This analysis will include an evaluation of potential direct and indirect impacts, and will account for cumulative impacts from other relevant activities in the area of Camden County, Georgia.

Alternatives

The alternatives under consideration include the Proposed Action and the No Action Alternative; however, based on comments received during the scoping period, the FAA may analyze additional alternatives. Under the No Action Alternative, the FAA would not issue a Launch Site Operator License to the Camden County Board of Commissioners.

Scoping Meeting

A public scoping meeting will be held to solicit input from the public on potential issues that may need to be evaluated in the EIS. The scoping meeting will be held on Monday, December 7, 2015, from 5 p.m. to 8 p.m., at the Camden County Public Services Authority Recreation Center Community Room, 1050 Wildcat Drive, Kingsland, Georgia 31548. The meeting format will include an open-house workshop from 5:00 p.m. to 6:00 p.m. The FAA will provide an overview of the environmental process from 6:00 p.m. to 6:15 p.m., followed by a public comment period from 6:15 p.m. to 8:00 p.m. During the public comment period, members of the public may provide up to a 2-minute statement. The FAA will transcribe oral comments. Members of the public also may submit written or emailed comments. All comments received during the scoping period, whether provided in writing or verbally, will be given equal weight and will be taken into consideration in the preparation of the Draft EIS.

More information on the proposed project and the NEPA process is available on the project Web site at: http://www.doc.gov/about/offices_org/headquarters_offices/ia/ environmental/nea/docs/review/documents_progress/camden_spaceport/
DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

AGENCY: DOT, Federal Aviation Administration (FAA), lead Federal agency; and National Aeronautics and Space Administration, and National Park Service, cooperating agencies.

ACTION: Notice of extension of public scoping comment period.

SUMMARY: A Notice of Intent to prepare an Environmental Impact Statement, open a public scoping period, and hold a public scoping meeting for the proposed Spaceport Camden was published in the Federal Register by the Federal Aviation Administration on November 6, 2015. The comment period for the Draft EIS was to end on January 4, 2016 (more than 45 days after publication of the Notice of Intent in the Federal Register). This notice extends the comment period to January 18, 2016 to allow the public additional time to provide scoping comments.

DATES: Written comments must be received on or before January 18, 2016.

ADDRESSES: Please submit comments, statements, or questions concerning scoping issues or the EIS process to Ms. Stacey M. Zee, FAA, Environmental Specialist, Spaceport Camden County EIS, c/o Leidais, 20201 Century Boulevard, Suite 105, Germantown, MD 20874. Comments can also be sent by email to FAA Camden Spaceport EIS@faas.gov.com.

FOR FURTHER INFORMATION CONTACT: Ms. Stacey M. Zee, Environmental Protection Specialist, Federal Aviation Administration, 800 Independence Avenue SW., Suite 325, Washington, DC 20591; email Stacey.Zee@faa.gov, or phone (202) 267-6305.

SUPPLEMENTARY INFORMATION: On November 6, 2015, the FAA published a Notice of Intent to prepare an
Environmental Impact Statement, open a public scoping period, and hold a public scoping meeting for the proposed Spaceport Camden in the Federal Register and requested comments. The public scoping period was originally scheduled to close on January 4, 2016, but the FAA extended the comment period an additional 14 consecutive days, changing the deadline for submitting public scoping comments from January 4, 2016 to January 18, 2016.

Additional information regarding the proposed project is available online at:
http://www.faa.gov/about/offices/oaa/headquarters_offices/oaa/environmental/spaceport/EnvironmentalImpactStatement/documents_progress/camden_spaceport/

Issued in Washington, DC on January 5, 2016.

Daniel Murray,
Manager, Space Transportation Development Division.

[D0 Dec. 2015-00394 Filed 1-6-16; 4:45 am]

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Appendix B

Scoping and Scoping Extension Communications
SPACEPORT CAMDEN EIS

The Federal Aviation Administration (FAA) Office of Commercial Space Transportation is in the initial planning stages of preparing an Environmental Impact Statement (EIS) to evaluate a proposed commercial space launch site (known as Spaceport Camden) in Camden County, Georgia.

Public Scoping Meeting
Monday, December 7, 2015, 5:00 PM to 8:00 PM
Camden County Public Service Authority Recreation Center, Community Room
1050 Wildcat Drive, Kingsland, Georgia 31548

You are invited to attend the public scoping meeting, which includes an open-house workshop from 5:00-6:00 PM, an FAA presentation of the environmental process from 6:00-6:15 PM, and a public comment period from 6:15-8:00 PM. During the public comment period, members of the public may provide up to a 2-minute statement.

Stacey Zee
Spaceport Camden EIS
c/o Leidos
2001 Century Boulevard
Suite 115
Germania, MD 20674

Comments, statements, questions, and requests to be added to the project mailing list can be sent by email to FAA/CamdenteSpaceportEIS@leidos.com. They may also be mailed to: Mr. Stacey Zee, Spaceport Camden EIS, c/o Leidos, 2001 Century Boulevard, Suite 115, Germantown, MD 20674.

In all communications, please include your first and last name, and email address.
Draft Scoping Summary Report
Spaceport Camden Environmental Impact Statement

Dear Interested Party:

You are receiving this email to inform you about the Spaceport Camden Environmental Impact Statement (EIS) project.

Pursuant to the National Environmental Policy Act (NEPA), the Federal Aviation Administration (FAA) Office of Commercial Space Transportation is preparing an EIS to evaluate the potential environmental impacts of the Camden County Board of Commissioners' proposal to construct and operate Spaceport Camden, a commercial space launch site. The proposed launch site is located in an unincorporated area of Woodbine, in Camden County, Georgia, approximately 11.5 miles due east of the town of Woodbine, Georgia. On November 6, 2015, the FAA issued a Notice of Intent to prepare the EIS, open the public scoping period, and hold a public scoping meeting in Kingsland, Camden County, Georgia.

The EIS will consider the potential environmental impacts of the Proposed Action and the No Action Alternative. Based on comments received during the scoping period, the FAA may analyze additional alternatives. The Proposed Action is for the FAA to issue a Launch Site Operator License to the Camden County Board of Commissioners that would allow the County to offer the commercial space launch site to commercial launch providers to conduct launches of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles.

To help determine the scope of the EIS, the FAA is hosting a public scoping meeting at the following date, time, and location:

Monday, December 7, 2015
5:30 PM to 8:00 PM
Camden County Public Service Authority Recreation Center
Community Room
1050 Wabasso Drive
Kingsland, Georgia 31548

The meeting format will include an open-house workshop from 5:00 PM to 6:00 PM, followed by a formal comment session. During the open house, there will be a table with comment forms for writing your comments, or you may speak to a stenographer who will record your comments. After the open house, the formal session will begin. The FAA will provide an overview of the environmental process from 6:00 PM to 6:15 PM, followed by a public comment period from 6:15 PM to 8:00 PM. During the public comment period, members of the public may provide up to a 5-minute statement. A stenographer will transcribe oral comments.

Comments, statements, or questions concerning scoping issues or the EIS process should be mailed to: Ms. Stacey H. Zee, FAA Environmental Specialist, Spaceport Camden County EIS, c/o Leidos, 22501 Century Boulevard, Suite 105, Germantown, MD 20874. Comments may also be sent by email to FAACamdenSpaceportEIS@leidos.com.

All comments received during the scoping period, whether provided in writing or orally, will be given equal weight and will be taken into consideration in the preparation of the Draft EIS.

More information on the proposed project and the NEPA process, and the Notice of Intent, are available on the project website at: http://www.faa.gov/about/office_opheimheadquarters_offices/aerospace/environmental/tepa_docs/reviews/documents_progress/camden_spaceport/

Media inquiries, please contact Hank Price at 202-267-3447.
Dear Invited:

The Federal Aviation Administration (FAA) Office of Commercial Space Transportation issued a Notice of Intent (NOI) on November 6, 2015, to prepare an Environmental Impact Statement (EIS) for the Camden County Board of Commissioners' proposal to construct and operate a commercial space launch site ("Spaceport Camden") in unincorporated Woodbine, Camden County, Georgia. The Proposed Action is for the FAA to issue a Launch Site Operator License to the Camden County Board of Commissioners that would allow the County to offer Spaceport Camden to commercial launch providers to conduct launches of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles. Under the Proposed Action, the Camden County Board of Commissioners would construct and operate Spaceport Camden, which would include a vertical launch site, a landing zone, a control center complex, and a facility that includes visitor-viewing areas.

The FAA issued the attached NOI to prepare an EIS for the project, initiate a public scoping process, and hold a public scoping meeting. Additional information about the proposed project can be found at: [Redacted].

In addition to the public scoping meeting listed in the NOI, the FAA will host an agency scoping meeting on Tuesday, December 8 from 9:30 a.m. to 12:00 p.m. at:

Camden County Emergency Operations Center
131 North Lee Street
Kingsland, GA 31548
Conference Call Line - 1-877-423-6338; passcode 338-638-9502#

Immediately following the agency scoping meeting, a site visit is planned from 12:30 to 2:30 p.m.

Attached to the email notification is the list of staff invited to the agency scoping meeting. In some instances, multiple staff from the same agency have been invited. Please review the list of staff and determine the most appropriate attendee(s) from your agency.

If you wish to attend the agency scoping meeting and site visit, please contact me at (202) 267-6505 or Stacey.Zee@faa.gov <mailto:Stacey.Zee@faa.gov> by Friday, December 4. Please note whether you will attend in person or via phone. I look forward to your participation in the environmental review process.


Stacey M. Zee
Environmental Specialist
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591
202-267-6505
Dear Interested Party:

You are receiving this email to inform you about the Spaceport Camden Environmental Impact Statement (EIS) project. The Federal Aviation Administration (FAA) has received a number of requests to extend the scoping period. Therefore, we are extending the scoping comment period until January 16, 2016.

In compliance with FAA policy and procedures (FAA Order 1050.1F) for implementing the National Environmental Policy Act, as amended (42 U.S.C. 4321 et seq.), the FAA initiated a scoping period for the Spaceport Camden EIS through publication of a Federal Register Notice of Intent on November 6, 2015. The FAA held an open house public meeting on December 7, 2015, from 5:00 p.m. to 8:00 p.m. at the Camden County Public Service Authority Recreation Center, located at 1050 Whidbey Drive, Kingsland, Georgia 31548. The public had the opportunity to speak with project representatives one-on-one and submit written comments or provide oral comments to a stenographer. The public scoping period was originally scheduled to close on January 4, 2016, but the FAA is extending the comment period an additional 14 consecutive days, changing the deadline for submitting public scoping comments from January 4, 2016 to January 18, 2016.

The FAA encourages all interested parties to provide comments concerning the scope of the EIS by January 18, 2016. Comments, statements, or questions concerning scoping issues or the EIS process should be mailed to: Ms. Stacey M. Zee, FAA Environmental Specialist, Spaceport Camden County EIS, c/o Leidos, 2001 Century Boulevard, Suite 105, Germantown, MD 20874. Comments may also be sent by email to FAA Camden Spaceport EIS@leidos.com.

All comments received during the scoping period, whether provided in writing or verbally, will be given equal weight and will be taken into consideration in the preparation of the Draft EIS.

More information on the proposed project and the NEPA process, the Notice of Intent, and the Scoping Meeting Information are available on the project website at: http://www.faa.gov/about/offices/headquarters_offices/ost/environmental/npa_docs/2015/05/2050180-8-9950-895696063882393478d/300502787/44824/20150520081017286815169/300502787/44824/20150520081017286815169/

We look forward to receiving your comment by January 18, 2016. After the close of the public comment scoping period, we will prepare a scoping report and post it to the project website.

For media inquiries, please contact Hank Price at 202-267-3447.

Thank you,

Stacey Zee, FAA Environmental Specialist
Office of Commercial Space Transportation
APPENDICES A-29 March 2018

Draft Scoping Summary Report
Spaceport Camden Environmental Impact Statement

From: Stacey Zee [FAA] [mailto:Stacey.Zee@faa.gov]
Sent: Tuesday, January 05, 2016 9:25 AM
To: "auburn@crc.gov", "joe.bradford@dirr.ga.gov", "garry.ingram@nps.gov"
"info@georgiapeacecouncil.org", "karen.hyten@crc.gov", "keith.moore@dirr.state.ga.gov"
"jul.turner@dirr.state.ga.gov", "tom.shlack@dirr.state.ga.gov", "becky.kelley@dirr.state.ga.gov"
"eddie.henderson@dirr.state.ga.gov", "sfoester@dirr.state.ga.gov", "david.cross@dirr.ga.gov"
"rgilbert@kellyaults.net", "mark.williams@dirr.state.ga.gov", "kirk.burgess@dirr.state.ga.gov"
"bradley.smith@dirr.state.ga.gov", "glen.bowman@nps.gov", "jim.buddenhewer@gemba.gov.gov"
"flatt@flatt.state.ga.gov", "jennifer.dioso@dirr.ga.gov", "tma.norman-1@nasa.gov"
"donald.j.darkest@nasa.gov", "shane.quain@nasa.gov", "kevin.square@nps.gov"
"kay.davy@nasa.gov", "paul.wilber@nasa.gov", "terri.daly@nasa.gov", "garry.ingram@nps.gov"
"john.pry@nps.gov", "doug.hoffman@nps.gov", "tami.c.kids@usace.army.mil"
"william.m.fulton@usace.army.mil", "sherrill.d.richard@usace.army.mil", "jeffrey.michaud@usace.army.mil"
"pacel.wilber@nasa.gov", "joyce_stanley@usace.army.mil", "william.studying@navy.mil"; "toney.heather@jeta.gov", "somerville.eric@jeta.gov", "robert_brooks@flws.mil"
"gill_ortiz@flws.mil", "kimberly.l.given@usace.army.mil", "bill_wickoff@flws.mil"
Lisa.E.Farre@fws.gov; Tony.Butter@fws.gov; Larry.Check@fws.gov; Jackie.Sweet@fws.gov; Dondra.L.Darkest@fws.gov; John.A.Shafer@fws.gov; Jacky.daly@nasa.gov; Steven.E.Cross@fws.gov; John.B.Frater@fws.gov; Gail.Wickoff@fws.gov;
William M. Fulton@usace.army.mil; Shawn L. Block@usace.army.mil; CjlfhQ.B.Hendry@usace.mil; Clayton P. Berrill@usace.mil; gasserstana.berry@usace.mil; Bill.Wickoff@fws.gov; Jason.m.manning@usace.mil; laurel.chesson@usace.mil; Center.becker@usace.mil; william.durham@usace.mil; turned.e@usace.mil; Alan.G.Woodle@flhr.gov; Dondra.L.Darkest@fhr.gov; spat.woodle@fhr.gov; Bradley.smith@fhr.gov; Robert.wohleben@fhr.gov; Jason.m.manning@fhr.gov; Todd.schroeder@fhr.gov
Cc: Daniel.murray@fws.gov; Howard.kemp@faa.gov; Daniel.Cutler@faa.gov; Grome, Chad D.; Gallagher, Daniel.W.; Pam.Schafer@fws.gov; Elise.M.Hendry@fws.gov; Pam.Underwood@fws.gov; Leslie.Grinich@fhr.gov

Subject: RE: Spaceport Camden Agency Scoping Meeting

All —

Based on a number of requests from the public – we are extending the Spaceport Camden EIS scoping period to January 18, 2016. Attached is the notice that is going out to the general distribution list. We will post a notice in the Federal Register. A notice also will be posted to the project website: http://www.fws.gov/abaco/office/one/headquarters/office/atl/environmental/epa_docu/

Thank you to all of you who have submitted comments so far. We look forward to working together on this project.

Stacey M. Zee
Environmental Specialist
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591
202-267-9305

From: Zee, Stacey (FAA)
Sent: Wednesday, December 30, 2015 9:00 AM
To: "auburn@crc.gov", "joe.bradford@dirr.ga.gov", "garry.ingram@nps.gov"
"info@georgiapeacecouncil.org", "karen.hyten@crc.gov", "keith.moore@dirr.state.ga.gov"
"jul.turner@dirr.state.ga.gov", "tom.shlack@dirr.state.ga.gov", "becky.kelley@dirr.state.ga.gov"
"eddie.henderson@dirr.state.ga.gov", "sfoester@dirr.state.ga.gov", "david.cross@dirr.ga.gov"
"rgilbert@kellyaults.net", "mark.williams@dirr.state.ga.gov", "kirk.burgess@dirr.state.ga.gov"
"bradley.smith@dirr.state.ga.gov", "glen.bowman@nps.gov", "jim.buddenhewer@gemba.gov.gov"
"flatt@flatt.state.ga.gov", "jennifer.dioso@dirr.ga.gov", "tma.norman-1@nasa.gov"
"donald.j.darkest@nasa.gov", "shane.quain@nasa.gov", "kevin.square@nps.gov"
"kay.davy@nasa.gov", "paul.wilber@nasa.gov", "terri.daly@nasa.gov", "garry.ingram@nps.gov"
"john.pry@nps.gov", "doug.hoffman@nps.gov", "tami.c.kids@usace.army.mil"
"william.m.fulton@usace.army.mil", "sherrill.d.richard@usace.army.mil", "jeffrey.michaud@usace.army.mil"
"pacel.wilber@nasa.gov", "joyce_stanley@usace.army.mil", "william.studying@navy.mil"; "toney.heather@jeta.gov", "somerville.eric@jeta.gov", "robert_brooks@flws.mil"
"gill_ortiz@flws.mil", "kimberly.l.given@usace.army.mil", "bill_wickoff@flws.mil"
Lisa.E.Farre@fws.gov; Tony.Butter@fws.gov; Larry.Check@fws.gov; Jackie.Sweet@fws.gov; Dondra.L.Darkest@fws.gov; John.A.Shafer@fws.gov; Jacky.daly@nasa.gov; Steven.E.Cross@fws.gov; John.B.Frater@fws.gov; Gail.Wickoff@fws.gov; William M. Fulton@usace.army.mil; Shawn L. Block@usace.army.mil; CjlfhQ.B.Hendry@usace.mil; Clayton P. Berrill@usace.mil; gasserstana.berry@usace.mil; Bill.Wickoff@fws.gov; Jason.m.manning@usace.mil; laurel.chesson@usace.mil; Center.becker@usace.mil; william.durham@usace.mil; turned.e@usace.mil; Alan.G.Woodle@flhr.gov; Dondra.L.Darkest@fhr.gov; spat.woodle@fhr.gov; Bradley.smith@fhr.gov; Robert.wohleben@fhr.gov; Jason.m.manning@fhr.gov; Todd.schroeder@fhr.gov

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All –

I've attached a list of attendees with roles/responsibilities and a summary of the December 8th Spaceport Camden Agency Scoping Meeting. Please review the files and send any corrections back in redline.

Please let me know if your agency is interested in participating as a cooperating agency or coordinating agency on the ES – or as a consulting party in the Section 106 process.

Please remember to submit your scoping comments by Monday, January 4th.

As a reminder – the project website can be found here:
http://www.nasa.gov/About/offices/headquarters/offices/ao3/environmental/epa_docs/cedex/documents_essess/ceess_scanspaceport/

Also for your reference - below are links to the FAA NEPA Implementing Order – FAA Order 1050.1F:

- FAA Order 1050.1F: http://www.faa.gov/about/offices/headquarters/offices/ao3/environmental/policy/easenpl/cedex/cedex_faa_nepa_order/
- Desk Reference - http://www.faa.gov/about/offices/headquarters/offices/ao3/environmental/policy/easenpl/cedex/cedex_faa_nepa_order/desk_ref/

Have a wonderful New Year!

Stacey M. Zee
Environmental Specialist
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave., SW
Washington, DC 20591
202-267-9365

B-6
Attachment to January 5, 2016 Email

Subject – Spaceport Camden EIS – Notice of Scoping Period Extension

Dear Interested Party:

You are receiving this email to inform you about the Spaceport Camden Environmental Impact Statement (EIS) project. The Federal Aviation Administration (FAA) has received a number of requests to extend the scoping period. Therefore, we are extending the scoping comment period until January 18, 2016.

In compliance with FAA policy and procedures (FAA Order 1950.1F) for implementing the National Environmental Policy Act, as amended (42 U.S.C. 4321 et seq.), the FAA initiated a scoping period for the Spaceport Camden EIS through publication of a Federal Register Notice of Intent on November 6, 2015. The FAA held an open house public meeting on December 7, 2015, from 5:00 p.m. to 6:00 p.m. at the Camden County Public Service Authority Recreation Center, located at 1050 Wildcat Drive, Kingsland, Georgia 31548. The public had the opportunity to speak with project representatives one-on-one and submit written comments or provide oral comments to a stenographer. The public scoping period was originally scheduled to close on January 4, 2016, but the FAA is extending the comment period an additional 14 consecutive days, changing the deadline for submitting public scoping comments from January 4, 2016 to January 18, 2016.

The FAA encourages all interested parties to provide comments concerning the scope of the EIS by January 18, 2016. Comments, statements, or questions concerning scoping issues or the EIS process should be mailed to: Ms. Stacey M. Zee, FAA Environmental Specialist, Spaceport Camden County EIS, c/o Leidos, 2001 Century Boulevard, Suite 105, Germantown, MD 20874. Comments may also be sent by email to FAAcamden/SpaceportEIS@Leidos.com.

All comments received during the scoping period, whether provided in writing or verbally, will be given equal weight and will be taken into consideration in the preparation of the Draft EIS.

More information on the proposed project and the NEPA process, the Notice of Intent, and the Scoping Meeting information are available on the project website at: http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

We look forward to receiving your comment by January 18, 2016. After the close of the public comment scoping period, we will prepare a scoping report and post it to the project website.

For media inquiries, please contact Hank Price at 202-267-3447.

Thank you,

Stacey Zee, FAA Environmental Specialist
Office of Commercial Space Transportation
Appendix C

Newspaper Advertisements
Local & State

Big spenders flock to Isles stores on Black Friday

CHRISTMAS SEASON HAS ARRIVED

Fundraising campaign to preserve, enhance Glynn tree canopy continues
Enlargement of Newspaper Ad on Previous Page

Thursday, Nov. 26
Commercial trash will be picked up on regular service day.

WM would like to wish everyone a Safe & Happy Thanksgiving!

RIVED
Santa and Mrs. Claus are greeted by the large crowd gathered at Machen Square on Newcastle Street Friday evening for the annual Christmas Tree lighting ceremony. Following a countdown from 10 by the crowd, the lights on the Brunswick Christmas tree came on Friday evening at Machen Square on Newcastle Street. Scott Ragsby kicked the event off with the reading of "Tweaks the Elf." Before Christmas, then the crowd counted down from 10 and the lights on the tree turned on.

Gusty Harris/The Brunswick News

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Please mark your calendars and attend the public hearings:

Time and Date:
December 7, 2018, 5 - 8 p.m.

Location:
Camden County Public Service Authority
100 Village Drive
Kingston, Georgia 31331

The public hearings will be held at the public hearings to discuss the DJST Final Environmental Impact Statement. The public will have an opportunity to comment on the Final Environmental Impact Statement and to learn more about the Space Launch Site proposed for Camden County. The public comments will be considered in the Final Environmental Impact Statement document.

For more information, please visit the website: www.spaceportcamden.com

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Enlargement of Newspaper Ad on Previous Page

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Gusty Harris/The Brunswick News

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For more information, please visit the website: www.spaceportcamden.com

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Enlargement of Newspaper Ad on Previous Page

The Federal Aviation Administration invites you to attend a public scoping meeting for an Environmental Impact Statement for Construction and Operation of a Commercial Space Launch Site in Camden County, Georgia.

The FAA has initiated a scoping process to identify community concerns and local issues that will be addressed in the EIS. As part of the scoping process, public scoping meetings will be held in various locations. These meetings are intended to provide an opportunity for the public to learn about the proposed project, provide input, and express concerns. The public is encouraged to attend these meetings and provide feedback on the proposed project.

Time and Date:
December 7, 2016, 5 - 8 pm
Caldwell Banker
670 Ocean Blvd
St. Simons Island, GA 31522

Location:
Camden County Police Station
Recreation Center Community Room
1000 North Drive
Kingston, GA 30223

The meeting location is accessible to persons with disabilities. If you require special assistance, such as a sign language interpreter, please call 1-800-555-6091 by 12:00 p.m. on December 3, 2016.

Can't Make the Meeting?
Please send comments by January 4, 2016.

Send comments by email: FAA Camden Spaceport 2016@faa.gov.

Mail comments to: Mr. Stacy J. Zic, FAA, Environmental Specialist, Spaceport Camden IOC, Office of Environmental Protection, 800 Independence Avenue SW, Washington, DC 20591.

Appendix D

Government-to-Government Letters
and National Historic Preservation Act
Section 106 Consultation Initiation Letters
Spaceport Camden Project Description and Proposed Project Location

This project description and map are attachments for each of the letters in this Appendix.
Spaceport Camden Project Description

The Camden County Board of Commissioners (the County) proposes to construct and operate a commercial space launch site (Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The County has signed an option to purchase approximately 4,000 acres of an approximately 12,000-acre industrial site on which to construct the spaceport, and is considering purchasing approximately another 7,800 acres of adjoining property in the same industrial complex. The County will be required to obtain a Launch Site Operator License from the FAA for the operation of the launch site.

The proposed Spaceport Camden property is located in an unincorporated area of Woodbine, in Camden County, approximately 11.5 miles due east of the town of Woodbine, Georgia, in the extreme southeastern part of the state. Access to the site is at the eastern terminus of Union Carbide Road, an extension of Harriet’s Bluff Road (Exit 7 from I-95). The site is on the coast, surrounded by salt marshes to the east and south, and the Satilla River to the north. The property comprises uplands, salt marshes, and fresh water wetlands. Approximately 100 non-contiguous upland acres would be used for the launch pad, landing site, control center, and supporting facilities. Each of these facilities would be fenced to provide security and access control, as would the approximately 400 acres of uplands on which these facilities would be located. The remainder of the site, much of which is marshland, would be used as buffer.

The vertical launch facility would be approximately 23 acres in size and would include a launch pad and stand with its associated flame duct; propellant storage and handling areas; vehicle and payload integration facility; storage tanks; lightning protection systems; deluge water systems for local sound and vibration suppression; and other launch-related facilities and systems. The landing area would be approximately 11 acres in size and include a proposed 400-foot by 400-foot concrete pad located roughly in the center of the area, with fuel and oxidizer “off load” tanks, and related infrastructure. The control center complex would be located on the property at a safe distance from the launch and landing areas and would house the site administration offices, a control room with related equipment, payload pre-processing/checkout area, and a first-responder facility. This complex would be situated in an area of approximately 2.75 acres, and would consist of two buildings with a parking lot between them. A similar facility would be constructed near the main entrance of the property mirroring the control center complex in size, design and facilities, but would also include provisions for visitors and viewing launches.

Operations would consist of up to 12 vertical launches and up to 12 associated launch vehicle first-stage landings per year. In addition, other operations could occur, including up to 12 static fire engine tests and up to 12 wet dress rehearsals per year. All vehicles would launch to the east over the Atlantic Ocean. The first stage of the launch vehicle could return to and land at Spaceport Camden, or would land in the Atlantic Ocean.
Location of Proposed Spaceport Camden Project
Government-to-Government Letters
Dear Mr. Scott:

The purpose of this letter is to initiate formal government-to-government consultation with the Thlophalo Tribal Town regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project is enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa Docs/review/Documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Charles Coleman, Tribal Historic Preservation Officer
Draft Scoping Summary Report
Spaceport Camden Environmental Impact Statement

U.S. Department of Transportation
Office of the Associate Administrator for Commercial Space Transportation
800 Independence Ave., SW.
Washington, DC 20591

DEC 4 2015

Principal Chief Leonard M. Harjo
Seminole Nation of Oklahoma
PO Box 1498
Wewoka, Oklahoma 74884

Dear Mr. Harjo:

The purpose of this letter is to initiate formal government-to-government consultation with the Seminole Nation of Oklahoma regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc:  Alan D. Emarthle, Tribal Historic Preservation Officer
      Natalie (Deere) Harjo, Tribal Historic Preservation Officer
Dear Ms. Bryan:

The purpose of this letter is to initiate formal government-to-government consultation with the Poarch Band of Creeks regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Robert Thower, Tribal Historic Preservation Officer
DEC 4, 2015

Principal Chief George Tiger
Muscogee (Creek) Nation
PO Box 580
Okmulgee, Oklahoma 74447

Dear Mr. Tiger:

The purpose of this letter is to initiate formal government-to-government consultation with the Muscogee (Creek) Nation regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/offices/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Johnnie Jacobs, Tribal Historic Preservation Officer
Emman Spain, Tribal Historic Preservation Officer
Chief Gary Batton  
Choctaw Nation of Oklahoma  
PO Box 1210  
Durant, Oklahoma 74702-1210

Dear Mr. Batton:

The purpose of this letter is to initiate formal government-to-government consultation with the Choctaw Nation of Oklahoma regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Dr. Ian Thompson, Tribal Historic Preservation Officer
Governor Bill Anoatubby  
Chickasaw Nation  
PO Box 1548  
Ada, Oklahoma 74821

Dear Mr. Anoatubby:

The purpose of this letter is to initiate formal government-to-government consultation with the Chickasaw Nation regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an "undertaking" subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe's interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/neps_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Ms. Virginia Nail, Tribal Historic Preservation Officer
Chairman James E. Billie
Seminole Tribe of Florida
6300 Stirling Road
Hollywood, Florida 33024

Dear Mr. Billie:

The purpose of this letter is to initiate formal government-to-government consultation with the Seminole Tribe of Florida regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an "undertaking" subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Dr. Paul N. Backhouse, Tribal Historic Preservation Officer
National Historic Preservation Act
Section 106 Consultation Initiation Letters
Ms. Jennifer Dixon
Environmental Review & Preservation Planning Program Manager
DNR Historic Preservation Division
Jewett Center for Historic Preservation
2610 GA Hwy 155, SW
Stockbridge, GA 30281

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Ms. Dixon:

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the National Historic Preservation Act (NHPA) and its implementing regulations under Section 106 (36 CFR Part 800, as amended). A project description and map are attached to this letter. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

This letter is intended to initiate Section 106 consultation and solicit any initial comments you may have on the proposed undertaking. The FAA is inviting the following tribes to participate in this consultation: Cherokee of Georgia Tribal Council, Chickasaw Nation of Oklahoma, Georgia Tribe of Eastern Cherokee, Lower Muscogee Creek Tribe, Muscogee Creek Nation, Poarch Band of Creeks, Seminole Nation of Oklahoma, Seminole Tribe of Florida, Tsalithoicco Tribal Town. The FAA may also identify additional consulting parties through the NEPA scoping process.
Draft Scoping Summary Report
Spaceport Camden Environmental Impact Statement

The FAA will provide you with a determination of the Area of Potential Effects (APE) for the proposed project and a proposed level of effort for the identification of historic properties. If you have initial comments or questions on this undertaking, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachments: Spaceport Camden Project Description, Location Map
JAN 06 2016

Eric Wilkerson
Tribal Representative
Cherokee of Georgia Tribal Council
Saint George, Georgia 31646

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Mr. Wilkerson:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/neaDocsReview/documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2018

Virginia Nall
Tribal Historic Preservation Officer
Chickasaw Nation
PO Box 1548
Ada, Oklahoma 74821

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Ms. Nall:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/act/environmental/nepa_docs/review/documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2015

Dr. Ian Thompson
Tribal Historic Preservation Officer
Choctaw Nation of Oklahoma
PO Box 1210
Durant, Oklahoma 74702-1210

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Dr. Thompson:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@fda.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2016

Georgia Tribe of Eastern Cherokee
PO Box 1915
Cumming, Georgia 30028

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

To Whom It May Concern:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/as/environmental/nepa_docs/review/documents_progress/camden_spaceport.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@fas.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2016

Marian S. McCormick
Principal Chief
Lower Muskogee Creek Tribe
106 Tall Pine Drive
Whigham, Georgia 39897

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Ms. McCormick:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nea Docs/Review/documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2016

Johnnie Jacobs and Emman Spain
Tribal Historic Preservation Officers
Muscogee (Creek) Nation
PO Box 580
Okmulgee, Oklahoma 74447

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Mr. Jacobs and Mr. Spain:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/offices_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@fann.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2015

Robert Thrower
Tribal Historic Preservation Officer
Poarch Band of Creek Indians
5811 Jack Springs Road
Atmore, Alabama 36502

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Mr. Thrower:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/sat/environmental/nea_docs/eval/ documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2016

Natalie (Deere) Harjo
Tribal Historic Preservation Officer
Seminole Nation of Oklahoma
PO Box 1498
Wewoka, Oklahoma 74884

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Ms. Harjo:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

For your reference, Attachment A to this letter includes a map of the project area and brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/ost/environmental/nepa_docs/review/documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
Alan D. Emarthle  
Tribal Historic Preservation Officer  
Seminole Nation of Oklahoma  
PO Box 1768  
Seminole, Oklahoma 74868  

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia  

Dear Mr. Emarthle:  

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.  

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.  

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If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@fas.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
JAN 06 2016

Dr. Paul N. Backhouse
Tribal Historic Preservation Officer
Seminole Tribe of Florida
30290 Josie Billie Highway
Clewiston, Florida 33440

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Dr. Backhouse:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

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If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@faa.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
Charles Coleman  
Tribal Historic Preservation Officer  
Thiophleco Tribal Town  
PO Box 188  
Okemah, Oklahoma 74859

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Mr. Coleman:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the above-referenced project and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NHPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

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If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305 (Stacey.Zee@fia.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachment A.
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
Dr. Althea Nastalgia Sumpter
Gullah-Geechee Commission Chair
Gullah-Geechee Cultural Heritage Corridor
PO Box 1007
Johns Island, SC 29457-1007

Dear Dr. Sumpter:

The purpose of this letter is to initiate consultation with you under Section 106 of the National Historic Preservation Act (NHPA) for the Spaceport Camden Environmental Impact Statement (EIS) and to learn whether your organization is interested in participating as a Consulting Party.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the Federal Aviation Administration (FAA) Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the NEPA and its implementing regulations under Section 106 (36 CFR Part 800, as amended). The proposed project and its associated activities also are subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an EIS to meet its regulatory obligations.

For your reference, attachments to this letter include a map of the project area and a brief project description. Additional information on this project is available on the FAA’s website at https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zeo of my staff at 202-267-9305 (Stacey.Zeo@fmi.gov). I respectfully request that you respond at your earliest convenience if you are interested in participating as a Consulting Party. Thank you for your consideration.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachment
Spaceport Camden Project Description
Location of Proposed Spaceport Camden Project Map
Appendix E

Agency Comments
Mr. Daniel Murray
U.S. Department of Transportation
Federal Aviation Administration
Office of the Associate Administrator
for Commercial Space Transportation
800 Independence Ave., SW.
Washington, DC 20591

Dear Mr. Murray:

The National Park Service (NPS) has reviewed the Federal Aviation Administration’s (FAA) November 6, 2015, Federal Register Notice announcing its Notice of Intent (NOI) to prepare an Environmental Impact Study (EIS) to analyze the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site, Camden County, Georgia.

As a cooperating agency, the NPS formally submits comments in developing the EIS for all phases of the study which have the potential to affect the Cumberland Island National Seashore (CIUS).

The NPS has special expertise regarding the resources and values of CIUS and the surrounding areas, which would aid the FAA in its environmental impact analysis and ultimate decision regarding the issuance of a Launch Operator License for the Camden County site. Consideration of NPS concerns will help ensure that pertinent NPS mission statements, legislative authorities, and policies are duly considered when developing any alternatives, related management actions, or options that could potentially affect CIUS.

Specific Comments

Development of launch facilities adjacent to CIUS with launch trajectories and first stage recoveries over CIUS could have several primary affects, including temporary or permanent closures which would restrict visitor access, impacts to CIUS’ significant natural, scenic, and cultural resources; and potential threats to visitor safety. The NPS offers the following questions and comments, specifically:
1. Unit of the National Park Service
   a. As such, CUIS is committed to the legislated purpose of the National Park Service, which is "...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The proposed launch facility and its associated activities could potentially have an impact on the NPS responsibility and ability to achieve that purpose.

2. Visitor access restrictions
   a. Closures and other restrictions associated with the proposed launch facility will impact the visitor enjoyment and experience for many. In many cases, this may affect once-in-a-lifetime opportunities, months or years of planning, financial obligations, time commitments, and/or other commitments. Moreover, some closures/restrictions may occur with little notice and create further, more severe hardship.

3. The island contains 9,886 acres of Designated Wilderness and 10,500 acres of Potential Wilderness (16 U.S.C. §§ 1131-1136). What will the impacts be to Wilderness during flight operations for both launch and recovery? What will the impacts be from daily facility operations?
   a. The Cumberland Island Wilderness was established in 1982 under Public Law 97-250. Wilderness laws, regulations, and policies restrict conditions and activities that can occur in association with these protected areas. NPS Director’s Order 41 delegates to the Park the responsibility for stewardship for all categories of eligible, proposed, recommended, and designated wilderness areas.
   b. The Wilderness Act of 1964 defines Wilderness as "...areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."
   c. The Cumberland Island Wilderness area covers the northern half of the island. Activities associated with the proposed launch facility have the potential to impact
Wilderness character and values and may conflict with established laws, regulations, and policies.

4. Five historic districts and two archaeological districts listed on the National Register of Historic Places (NRHP) are located on Cumberland Island. What are the potential impacts to these resources?
   a. The CUIS historic and archeological districts were deemed significant due to their association with people, events, architecture, and/or cultures from Native American inhabitation, European contact, the colonial period, the plantation era, the gilded age, and other periods of history.
   b. The NRHP districts are:
      - Dungeness Historic District, located on the island’s south end
      - Greyfield Historic District, located on the south within privately held property
      - Stafford Plantation Historic District, located mid-island
      - Plum Orchard Historic District, located mid-island
      - High Point – Half Moon Bluff Historic District, located on the north end
      - Table Point Archeological District, located mid-island
      - Rayfield Archeological District, located mid-island

5. The island contains 91 historic structures on the NPS List of Classified Structures. There are also 64 known archeological sites. What are the potential impacts to these resources?
   a. The 91 historic structures on the island date to the early 19th century and later. The majority are contributing features to one of the NRHP listed Historic Districts, with the remainder listed as a single resource in the NRHP.
   b. The archeological sites are the remnants of over 4,000 years of human habitation on the island. Some of the sites are contributing features to the NRHP historic districts. The others are located throughout the island outside of a defined historic district.

6. What will the impacts be to native flora and fauna on the island, including multiple Federal and State protected species?
   a. The island and/or its environs support 22 species of animals on Federal and/or State protected species lists, ranging from rare to endangered. Critical nesting habitat is involved for some species. There are also potentially six plant species that are State listed, ranging from rare to threatened. In addition, there are species that are protected under other Federal laws such as the 1918 Migratory Bird Treaty Act.
   b. There are 22 identified biological communities on the island with approximately 30 species of mammals, 300 bird species, 55 species of reptiles and amphibians, 85 fish species, and 498 plant species.
7. Government and private inholdings within the CUIS. These properties vary in size, number of residential structures, and volume and period of occupancy. What are the potential impacts to these properties and their occupants?

a. The U.S. Navy owns Drum Point Island, the U.S. Army Corps of Engineers owns portions of the Beach Creek marsh, and the State of Georgia owns large amounts of salt marsh habitat. These properties sustain native habitat and are generally undeveloped.

b. There are ten private, fee simple properties on Cumberland Island ranging in size from 1.6 acres to 210 acres. The properties support various functions including undeveloped land, a cemetery, an inn, and multiple private residences. Volumes and periods of occupancy will vary from fulltime permanent residency to continuous short-term guests to infrequent visitation.

c. There are eleven properties on the island with lifetime reserve agreements for private use and occupancy. The properties range in size from 0.3 acres to 186 acres. Each of the properties contain at least one residential structure and others as many as nine. Volumes and periods of occupancy vary from fulltime permanent residency to occasional overnight occupancy.

8. Will cooperating agencies have access to the operator license application once it is submitted by Camden County?

a. The NPS needs to review the application as early as possible to gather further detail on the proposed facility and activities in order to assess potential impacts to the CUIS.

9. What is the trajectory and flight path for vertical take-offs? What is the trajectory and flight path of a “first stage of the launch vehicle” returning to land at the spaceport? FAA representatives spoke of parameters that the spaceport would have to work within for trajectory and flight path. That information is essential for determining the potential impacts along those courses.

10. In previous conversations with the NPS, the FAA has indicated that the operator permit would not restrict the number of launches. That point needs to be established and/or clarified in the EIS to allow full assessment of potential impacts.

11. FAA representatives indicated that individual launch providers are responsible for launch trajectory and closure areas, among other responsibilities. How many different launch providers can be anticipated and how consistent/inconsistent will coordination be with affected agencies and the public?

a. Multiple launch providers with varying requirements have the potential to create additional and repeated burdens on CUIS and the NPS. It is possible that multiple
Memorandums of Agreement will have to be established with each provider and potentially for the various launch vehicles/payloads.

12. How often will launch providers seek to launch vehicles outside the parameters of the operator license and what will the burden be to affected agencies?
   a. Additional launch specifications and requirements have the potential for further and possibly greater impacts to CUIS.
   b. The FAA has indicated that launches outside the defined parameters of the launch site permit would require additional environmental evaluation and compliance, which would create additional burdens to the NPS and CUIS.

13. What sort of discharge of fluids, chemicals, materials, and/or other substances from launched and returning vehicles occur during flight?
   a. When a rocket is launched and/or a stage returns to the launch site what materials and/or substances are released from the rocket and fall back to earth during the operation?
   b. Materials and/or substances falling onto Cumberland Island and its surrounding waters have the potential to cause short and long term impacts, particularly if they are hazardous materials. Aquatic systems, such as wetlands, could be particularly vulnerable as well as vegetation communities. Visitors, residents, staff, and wildlife encountering these items could also be harmed, even well after the launch has occurred.

14. What are the contents of payloads and what potential hazards might they contain? Are there any limits/restrictions on payloads?
   a. Will any potential payloads contain hazardous materials? In the event of a launch failure and a payload landing on the island or its environs, is there potential for the release of the materials? Health and safety and threats to the island’s natural and cultural resources are a concern directly from the materials and indirectly from any recovery/containment operations.

15. In the event of a catastrophic failure, detonation, or abort what will the impacts be to Cumberland Island? Potential impacts whether the failure occurs over the island or offshore? Could guidance failure or other mishap cause a vehicle to travel beyond the trajectory cone and/or the proposed closure areas?
   a. Such a failure or mishap could have long term effects on the island, potential impairment to the island’s natural and cultural resources, and major consequences for enjoyment of the island by future generations.
16. What is the statistical probability of a catastrophic failure occurring over the island or outside park boundaries, but still having an impact to the island?

   a. The level of risk is needed to properly assess the potential for adverse impacts and/or impairment. Specific statistical information on commercial operators or other entities that may use the facility would be particularly helpful. Risk assessment data should be available, especially for insurance companies such that actuaries can calculate premium rates. At the Mid-Atlantic Regional Spaceport they’ve had eleven launches in 9 years with one (catastrophic) failure. Other sources indicate their record as 12 and 2.

17. How far in advance will a launch schedule be known?

   a. A launch schedule will be critical to park planning for normal park operations and activities, as well as preparation for CUIS operations and actions related to the launch. In addition, the information is needed for visitors as they plan and make reservations to visit CUIS.

18. What are the details of the closure requirement... lead time, duration, scrub and rescheduling, enforcement, cost and economic responsibility, etc.?

   a. The closure requirements will be critical for CUIS to plan, manage, and implement the necessary closure actions and to manage other, unrelated activities that will be disrupted by the closures. In addition, potential rescheduling will require the park to develop contingency plans.

   b. Planning and enforcing closure requirements on the island will place a significant burden on CUIS with respect to staff time and financial costs.

19. Impacts of launches and potential repeated launch delays to park visitation, activities, and operations; particularly considering variable factors such as weather?

   a. The park takes reservations for visitor activities up to six months in advance such as tours to the north end of the island, backcountry camping permits, and ferry transportation. Launch schedules and reschedules would significantly influence those activities and will surely upset visitors’ plans and experiences due to cancellations, evacuations, or other disruptions. Other activities such as public hunts are scheduled through the State of Georgia for a two year cycle. Resource Management activities such as wild horse census and bird surveys are set on specific seasonal and environmental conditions and would potentially be disrupted by schedules/reschedules/closures. Other activities also must be planned well in advance and launches will surely create inconveniences at minimum and major disruptions (scientific, financial, visitor conflicts, logistics, etc.) at the worst.

20. What will the impacts be to natural sound during flight operations for both launch and recovery? What will the impacts be from daily facility operations? The NPS is concerned
about the potential of the proposed action to adversely affect the acoustic environment and soundscapes at CUIS.

a. Natural and cultural sounds are integral components of the suite of resources and values that NPS managers are charged with preserving and restoring. NPS evaluates federal actions which may impact the human and natural environment within our parks with respect to our Organic Act mandates, including “…to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.” The “scenery,” includes the natural soundscapes, as well as the landscape (NPS 2006). NPS Director’s Order 47 delegates to the parks the responsibility to preserve natural soundscapes and eliminate or mitigate inappropriate noise sources.

b. The acoustic environment of a national park, like air, water, or wildlife is a valuable resource that can easily be degraded or destroyed by inappropriate sound levels and frequencies. Intrusive sounds are of concern to the management of national parks because they can impede the ability to accomplish the NPS mission of resource protection. Visitors at many NPS units come with expectations of seeing, hearing, and experiencing phenomena associated with a specific natural or cultural environment, yet in many cases these environments are being increasingly impacted by artificial sounds due to noise associated with aircraft overflights.

21. What will the impacts be to scenic views?

a. In cooperation with surrounding landowners and partners the NPS strives to preserve the scenic views associated with the island. Such viewed preservation is even more important in wilderness areas. Unobstructed views of natural and cultural landscapes are important to visitor enjoyment, experience, and understanding. The NPS is concerned about the potential of the proposed facility to adversely affect scenic views at CUIS.

22. What will the impacts be to night sky due to facility operations?

a. NPS Management Policies dictate that the Service will preserve, to the greatest extent possible, the natural lightscapes of parks, which are natural resources and values that exist in the absence of human-caused light. Natural nighttime light conditions (moon, stars, planets) are part of the visitor experience and enjoyment, and natural light conditions are also important in animal behavior. The NPS is concerned about the potential of the proposed facility to adversely affect the lightscapes at CUIS.

23. Will operation of the facility have any impact to adjacent air quality?

a. The NPS is concerned that routine or accidental emissions from the facility, either through a launch or other operations, may impact the air quality on the island and
in turn have an adverse effect to human health and safety, plant and animal life, water quality, and/or cultural resources.

24. What are the surface water and/or groundwater requirements for the operation? Where will they be drawn from and at what quantity? Potential effects to groundwater quantity and quality? Potential effects to surface water quality?
   a. The NPS is concerned that drawdowns from underground aquifers will have an impact on the island, including surficial aquifers on down to the major Floridan aquifer. Withdrawals from these aquifers could affect wells or surface water.
   b. The NPS is concerned that the discharge of waste water from the facility could have an impact to waters that surround the island and flow tidally into marshes and streams.

25. Other than space vehicles what type of other flight activity can be expected in association with the facility?
   a. Is the facility expected to have any fixed wing or rotary aircraft activity? Is an airstrip proposed? Will they have to apply for an additional license from the FAA for such operations? The NPS is concerned that such activities may have further impacts on CUIS.

26. Is additional transportation infrastructure and/or other support facilities or operations involved such as a port facility or dredging?
   a. The NPS is concerned that supplemental activities not specifically identified in the NOI or public meetings may have impacts on CUIS.

27. What are the operational, logistical, and fiscal burdens placed on Cumberland Island National Seashore to ensure policies, regulations, and other requirements are met in conjunction with proposed space port activities? What is the potential NEPA/NHPA burden placed on Cumberland Island National Seashore in light of actions that may be required on the island to support/address space port activities? What will the NPS have to do to ensure safety and protection of resources?
   a. CUIS has a limited staff.
   b. Will additional Law Enforcement Rangers and emergency responders for medical and fire be needed?
   c. Will the NPS have to erect gates to enforce closures, will we be responsible for evacuating residents, will we have to monitor specific natural or cultural resources to ensure they are not harmed, etc.
d. Will the NPS have to complete our own National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and/or Wilderness compliance to put any of these requirements in place?

e. Of particular concern is the variability from one launch permit/operator to the next. Moreover, if any of these operators wants to go outside the parameters of the site permit then that triggers another round of NEPA compliance.

28. Any seismic effects from launches, landings, firing tests, and wet dress rehearsals?
   a. The NPS is concerned that any seismic effects could have an impact on island resources such as slope and bank erosion, historic structures (some with existing stability problems), or other structures.

29. Notice of Intent states “All vehicles would launch to the east over the Atlantic Ocean”, which fails to recognize that launches would also be over CUIS.
   a. This misconception that rockets will be directly launched and landed over the ocean has been stated elsewhere in other materials and venues and can be misleading to those reviewing the proposed activities. The NPS is concerned that this oversight will leave many with the false impression that the facility and its activities will have little or no effect on CUIS.

30. The NOI describes possible landing of first stage in Atlantic Ocean on a barge or in the water.
   a. More specific information is needed on these possible operations for the NPS to address any potential concerns.

31. What is a wet dress rehearsal?
   a. In the FAA NOI states that the proposed action includes 12 wet dress rehearsals per year. However, there is no explanation of what that activity entails. The NPS cannot address any potential concerns without such information.

Section 4(f) Comments

The NOI identified alternatives under consideration include the Proposed Action and the No Action Alternative. The Proposed Action has been identified as one specific site location within Camden County, Georgia. Section 4(f) of the Department of Transportation Act of 1966, resides in the United States Code at 49 USC § 303 and 23 USC § 438. Section 4(f) protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance and historic sites of national state, or local significance from use by transportation projects. These properties may only be used if there is no prudent or feasible alternative for their use and the program or project encompasses all possible planning to minimize harm resulting
from its use. Constructive use occurs when impacts of a project in proximity to an adjacent or near-by Section 4(f) property are so severe that the activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired.

The CUIS enabling legislation states that it was created "...to provide for public outdoor recreation use and enjoyment of certain significant shoreline lands and waters of the United States, and to preserve related scenic, scientific, and historical values, there is established in the State of Georgia the Cumberland Island National Seashore." The legislation further states that "Except for certain portions of the seashore deemed to be especially adaptable for recreational uses,... which shall be developed for such uses as needed, the seashore shall be permanently preserved in its primitive state, and no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions not prevailing..." In addition, considering the number of proposed closures for actual launches and the anticipated two additional closure backup dates for each individual launch for this proposal as communicated to NPS personnel in 2013, coupled with CUIS' General management Plan maximum daily visitation number of 300 visitors per day, cumulatively, activities within CUIS would be severely limited by these proposed actions. Previous conversations with FAA staff indicate the proposed launch permit would not restrict the number of launches; therefore, it is theoretically possible the number of launches could increase. Given all of these factors, the NPS under Section 4(f) would view this as a constructive use of CUIS. Therefore, we strongly recommend the consideration of other alternative site locations to determine the extent to which other areas would be considered prudent and feasible under the standard of Section 4(f).

We appreciate your coordination with us and look forward to working with the FAA on this important project and EIS. Should you have any questions, or need additional information concerning this request, please contact Mr. Gary Ingram, Superintendent, Cumberland Island National Seashore, by calling (912) 882-4336, extension 227.

Sincerely,

Stan Austin
Regional Director
Southeast Region
From: Durig, Brock CIV NAVFAC SE, EV [mailto:william.durig@navy.mil]
Sent: Friday, December 18, 2015 9:15 AM
To: Zee, Stacey (FAA)
Subject: Navy Region Southeast Scoping Response Letter. Ref: Camden Spaceport EIS

Stacy:

Navy Region Southeast has completed our review of the Camden Spaceport NOI and associated actions. Attached is the official response letter that has been mailed to you (via Leidos).

There is one correction to the letter. Within the second comment (b) we reference the Warning Area W-157. The Warning Area numbering was revised earlier this year with the FAA and the former W-157 has now been broken into smaller sub areas and renumbered.

I have attached an updated Jacksonville Operations Area Map with the associated numbering and coordinates. For a point of reference the proposed Spaceport would be located just north of the SSI (and west of W-136C, W-137C, etc.).

Please do not hesitate to contact me if you need further information and/or mapping. Have a great holiday season and happy new year.

r/

W. Brock Durig
Environment Operations Support
Sr Environmental Planner
CNRSE / NAVFAC SE
904-542-6966 DSN 942
William.durig@navy.mil
William.durig@navy.smil.mil
Ms. Stacey M. Zee  
FAA Environmental Specialist  
Federal Aviation Administration, c/o Leidos  
20201 Century Boulevard, Suite 105  
Germantown, MD 20874

December 17, 2015

Dear Ms. Zee:

SUBJECT: SCOPING COMMENTS ON THE FEDERAL AVIATION ADMINISTRATION (FAA) ENVIRONMENTAL IMPACT STATEMENT TO EVALUATE THE ISSUANCE OF A LAUNCH SITE OPERATOR LICENSE TO CAMDEN COUNTY, GEORGIA, BOARD OF COMMISSIONERS FOR THE PROPOSED SPACEPORT CAMDEN

As the Navy’s Region Environmental Coordinator for Environmental Protection Agency Region 4, Commander, Navy Region Southeast (CNRSE) has reviewed the FAA’s Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site (Spaceport Camden). CNRSE also participated in the agency scoping meeting held on December 8, 2015.

We would request the FAA consider the following comments, questions, and areas of concern relating to Navy training and operations conducted on or in the vicinity of Naval Submarine Base Kings Bay during the EIS analysis and process:

a. Impacts to Navy air operations within Military Operating Areas (MOA’s) in the vicinity of Camden County, GA.

b. Impacts to Navy training and operations at sea and within the Jacksonville Operations Area (primarily Warning Area W-157).

c. Coordination with the Navy (Fleet Area Control and Surveillance Facility Jacksonville) for proposed air and sea space scheduling or de-confliction issues and procedures.

d. Any explosive safety concerns with respect to SUBBASE Kings Bay. The proposed launch area is only approximately 8 miles from the Navy installation.

e. Proposed vehicle flight trajectory limitations.

f. Any cumulative impacts with respect to residential or commercial development that may have the potential to encroach upon SUBBASE Kings Bay.
The Navy understands the importance of developing the commercial space program and we look forward to working with the FAA and Camden County during the EIS process.

My point of contact for future coordination and for any additional information that you may require will be Mr. W. Brock Darig who can be reached at commercial: (904) 542-6966 or email: william.darig@navy.mil.

Sincerely,

C. R. DESTAFNEY, PE
Regional Environmental Director
By direction
of the Commander

Copy to:
SUBASE Kings Bay (N4)
USFF (N46)
FACSFAC JAX (Airspace Officer)
NAVFASE (N4)
WARNING AREAS

OPERATING ALTITUDES:

W-135 SFC-012 W-140 "A-E" SFC-240
W-136 "B-C" and "E-F" W-140 "F" SFC-130
W-137 "A-F" AND "L" SFC-UNL W-140 "H" 430-UNL
W-137 "G" SFC-130 W-141 SFC-050
W-138 "A-E" AND "L" SFC-UNL
W-139 "A-E" SFC-UNL
W-139 "F" SFC-130

NOTE: W-140H does NOT overly W-140A, only W-140B-F

4
Warning Area Coordinates

W-135
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N30°36'00" W080°57'46" to
N30°34'53" W080°57'46" to
N30°39'00" W080°59'47" to
N30°03'21" W081°02'44" to
N30°14'43" W081°14'23" to
N30°19'27" W081°18'19" to

W-136C
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N31°24'00" W080°41'09" to
N30°45'00" W080°56'55" to
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N29°56'38" W080°45'42" to
N29°51'15" W081°02'02" to
N30°03'21" W081°01'44" to

W-136B
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N31°24'00" W080°41'09" to
N31°24'00" W080°50'23" to
N31°37'00" W080°41'00" to

W-136F
N29°51'15" W081°02'02" to
N29°56'38" W080°45'42" to
N29°56'38" W080°54'52" to
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Warning Area Coordinates (cont)

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beginning

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beginning

W-138C
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beginning

W-138D
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beginning

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beginning
Warning Area Coordinates (cont)

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Beginning

W-139B
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Beginning.

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W-139D
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Beginning

W-139E
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APPENDICES A-111 March 2018

Draft Environmental Impact Statement
Spaceport Camden

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Beginning

W-140C
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W-140D
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Warning Area Coordinates
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Dear Ms. Zee,

Thank you for the opportunity to attend the Agency Scoping Meeting regarding the FAA’s intent to prepare an EIS to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site, “Spaceport Camden.” Marine Corps Air Station Beaufort has reviewed the Notice of Intent to prepare an EIS.

Background: In January 2014, the Marine Corps completed the Environmental Impact Statement for the Modernization and Expansion of Townsend Bombing Range (TBR), GA. TBR is located approximately 50 miles north of the proposed site. The Air Station and TBR are connected by approximately 2,600 square miles of Special Use Airspace in Georgia and South Carolina. The Marine Corps is working with the FAA to acquire airspace for this expansion. The additional airspace will exclude non-participating aircraft from intruding into hazardous operations, as required by FAA regulations.

We request the FAA consider the following comments, questions, and areas of concern relating to Marine Corps training conducted on or in the vicinity of Townsend Bombing Range and Marine Corps Air Station Beaufort during the EIS analysis and process:

a. Air Operational impacts will require coordination with MCAS Beaufort as the Using Agency for TBR R-3007, Coastal MDA, Military Training Routes, Warning Areas 137-145, and the Strike Altitude Reservation (ALTZ).

b. Launch trajectory limitations should be developed to include the recovery pattern/path with specific criteria for first stage recovery plan and impact area.

c. Ensure that the Letter of Agreement (LOA) procedure to deconflict airspace scheduling issues is signed by appropriate authority.

d. The Marine Corps requests to be included as a signatory for each Temporary Flight Restriction (TFR) to quantify the exact size and duration.

e. Frequency spectrum impact (i.e., radar, radio restrictions).

f. Impacts (if any) on explosive safety.
Point of Contact for MCAS Beaufort is Laurel Rhoten at (843) 228-7372 or email laurel.rhoten@usmc.mil. Please add her name to the email notification list for future updates. We look forward to working with the FAA and Camden County during the EIS process.

William A. Drawdy  
Natural Resources and Environmental Affairs Officer  
By direction of the Commanding Officer
December 22, 2015

Ms. Stacey M. Zoe
FAA Environmental Specialist
Spaceport Camden County EIS
c/o Leidos
20201 Century Boulevard, Suite 105
Germantown, Maryland 20874

Re: USFWS File Number 2016-0135

Dear Ms. Zoe:

The U. S. Fish and Wildlife Service (Service) has reviewed the Federal Aviation Administration (FAA), Office of Commercial Space Transportation’s Notice of Intent to prepare an Environmental Impact Statement (EIS), Environmental Review 15-0617, to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners (County) for a proposed commercial space launch site, Spaceport Camden, in Camden County, Georgia. The County proposes to construct and operate Spaceport Camden in an unincorporated area approximately 11.5 miles due east of Woodbine on a 4,000 acre tract that could be expanded to 12,000 acres. All land would be owned or leased by Spaceport Camden. Our comments are provided in accordance with provisions of the Endangered Species Act (ESA) of 1973, as amended; (16 U.S.C. 1531 et seq.), the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 et seq.), and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.).

Spaceport Camden would include a number of facilities: a vertical launch facility with propellant tank farm, water tower, launch pad with deluge system and water capture tank and shops/integration facility, a landing zone facility with fuel and oxidizer off-load tanks, a barge landing facility, a launch control center with payload processing facility, and an alternate launch control center with visitor center facility. There would be fencing around each facility and around the spaceport. Proposed operations would include up to twelve launches per year of liquid-fueled, medium-lift-class orbital and suborbital vertical launch vehicles. All launches
would be conducted to the east over Cumberland Island and the Atlantic Ocean. Also up to
twelve static fire engine tests, twelve wet dress rehearsals, and twelve returns of first stage
launch vehicles per year are proposed. The first stage returns could land at the landing zone at
Spaceport Camden, on a barge in the Atlantic Ocean and be returned, or land in the ocean
without recovery.

Under the proposed action, the County would be issued a Launch Site Operator License by the
FAA to operate Spaceport Camden. All future vehicle operators would be required to apply to
the FAA for a launch license prior to conducting launch operations.

Endangered Species Act Comments
Our resources of concern for any geographic area, including this one, can be found on our
Information for Planning and Conservation (IPaC) website: http://ecos.fws.gov/ipac/. The
website has links to species information. Appropriate threatened and endangered species surveys
should be conducted based on the habitats present on the site. The lack of a documented
occurrence mentioned here may indicate lack of a survey rather than the lack of species presence.
Our comments on the species as they are listed in IPaC:

The striped newt (Notophthalmus perstriatus) is a federal candidate species. There have been
two element occurrences of the newt four miles to west in 2008. Similar habitats are anticipated
on the project site. The Service encourages voluntary cooperative conservation efforts for the
newt since it does warrant future protection under the ESA.

The listed shore birds, the piping plover (Charadrius melodus) and the red knot (Calidris rufa)
are found to the east around the sounds, marshes, and beaches. The red knot should be
considered in the EIS if it is found to be in the ‘hazardous airspace’ of Spaceport Camden, this is discussed later in the general comments.

The red-cockaded woodpecker (Picoides borealis) has no known habitat on or near the project
site. The site should be surveyed for potential habitat.

Potential foraging habitat exists in the wetlands on the project site for the wood stork (Mycteria
americana). Extensive foraging habitat for the wood stork is found in close proximity to the site
and throughout the coastal counties of Georgia. The Service considers wood stork rookeries in
Georgia to have a 13-mile core foraging radius. Wetlands within this distance will be used when
the rookeries are active during the months of February through August. The Spaceport Camden
site is encompassed by the core foraging radii of five known active wood stork rookeries.

The Atlantic sturgeon (Acipenser oxyrinchus) and the shortnose sturgeon (Acipenser
brevoortii) are known to occur in waterways of the county. The shortnose sturgeon has been
documented adjacent to the site in the Satilla River. Both sturgeon species are under the
jurisdiction of National Oceanic and Atmospheric Administration (NOAA) Fisheries.
Maintaining the water quality leaving the site may be important to the health of any fish nearby.

There are no known occurrences of hairy rattleweed (Baptisia arachnifera) near the site.
The North Atlantic right whale (Eubalaena glacialis) and its designated critical habitat occur off the coast. The right whale is under the jurisdiction of NOAA Fisheries.

The West Indian manatee (Trichechus manatus) is known to occur in waters adjacent to the site. Any construction in tidal waters associated with this project should be conditioned with the U.S. Army Corps of Engineers “Standard Manatee Conditions and Procedures for Aquatic Construction”. All barge and vessel traffic should be aware of the potential presence of manatees especially when approaching docks, wharfs, and moorings. Any warm and/or fresh water discharges into waters that may hold a manatee should be diffused and possibly metered to prevent them from being a manatee attractant.

The eastern indigo snake (Drymarchon couperi) and the gopher tortoise (Gopherus polyphemus) are both known to occur on the site. The indigo snake is federally listed as threatened. The gopher tortoise is a candidate species for federal listing. The Service encourages voluntary cooperative conservation efforts for the tortoise since it does warrant future protection under the ESA. We encourage coordination with the Georgia Department of Natural Resources for gopher tortoise conservation efforts. The indigo utilizes gopher tortoise burrows during the cold weather months and forages in wetlands during warm months. Project development on gopher tortoise habitat would impact both species. Connectivity between gopher tortoise habitats on and near the site should be considered in the project layout and design to allow movement of tortoises.

Consideration of connectivity for the indigo snake to move between the gopher tortoise burrow uplands and the foraging area wetlands should also be considered in project layout and design. Both species show site fidelity. Surveys for both species should be conducted early in project planning. Project facility layout on the site should consider avoiding impacts to habitat for both species.

Three species of sea turtle nest on area beaches to the east of the project site. The closest nesting beach is 7.5 miles to the east. The loggerhead sea turtle (Caretta caretta) accounts for most of the nesting. The leatherback sea turtle (Dermochelys coriacea) and green sea turtle (Chelonia mydas) occasionally nest. Facility lighting has the potential to cause mis-orientation of nesting sea turtles and hatchlings on the beaches. This could be through sky glow or the lights may be directly visible from Little Cumberland or Jekyll island beaches. We recommend the project be designed with as little light as necessary for the tasks, with lights mounted as low as possible and fully shielded so that neither the luminary nor any reflective surface is visible from the beaches.

Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act Comments

The bald eagle (Haliaeetus leucocephalus) has been documented as nesting on the site. Nests can be abandoned due to disturbance in the area. Currently five nests are documented nearby; three active and two inactive. These nests are within two miles of an assumed center-point for the Spaceport at the Bayer Crop Science Runway (aka Union Carbide plant strip). One of the active nests is on Pompee Island, approximately one half mile north of the currently proposed launch facility. There is another eagle nest four miles to the south on Grover Island. Also there are at least three active eagle nests on Cumberland and Little Cumberland islands approximately six to eight miles generally to the east. Nesting activities occur October through June.
The proposed development will cause the level of human related activities to dramatically increase on this tract. The BGPEA and MBTA prohibit anyone from taking or disturbing bald eagles and their nests. The applicant is responsible for determining if a federal BGPEA permit is necessary. We recommend a thorough survey of the area for all avian concerns. If there are active eagle nests closer than 0.5 miles, or within the proposed hazardous area as defined in a Wildlife Hazard Assessment and Management Plan (discussed later), we recommend the applicant consult with the Service’s Migratory Bird Eagle Permitting Program as a permit would likely be advised under 50 CFR 22.26 (disturbance), or 50 CFR 22.27 (nest take) depending upon the activity being proposed.

The National Bald Eagle Management Guidelines (Guidelines) (U. S. Fish & Wildlife Service, May 2007) contain recommendations for activities near bald eagle nests. Blast zones from rocket tests and launches would be categorized in the Guidelines as being in Category H: blasting and other loud, intermittent noises. The Guidance states: ‘Avoid blasting and other activities that produce extremely loud noises within ½ mile of active nests, ...’. As mentioned previously, the Pompey Island eagle nest is approximately ½ mile from the proposed launch pad. Much of this distance is across an ‘open vista’ of marsh and open water. Visibility is a factor because, in general, eagles are more prone to disturbance when an activity occurs in full view. For this reason, we recommend that people locate activities farther from the nest structure in areas with open vistas, in contrast to areas where the view is shielded by trees, or other screening factors.

For construction activities, the Guidelines generally prescribe a minimum 660-foot no disturbance buffer around any active eagle nest and recommend applying for an eagle take permit if there is any disturbance planned within that distance. This guideline is based on there being similar scope activities within one mile of the eagle nest. Based on preliminary evaluation of the project site, it appears that all the nests are greater than one mile from any neighboring activity considered similar in scope. Consideration should be given to timing construction activities that are near active nests to be outside of nesting season.

Todd Schneider (Georgia Department of Natural Resources - personal communication, December 15, 2015), reports the brown pelican (Pelecanus occidentalis) has a nesting colony on an island in the Satilla River approximately 1.5 miles northeast of the proposed launch pad. The colony has been extant for over 20 years and has up to 400 nesting pairs per year.

General Comments
We recommend a Wildlife Hazard Assessment and Management Plan be prepared by USDA Wildlife Services, or APHIS. Plan recommendations should be considered in the EIS. For the plan and for the EIS, a systematic survey for active raptor nests should be conducted within the ‘hazardous airspace’. The distance for this should be defined by APHIS. Any other MBTA nests should be noted. Information from any other surveys necessary for the Wildlife Hazard Assessment and Management Plan should also be considered in the EIS.

Consider adjusting the locations, or siting, of the proposed facilities on the site to avoid and accommodate wildlife species and habitats of concern, and sensitive natural environments. In addition, during Spaceport Camden operations there may be unintended leaks or releases of...
chemicals into the environment. During project planning, facilities with the highest potential for leaks or releases should be sited away from the most environmentally sensitive areas on and near the project site, such as protected species habitats and tidal marsh environments. Forested uplands should serve as buffers between the facilities and the sensitive habitats. For example, the site has documented occurrences of the federally threatened eastern indigo snake. The snake is a commensal species of the gopher tortoise, a federal candidate species. The site should be surveyed to identify gopher tortoise habitat so that it may be avoided in siting the facilities of the project. Currently the Launch Control Center and Payload Processing Facility are adjacent to or sited on possible gopher tortoise habitat. As another example, the launch facility is currently proposed close to the brackish tidal marsh and an active eagle nest on Pompey Island. We recommend moving it inland to the southeast at least 1.25 miles to create a much wider forested buffer to protect the marsh. This would also serve to lessen any potential impacts to the active eagle nest and the pelican nesting colony. Also connectivity between habitats utilized by species of concern should be considered. The indigo snake moves between upland gopher tortoise burrows in cold weather months and wetlands in warm months. Impediments to these type movements should be avoided. If avoidance is not possible, they should be minimized, or as a last resort they should be mitigated for.

The site has known environmental contaminants and potentially has unknown contaminants. These need to be discovered on the site, defined, and considered in the project and EIS. Soils on site are sandy allowing for hydrological movement within the soil. Ground disturbing activities may free contaminants confined in the soil.

The Service considers the proposed development to be on and adjacent to environmentally sensitive natural resources. Development causes increased impervious surface on site. Stormwater runoff volumes and pollutant loads generated on the site are increased and have the potential to impact the water quality of the habitats present both on site and in the immediately adjacent tidal marshes and rivers. The impacts include changes in hydrology, decreased water quality, due to increased levels of sediment, nutrients, metals, hydrocarbons, bacteria and other pollutants, increased water temperatures, reduced dissolved oxygen levels, degradation of habitat and an overall decline in wildlife health, abundance, and diversity (CSS 2009). The stormwater will carry pollutants from the development that will degrade the wetlands and potentially harm wildlife living there. This will be indirect and cumulative adverse effects of the action. The Service recommends not routing stormwater into wetlands. Pollutants carried in runoff from the development have the potential to leave the project area and adversely impact the adjacent marshes and open waters of the Satilla and Cumberland Rivers. A downstream analysis should be performed to identify any additional overbank or extreme flooding that may result from an increase in stormwater runoff rates and volumes on the development site.

Due to the proximity of the site to tidal wetlands, we recommend provisions be made for stormwater to be treated and held on site. We recommend following the criteria in the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual sections 4.4.3, 4.4.5 and 4.5.1 for primary conservation areas, extreme flood protection, and special criteria. We further recommend a conservation easement or similar protective instrument be placed on all wetlands in the development site for their long-term protection.
We appreciate the opportunity to comment on this project. We will continue to coordinate with your office as needed and welcome questions and comments at any time. If you have any further questions, please contact our Coastal Georgia Sub Office staff biologist, Bill Wikoff, at 912-832-8739 extension 5.

Sincerely,

Donald W. Inman, PhD.
Project Leader

cc: Bradley Smith, GIDNR-EPD, Brunswick, Georgia
Eric Somerville, EPA, Athens, Georgia
Jacelyn Daly, NMFS, Charleston, South Carolina
Kelie Moore, GADNR-CRD, Brunswick, Georgia
Jason Lee, GADNR-WRD Non-game, Brunswick, Georgia
Christine Willis, USFWS, Atlanta
Stephanie Nash, USFWS, Washington, D.C.
Lisa Treichel, DOI Office of Environmental Compliance, Washington D.C.

Literature Cited

Ms. Stacey M. Zee  
FAA Environmental Specialist  
Spaceport Camden County EIS c/o Leidos  
20201 Century Boulevard, Suite 105  
Germantown, Maryland 20874  

Dear Ms. Zee:  

I refer to the Federal Aviation Administration (FAA) Office of Commercial Space Transportation Notice of Intent dated November 6, 2015, to prepare an Environmental Impact Statement (EIS) for the Camden County Board of Commissioners’ proposal to construct and operate a commercial space launch site to be known as “Spaceport Camden.” In addition, I refer to the agency scoping meeting and the on-site inspection we participated in on December 8, 2015. The proposed project would include the construction of a vertical launch site, a landing zone, a control center complex, and a facility that includes visitor viewing areas. The proposed facility would conduct launches of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles. This project is located at the eastern termination of Union Carbide Road, 11.5 miles east of the town of Woodbine, in Camden County, Georgia (Latitude 30.9042, Longitude -81.5268). This project has been assigned number SAS-2015-00823. Please refer to this number in any future correspondence.

Based on a review of the information provided during the agency scoping meeting and our on-site inspection, it appears that this project site may contain jurisdictional wetlands and other waters of the United States. I would recommend that a formal wetland delineation be accomplished by a qualified environmental consultant. I would also recommend that this delineation be provided to our office in order to receive a written jurisdictional determination prior to performing any work on this site. By establishing U.S. Army Corps of Engineer’s jurisdictional limits under Section 404 of the Clean Water Act (33 United States Code (U.S.C.) 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), potential impacts to waters of the United States can be considered and/or avoided during your planning process/environmental review. Based on our on-site inspection of the approximate 12,000 acre site, there appears to be a substantial amount of upland areas not subject to our jurisdiction. A jurisdictional determination would allow project planners to consider alternative designs that would avoid areas subject to our jurisdiction to the maximum extent possible. If the
project is designed to avoid all waters of the United States, no Department of the Army (DA) permit would be required. Additionally, if you would like to discuss any of the requirements in regards to our program, policy, and procedures, you may contact us directly.

If the proposed project would cause the loss of 0.5 acre of waters of the United States or less, the project would likely qualify for our Nationwide Permit Program, which is an expedited permit process to authorize certain activities that have minimal impacts to waters of the United States, both individually and cumulatively. However, I must point out that if the project would impact more than 0.5 acre of waters of the United States, including wetlands, the application would likely be evaluated under our Individual Permit (IP) Program. Processing of an IP application requires issuance of a Joint Public Notice which solicits comments from federal, state and local agencies, the general public, and other interested parties so that we can consider and evaluate the impacts of the proposed project.

Since the FAA is the lead federal agency on the proposed project, if a DA permit is determined to be necessary, we would need to discuss our involvement as either a coordinating or cooperating federal agency for the EIS process. If we do become a coordinating or cooperating federal agency due to the need for a DA permit, we would like to have the opportunity to review survey scopes of work for both Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act of 1966 in order to make sure that our requirements would be met by the EIS process.

Should an IP be required, the Corps would need to be much more involved in the EIS process to ensure that the EIS contains all the documentation required for a DA permit decision. An important step in our review of an Individual Permit application is to determine the basic purpose of the project. A project’s basic purpose acts to guide the scope of review pursuant to the Section 404(b)(1) Guidelines of the Clean Water Act as outlined in Title 40 of the Code of Federal Regulations, published in the Federal Register on December 24, 1980. A stated project purpose cannot be made so specific that it effectively precludes all other potential project sites from consideration. At the same time, the project purpose cannot be so general that we cannot make a determination that the preferred alternative is the least environmentally damaging practicable alternative. For example, filling wetlands for the purpose of creating high ground for sale of a property is not an acceptable basic project purpose.

The 404(b)(1) guidelines are sequential and require that permit applicants: (1) avoid unnecessary impacts to waters of the United States on the preferred alternative to the maximum extent practicable; (2) minimize to the maximum extent practicable the
unavoidable adverse impacts to waters of the United States on-site; and (3) provide a compensatory mitigation plan to replace the wetland and/or stream functions lost as a result of unavoidable adverse impacts associated with the project. The Corps can only issue a permit for the least environmentally damaging practicable alternative that meets the project's basic purpose. Therefore, the basic project purpose is a critical element in our evaluation for compliance with the 404(b)(1) Guidelines.

Please be advised that for projects impacting 0.1 acre or more of wetlands or open water and/or 100 linear feet or more of stream, compensatory mitigation will be required to replace any lost wetland and/or stream function(s). In addition, if either wetland or stream impact threshold is exceeded, compensatory mitigation would be required for all impacts. The most preferable method of compensatory mitigation is the purchase of mitigation credits from a Corps-approved mitigation bank that services the project area. A complete list of Corps-approved mitigation banks in the State of Georgia can be found on the website at: https://rbiits.usace.army.mil/rbiits.aspx?pc=1072. In the event that sufficient mitigation credits are not available, mitigation may be accomplished by restoring, enhancing and/or preserving wetlands and/or streams on or near the project site. Please be advised that submission of an application with an acceptable mitigation plan does not guarantee that a permit will be issued. The application form and information on the Regulatory Program are available on our website at: http://www.sas.usace.army.mil/Missions/Regulatory.aspx.

Please also be advised that due to past land management practices within the project site, portions of this site have a high potential to be contaminated. Therefore, we would recommend contaminant testing be conducted in any areas where land disturbing activities would be performed.

Lastly, the applicant may want to consider transferring the existing dock facility if/when they own the property if any work on the dock facility is proposed and/or any dredging for the "deep water" access is necessary.
Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our web site at: http://corpsmapu.usace.army.mil/cm_apex/?p=regulatory_survey, and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

If you have any questions, please call me at 912-652-6086.

Sincerely,

Shaun Blocker
Project Manager, Coastal Branch
Ms. Stacey M. Zee, FAA Environmental Specialist  
Spaceport Camden County EIS c/o Leidos  
20201 Century Boulevard, Suite 105  
Germantown, MD 20874

Dear Ms. Zee:

The National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NMFS), Southeast Regional Office, reviewed the Federal Aviation Authority’s (FAA’s) Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site (“Spaceport Camden”). The FAA announced their NOI to prepare the document in the Federal Register on November 6, 2015 (80 FR 68993). Based on the NOI and supporting materials, NMFS provides the following comments to guide development of the EIS.

**Threatened and Endangered Species/ Marine Mammals**

The only known North Atlantic right whale calving area is located off the southeast U.S. Atlantic Coast, including oceanic waters off southeast Georgia and northeast Florida. Calving right whales and other segments of the endangered North Atlantic right whale population use the area from November 15 through April 15 (calving season), annually.

NMFS has implemented a number of important measures to reduce human-induced injuries and mortalities from vessel collisions and fishery gear entanglement. To protect North Atlantic right whales from vessel collisions, NMFS has implemented vessel speed restrictions in times and areas where right whales occur (50 CFR 224.105). To protect this and other large whale species from fishery gear entanglement, NMFS has implemented the Atlantic Large Whale Take Reduction Plan (50 CFR 229.32) and supports and administers a response network that focuses on rescuing entangled and injured large whales. Emergency response efforts can include teams of individuals that represent varying agencies and organizations (contingent upon response type) and may include boat and/or air-based operations at unscheduled times and places.

Additionally, NMFS implements a number of important programs to monitor the species’ status including aerial surveys and biopsy sampling cruises. The monitoring and other abovementioned efforts occur off southeast Georgia and northeast Florida and are restricted to good-weather days (i.e., Force 3 or less on the Beaufort Wind Scale and good visibility) and should be considered in the EIS.

Under the Endangered Species Act, the NMFS proposed to replace critical habitat for right whales in the North Atlantic with two new areas: a foraging area (Unit 1) and a calving area (Unit 2). The area proposed as calving area critical habitat (Unit 2) extends from Cape Fear,
North Carolina, south to New Smyrna Beach, Florida. We anticipate that the final rule designating North Atlantic right whale critical habitat will publish in early 2016.

The physical features essential to the conservation of the North Atlantic right whale, which provide calving area functions in Unit 2 are: sea surface conditions associated with Force 4 or less on the Beaufort Scale; sea surface temperatures of 7 to 17°C; and water depths of 6 to 28 meters, where these features simultaneously co-occur over contiguous areas of at least 231 square nautical miles. Based on the limited information provided in the NOI and on the website, we are unable to determine possible routes of effects from the proposed action on these calving area physical features.

Atlantic (Acipenser oxyrinchus) and Shortnose sturgeon (Acipenser brevirostrum) may also occur in the estuarine waters immediately adjacent to the proposed Spaceport Camden. Adult Shortnose sturgeon spawn in the rivers where they were born. Adults typically spawn well upriver in the late winter to early spring and spend the rest of the year in the vicinity of the saltwater/freshwater interface (Collins and Smith 1993). Shortnose sturgeon rely on a variety of water quality parameters to successfully carry out their life functions. Low dissolved oxygen and the presence of contaminants modify the quality of sturgeon habitat and, in some cases, restrict the extent of suitable habitat for life functions.

Similar to Shortnose sturgeon, Atlantic sturgeon are long-lived, late-maturing, estuarine-dependent, anadromous fish distributed along the eastern coast of North America (Waldman and Wirgin 1998). Atlantic sturgeon spend the majority of their lives in nearshore marine waters, returning to their natal rivers to spawn (Wirgin et al. 2002). Young sturgeon may spend the first few years of life in their natal river estuary before moving out to sea (Wirgin et al. 2002).

Sturgeon are omnivorous benthic (bottom) feeders and filter quantities of mud along with their food. Adult sturgeon diets include mollusks, gastropods, amphipods, isopods, and small fishes, especially sand lances (Ammodites sp.) (Scott and Crossman 1973).

Although not listed as an endangered species, the Southern Georgia Estuarine System Stock of bottlenose dolphins (Tursiops truncatus) are found in the area of the proposed Spaceport Camden. The minimum population estimate for this stock is 185. A portion of the stock’s range is highly industrialized, and the Environmental Protection Agency (EPA) has included four sites within the Brunswick area on its National Priority List of hazardous waste sites (EPA 2008). The high levels of PCBs recorded in dolphins from this stock, along with demonstrated PCB-related health effects, raise concern for the long-term health and viability of the stock. Given that this stock is already compromised as a result of nearby hazardous waste sites, additional chemical exposure as a result of the construction and operation of a spaceport in this area should be considered.

In summary, we recommend the EIS consider:

1. Right whales and bottlenose dolphins may be injured or killed as the result of collisions from first stage ocean landings or vessel traffic.
a. Consider prohibiting first stage landings and Spaceport Camden-related vessel traffic during the calving season and within the calving area.
b. If vessel traffic is necessary in the calving area during the calving season, consider the following:
   i. Minimize traffic
   ii. Vessels 43’ in overall length and greater should be restricted to 10 knots or less
   iii. Vessels 43’ in overall length and greater should be equipped with and operating automatic identification systems transceivers
2. Efforts to rescue injured and entangled right whales and monitor the population by aerial surveys, biopsy sampling, and other means may be hampered or prevented if air space or oceanic waters are restricted.
   a. Consider not restricting air space or oceanic waters to NMFS and partners within the calving area during the calving season.
   b. If certain activities will require restricting air space or oceanic waters, those activities should be prohibited in the calving area during the calving season.
   c. If air space or oceanic waters are restricted to NMFS and partners within the calving area during the calving season, the following factors should be assessed:
      i. Inability or restricted ability to rescue distressed right whales
      ii. Restricted ability to effectively monitor the right whale population
3. Construction and operation of the spaceport may introduce chemical contaminants into the estuarine environment and effect bottlenose dolphins and Atlantic and Shortnose sturgeon through physical contact or ingestion/feeding.

It would be prudent to take extra precautions to prevent any chemicals associated with the facility from leaching into the nearby salt marsh.

Furthermore, any actions taken to reduce high speed boat traffic and landings would also benefit dolphins as they may be injured or killed as the result of collisions from first stage ocean landings or vessel traffic.

Essential Fish Habitat Provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)
Habitats in and around the proposed spaceport include salt marsh, tidal creeks, and oyster reefs associated with the Satilla River and St. Andrew Sound. The South Atlantic Fishery Management Council (SAFMC) identifies these habitats as essential fish habitat (EFH) for penaeid shrimp, including white shrimp (Litopenaeus setiferus) and brown shrimp (Farfantepenaeus aztecus), and for estuarine-dependent species of the snapper-grouper complex (such as gray snapper, Lutjanus griseus). The SAFMC also designates oyster reefs as a Habitat Area of Particular Concern for estuarine-dependent species of the snapper-grouper complex. The SAFMC made these designations because larvae or juveniles concentrate, feed extensively, and shelter within these habitats. Consequently, growth rates are high and predation rates are low, making these habitats effective nursery areas for shrimp and fish. The SAFMC provides additional information on EFH and its support of federally managed species in Volume IV of the Fishery Ecosystem Plan of the South Atlantic Region (available at www.safmc.net).

1 NMFS can provide the FAA with technical assistance on identifying the calving area.
The Magnuson-Stevens Act requires federal agencies to consult with the NMFS on activities that may adversely affect EFH, and the Magnuson-Stevens Act defines “adverse effect” to be any impact reducing the quality or quantity of EFH, including direct, indirect, or cumulative effects. Based on the limited information available, the NMFS believes potential effects to EFH from construction of the spaceport include filling freshwater wetlands adjacent to salt marsh and tidal creeks, which may increase runoff into the salt marsh and tidal creeks and may decrease organic material flowing into these habitats. These impacts can be minimized by having vegetated upland buffers, generally 75 feet or more, between developed areas and wetlands. Operation of the spaceport may affect EFH by introducing into these nursery areas chemical contaminants from the rockets and from earthwork in and around historical chemical manufacturing plants. The NMFS is available to provide technical support for the EFH consultation.

Thank you for your consideration of our comments. Related questions or comments on EFH should be directed to Jaclyn Daly-Fuchs at jacyln.daly@noaa.gov. Questions or comments related to threatened and endangered species/marine mammals should be directed to Barb Zoodmana at Barb.Zoodmana@noaa.gov.

Sincerely,

[Signature]

Roy E. Crabtree, Ph.D.
Regional Administrator

Cc: F/SER-Strelcheck, Silverman
F/SER2-McGovern
F/SER3-Bernhart
F/SER4-Fay
F-Leathery, Holmes, McCune
PPI-Kokkinakis
January 4, 2016

Stacey M. Zee
Environmental Specialist
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591

Subject: Georgia DNR Wildlife Resources Division comments regarding wildlife impacts to be considered in preparation of Camden Spaceport Environmental Impact Statement

Dear Ms. Zee:

The Georgia Department of Natural Resources Wildlife Resources Division (WRD) appreciates the opportunity to comment on the proposed spaceport in Camden County, GA. As the agency charged with managing native wildlife in the State of Georgia, we would like to highlight some issues that should be addressed in the Environmental Impact Statement. Those recommendations are detailed below.

Staff of WRD participated in a scoping process with The Nature Conservancy, Georgia Conservancy, National Audubon Society, and others regarding the subject Union Carbide Corporation (UCC) property. We also contributed to the Site Characterization of the UCC Woodbine Site, Camden County, Georgia (see attached). WRD participation was sought to ascertain the conservation values of the property and to help determine a process to conserve those values if the spaceport is developed. A conservation easement that protects a substantial portion of the property and its wildlife habitats was suggested by UCC representatives. WRD and TNC staff offered technical advice related to that proposal.

In the proposed conservation scenario, approximately 1,000 acres of upland and freshwater wetlands will be permanently protected. UCC representatives informally indicated via email on 12/22/2015 that: “these recommendations and additional input from GA DNR will be important in developing the terms of the Conservation Easement. ... UCC representatives have indicated their intent to work together with GA DNR and other conservation organizations to ensure funding for conservation management may be made available to the easement holder, recognizing that intensive management is critical to maintain and enhance longleaf pine/gopher tortoise habitat.” (Steven Brown, Senior Research Scientist, UCC). The accompanying 2,000 acres of saltmarsh on the property will also be placed under a conservation easement. Known contaminant areas are presumably not included within the easement boundary, but would be important to include in any management plans.
Our primary interest in protection of the property is conservation of the site’s longleaf pine uplands, maritime forest, wetlands, and associated native wildlife. The gopher tortoise (a candidate for federal listing under the Endangered Species Act) is present onsite in significant numbers and is abundant in adjacent properties. The eastern indigo snake is also present in the immediate vicinity of the property. Underlying soils are predominantly Mandarin fine sand and Postsburg sand, indicative of moderate-to-high quality gopher tortoise habitat. Gopher tortoises are also present in maritime forest on the property, an uncommon occurrence.

Active management is necessary to conserve longleaf pine habitat. That management consists primarily of application of prescribed fire, which maintains the grassy herbaceous understory of longleaf pine upland and flatwoods communities and allows for longleaf pine regeneration. In most areas on the UCC property, removal of loblolly pine plantations will be necessary as a component of longleaf pine restoration. If funding for restoration and management were made available to an appropriate easement holder, habitat on the UCC property could likely be enhanced to support a viable gopher tortoise population and benefit associated native wildlife species. A survey to determine the size of the gopher tortoise population onsite combined with analysis of existing and potential longleaf pine upland communities is warranted. Other conservation values pertaining to any potential easement or restoration of the property are discussed in Appendix E of the attached report.

We recommend that the following issues be addressed in the EIS:

Recreational Use:

The area surrounding the UCC property is heavily used by anglers and boaters. Restrictions on recreational use of the Satilla River during operation of the spaceport would affect local citizens significantly. The EIS should address impacts on recreational use of public lands or waters in the project area.

Natural Communities:

The property contains several examples of significant coastal natural communities. These include high quality maritime forests, coastal forested wetlands, and a rare longleaf pine scrubby flatwoods community known from only a handful of sites on the Georgia coast. Protection of these natural communities by conservation easement, as well as specific restoration and management actions described in Appendix E of the UCC Woodbine Site Characterization Report, are strongly recommended to conserve and promote biodiversity on the property. The EIS should consider direct impacts to these habitats resulting from the development of spaceport facilities as well as longer term impacts associated with prescribed fire limitations that would affect management of fire-dependent habitats onsite and on adjacent properties.

The EIS should consider potential impacts resulting from disturbance of soils containing residual contaminants from previous industrial uses. Exacerbating factors such as the erosion of the Todd Creek bank and its threat to the adjacent landfill as well as sea level rise should be taken into consideration in this assessment.
Sea Turtles and Other Reptiles:

The project area currently has few artificial lights. Cumberland Island, Little Cumberland Island and Jekyll Island are significant nesting areas for loggerhead sea turtles. Exterior lighting associated with spaceport maintenance and launch activities could result in disorientation and mortality of hatching sea turtles on nearby beaches. The EIS should document existing lighting conditions and estimate the impacts of the proposed facility. Consideration should also be given to the need for long term monitoring of lighting conditions and their effects on sea turtles.

The EIS should evaluate the impacts of rocket launches and related activities on sea turtles and other reptiles. Debris from rocket launches could result in increased levels of metals (iron, lithium, nickel, and mercury) which could bioaccumulate in local reptile populations including diamondback terrapins and alligators.

Birds:

A thorough field survey is warranted to assess where birds of conservation concern are nesting onsite as well as in adjacent areas that might be impacted by spaceport activities. Surveys should also be conducted to delineate and document important foraging areas so these can be highlighted on emergency spill response maps and included in spill containment and remediation plans. Biologists and environmental staff at other rocket launching facilities such as Cape Canaveral as well as the scientific literature should be consulted regarding impacts of launches and related activities on birds.

There are three bald eagle nests in close proximity (~2 miles or less) to the proposed launch site. One eagle nest may be as close as ½ mile from this launch site. In addition, a large brown pelican nesting colony (300-400 pairs) is in close proximity to the proposed launch site. Rocket blasts or other activities associated with a launch could potentially cause nest abandonment or otherwise impair nesting success. Another concern is the potential for chemical spills in the marsh, river, or along the shoreline that could contaminate food resources used by shorebirds, marsh birds, waterbirds, ospreys, or eagles. While the EIS should consider potential impacts of increased noise and accidental chemical releases on all native wildlife in the project area, the following are recommended as specific issues to be addressed for birds:

1) Employment of safeguards to ensure that the eagle nests and the pelican colony will not be significantly impacted by rocket blasts or other launch-related activities.
2) Establishment of launch protocols to limit potential impacts to at-risk species (e.g., excluding launches during the pelican nesting season)
3) Plans and resources for monitoring the impacts of launch-related activities on nest use and nesting success of bald eagles, brown pelicans, and other species.
4) Protocols for minimizing impacts of accidental chemical releases.
Northern Right Whales:

North Atlantic right whales are present in the flight path of the proposed launches from November 15 to April 15 yearly. The following mitigation measures are recommended to avoid conflicts with right whales in their calving grounds:

1) Avoiding harassment and injury to right whales generally:
   a. First stage landings into the ocean, or onto barges floating on the ocean, should be prohibited or closely monitored to minimize impacts within the proposed revised right whale critical habitat from November 15 to April 15 annually (see map below). This includes Atlantic Ocean waters within 36-40 km of the Georgia and northeast Florida coast.

2) Avoiding vessel impacts:
   a. All vessels should travel at speeds of 10 knots or less when operating in the proposed revised right whale critical habitat from November 15 to April 15.
   b. All vessels should be equipped with operational AIS transceivers when operating in the proposed revised right whale critical habitat from November 15 to April 15.
Other Priority Species, Natural Communities, and Conservation Sites:

According to our records as of December 22, 2015, the following high priority species, natural communities, and conservation areas occur within a three-mile radius of the project site (see also Appendix C in attached UCC Woodbine Site Characterization Report):

(Site Center: -81.526023, 30.956392, WGS84)

- *Ammodramus maritimus* (Seaside Sparrow) approx. 2.2 mi E of site at Pompey Island
- *Ammodramus maritimus macgillivraii* (MacGillivra’s Seaside Sparrow) approx. 2.2 mi NE of site
- *Crotalus adamanteus* (Eastern Diamond-backed Rattlesnake) approx. 1.9 mi W of site
- *Drymarchon couperi* (Eastern Indigo Snake) in an uncertain location near the project site
- *Drymarchon couperi* (Eastern Indigo Snake) approx. 1.4 mi W of site
- *Gopherus polyphemus* (Gopher Tortoise) in an uncertain location near the project site
- *Haematopus palliatus* (American Oystercatcher) approx. 2.5 mi SE of site at Cumberland Shell Rakes
- *Haematopus palliatus* (American Oystercatcher) approx. 2.3 mi SE of site in the Cumberland River

- *Haliateetus leucocephalus* (Bald Eagle) on site

- *Liatris tenuifolia var. quadriflora* (Blazing Star) approx. 2.5 mi S of site
- *Malaclemys terrapin* (Diamondback Terrapin) approx. 2.0 mi S of site
- *Notophthalmus viridescens* (Striped Newt) approx. 2.9 mi W of site
- *Necturus microscincus* (Black-crowned Night-heron) approx. 0.6 mi N of site
- *Necturus microscincus* (Black-crowned Night-heron) approx. 0.8 mi NE of site at the Satilla River Rookery
- *Passecrina ciris* (Painted Bunting) approx. 1.8 mi SE of site at Cumberland Island
- *Passecrina ciris* (Painted Bunting) approx. 2.6 mi NW of site
- *Pelecanus occidentalis* (Brown Pelican) approx. 0.8 mi NE of site at Egg Island Bar
- *Plegadis falcinellus* (Glossy Ibis) approx. 0.8 mi NE of site at the Satilla River Rookery
- *Sarracenia minor var. minor* (Hooded Pitcherplant) approx. 1.2 mi SW of site
- *Sarracenia minor var. minor* (Hooded Pitcherplant) approx. 1.6 mi SW of site
- *Sarracenia minor var. minor* (Hooded Pitcherplant) [HISTORIC] approx. 2.9 mi SW of site

- *Trichechus manatus* (Manatee) on site

- *Wading Bird Colony* (Wading Bird Colony) approx. 0.2 mi E of site
- *Wading Bird Colony* (Wading Bird Colony) approx. 1.7 mi SE of site
- *Wading Bird Colony* (Wading Bird Colony) approx. 1.3 mi W of site
- *Liquidambar styraciflua - Acer rubrum - Nyssa biflora / Woodwardia virginica Forest* (South Atlantic Coastal Nonriverine Swamp Forest) approx. 0.7 mi SW of site
- *Panax composita - Piscidia (camphorata, rosea) - Ludwigia spp. Herbaceous Vegetation (Outer Coastal Plain Moundencane Pond) approx. 3.0 mi W of site
- *Quercus geminata - Quercus virginiana / Serenoa repens - Lyonia fruticosa Forest* (Southeastern Florida Maritime Hammock) approx. 2.9 mi S of site
Ms. Stacey Zee  
January 4, 2016  
Page 6 of 6

Quercus virginiana - Quercus hemisphaerica - Pinus taeda - Quercus alba / Ilex vomitoria Forest (Atlantic Coastal Fringe Evergreen Forest) approx. 2.8 mi W of site  
Sabal palmetto - Quercus laurifolia - Quercus virginiana - Magnolia virginiana - Ulmus americana Forest (Temperate Hydric Hammock) approx. 1.2 mi SW of site  
Satilla River 1 (0307020112) [SWAP High Priority Watershed], on site  
Satilla River Coast 2 (0307020303) [SWAP High Priority Watershed], approx. 2.6 mi N of site  
Crooked River (0307020304) [SWAP High Priority Watershed], on site  
Satilla River Coast 1 (0307020305) [SWAP High Priority Watershed], approx. 2.2 mi SE of site

GA = State protected species  
US = Federally protected species

Thank you for the opportunity to provide comments regarding wildlife-related impacts to be considered in preparation of the Camden Spaceport Environmental Impact Statement. If you have any questions or need additional information, please contact Jason Lee at jason.lee@dnr.ga.gov or 912-262-3128.

Sincerely,

[Signature]

Bill Forster

Cc: Jon Ambrose  
    Jason Lee

Attachment
January 27, 2016

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue, SW
Washington DC 20591

Attn: Stacey Zee

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has received initial information concerning the above referenced project. Our comments are offered to assist the Federal Aviation Administration in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Thank you for notifying us of this proposed project. We look forward to receiving Section 106 compliance documentation when it becomes available and working with you as this project progresses.

Please refer to project number HP-151117-001 in future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at Jennifer.divos@dnr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

E-44
A.1.2  Draft EIS Review

FAA is providing the Draft EIS to the public for review and comment. FAA considers all comments on the Draft EIS and responds to substantive comments in the Final EIS. Substantive comments and responses to those comments will be presented in this section in the Final EIS.
A.2 Coordination and Consultation

A.2.1 Coordination

A.2.1.1 Government-to-Government Correspondence

DEC 4, 2015

Mr. George Scott, Town King
Thlopihloco Tribal Town
PO Box 188
Okemah, Oklahoma 74859

Dear Mr. Scott:

The purpose of this letter is to initiate formal government-to-government consultation with the Thlopihloco Tribal Town regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project is enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9365, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Charles Coleman, Tribal Historic Preservation Officer
Principal Chief Leonard M. Harjo
Seminole Nation of Oklahoma
PO Box 1498
Wewoka, Oklahoma 74884

Dear Mr. Harjo:

The purpose of this letter is to initiate formal government-to-government consultation with the Seminole Nation of Oklahoma regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
    Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Alan D. Emathile, Tribal Historic Preservation Officer
    Natalie (Deere) Harjo, Tribal Historic Preservation Officer
Chairperson Stephanie Bryan  
Poarch Band of Creeks  
5811 Jack Springs Road  
Atmore, Alabama 36502  

Dear Ms. Bryan:  

The purpose of this letter is to initiate formal government-to-government consultation with the Poarch Band of Creeks regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9365, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_does/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Robert Thrower, Tribal Historic Preservation Officer
DEC - 4 2015

Principal Chief George Tiger
Muscogee (Creek) Nation
PO Box 580
Okmulgee, Oklahoma 74447

Dear Mr. Tiger:

The purpose of this letter is to initiate formal government-to-government consultation with the Muscogee (Creek) Nation regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Johnnie Jacobs, Tribal Historic Preservation Officer
    Emman Spain, Tribal Historic Preservation Officer
DEC - 4 2015

Chief Gary Batton
Choctaw Nation of Oklahoma
PO Box 1210
Durant, Oklahoma 74702-1210

Dear Mr. Batton:

The purpose of this letter is to initiate formal government-to-government consultation with the Choctaw Nation of Oklahoma regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Dr. Ian Thompson, Tribal Historic Preservation Officer
Governor Bill Anoatubby  
Chickasaw Nation  
PO Box 1548  
Ada, Oklahoma 74821

Dear Mr. Anoatubby:

The purpose of this letter is to initiate formal government-to-government consultation with the Chickasaw Nation regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 121020, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Niell
Associate Administrator for
Commercial Space Transportation

Encl.
Location of the Proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Ms. Virginia Nail, Tribal Historic Preservation Officer
Chairman James E. Billie
Seminole Tribe of Florida
6300 Stirling Road
Hollywood, Florida 33024

Dear Mr. Billie:

The purpose of this letter is to initiate formal government-to-government consultation with the Seminole Tribe of Florida regarding the Spaceport Camden Environmental Impact Statement in Camden County, Georgia. The primary purpose of government-to-government consultation, as described in Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and Federal Aviation Administration (FAA) Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, is to ensure that federally-recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined to be an “undertaking” subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, as amended. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA), and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. For your reference, a description and map of the project area showing the location of the proposed project are enclosed with this letter.

The FAA would like to know your Tribe’s interest to consult with us regarding the broader range of impacts assessed under NEPA, including those to tribal lands and resources such as plant gathering areas and religious sites. Early identification of Tribal concerns will allow the FAA to consider ways to avoid and minimize potential impacts to Tribal resources and practices.
If you have any questions or would like to discuss the project in more detail, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov. Additional information is also available on the project website at: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

Your timely response will greatly assist us in incorporating your comments into project planning. Please respond to Ms. Zee at your earliest convenience.

Sincerely,

[Signature]

Dr. George C. Nield
Associate Administrator for
Commercial Space Transportation

Enclosure
Location of the proposed Spaceport Camden Project
Spaceport Camden Project Description

cc: Dr. Paul N. Backhouse, Tribal Historic Preservation Officer
Spaceport Camden Project Description

The Camden County Board of Commissioners (the County) proposes to construct and operate a commercial space launch site (Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The County has signed an option to purchase approximately 4,000 acres of an approximately 12,000-acre industrial site on which to construct the spaceport, and is considering purchasing approximately another 7,800 acres of adjoining property in the same industrial complex. The County will be required to obtain a Launch Site Operator License from the FAA for the operation of the launch site.

The proposed Spaceport Camden property is located in an unincorporated area of Woodbine, in Camden County, approximately 11.5 miles due east of the town of Woodbine, Georgia, in the extreme southeastern part of the state. Access to the site is at the eastern termination of Union Carbide Road, an extension of Harriett's Bluff Road (Exit 7 from I-95). The site is on the coast, surrounded by salt marshes to the east and south, and the Satilla River to the north. The property comprises uplands, salt marshes, and fresh water wetlands. Approximately 100 non-contiguous upland acres would be used for the launch pad, landing site, control center, and supporting facilities. Each of these facilities would be fenced to provide security and access control, as would the approximately 400 acres of uplands on which these facilities would be located. The remainder of the site, much of which is marshland, would be used as buffer.

The vertical launch facility would be approximately 23 acres in size and would include a launch pad and stand with its associated flame duct; propellant storage and handling areas; vehicle and payload integration facility; storage tanks; lightning protection systems; deluge water systems for local sound and vibration suppression; and other launch-related facilities and systems. The landing area would be approximately 12 acres in size and include a proposed 400-foot by 400-foot concrete pad located roughly in the center of the area, with fuel and oxidizer “off load” tanks, and related infrastructure. The control center complex would be located on the property at a safe distance from the launch and landing areas and would house the site administration offices, a control room with related equipment, payload processing/check-out area, and a first-responder facility. This complex would be situated in an area of approximately 2.75 acres, and would consist of two buildings with a parking lot between them. A similar facility would be constructed near the main entrance of the property mirroring the control center complex in size, design and facilities, but would also include provisions for visitors and viewing launches.

Operations would consist of up to 12 vertical launches and up to 12 associated launch vehicle first-stage landings per year. In addition, other operations could occur, including up to 12 static fire engine tests and up to 12 wet dress rehearsals per year. All vehicles would launch to the east over the Atlantic Ocean. The first stage of the launch vehicle could return to and land at Spaceport Camden, or would land in the Atlantic Ocean.
From: David Proctor [mailto:Davidp@MCN-NSN.gov]
Sent: Wednesday, August 16, 2017 10:42 AM
To: Zee, Stacey [FAA] <Stacey.Zee@faa.gov>
Subject: FAA - Proposed Spaceport - Camden, Camden Co., GA

Mr. Daniel Murry
Manager
Transportation Development Division
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Ave., SW
Washington, DC 20591

Mr. Murry:

Thank you for the correspondence regarding the Phase I Archeological Survey for the proposed Spaceport Project located in Camden, Camden Co., GA. We concur with the findings/recommendations of the report and that work should proceed as planned. However, as the projects are located in an area that is of general historic interest to the Tribe, we request that work be stopped and our office contacted immediately if any Native American cultural materials are encountered. This stipulation should be placed on the construction plans to insure contractors are aware of it. Please feel free to contact me with any further questions or concerns.

David J. Proctor
Historic and Cultural Preservation Department, Traditional Cultural Advisor
Muscogee (Creek) Nation
P.O. Box 580, Okmulgee, OK 74447
T 918.732.7732
F 918.758.0649
Davidp@MCN-NSN.gov
http://www.muscogeeNation-nsn.gov/

Federal and state agencies, museums, and consulting partners, as of October 1, 2015 please send all Section 106 project notices as well as all NAGPRA notices to our section 106 email: section106@mcn-nsn.gov. If you have any questions, please give us a call at 918-732-7733.
A.2.2 Agency Consultation

A.2.2.1 National Historic Preservation Act Section 106 Consultation

A.2.2.1.1 NHPA Section 106 Consultation with State and Federal Agencies

JAN 06 2016

Ms. Jennifer Dixon
Environmental Review & Preservation Planning Program Manager
DNR Historic Preservation Division
Jewett Center for Historic Preservation
2610 GA Hwy 155, SW
Stockbridge, GA 30281

RE: Section 106 Consultation Initiation for the Spaceport Camden Environmental Impact Statement, Camden County, Georgia

Dear Ms. Dixon:

The Camden County Board of Commissioners is seeking a Launch Site Operator License from the FAA Office of Commercial Space Transportation to develop and operate a commercial space launch site (known as Spaceport Camden) in an unincorporated area of Woodbine, in Camden County, Georgia. The project has been determined an “undertaking” subject to the National Historic Preservation Act (NHPA) and its implementing regulations under Section 106 (36 CFR Part 800, as amended). A project description and map are attached to this letter. The proposed project and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an Environmental Impact Statement to meet its regulatory obligations. The agency intends to complete Section 106 in conjunction with the NEPA process.

This letter is intended to initiate Section 106 consultation and solicit any initial comments you may have on the proposed undertaking. The FAA is inviting the following tribes to participate in this consultation: Cherokee of Georgia Tribal Council, Chickasaw Nation, Choctaw Nation of Oklahoma, Georgia Tribe of Eastern Cherokee, Lower Muscogee Creek Tribe, Muscogee Creek Nation, Poarch Band of Creeks, Seminole Nation of Oklahoma, Seminole Tribe of Florida, Tlhopliholco Tribal Town. The FAA may also identify additional consulting parties through the NEPA scoping process.
The FAA will provide you with a determination of the Area of Potential Effects (APE) for the proposed project and a proposed level of effort for the identification of historic properties. If you have initial comments or questions on this undertaking, please contact Stacey Zee of my staff at 202-267-9305, or via email at Stacey.Zee@faa.gov.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachments: Spaceport Camden Project Description, Location Map
January 27, 2016

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue, SW
Washington DC 20591
Attn: Stacey Zee

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has received initial information concerning the above referenced project. Our comments are offered to assist the Federal Aviation Administration in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Thank you for notifying us of this proposed project. We look forward to receiving Section 106 compliance documentation when it becomes available and working with you as this project progresses.

Please refer to project number HP-151117-001 in future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at Jennifer.dixon@dtr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning
MAY 24 2016

Ms. Jennifer Dixon  
Environmental Review & Preservation Planning Program Manager  
DNR Historic Preservation Division  
Jewett Center for Historic Preservation  
2610 GA Hwy 155, SW  
Stockbridge, GA 30281  

Re: Spaceport Camden Environmental Impact Statement  
Area of Potential Effects Definition and Proposed Level of Identification Effort  
Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine,  
Camden County, Georgia  
HP-151117-001

Dear Ms. Dixon:

The Federal Aviation Administration (FAA), as part of the Section 106 review of Construct/Operate Commercial Space Launch Site, Spaceport Camden, has determined an appropriate Area of Potential Effects (APE) for the proposed undertaking based on the project description in Attachment 1 and an assessment of the undertaking’s potential direct and indirect effects.

- Direct Effects: Direct effects on historic properties may result from ground disturbance and physical activities (e.g., demolition and tree clearing) associated with the proposed undertaking, including the construction of facilities; installation or upgrading of utilities, access roads or other routes, and staging areas; as well as the location of maintenance and operations activities. The proposed project would include construction of facilities described in Attachment 1 such as the launch facility, landing zone, launch control center buildings, processing facilities, processing hangars, workshops and office areas, warehouses, and various roads, parking areas, fencing, and required utilities. Ground disturbance up to 4 feet below grade, with footers as deep as 60 feet below grade in areas such as the launch pad, is anticipated in construction areas. Attachment 2 shows the proposed Spaceport Camden site plan with enlarged facility footprints to
accommodate potential repositioning and construction laydown areas, and highlights new and improved roadways\textsuperscript{1}.

- **Indirect Effects:** Both construction and operational activities may have indirect effects on historic properties located beyond the project area. 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. Notable vertical elements are anticipated to include the launch pad and stand, as well as any necessary water towers and lightning protection towers. Vertical elements may extend up to 400 feet, although project plans are still to be defined. Operations are anticipated to include the periodic launching of payloads, which will necessitate area closures and safeguards, as well as wet dress rehearsals and other protocols. Noise and viewed modeling and analyses will be conducted as part of the project to appropriately assess effects on historic properties.

The FAA has defined the following areas for the APE.

- **Architectural APE:** The FAA has proposed a 5-mile radius architectural APE (indirect APE), extending around the proposed project limits. 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, craftsmanship, 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.

- **Archaeological APE:** The APE for archaeological resources (direct APE) would consist of areas where there would be direct ground disturbance, including construction of facilities, installation or upgrading of utilities, access roads or other routes, and staging areas, as well as the location of maintenance and operations activities (Attachment 2).

\textsuperscript{1} As shown in Attachment 2, some roads proposed for access between Spaceport Camden facilities are located on the adjacent property. Spaceport Camden would either purchase the adjacent property or negotiate easements to use the roads. Alternatively, instead of using these roads, other roads could be developed entirely within the currently proposed Spaceport Camden footprint.
The FAA recommends the following to identify historic properties within the APE:

- Detailed background research and records review of archaeological sites within a 1-mile radius of the direct APE shown in Attachment 2;
- Detailed background research and records review of historic architectural resources within the indirect APE, the 5-mile buffer centered on the proposed launch facility shown in Attachment 3;
- Outreach and consultation with Tribes and knowledgeable local persons listed in Attachment 4;
- Completion of a Phase I Archaeological Identification Survey of the direct APE in accordance with Georgia Council of Professional Archaeologists (GCPA) guidelines; and
- Completion of a Phase I Architectural Resource Reconnaissance Survey of the indirect APE, accounting for all historic architectural resources (i.e., buildings, structures, and objects) 45 years of age or older, as well as significant rural and/or cultural landscapes.

The results of these investigations will be presented to your office for review and comment as part of the consultation process. Attachment 5 describes our methodology for the Phase I archaeological and architectural field work and reporting. Given the scope of the undertaking and the magnitude of the potential effects, the FAA finds the effort meets the reasonable and good faith effort set forth in 36 CFR §800.4(b)(1) at this time.

Pursuant to 36 CFR §800.4(a)(1), the FAA is seeking your concurrence on the APE determination and identification efforts for this undertaking. If appropriate, please also provide additional recommended sources of local knowledge that were not included in Attachment 4. If you have any questions, please contact Stacey Zee of my staff at 202-267-9304, or via email at Stacey.Zee@faa.gov.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

cc: Steve Howard, Camden County
    John Fry, National Park Service

Attachments:
(1) Project Description
(2) Proposed Spaceport Camden Site Plan with Proposed 1-Mile Record Review APE
(3) Proposed 5-Mile APE Map
(4) Tribal and Local Cultural Resources Contact List
(5) Archaeological and Architectural Methodology
Attachment 1
Spaceport Camden Project Description

The Camden County Board of Commissioners has applied to the FAA for a Launch Site Operator License for a commercial spaceport in Camden County, Georgia. The proposed site, called Spaceport Camden, would be located on approximately 4,000 acres of an approximately 12,000-acre zoned and previously used as an industrial site. The spaceport could be expanded to include another 7,800 acres of adjoining property in the same industrial complex. The proposed Spaceport Camden property is located in an unincorporated area of Woodbine, in Camden County, approximately 11.5 miles due east of the town of Woodbine, Georgia, in the extreme southeastern part of the state. Access to the site is at the eastern termination of Union Carbide Road, an extension of Harriet's Bluff Road (Exit 7 from I-95). The site is on the coast, surrounded by salt marshes to the east and south, and the Satilla River to the north. The property comprises uplands, salt marshes, and fresh water wetlands. Approximately 100 non-contiguous upland acres would be used for the Vertical Launch Facility, Landing Zone, Launch Control Center, and supporting facilities. Each of these facilities would be fenced to provide security and access control, as would the approximately 400 acres of uplands on which these facilities would be located. Small guardhouses would be constructed at entrances to the site, and the launch and landing zones. Roads would be improved or constructed between and around the facilities. Water pipes and power lines would be run alongside the roadways, and septic systems would be provided for each of the facilities. Lighting would be designed and operated using best practices for wildlife, navigation, safety and security. The remainder of the site, much of which is marshland, would be used as buffer.

The Vertical Launch Facility would be approximately 23 acres in size and would include a launch pad and stand with its associated flame duct; propellant storage and handling areas; vehicle and payload integration facility; storage tanks; lightning protection systems; deluge water systems for local sound and vibration suppression; and other launch-related facilities and systems, including shops and office facilities. The launch pad would be a pile-supported concrete platform with steel gantry framing.

The Landing Zone would be approximately 11 acres in size and include a proposed 400-foot by 400-foot concrete pad located roughly in the center of the area, with fuel and oxidizer “off load” tanks, small support buildings, and related infrastructure. Concrete side wings would provide space for parking, storage of mobile off-load propellant tanks and other support equipment such as a mobile crane or forklifts.

The Launch Control Center Complex would be located on the property at a safe distance from the launch and landing areas and would house the site administration offices, a control room with related equipment, payload processing and check-out area, and a first-responder facility. This complex would be situated in an area of approximately 2.75 acres, and would consist of two main buildings with a parking lot between them and two smaller storage buildings. A similar facility, the Alternate Control Center and Visitor Center, would be constructed near the main entrance of the property mirroring the control center complex in size, design and facilities, but would also include provisions for visitors and viewing launches.

1 Some roads proposed for access between Spaceport Camden facilities already exist on the adjacent property and would be improved. Spaceport Camden would either purchase the adjacent property or negotiate easements to use the roads. Alternatively, instead of using these roads, other roads could be developed entirely within the currently proposed Spaceport Camden footprint.
Operations would consist of up to 12 vertical launches and up to 12 associated launch vehicle first-stage landings per year. In addition, other operations could occur, including up to 12 static fire engine tests and up to 12 wet dress rehearsals per year. All vehicles would launch to the east over the Intracoastal Waterway, Cumberland Island National Seashore, and the Atlantic Ocean. The first stage of the launch vehicle could return to and land at Spaceport Camden, or would land in the Atlantic Ocean, either in the water or on a barge.
Attachment 4

Tribal and Knowledgeable Local Cultural Resource Contacts

I. FAA Consultation Activities

FAA has initiated formal government-to-government consultation with the following Native American Tribes:

- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Muscogee (Creek) Nation
- Poarch Band of Creek Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Tlalopatho Tribal Town

FAA mailed Historic Preservation Act Section 106 consultation letters to the Tribal Historic Preservation Officers at the following Native American Tribes:

- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Muscogee (Creek) Nation
- Poarch Band of Creek Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Tlalopatho Tribal Town
- Cherokee of Georgia Tribal Council
- Georgia Tribe of Eastern Cherokee
- Lower Muskogee Creek Tribe

FAA also sent by email a National Historic Preservation Act Section 106 consultation letter to the Chair of the Gullah Geechee Commission.

II. Local Persons to be Contacted during Cultural Resources Survey

Ms. Eloise Bailey Thompson, author
Ms. Judy Buchanan, librarian at the Bryan-Lang Historical Archives
Ms. Susan Shipman, retired former director of the Coastal Resources Division of Georgia DNR
Mr. Taylor Davis
Mr. Dwight Kirkland
Attachment 5

Methodology for Phase I Archaeological and Architectural Area of Potential Effect Field Work for the Spaceport Camden Project

I. Approach to the Phase I Archaeological Area of Potential Effect Fieldwork for the Spaceport Camden Project

Survey Area: The investigation will commence with a review of the Georgia Archaeological Site Files maintained at the University of Georgia in Athens (UGA) Laboratory of Archaeology. The information on known archaeological and historical sites occurring within 1 mile of the project area will be examined, as well as cultural resource reports and historic documents pertinent to the proposed area of surface disturbance. General historical information on the project area and Camden County will also be consulted as available and appropriate. In addition, research will be conducted in the Main Library on the North Campus at UGA, as well as the Science Library on the South Campus. The Camden County Courthouse will also be consulted as necessary.

The Phase I archaeological survey will be conducted within those areas proposed for construction of facilities. This will include proposed access roads, utility access corridors, and direct development areas. It may be necessary to access some project areas by crossing through areas not proposed for construction. The project team will be equipped with GPS units capable of submeter accuracy, which will facilitate locating the required survey areas.

Field Methods: As per Georgia Council of Professional Archaeologists (GCPA) guidelines, shovel tests will be excavated at 30-meter intervals on transects spaced 30 meters apart. Each shovel test will measure approximately 30 centimeters in diameter and will be excavated to sterile subsoil, or 80 centimeters below ground surface, whichever is encountered first. All excavated soil will be screened through 1/4-inch wire mesh. Each shovel test will be backfilled once completed. Representative shovel tests will be photographed, and representative views of the project area will also be photographed. In accordance with GCPA guidelines, photographs will be taken of each identified archaeological site. Systematic shovel tests will not be excavated in areas with greater than 50 percent ground surface visibility; surface survey will be conducted in those areas. It is anticipated that very few areas with the requisite surface visibility will be present in the study areas. Shovel testing will not be conducted in areas covered by surface water, or in areas where the slope is greater than 10 percent. In addition, no subsurface testing will be conducted within identified cemetery boundaries that could potentially disturb human remains. These areas will be examined through pedestrian survey only and documented accordingly. Known cemetery boundaries will be delineated on GPS units and field maps to ensure avoidance of the resource. No shovel testing will occur outside the perimeters of the project area. When archaeological resources are encountered, the shovel test interval will be reduced to 10 meters as needed, and the site boundaries will be delineated based on the results of these tests. Shovel test depths, soil descriptions, and recovered artifacts will be recorded using standardized Shovel Test Forms designed by Cultural Resource Analysts, Inc. (CRA), the firm that will be conducting the field surveys, analyzing the data and documenting the results.

The methods used to conduct the fieldwork are minimally invasive, and all excavated shovel tests will be backfilled as soon as they are completed. No heavy equipment will be used during the survey, and the work should result in no measurable property damage.
All materials recovered from shovel tests and surface collections will be bagged and labeled by provenience. Identified sites will be located using a Trimble GPS receiver, and sketch maps will be drawn of each site indicating the topography, vegetation, natural features, shovel test locations, and its relationship to the project area. A photographic record will be maintained and detailed field notes recorded by the field director. Sites will be recorded in accordance with GCPA forms and procedures.

Laboratory Analysis: Upon completion of the archaeological field survey, all recovered materials will be transported to CRA’s laboratory, where they will be processed and recorded according to the requirements set forth by the GCPA. Analysis of the artifacts will be focused on identifying temporally and culturally diagnostic artifacts and providing a description of materials and potential functional or decorative qualities of the artifacts. A spreadsheet containing this information will be compiled and included with the Phase I technical report. During the analysis phase, specimens will be placed in archival acid-free bags with a permanent provenience designation and listed in an inventory. Upon completion of the analysis and preparation of the final report, artifacts, field notes, maps, and photographs pertaining to the survey will be prepared for curation in keeping with 36 CFR Part 79. CRA will temporarily curate the project materials until they can be permanently curated at a facility that meets the standards of the Georgia State Historic Preservation Office.

II. Approach to the Phase I Above-Ground Structure Area of Potential Effect Survey for the Spaceport Camden Project

Survey Area: To ascertain the presence of historic structures and cultural landscapes within the Area of Potential Effect (APE), CRA will conduct a file search at the SHPO in Atlanta, Georgia, and will complement it with research at local and state archives to identify historic maps, land records, aerial photographs, newspaper articles, and other historical references important to understanding the character of the APE. The APE for this project will be a 5-mile radius surrounding the project footprint.

Field Methods: Beyond the project development site, the fieldwork will entail driving all publicly-accessible roads to identify and document historic architectural resources (including buildings, structures, and objects) 45 years of age or older. Properties in this area will not be accessed without owner consent. Should a property not be visible from the public right-of-way, CRA will attempt to contact the property owner on site. If the property owner is contacted, CRA will ask for permission to photograph any structures that are not visible from the road. Within the project development site, CRA will seek to access known historic resources (e.g., cemeteries, monuments, and building ruins) as identified through historic aerial photography, topographic quadrangles, written record, and visual inspection. This will require accessing private roads within the project development site. To the extent feasible, CRA will drive all roads within this area. For properties with known historic resources beyond the roadway, CRA will also require access to the properties by foot where the resources are not visible. Should it be feasible, it may be helpful to have an escort provide access to such remote resources. If resources are covered or obscured with vegetation, CRA will not impact the vegetation in any way but rather will document the resources to the extent feasible given current conditions. CRA will not seek to enter the interior of any structures. For each resource, CRA will take representative photographs and record the location with a GPS point, line, or polygon, as appropriate, on a topographic quadrangle map. CRA will not directly impact or alter any identified architectural resources in any manner.

Based on current aerials of the 5-mile architectural APE, there is limited potential for the presence of historic standing structures. Approximately 30 such resources are anticipated. However, isolated resources do exist and other orphaned structures may be found throughout the APE. CRA will complete baseline recording of each historic resource located within the APE to include locational data, owner information, physical description, and historical associations, if any should exist. In addition, each
historic resource will be thoroughly documented through digital photography to further relate the character and setting of each resource. All documentation outside the project development site will occur from the public right-of-way and will be recorded in a detailed photo log. The locations of all properties will be marked on a topographic quadrangle and aerial map depicting the APE. For individual resources within the National Park Service (NPS) Cumberland Island National Seashore property, CRA will coordinate with NPS personnel, as appropriate, to record resources within the limits of their land. Documentation will be focused on the assessment of potential effects. Should access to all resources within the APE not be feasible due to NPS limitations, CRA will denote the number and characteristics of known resources through available documentation.

Because of the nature and history of the area within the APE, CRA will also conduct a thorough analysis of the landscape, noting the potential for any cultural landscapes that might be present. Where such landscapes are perceived, CRA will document them through digital photography and detailed notes to record the character, setting, and existing intrusions to the landscape.

Fieldwork will result in sufficient documentation to make a defensible statement regarding each property’s potential eligibility for listing in the National Register of Historic Places and to assess the potential impact of the proposed project on each historic property, should there be any.

III. Cultural Resource Report of Findings

Once the archival and field research is complete, individual archaeological and architectural draft reports will be prepared to summarize findings in accordance with GCPA and NPS requirements. The reports will be produced in conformity with the GCPA and NPS Report Guidelines and will include an Executive Summary, Project Background, Methodology and Research Design, Results of the Cultural Resource Survey, Analysis of Potential Effects, Recommendations, and Appendices, as appropriate, and will be presented in such a way to facilitate incorporation into the EIS document. The results of the cultural resource survey, recommendations for further work, if any, and assessment of potential effects will be clearly documented and accompanied by appropriate supporting materials such as annotated topographic quadrangles, aerials, and photography. FAA will submit Phase I draft reports to SHPO for review and comment prior to preparation of the final reports.
June 12, 2016

Daniel Murray  
Manager, Space Transportation Development Division  
Office of Commercial and Space Transportation  
Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, DC 20591  
Attn: Stacey Zee

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the information submitted concerning the above referenced project. Our comments are offered to assist the Federal Aviation Administration in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information provided, HPD concurs with the area of potential effect (APE) determinations for the proposed project. Additionally, HPD concurs that the proposed methods for the archaeological Phase I survey are generally appropriate to identify archaeological resources within the direct APE. HPD recommends the following be taken into consideration for the Phase I survey:

- Depending on the specific depositional environment in the area, 80 centimeters below surface (cmbs) is not always an appropriate depth to terminate a shovel test on the coast. If artifacts are present near 80 cmbs, HPD suggests continuing shovel testing until either a) twenty (20) centimeters (cm) of sterile soil below artifacts has been reached or b) hardpan or water table is reached. If either of these options is not feasible, and artifacts are still present within 20 cm of the termination of the shovel test, it may be appropriate to continue with a larger test unit in order to fully determine depth of deposits. HPD recommends consulting with our office to determine the best course of action should this situation occur.

- Particular areas, such as riverine and coastal environments, have a higher potential to contain sites that have been completely capped by depositional activity, and thus can result in a lack of surface expression. HPD recommends continuing the 30 meter interval or less shovel testing in these areas, as surface-only survey would not be considered sufficient.

- For slopes greater than ten (10) percent, HPD recommends that a pedestrian survey still be conducted in these areas.

- Although HPD concurs shovel testing within a cemetery would not be appropriate, subsurface probing is considered appropriate and recommended in order to confirm that
there are no unmarked interments outside of any visual boundary and to fully delineate
the cemetery boundary.

- All site boundaries should be delineated by two (2) consecutive negative shovel tests,
  obvious changes in topography, or documented and/or reasonable survey limitations
  (obstructions, severe disturbances, etc.).

- Field methods and report writing should also follow all National Park Service, Secretary
  of the Interior's Standards for professional qualifications, as well as site identification,
  evaluation, and documentation.

Furthermore, HPD concurs that the proposed methods for the architectural Phase I survey are generally
appropriate to identify historic resources within the direct and indirect APE. HPD recommends the
following be taken into consideration for the Phase I survey:

- Since all historic resources may not be visible from the public right of way, HPD recommends
  conducting additional background research on the county’s tax assessor website or at the tax
  assessor offices.

- For information purposes only, HPD’s records include county and city surveys, identified site
  files, environmental review files, National Register of Historic Places (NRHP) listed and pending
  files, and Centennial Farm files.

- Should a historic resources not be accessible, HPD recommends a NRHP determination of
  unknown and treating the resource as NRHP-eligible throughout the Section 106 process.

- The Phase I report should also include location history in order to place the identified historic
  resources within an historic context.

HPD looks forward to receive the Phase I reports and working with FAA as this project progresses.
Please refer to project number HP-151117-001 in any future correspondence regarding this project. If we
may be of further assistance, please feel free to contact me at (770) 589-7851 or
Jennifer.dixon@dhr.ga.gov.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning
Ms. Jennifer Dixon  
Environmental Review & Preservation Planning Program Manager  
DNR Historic Preservation Division  
Jewett Center for Historic Preservation  
2610 GA Hwy 155, SW  
Stockbridge, GA 30281  
Re: HP-15-1117-01, Proposed Spaceport Camden Project, Camden County, Georgia  
Determinations of Eligibility Report  

Dear Ms. Dixon,  

Camden County has applied to the Federal Aviation Administration (FAA) for a Launch Site Operator License for a commercial launch site in Camden County, Georgia. The FAA has determined that the Spaceport Camden Project is an undertaking, per 36 CFR 800.16 of the National Historic Preservation Act of 1966 (NHPA), and initially consulted with your office on January 6, 2016.  

In compliance with the NHPA, the FAA requests your concurrence on the eligibility recommendations prepared by Cultural Resource Analysts, Inc. (CRA) in the Determinations of Eligibility Report for the Proposed Spaceport Camden Project. We have enclosed both a hard copy and digital copy, on CD, of the report.  

On May 24, 2016, we consulted with your office and defined the Architectural Area of Potential Effect (APE) for the Project as a five-mile buffer surrounding the proposed vertical launch facility. We developed the APE to take into consideration the scale and nature of the Project and encompasses the area in which the Project may directly or indirectly affect historic properties (36 CFR 800.4[1]).  

During the field survey, CRA personnel identified a total of 28 historic resources within the APE. Fifteen of these resources were newly identified and 13 were previously surveyed. Of the resources identified, three components of the Floyd’s Bellevue and Fairfield Plantations are recommended as individually eligible for listing on the National Register of Historic Places:
Draft Environmental Impact Statement
Spaceport Camden

- Bellevue/Anchor House is individually eligible under Criterion C as a unique example of antebellum architecture in Georgia.
- The Charles Rinaldo Burial Site is individually eligible under Criterion B and Criteria Consideration C for its association with Charles Rinaldo Floyd, a person whose exploration accounts and subsequent writings have contributed to the understanding of Georgia’s unexplored landscape and the daily workings of plantation life in the antebellum era.
- The Floyd Cemetery, which is distinguished by age, is eligible for listing in the NRHP under Criterion A and Criteria Consideration D for its association with the settlement era of Camden County.

It is also recommended that the resources associated with the African-American Settlement at Half Moon Bluff, located in the High Point-Half Moon Bluff Historic District, retain the necessary integrity to be considered contributing resources to the National Register-listed High Point-Half Moon Bluff Historic District. CRA also recommends that the Main Road (#84000941) on Cumberland Island retains sufficient integrity to maintain its NRHP listing. These resources are all within the project APE.

In accordance with 36 CFR 800.4, the FAA is requesting your concurrence with the findings and recommendations of the Determinations of Eligibility Report for the Proposed Spaceport Camden Project. Please contact the FAA project lead, Stacey Zee at 202-267-9305, with any questions.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachments:

1) Spaceport Camden Description of Proposed Action and Alternatives

2) Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia
Ms. Jennifer Dixon
Environmental Review & Preservation Planning Program Manager
DNR Historic Preservation Division
Jewett Center for Historic Preservation
2610 GA Hwy 155, SW
Stockbridge, GA 30281

Re: HP-15-1117-01, Proposed Spaceport Camden Project, Camden County, Georgia Phase I Archaeological Survey Report

Dear Ms. Dixon:

Camden County has applied to the Federal Aviation Administration (FAA) for a Launch Site Operator License for a commercial launch site in Camden County, Georgia. The FAA has determined that the Spaceport Camden Project is an undertaking, per 36 CFR 800.16 of the National Historic Preservation Act of 1966 (NHPA), and initially consulted with your office on January 6, 2016.

Enclosed with this letter please find one hard copy of the Draft-Final report, Phase I Archeological Survey of the Proposed Spaceport Camden, Camden Count, Georgia. Also enclosed is a CD, which contains a digital copy of the report.

In support of National Historic Preservation Act Section 106 consultation for the proposed development and operation of a spaceport in Camden County, Georgia, the FAA (through Cultural Resource Analysts, Inc. [CRA]) has completed a Phase I archaeological survey for the associated project development area. The entire Area of Potential Effects (APE) includes the actual project site, considered for development, and a five-mile radius around the project site that is considered for operation of the spaceport (i.e., launches). The focus of the Phase I survey was that portion of the APE considered or development (actual project site).

The field survey consisted of approximately 89 acres and five miles of connecting roadway. In all, 117 artifacts were recovered, including prehistoric pottery, lithics, and a single historic artifact. Three isolated finds were recorded, along with two previously unrecorded archaeological sites, Sites 9CM570 and 9CM571. The boundaries of two previously recorded archaeological sites, Sites 9CM30 and 9CM64, were expanded, as well. The isolated finds consisted of one piece of ferrous metal, one chert flake, and one chalcedony flake.
Previously recorded Sites 9CM30 and 9CM64 are recommended as potentially eligible for inclusion on the National Register of Historic Places (NRHP).

Sites 9CM570 and 9CM571, both located near Sites 9CM30 and 9CM64, were recorded as a result of shovel testing during the current survey. These sites are also recommended as potentially eligible for inclusion in the NRHP.

If construction will occur and the sites cannot be avoided, then Phase II National Register eligibility testing will be required. If the sites are determined to be eligible for inclusion on the NRHP, then Phase III archaeological data recovery will be required, if the sites cannot be avoided by the proposed construction. As discussed previously, we plan to develop a Programmatic Agreement (PA) for this project. The PA would outline the process for formally evaluating the identified resources for National Register eligibility, and treating any resources that meet National Register eligibility criteria that cannot be avoided by the undertaking. Please contact the FAA project lead, Stacey Zee at 202-267-9305, with any questions.

Sincerely,

Daniel Murray
Manager, Space Transportation Development Division

Attachments:
1) Spaceport Camden Description of Proposed Action and Alternatives
2) Phase I Archaeological Survey of the Proposed Spaceport Camden, Camden County, Georgia
March 30, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
Attn: Stacey Zee, Project Lead

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

Dear Mr. Murray,

The Historic Preservation Division (HPD) has reviewed the draft report entitled, *Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia*, prepared by Cultural Resource Analysts, Inc. and dated February 20, 2017. Our comments are offered to assist the Federal Aviation Administration (FAA) in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information provided in the report, HPD is unable to concur with FAA’s determinations of eligibility without additional information. It is HPD’s opinion that the report provided is insufficient to determine the National Register of Historic Places (NRHP)-eligibility of the historic resources included. In general, HPD would like to note, or recommends, the following:

- Include maps or aerals, along with supporting photographs, indicating resource boundaries, outbuildings, additions, etc. to support the information contained within the report.
- Include maps for historic districts noting contributing or non-contributing, ages of resources within the district, etc. to clearly represent the overall district.
- Provide clear and detailed descriptions of the resources noted – in particular approximate dates of additions or changes and specific reasoning for ineligibility, especially when based on integrity.
- Remove discussions regarding Criteria Consideration G. Evaluating resources over 40 years of age provides for longevity of the survey and minimizes the need for multiple additional surveys during project planning and construction. All resources should be assessed as if they are of age so that the survey remains relevant.
- Appropriately apply HPD’s guidelines for Ranch and American Small house types.
- Assess resources under Criterion D.
  - A resource must be a good and representative example to be eligible for listing. It is not necessary for the resource to be “exceptional,” “unique,” or “notable.”
  - Include discussion of the cultural landscape and its eligibility within the area of potential effect (APE), such as historic road systems, natural landscape, and others.
- Evaluate historic properties in which any portion of the property falls within the APE. A historic resource’s eligible boundary often includes its surrounding property. As such, if
the property related to a historic property is partially within the APE, it should be assessed, such as the rice plantation ruins noted within the report appear to be.

Regarding specific resources, HPD recommends the following:

- Dover Bluff Club: Although a portion of the historic district falls outside of the APE, the entire district should be assessed in order to determine the district’s NRHP-eligibility. HPD recommends a minimum of background and desktop research and a windshield survey.
- Cabin Bluff: It appears to HPD that this resource should be evaluated for its Coffin-era resources, not the Floyd-era resources. Further, it appears from the description of the layout that the district boundaries could be drawn in a way so as to omit the majority of the modern intrusions.
- High Point-Half Moon Bluff: HPD recommends evaluating the potential for an expanded period of significance and areas of significance to include the mid-century development and archaeological potential.

We look forward to reviewing the requested information and working with you as this project progresses. Please refer to project number HP-151117-001 in any further correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at Jennifer.dixon@dnr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

cc: Lupita McClenning, Coastal Georgia Regional Commission
MARK WILLIAMS
COMMISSIONER

April 3, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
Attn: Stacey Zee, Project Lead

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the draft report entitled, Phase I Archaeological
Survey of the Proposed Spaceport Camden, Camden County, Georgia, prepared by Cultural Resource
Analysts, Inc. and dated February 15, 2017. Our comments are offered to assist the Federal Aviation
Administration (FAA) in complying with the provisions of Section 106 of the National Historic
Preservation Act (NHPA).

Based on the information contained in the report, HPD concurs that archaeological sites 9CM30, 9CM64,
9CM570, 9CM571 are unknown (“potentially eligible”) for listing in the National Register of Historic
Places (NRHP) under Criterion D. Additionally, HPD concurs with the boundary expansions for sites
9CM30 and 9CM64. Furthermore, HPD concurs with the recommendation to avoid all four sites and
that if avoidance is not possible, Phase II testing should occur to determine the sites’ NRHP-eligibility.

Please refer to project number HP-151117-001 in any future correspondence regarding this project. If we
may be of further assistance, please do not hesitate to contact Jennifer Bedell, Archaeological Compliance
Unit Manager, at Jennifer.bedell@dnr.ga.gov or (770) 389-7861 or me at jennifer.dixon@dnr.ga.gov or
(770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

JEWETT CENTER FOR HISTORIC PRESERVATION
2610 GA HWY 155, SW | STOCKBRIDGE, GA 30281
770.389.7844 | FAX 770.389.7878 | WWW.GEORGIAHPO.ORG
From: Dixon, Jennifer <Jennifer.Dixon@dnr.ga.gov>
Sent: Wednesday, April 12, 2017 8:02 AM
To: Stacey.Zee@faa.gov
Cc: Akstulewicz, Kevin D.; Pam.Schanel@icf.com; Leslie.Grey@faa.gov
Subject: EXTERNAL: Re: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden Co, HP 151117-001

Stacey,

Please see below for our clarifications. Please let me know if there is still some confusion or questions!

Thank you!

Jennifer Dixon, MHP, NCIDQ
LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

Historic Preservation Division
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GEORGIA DEPARTMENT OF NATURAL RESOURCES

From: Stacey.Zee@faa.gov <Stacey.Zee@faa.gov>
Sent: Monday, April 10, 2017 9:52 AM
To: Dixon, Jennifer
Cc: KEVIN.D.AKSTULEWICZ@leidos.com; Pam.Schanel@icf.com; Leslie.Grey@faa.gov
Subject: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden Co, HP 151117-001

Jennifer —

The FAA appreciates your review of the draft report Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia and understands the need for additional information/clarification on some items before the GA SHPO can concur on the findings. In response to the letter provided on March 30, 2017 we would like to offer the following and also request clarification on some of the comments SHPO has provided. Could we please schedule a follow-on teleconference to discuss these issues so that we can ensure the revised report meets SHPO’s needs? We are fairly open next week – except for Wednesday, April 19th. If helpful, I could set up a doodle poll to determine the team’s availability.

Upon resolution of these items we would then respond back officially to your letter with a revised report and response to comments.
Comments/Responses

1) SHPO Comment: Include maps or aerials, along with supporting photographs, indicating resource boundaries, outbuildings, additions, etc. to support the information contained within the report.

FAA Response: We are unsure of the intent of this comment and would ask for clarification. Is this comment indicating that a map is necessary for each identified resource that specifically calls out parcel lines, outbuildings, and additions?

SHPO: Yes, we recommend including a map or aerial for each resource (or a group of resources, if they are close to each other and enough detail can be seen in the image), with things like additions to the building (especially if noted as a reason for ineligibility), outbuildings discussed, boundaries, ages of resources (particularly in districts), etc.

2) SHPO Comment: Include maps for historic districts noting contributing or non-contributing, ages of resources within the district, etc. to clearly represent the overall district.

FAA Response: High Point-Half Moon Bluff HD is the only recommended eligible/listed district. It is depicted on Figure 2e with contributing and non-contributing resources called out (the report could rephrase the “NRHP-listed” and “Not Eligible” labels). If dates are required on the map, they can be added based on the information available at this time. An aerial (Figure 186) is shown with the High Point-Half Moon Bluff HD write up to depict the NRHP boundary, but no structures are visible due to vegetation coverage, so they are not called out. We can refer back to Figure 2e here.

For clarification, can SHPO please clarify if anything additional is needed to resolve this comment or if you are requesting maps for any other collectives, even if they’re recommended as not eligible?

SHPO: This comment is primarily for Dover Bluff and Cabin Bluff, as we are not in agreement that these are not eligible, with the information provided. A map or aerial showing what would be the entire potential district (or broken up over a couple maps, if detail cannot be seen in one map), and color-coded/noted some how to show which resources within are historic and which are not, which are historic but altered greatly, where demo’d resources once were, etc.

3) SHPO Comment: Provide clear and detailed descriptions of the resources noted, in particular approximate dates of additions or changes and specific reasoning for ineligibility, especially when based on integrity.

FAA: We believe the report provides descriptions for each of the resources noted; are there any in particular the SHPO has identified as missing? Please note that dates for additions or changes would be arbitrary as available information does not identify when changes were actually made.

FAA believes the report does provide specific reasoning for ineligibility and explains in what ways integrity is diminished for resources where that is the case. As a result, we would request clarification on this comment to identify specifically what is deficient.

SHPO: We are mainly requesting supporting documentation, as well as a clear description, of ineligibility determinations. For example, the description may say that additions were added, and the reason for ineligibility is that there were additions, but no approximate date of the additions or anything similar (comparison aerials, for example, and photos of the additions to the resource) are shown. If an addition was added during the historic period, it would not necessarily constitute ineligibility. Same thing for other changes on the resources - if material changes are the reason for ineligibility, and no approximate date of the change or photo showing the change is provided, it is hard for our office to concur. As an example, it helps to say something like ‘...lacks integrity of materials due to the vinyl siding added in the 1970s...’ or ‘...lacks integrity of design due to the addition that was added between 1968 and 1990 according to historic aerials (Figure ## and #)’ etc. While some of this information may currently be in the description, and significance is noted in another section, it helps to tie it all together in the integrity discussion (or somewhere).
Draft Environmental Impact Statement  
Spaceport Camden

4) SHPO Comment: Remove discussions regarding Criteria Consideration G. Evaluating resources over 40 years of age provides for longevity of the survey and minimizes the need for multiple additional surveys during project planning and construction. All resources should be assessed as if they are of age so that the survey remains relevant.

FAA: We will remove discussions regarding Criteria Consideration G.

SHPO: Thanks! :)

5) SHPO Comment: Appropriately apply HPD's guidelines for Ranch and American Small house types.

FAA Response: We are unsure of the intent of this comment and would request clarification. The report already uses the HPD guidelines to evaluate Ranch houses in the report. For the first Ranch house write up, there is a lengthy evaluation about Ranch houses, which is then cross-referenced in other resources where a more brief evaluation is presented instead of repeating the same contextual information for each resource.

SHPO: I believe this is in reference to a few discussions within the report that note things like prominent chimneys and multiple materials are character-defining features for ranch houses. While they are for some areas, our guidelines specifically note that these are not regional characteristics, so should not be utilized as a reasoning for ineligibility. Also, the same window, used in different configurations is also common for this area, rather than multiple window types. Further, red brick is common for the south, but not exclusively. For the American Small guidelines, I think it is similar (and they didn't really seem to be mentioned within the discussions either). Also, things like screen porches would be characteristic of coastal resources, due to bugs, air flow, etc. Referencing the guidelines when discussing those aspects also helps, as it makes it easier for us to cross reference when reviewing.

6) SHPO Comment: Assess resources under Criterion D.

FAA Response: We can insert a statement about Criterion D and “information potential” as it relates to the built structure, excluding archaeology.

SHPO: Thank you, and keeping in mind that there does not have to be any actual archaeological testing (ie. digging) in order to determine if there is archaeological potential.

7) SHPO Comment: A resource must be a good and representative example to be eligible for listing. It is not necessary for the resource to be “exceptional,” “unique,” or “notable.”

FAA Response: This language can be rephrased in the report.

SHPO: Thank you! We often find that a reason for ineligibility noted in reports is that it is not ‘unique’ or ‘exceptional’ - this is not an acceptable reason for ineligibility and other aspects (lack of character-defining features, lack of integrity, etc.) should be the reasons explored. This also goes back to note #3, above.

8) SHPO Comment: Include discussion of the cultural landscape and its eligibility within the area of potential effect (APE), such as historic road systems, natural landscape, and others.

FAA Response: We are unsure of the intent of this comment and would request clarification. Is this in reference to additional discussion of Cumberland Island as a cultural landscape or the totality of the area?

SHPO: A little bit of both - there appear to be cultural landscape systems throughout (natural systems and features, spatial organization, land use, circulation/roads, cultural traditions, etc) and physical elements (topo, vegetation, buildings/structures, waterways/features, archaeology, views/vistas, etc.) which constitute a cultural landscape, its just a matter of the significance and integrity. These elements should be looked at and assessed within the project area - maybe it ends up only being Cumberland Island, or a portion of it, or maybe there is another area that has a collection of
these aspects and a shared history. Without delving into the research ourselves, we can’t really say how this will take shape, but know that it should be assessed.

9) SHPO Comment: Evaluate historic properties in which any portion of the property falls within the APE. A historic resource’s eligible boundary often includes its surrounding property. As such, if the property related to a historic property is partially within the APE, it should be assessed, such as the rice plantation ruins noted within the report appear to be.

FAA Response: It appears the Dover Bluff Club owns almost 4,000 acres, half of which is in the APE and half of which falls to the north of the APE. So, the tabby ruins are actually located on land owned by the Dover Bluff Club, which technically reaches into the APE. The ruins are outside the APE and about 5.25 miles from the project area. However, photos of the ruins are available and can be included in the report.

SHPO: This should be discussed in the report. Some initial thoughts on questions to answer: If they are part of the Dover Bluff Club, why are they not included in the district? Would they be considered a separate district, and if so, where would its boundaries fall (inside or outside the APE)? Why is the Dover Bluff Club’s boundaries restricted to just the built area? etc. Other than the tabbys noted in the report, the main purpose for this comment is that our office will often see surveyors skip edges of properties that fall into the APE, but have nothing on them within the APE. Yet, that property, as a whole, has a historic, eligible, resource on it. Tax assessors are an easy way to see if anything like this is the case for this project - all those properties that slightly overlap into the APE, if they have a historic resource on them, should be assessed and evaluated, as the property surrounding it would, typically, be considered its NRHP-eligible boundary.

10) SHPO Comment: Dover Bluff Club: Although a portion of the historic district falls outside of the APE, the entire district should be assessed in order to determine the district’s NRHP-eligibility. HPD recommends a minimum of background and desktop research and a windshield survey.

FAA Response: FAA believes this request has been satisfied within the report and is therefore unsure of the intent of this comment and would request clarification. Background and desktop research were performed as part of the study, which is where the language regarding the general history of hunt clubs, the map history of Dover Bluff Club, and the statements regarding Sirmans and Parker are derived from. No additional information was revealed during research. A windshield survey was likewise completed as discussed in the report and included in Figures 21-23. With this, the entire area was assessed for eligibility as a potential district but integrity was found to be compromised.

SHPO: The streetscape photos of the areas outside of the APE are not sufficient to assess the eligibility of the Club as a whole. A windshield survey should include a photo of each resource (or at least a majority), documentation of ages of resources, minor discussion/description of resources, etc. Background/desktop research should include Google Streetview, tax assessors, etc. to determine and sufficiently assess the eligibility. This, coupled with the map/aerial aspects noted above in #2, should aid in a more complete evaluation.

11) SHPO Comment: Cabin Bluff: It appears to HPD that this resource should be evaluated for its Coffin-era resources, not the Floyd-era resources. Further, it appears from the description of the layout that the district boundaries could be drawn in a way so as to omit the majority of the modern intrusions.

FAA Response: Additional information about Coffin can be added to the document, although Coffin developed a lot of land and has stronger ties to Sea Island. And, integrity remains an issue for the entirety of the property. While a boundary could be drawn to exclude modern resources to the north (although, doing so would effectively also cut off relational context of the entire landscape of the property in that area), it would be more appropriate to retain such resources to the south that are integrated within the developed core of the property but as “non-contributing” resources. Otherwise, it distorts the developmental history of the property. That said, we will re-examine this property in relation to the request.
SHPO: Regardless of where Coffin had his ties, if the majority of the built environment that remains at Cabin Bluff is from his era of ownership, then it should be assessed as such. Not because it was necessarily him involved, but because that is what is left of the built environment. Justification and explanation of the boundary would be important in this discussion as well, which coupled with note #2, above, should help evidence the development, etc. of the district. Since a lot has also been demo’d (from Floyd days, it seems?), noting where and what those resources are on a map/aerial, would also help. Considering all the differing, overlapping, aspects, layers, and eras, this is one where documentation, detail, description, and evidence is crucial to aid our office’s understanding of the determinations made.

12) SHPO Comment: High Point-Half Moon Bluff: HPD recommends evaluating the potential for an expanded period of significance and areas of significance to include the mid-century development and archaeological potential.

FAA Response: We can explore an expanded period of significance here

SHPO: Sounds good!

Thank you – we look forward to talk to you next week.

Stacey M. Zee
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591
202-267-9305
Dixon, Jennifer

Looks like we received it on June 26th. It has been added to the queue for reviews.

Thank you!

Jennifer Dixon, MHP, NCIDQ
LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

Historic Preservation Division
(770) 389-7851 I F: (770) 389-7878
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Stockbridge, Georgia 30281

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From: Akstulewicz, Kevin D. <KEVIN.D.AKSTULEWICZ@leidos.com>
Sent: Thursday, June 22, 2017 3:25 PM
To: Stacey.Zee@faa.gov; Dixon, Jennifer
Cc: Pam.Schanel@ifc.com
Subject: RE: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden Co, HP 151117-001

Hi All –

The hard copy/CD shipped out today directly from CRA... it was shipped priority so it should arrive in just a few business days.
Please let me know if it is not received within the next few days...
Thanks,

KDA
(865) 300-0612

From: Stacey.Zee@faa.gov [mailto:Stacey.Zee@faa.gov]
Sent: Wednesday, June 21, 2017 3:34 PM
To: Jennifer.Dixon@dnr.ga.gov
Cc: Akstulewicz, Kevin D.; Pam.Schanel@icf.com
Subject: EXTERNAL: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden Co, HP 151117-001

Jennifer --

Attached are responses to your comments from March. The project contractor, Kevin Akstulewicz, will mail a hardcopy and CD of the updated reports. Please let us know if you have any questions.

Stacey M. Zee
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591
202-267-9305

From: HPD-106reply [mailto:HPD-106reply@dnr.ga.gov]
Sent: Thursday, March 30, 2017 6:54 PM
To: Zee, Stacey (FAA) <Stacey.Zee@faa.gov>
Cc: Lupita McClennning <Lmcllenning@crc.ga.gov>
Subject: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine, Camden Co, HP 151117-001

From: Historic Preservation Division

Attached is our letter on the subject undertaking (in Adobe Acrobat PDF format)

Do not respond to this e-mail.

If you have any questions concerning our letter, please contact:
Jennifer Dixon at jennifer.dixon@dnr.ga.gov

A free copy of Adobe Acrobat Reader can be downloaded from: www.adobe.com
October 31, 2017

Ms. Jennifer Dixon
Environmental Review & Preservation Planning Program Manager
DNR Historic Preservation Division
Jewett Center for Historic Preservation
2610 GA Hwy 155 SW
Stockbridge, GA 30281

Re: HP-15-1117-01 – Addendum to Determinations of Eligibility Report for the Proposed Spaceport Camden Project, Camden County, Georgia

Dear Ms. Dixon:

Enclosed with this letter please find one electronic copy of the addendum to the report referenced above.

In support of National Historic Preservation Act Section 106 consultation for the proposed development and operation of a spaceport in Camden County, Georgia, the FAA (through Cultural Resource Analysts, Inc. [CRA]) has completed an historical resource/building evaluation for the project Area of Potential Effects (APE). The APE includes the actual project site considered for development, and a five-mile radius around the project site that is considered for operation of the spaceport (i.e., launches). The FAA seeks SHPO input and concurrence on the eligibility recommendations for resources identified within the APE, as indicated in the report.

As part of this process, the FAA provided the above-referenced report, dated June 13, 2017, for HPD review. The attached addendum to the above-referenced investigation is intended to address comments received from HPD on August 4, 2017 and as discussed with your office on September 21, 2017. This addendum is provided to supplement the original report and offer additional clarification and documentation related to five resources: High Point-Half Moon Bluff Historic District (National Register of Historic Places [NRHP] No. 78000265); Cabin Bluff Historic District; the Charles Rinaldo Floyd Burial Site and Floyd Family Cemetery within CM-CO 31; the Thiokol Chemical Company site within CM-CO 31; and the Dover Bluff Club.

In total, based on research, field survey, and discussions with HPD and in consideration of the information included in the attached addendum, the FAA recommends that the following resources within the APE for the proposed Spaceport Camden project be considered historic properties (NRHP-listed or –eligible):

- High Point-Half Moon Bluff Historic District (NRHP No. 78000265)
- Main Road (NRHP No. 84000941)
• Bellevue/Anchor House (CM-CO 31, Resource A)
• Charles Rinaldo Burial Site (CM-CO 31, Resource B)
• Floyd Family Cemetery (CM-CO 31, Resource C)
• Cabin Bluff Cumberland River Retreat Historic District
• Dover Bluff Club Historic District
• Cumberland Island, as a cultural landscape
• Historic Architectural Resource 16, tabby ruins at Black Hammock Plantation

The FAA recommends that the following resources be considered not eligible for listing in the NRHP:
• Thiokol Chemical Plant Site (CM-CO 31)
• Camden County, as a cultural landscape

In accordance with 36 CFR 800.4, the FAA is requesting your concurrence with the findings and recommendations as identified in the initial report and as supplemented by the attached addendum. Should your office have any questions or require additional information please contact the FAA project lead, Stacey Zee at (202) 267-9305 or stacey.zee@faa.gov.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

Attachments:
1) Addendum – Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia
November 22, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue SW
Washington DC 20591

Attn: Stacey Zee, FAA Project Lead

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the draft report entitled, *Addendum to Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia*, prepared by Cultural Resource Analysts, Inc. and dated October 19, 2017. Our comments are offered to assist the Federal Aviation Administration (FAA) in complying with the provisions of Section 106 of the National Historic Preservation Act (NHPA).

Based on the additional information contained in the addendum report and information contained in the initial report (June 13, 2017), HPD concurs that the Thiokol Chemical Plant Site and continues to concur that Camden County, as a cultural landscape, are not eligible for listing in the National Register of Historic Places (NRHP). Additionally, HPD continues to concur that Bellevue/Anchor House, Charles Rinaldo Burial Site, Floyd Family Cemetery, Cabin Bluff Cumberland River Retreat historic district, Dover Bluff Club historic district, Cumberland Island as a cultural landscape, and resource 16 are eligible for listing in the NRHP and within the proposed project’s area of potential effect (APE). Furthermore, HPD continues to concur that the NRHP-listed High Point-Half Moon Bluff Historic District and Main Road are within the proposed project’s APE.

HPD looks forward to receiving an assessment of effects report for the above noted NRHP-eligible and listed resources, once available, and working with the FAA as this project progresses. Please refer to project number HP-151117-001 in any future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at jennifer.dixon@dnr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

Cc: Lupita McClenning, Coastal Georgia Regional Commission
APPENDICES A-188 March 2018
Eastern Cherokee, Lower Muskogee Creek Tribe, Muscogee (Creek) Nation, Poarch Band of Creeks, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlocco Tribal Town did not respond to the FAA’s correspondence inviting them to participate. All project documentation and this determination of effect letter will be provided to any tribes that indicate they are interested in participating in the consultation; as of the date of this letter, no tribes have expressed interest. The Gullah Geechee Commission on the Gullah Geechee Cultural Heritage Corridor was invited to participate in Section 106 consultation as well, but has not responded.

Other Outreach Activities. Pursuant to 36 CFR § 800.2, the FAA has initiated consultation with the National Park Service (NPS), the Georgia Department of Natural Resources (DNR), Historic Preservation Division (HPD) (State Historic Preservation Office [SHPO]) and other consulting parties, as documented in previously submitted reports (Cultural Resource Analysts, Inc., 2017b).

Area of Potential Effects
The Area of Potential Effects (APE) for this undertaking (maps showing the location of the proposed infrastructure and launch trajectories associated with the undertaking are provided as Enclosure Figures 1 and 2, respectively) was defined in two parts.

(1) The APE for archaeological resources (direct APE – Enclosure Figure 3) is defined as the boundary of the proposed Spaceport Camden, and consists of areas where there would be direct ground disturbance, including construction of facilities, installation or upgrading of utilities, access roads or other routes, and staging areas, as well as the location of maintenance and operations activities.

(2) The architectural APE (indirect APE – Enclosure Figure 4), corresponding to the APE for audible (including vibratory) and visual effects, consists of the area within a 5-mile radius of the proposed Spaceport Camden, extending around the proposed project limits.

The Georgia Historic Preservation Division (HPD) concurred with the APE in a letter dated June 12, 2016 (See Enclosure 1).

Identification Efforts
The FAA consulted with HPD and the consulting parties on an appropriate level of identification effort for this undertaking. The FAA recommended the following measures to identify historic properties within the APE (See Enclosure 1):

- Detailed background research and records review of archaeological sites within a 1-mile radius of the direct APE;
- Detailed background research and records review of historic architectural resources within the indirect APE, the 5-mile buffer centered on the proposed launch facility;
- Outreach and consultation with Tribes and knowledgeable local persons;
- Completion of a Phase I Archaeological Identification Survey of the direct APE in accordance with Georgia Council of Professional Archaeologists (GCPA) guidelines; and
- Completion of a Phase I Architectural Resource Reconnaissance Survey of the indirect APE, accounting for all historic architectural resources (i.e., buildings, structures, and objects) 45 years of age or older, as well as significant rural and/or cultural landscapes.
The two studies, entitled Phase 1 Archaeological Survey of the Proposed Spaceport Camden, Camden County, Georgia (Cultural Resource Analysts, Inc. [CRA] 2017a) and Historic Resources Survey for the Proposed Camden Spaceport Project in Camden County, Georgia (CRA 2017b, and including a 2017 addendum), have been provided to your office. Both reports were completed by CRA, a subcontractor to Leidos – FAA’s contractor for the Spaceport Camden EIS. Your office concurred with the findings of the archaeological survey report in a letter dated April 3, 2017 (See Enclosure 2).

The findings of the architectural survey report were revised following input from and consultation with your office, and your office concurred with determinations of eligibility in letters dated August 4 and November 22, 2017 (See Enclosure 3). The historic properties documented in the APE and the FAA’s finding of effect for each historic property are found in Enclosure Table 1.

Historic Properties in the APE
The above-referenced studies identified historic properties in the APE for archaeological resources (direct effect) and also in the APE for visual and audible effects (indirect effects). Sixty-six individual historic properties, including the historic districts to which many of them contribute, were identified in the project APEs. Three are elements of NRHP-eligible Floyd’s Fairfield and Bellevue Plantations/Union Carbide Property (CM-CO 31); 23 are elements of the Dover Bluff Club Historic District; 16 are elements of the Cabin Bluff Cumberland River Retreat Historic District; 10 are elements of NRHP-listed High Point-Half Moon Bluff Historic District (NR-000265), and the remaining 10 are archaeological sites, ruins, a cultural landscape and a road. Enclosure Table 1 lists the historic properties in both APEs. Seven of the 66 historic properties are archaeological sites that are unevaluated for NRHP eligibility, and which are treated as NRHP-eligible for the purposes of Section 106 effects determination.

APE for Archaeological Resources (Direct Effects). There are four archaeological sites within the areas proposed for facilities construction that are unknown (“potentially eligible”) for listing on the NRHP under Criterion D. HPD concurred with FAA’s determination in a letter dated April 3, 2017. There are seven cultural resources in the APE for direct effects that are outside the areas proposed for facilities construction. Four of these are NRHP-eligible, and three have not been evaluated for NRHP eligibility, but are treated as NRHP-eligible for the purposes of Section 106 effects determination (Enclosure Table 1).

APE for Architectural Resources (Indirect Effects). In a letter dated August 4, 2017, HPD concurred that the Dover Bluff Club and 23 elements are eligible under Criterion C; that the Tabby Ruins associated with the Black Hammock Plantation (located to the north of the APE and of unknown eligibility) are eligible under Criteria A and D; that the Cabin Bluff Cumberland River Retreat Historic District and 16 elements are eligible for listing under Criteria A and C; and that four additional resources within the NRHP-listed High Point-Half Moon Bluff Historic District (within the Cumberland Island Cultural Historic Landscape) are eligible under Criterion D.

Application of the Criteria of Adverse Effect
An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a
historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties include, but are not limited to:

i. Physical destruction of or damage to all or part of the property;

ii. Alteration of a property, include restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (36CFR part 66) and applicable guidelines;

iii. Removal of a property from its historic location;

iv. Change of the character if the property’s use or of physical features within the property’s setting that contribute to its historical significance;

v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;

vi. Neglect of a property which causes it deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

FAA applied the criteria of adverse effect to all 66 individual historic properties, including the historic districts to which many of them contribute, that have been identified in the project APEs. Enclosure Table 1 lists the potential effect and potential source of effect for each historic property within the two APEs.

Finding of Effect in the APE for Direct Effects (Proposed Spaceport Camden Boundary)

Construction (direct effects)

Physical disturbance. There are no known NRHP-listed cultural resources within the areas that would be disturbed by facility construction. Four archaeological sites considered unknown ("potentially eligible") for listing on the NRHP under Criterion D, are located within the construction zone of the proposed Vertical Launch Facility. If project design cannot avoid these sites, then the Camden County will conduct Phase II testing to determine the sites’ NRHP eligibility. If one or more of the sites is found to be eligible, and if further project design cannot avoid the sites, construction would destroy all or part of the site(s) which would be an adverse effect to historic properties that would require mitigation. A mitigation plan would be developed through Section 106 consultation between the FAA and the HPD. HPD concurred with FAA’s finding of effect for the archaeological sites in a letter dated April 3, 2017.
Visual Intrusion. Based on a viewshed analysis performed for the Draft EIS (Federal Aviation Administration, 2018), visual effects to historic properties could stem from visibility of launch facility features such as buildings and towers; view of the space vehicles during launch or spaceport landing, and light from operation of the launch facility. Within the proposed Spaceport Camden, the three historic properties and seven potentially-eligible archaeological sites are unlikely to be affected by visual intrusions. As recently as 2009, the setting contained a more-than-300-foot tall manufacturing building with conveyors and related buildings and structures (which have since been removed). The setting has also undergone significant changes since the resources’ period of significance, without affecting NRHP eligibility.

Operations (indirect effects)

Effects to historic properties related to noise and vibration and visual intrusions within the APE for direct effect were examined with measurements of $L_{Amax}$ (dBA), $L_{max}$ (dB), and sonic booms. $L_{Amax}$ is maximum A-weighted overall sound pressure level (OASPL) in decibels. The $L_{Amax}$ noise metric is commonly used to assess community noise, because an “A-weighting” filter is applied that approximates the frequency response of human hearing, adjusting low and high frequencies to match the sensitivity of human hearing. $L_{max}$ is maximum un-weighted overall sound pressure level (OASPL) in decibels. The overall sound pressure level (OASPL) provides a measure of the sound level at any given time and the maximum OASPL ($L_{max}$) indicates the highest level achieved over the duration of the event. The $L_{max}$ noise metric is used to assess the potential risk for structural damage. A sonic boom is the sound associated with the shock waves created by a vehicle traveling through the air faster than the speed of sound. Enclosures showing noise contours are provided as Figures 5-12.

Acoustic Setting ($L_{Amax}$ (dBA)). Once construction of the launch site is completed, it is unlikely that any of the seven prehistoric archaeological resources would be affected by operation of Spaceport Camden, including vibration and noise generated by static engine tests, and movement of the launch vehicle to the launch pad or other activities. The change in the acoustical setting due to the proposed Spaceport Camden operations would not be an adverse effect to the seven prehistoric archaeological sites because they are considered potentially eligible for their potential data content under Criterion D, and setting is not one of the characteristics of these sites that would qualify the property for inclusion in the National Register.

Three NRHP-eligible architectural features associated with the 19th century Floyd’s Fairfield and Bellevue Plantations are also within the proposed Spaceport Camden boundary but outside the construction areas. These features are the Anchor House ruins, the Charles Rinaldo Floyd Burial Site and the Floyd Family Cemetery. These historic properties are within a radius of the launch site that would experience noise levels exceeding 65 dBA, and in most cases between 90 and 115 dBA during static fire, launch, and launch site landing-related activities under all models and trajectories. These noise events would exceed the standards identified by FAA Order 1050.1F of a 1.5 dB increase in the noise environment of a generally quiet setting, in this case of the historic properties. This increase in noise would constitute a change to the setting of the historic properties. However, the change would be transitory, lasting only as long as each noise event, varying from about 7 seconds for a static test, to a little over two minutes for a launch. Although such noise-induced changes to the quiet setting would be an effect to historic properties, it is unlikely to be an adverse effect, because the changes would be transitory and infrequent.

Noise Vibrations ($L_{max}$). Technical analysis indicates that an increase in noise and vibration is expected in the area of the NRHP-eligible architectural features of the Floyd’s Fairfield and Bellevue Plantations.
from periodic static fire, launch, and landing-related activities under all models and trajectories (Enclosure Figures 5 through 10). The technical analysis suggests that cracking or displacement to the tabby walls of the Anchor House ruins, or displacement or cracking of grave markers or the base of the Floyd Burial monument could occur as a result of the operation of Spaceport Camden.

$L_{10\text{th}}$ analysis to determine the potential for structural damage related to vibrations from noise was reported in Launch Vehicle Noise Study for Spaceport Camden's Environmental Impact Statement (James, Salton, & Downing, 2017). The analysis indicates that the three historic properties within the proposed Spaceport Camden boundary would be exposed to noise levels of 120 dB, a level which is predicted to generate structural damage claims at a rate of 1 per 100 households (structures) (James, Salton, & Downing, 2017). Archaeological structures like the Anchor House ruins, the Charles Rinaldo Floyd Burial Site and the Floyd Family Cemetery could be damaged by vibration from these periodic elevated noise levels, but the probability is low (1 per 100 structures per event).

**Sonic booms.** Sonic booms would be associated with both launch and landing events. For all launch trajectories, the sonic boom would occur far enough east of the coastline that there would be no effect on historic properties. For landings at the Spaceport, the sonic boom overpressure contour would be between 2 psf and 2.8 psf over the proposed Spaceport Camden (James, Salton, & Downing, 2017). At an overpressure of 2 psf, structures in poor repair could experience minor damage to structural elements including windows, plaster, or brick-a-brac (James, Salton, & Downing, 2017). For this reason, sonic booms, although projected to be relatively rare events (no more than 12 Spaceport landings per year) could have an effect on the Anchor House ruins, the Charles Rinaldo Floyd Burial Site and the Floyd Family Cemetery historic properties.

The Anchor House ruins are in a state of deterioration, with one elevation of the tabby ruins being braced with wood beam supports (Cultural Resource Analysts, Inc., 2017b). The Charles Rinaldo Floyd Burial Site is mostly intact with barely legible inscription and some collapse of the 1920s concrete block fence that surrounds it. The box tomb features of the Floyd Family Cemetery are in similar condition with illegible inscriptions and cracked and broken slabs. All three properties are heavily overgrown with vegetation. Thus, while archaeological structures like the Anchor House ruins, the Charles Rinaldo Floyd Burial Site and the Floyd Family Cemetery could be damaged by vibration and overpressure from these periodic noise events, it is unlikely that such damage would affect the condition of the properties to such a degree that they would be no longer eligible for listing on the NRHP.

**Visual intrusion.** Based on a viewsed analysis, visual effects to historic properties from proposed Spaceport Camden operations could stem from view of the space vehicles during launch or landing. As described above for facility construction, the three historic properties and seven potentially eligible archaeological sites within the direct effects APE (proposed Spaceport Camden) are unlikely to be affected by visual intrusions.

**Finding of Effect in the Architectural APE for Indirect (Audible "Noise") and Visual Effects (Proposed Spaceport Camden and 5-mile Radius)**

**Construction (direct effects)**

**Physical disturbance.** Effects to NRHP-eligible resources due to construction would be limited to the potential direct disturbance of four archaeological sites, described above in the APE for direct effects. There would be no effects from physical disturbance to historic properties in the APE for indirect effects from the proposed construction of Spaceport Camden facilities.
**Visual intrusion.** Based on a viewshed analysis performed for the Draft EIS (Federal Aviation Administration, 2018), construction-related visual effects to historic properties could stem from visibility of launch facility features such as buildings and towers. On Cumberland Island, visual intrusions from the proposed lightning towers and water towers could have an effect on historic properties because setting is a key element of their NRHP listing. Vegetation or other structures would block the view of the proposed lightning and water towers from most of the contributing features of the High Point-Half Moon Bluff Historic District and the Main Road. However, the proposed lightning and water towers, and the 65-foot tall Vehicle Integration Building at the Vertical Launch Facility site will reach heights that will be visible from the easternmost portion of the High Point-Half Moon Bluff Historic District which is included in the Cumberland Island Cultural Historic Landscape. Representative Observation Points for the visual analysis are illustrated in Enclosure Figure 13; Observation Point #4 is adjacent to easternmost point of the Historic District.

Structures and lights would be visible from the portion of the Cumberland Island Cultural Historic Landscape that lies within the indirect APE, introducing elements to the setting of the historic landscape that affect a key characteristic of its eligibility (Cultural Resource Analysts, Inc., 2017b). However, as with the Cumberland Island Historic District, it will not be an adverse effect.

These same effects apply to the Dover Bluff Club Historic District, the Tabby Ruins on Dover Bluff, and the Cabin Bluff Cumberland River Retreat Historic District. Although lightning towers, water towers, and lights may be visible at times, resulting in an effect to the setting of these historic properties, the effect will not be adverse, as views from these resources have included contemporary industrial objects during their periods of significance.

**Operations (indirect effects)**

Effects to historic properties related to noise and vibration and visual intrusions within the APE for indirect effects were examined with measurements of $L_{A_{max}}$ (dBA), $L_{max}$ (dB), and sonic booms, as described above for the direct effects APE. Enclosures showing noise contours are provided as Figures 5-12.

The architectural survey of the APE, for audible and visual effects within a 5-mile radius of the proposed Spaceport Camden, identified historic properties outside the proposed Spaceport Camden boundary that could be affected by changes to the audible and visual environment (Cultural Resource Analysts, Inc., 2017b).

On Cumberland Island, the architectural resources include the NRHP-listed High Point-Half Moon Bluff Historic District (listed on the NRHP), including 10 contributing elements, the Main Road and the Cumberland Island Cultural Historic Landscape. On Dover Bluff, the Dover Bluff Club Historic District includes 23 contributing elements consisting of residences (Enclosure Table 1). Tabby Ruins comprise a contributing element of the Black Hammock Plantation. The plantation is of unknown NRHP eligibility, but is treated as eligible, as are the Tabby Ruins. On Cabin Bluff, the Cabin Bluff

**Acoustic Setting ($L_{A_{max}}$ dBA).** Resources on Cumberland Island, Dover Bluff and Cabin Bluff would be subject to periodic noise levels of between 80 and 90 dBA under all launch trajectory headings. Noise modeling for vehicle first-stage landings indicates noise levels below 80 dBA in these areas of the architectural APE (indirect APE – Enclosure Figure 4), and somewhat less for static fire. These noise levels are unlikely to cause physical effects to these historic properties. However, in all cases, these noise events would exceed the standards identified by FAA Order 1050.1F of a 1.5 dBA increase in the noise environment of a generally quiet setting, in this case of the historic districts. This increase in noise would constitute a change to the setting of the historic properties. However, the change
would be transitory, lasting only as long as each noise event, varying from about 7 seconds for a static test, to a little over two minutes for a launch. Although such noise-induced changes to the quiet setting would be an effect to historic properties, it is unlikely to be an adverse effect, because the changes would be transitory and the portion of Cumberland Island that includes these historic properties lies within the hazard area that would be closed to visitors during launch and landing operations.

**Noise Vibration (L_{max} [dB])**. On Cumberland Island, Dover Bluff and Cabin Bluff, the historic properties within the architectural APE (indirect APE – Enclosure Figure 4) would be subject to L_{max} of at least 111 dB for all launch trajectory headings, possibly resulting in damage to structural elements such as windows in buildings in poor repair, cracked plaster or displaced bric-a-brac at the First African Baptist Church, Rischarde Red Barn, Alberty House and Trimmings House. However, the likelihood of physical damage to any structures, including archaeological structures, from these noise levels (an adverse effect) is low, with a probability of one damage claim per every 1,000 households (structures) (James, Salton, & Downing, 2017). Effects from noise on the Cemeteries, High Point Road, or Main Road, on Cumberland Island, is unlikely. L_{max} levels from all landing trajectories would fall below the levels shown to potentially cause damage, and the same holds for static fire engine tests (James, Salton, & Downing, 2017).

The same conditions apply to the historic properties on Dover Bluff and Cabin Bluff. The Tabby Ruins on Dover Bluff could be vulnerable to adverse effects from vibrations generated by launches, but in all cases, the likelihood of physical damage to any structures, including archaeological structures, from these noise levels remains very low, with a probability of one damage claim per 1,000 households (structures) (James, Salton, & Downing, 2017).

**Sonic Booms**. Sonic booms would be associated with both launch and landing events. For all launch trajectories, the sonic boom would occur far enough east of the coastline that there would be no effect on historic properties. For landings at the Spaceport, the sonic boom overpressure contour would be between 1 and 2 psf over Cumberland Island, and as high as 2.8 psf over the proposed Spaceport Camden (James, Salton, & Downing, 2017). At an overpressure of 2 psf, structures in poor repair could experience minor damage to structural elements including windows, plaster, or bric-a-brac (James, Salton, & Downing, 2017). For this reason, sonic booms, although projected to be relatively rare events (no more than 12 Spaceport landings per year) could have an effect on historic properties both within the proposed Spaceport Camden and on Cumberland Island. Although the incidence would be expected to be low, effects could include cracking or displacement of tabby walls, monument base, or grave markers within the proposed Spaceport Camden; glass breakage, damage to outside walls, or other, hard-to-predict damage to other structural elements of the First African Baptist Church, Rischarde Red Barn, Alberty House and Trimmings House on Cumberland Island. Sonic booms are unlikely to affect the Cemeteries, High Point Road or Main Road on Cumberland Island. If noise-induced structural damage to historic properties were allowed to accumulate, or go unrepaired, it could become an adverse effect.

For landings at the Spaceport, the sonic boom overpressure contour would be approximately 0.5 psf over Dover Bluff and Cabin Bluff (Enclosure figure 12), a level that would be unlikely to result in any damage to historic properties that are located on Dover Bluff and Cabin Bluff (James, Salton, & Downing, 2017).

**Visual Intrusion**. Based on a viewshed analysis performed for the Draft EIS (Federal Aviation Administration, 2018), proposed launch site operations-related visual effects to historic properties could stem from view of the launch vehicles during launches or landings.
On Cumberland Island, overhead launches would be visible (Enclosure Figures 11 and 12) from the historic properties on Cumberland Island, which would temporarily intrude into their setting. Although these changes to the viewscape would temporarily affect the setting of the historic properties, they would not constitute an adverse effect, because the views from Cumberland Island to the mainland over the past decades have varied considerably, including introduction of both rural and industrial objects, but not to the degree that the historic properties no longer qualify for listing on the NRHP.

Summary of Finding of Effect

Although effects to architectural historic properties would arise from the changes to the audible and visual environment during operation of the launch site through introduction of elements inconsistent primarily with the historic properties’ setting, in most cases these are not of an intensity or duration to constitute an adverse effect. Within the proposed Spaceport Camden but outside the construction zone, three NRHP-eligible components of the Floyd’s Fairfield and Bellevue Plantations/Union Carbide Property could experience effects (such as damage to tabby walls, monument base, or grave markers) from vibration related to noise from static engine firings, and launch and landing operations. However, it is unlikely that such noise-induced damage would affect the condition of the properties to such a degree that they would be no longer eligible for listing on the NRHP.

On Cumberland Island, there would be effects from noise and visual intrusions on a portion of the NRHP-listed High Point-Half Moon Bluff Historic District, including 10 contributing elements; to the NRHP-listed Main Road; and to the NRHP-eligible Cumberland Island Cultural Historic Landscape (a Historic Vernacular Landscape). However, structural damage due to noise vibration from static tests, launches, and landings at the proposed Spaceport Camden are unlikely. Visual effects from light from lightning poles and the water tower, visual impacts from the launch and landings, and visual effects on the view towards the launch site as seen from the historic landscape would be an effect on historic properties, but would not be an adverse effect because the viewscape included industrial features at the time it was listed on the NRHP, without affecting NRHP eligibility. The same holds true for the Dover Bluff Club Historic District, the Tabby Ruins on Dover Bluff, and the Cabin Bluff Cumberland River Retreat Historic District.

Based on the results of the studies and an assessment of effects to historic properties, the FAA has determined that this undertaking will have no adverse effect on historic properties, provided certain conditions are met. These include:

- Project design avoids the archaeological sites within the proposed Vertical Launch Facility, or the archaeological sites are not historic properties. If archaeological sites within the proposed Vertical Launch Facility cannot be avoided, Phase II testing will determine site eligibility. If Phase II testing finds that the sites are eligible for listing on the NRHP then mitigation will be required to resolve the adverse effect.

- Execution of a Programmatic agreement with stipulations for identification of, and mitigation for, any potential future adverse effects to historic-era historic properties within the APE from audible and visual (indirect) effects. A Monitoring program for historic-era historic properties within the direct effects APE (proposed Spaceport Camden) and within the indirect effects APE on Cumberland Island, Dover Bluff and Cabin Bluff would be possible way to address future potential damage from vibration potentially great enough to impair condition and integrity.

The FAA is requesting your concurrence with this determination. Please provide any comments within the 30-day regulatory time frame.
The documentation provided herein meets the regulatory standard for documenting this effect determination in accordance with 36 CFR 800.11(e). If you have questions or concerns regarding this finding or the sufficiency of documentation, please contact the FAA immediately through Stacey Zee of my staff at 202-267-9304, or via email at Stacey.Zee@faa.gov.

Sincerely,

[Signature]

Daniel Murray
Manager, Space Transportation Development Division

cc: Steve Howard, Camden County
John Fry, National Park Service
Don Dankert, NASA

Enclosures:

Enclosure 1: SHPO APE concurrence letter dated June 12, 2016
Figure 1. Proposed Spaceport Boundary and Infrastructure
Figure 2. Spaceport Camden Range of Launch Trajectories
Figure 3. Direct APE
Figure 4. Indirect APE
Table 1. Initial FAA Finding of Effect on Historic Properties of Proposed Spaceport Camden
Figure 5. Composite of LAmax Contours for an MCLV Launch at Spaceport Camden
Figure 6. Composite of LAmax Contours for an MCLV Landing at Spaceport Camden
Figure 7. LAmax Contours for an MCLV Static Fire Engine Test at Spaceport Camden
Figure 8. Composite of Lmax Contours for an MCLV Landing at Proposed Spaceport Camden
Figure 9. Composite of Lmax Contours for an MCLV Landing at Proposed Spaceport Camden
Figure 10. Lmax Contours for an MCLV Static Fire Engine Test at Proposed Spaceport Camden
Figure 11. Composite of Sonic Boom Peak Overpressure Contours for an MCLV Launch from Spaceport Camden
Figure 12. Composite of Sonic Boom Peak Overpressure Contours for an MCLV Landing at Spaceport Camden
Figure 13. Representative Visual Analysis Observation Points in the Area Surrounding Proposed Spaceport Camden
References Cited


Cultural Resources Analysts, Inc. (2017a). Phase I Archaeological Survey of the Proposed Spaceport Camden, Camden County, Georgia. Leidos for FAA.


Enclosure 1. SHPO APE concurrence letter dated June 12, 2016
June 12, 2016

Daniel Murray
Manager, Space Transportation Development Division
Office of Commercial and Space Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Attn: Stacey Zee

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the information submitted concerning the above referenced project. Our comments are offered to assist the Federal Aviation Administration in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information provided, HPD concurs with the area of potential effect (APE) determinations for the proposed project. Additionally, HPD concurs that the proposed methods for the archaeological Phase I survey are generally appropriate to identify archaeological resources within the direct APE. HPD recommends the following be taken into consideration for the Phase I survey:

- Depending on the specific depositional environment in the area, 80 centimeters below surface (cmbs) is not always an appropriate depth to terminate a shovel test on the coast. If artifacts are present near 80-cmbs, HPD suggests continuing shovel testing until either: a) twenty (20) centimeters (cm) of sterile soil below artifacts has been reached or b) Hardpan or water table is reached. If either of these options is not feasible, and artifacts are still present within 20 cm of the termination of the shovel test, it may be appropriate to continue with a larger test unit in order to fully determine depth of deposits. HPD recommends consulting with our office to determine the best course of action should this situation occur.

- Particular areas, such as rivers and coastal environments, have a higher potential to contain sites that have been completely capped by depositional activity, and thus can result in a lack of surface expression. HPD recommends continuing the 30 meter interval or less shovel testing in these areas, as surface-only survey would not be considered sufficient.

- For slopes greater than ten (10) percent, HPD recommends that a pedestrian survey still be conducted in these areas.

- Although HPD concurs shovel testing within a cemetery would not be appropriate, subsurface probing is considered appropriate and recommended in order to confirm that
there are no unmarked interments outside of any visual boundary and to fully delineate the cemetery boundary.

- All site boundaries should be delineated by two (2) consecutive negative shovel tests, obvious changes in topography, or documented and/or reasonable survey limitations (obstructions, severe disturbance, etc.).
- Field methods and report writing should also follow all National Park Service, Secretary of the Interior’s Standards for professional qualifications, as well as site identification, evaluation, and documentation.

Furthermore, HPD concurs that the proposed methods for the architectural Phase I survey are generally appropriate to identify historic resources within the direct and indirect APE. HPD recommends the following be taken into consideration for the Phase I survey:

- Since all historic resources may not be visible from the public right of way, HPD recommends conducting additional background research on the county’s tax assessor website or at the tax assessor offices.
- For information purposes only, HPD’s records include county and city surveys, identified site files, environmental review files, National Register of Historic Places (NRHP) listed and pending files, and Centennial Farm files.
- Should a historic resource not be accessible, HPD recommends a NRHP determination of unknown and treating the resource as NRHP-eligible throughout the Section 106 process.
- The Phase I report should also include location history in order to place the identified historic resources within an historic context.

HPD looks forward to receive the Phase I reports and working with FAA as this project progresses. Please refer to project number HP-151117-001 in any future correspondence regarding this project. If we may be of further assistance, please feel free to contact me at (770) 380-7651 or Jennifer.dixon@dot.ga.gov.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

April 3, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
880 Independence Avenue, SW
Washington, DC 20591
Attn: Stacey Zee, Project Lead

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the draft report entitled, Phase I Archaeological Survey of the Proposed Spaceport Camden, Camden County, Georgia, prepared by Cultural Resource Analysis, Inc. and dated February 15, 2017. Our comments are offered to assist the Federal Aviation Administration (FAA) in complying with the provisions of Section 106 of the National Historic Preservation Act (NHPA).

Based on the information contained in the report, HPD concurs that archaeological sites 9CM50, 9CM64, 9CM70, 9CM71 are unknown ("potentially eligible") for listing in the National Register of Historic Places (NRHP) under Criterion D. Additionally, HPD concurs with the boundary expansions for sites 9CM50 and 9CM64. Furthermore, HPD concurs with the recommendation to avoid all four sites and that if avoidance is not possible, Phase II testing should occur to determine the sites' NRHP-eligibility.

Please refer to project number HP-151117-001 in any future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact Jennifer Bedell, Archaeological Compliance Unit Manager, at Jennifer.bedell@dnr.ga.gov or (770) 389-761 or use jennifer.doherty@dnr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MIP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

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DEPARTMENT OF NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION

MARK WILLIAMS COMMISSIONER
DR. DAVID CRASS DIVISION DIRECTOR

August 4, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue, SW
Washington [DC 20591]

Attn: Stacey Ze, Project Lead

RE: Construct/Operate Commercial Space Launch Site, Spaceport Camden, Woodbine
Camden County, Georgia

HFP-155117-001

Dear Mr. Murray:

The Historic Preservation Division (HFD) has reviewed the revised draft report entitled, Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County, Georgia, prepared by Cultural Resources Analysts, Inc. and dated June 13, 2017. Our comments are offered to assist the Federal Aviation Administration (FAA) in complying with the provisions of Section 106 of the National Historic Preservation Act (NHPA).

Based on the information contained in the report, HFD concurs that Camden County, as a cultural landscape, is not eligible for listing in the National Register of Historic Places (NRHP). Additionally, HFD concurs that Cumberland Island, as a cultural landscape, Camden Bluff historic district, and CMC-31 Beachway (Anchor House, A), Charles Rinaldo Floyd Burial Site (E), and Floyd Family Cemetery (C) are eligible for listing in the NRHP. HFD also concurs that the NRHP-Listed High Point-Half Moon Historic District and Main Road area within the proposed project’s area of potential effect (APE). Furthermore, HFD concurs that Bluff Hammock Plantation estate is unknown for listing in the NRHP and that resource 16 should be considered contributing to the NRHP-known district. Regarding the High Point-Half Moon Historic District, HFD concurs with the proposed expansion of the period of significance and that the district is also eligible under criterion D, which would appear to indicate that the North Cabin (E), Landing Strip (F), Hangar (U), and Cumberland Wharf (H) are now contributing to the expanded district.

However, regarding Camden Bluff Historic district, HFD finds the district to also be eligible under criteria A and C as a good and representative example of recreational facilities and their adaptation and development consistent with recreational trends throughout the United States. As such, HFD recommends expanding the period of significance to include the 1970s, expanding the boundaries, and including the picnic area (O), tennis court and gazebos (T), and golf course (U) as contributing resources.

Regarding CMC-31, HFD finds that the Charles Rinaldo Floyd Burial Site (B) and Floyd Family Cemetery (C) are also eligible under criterion C as good and representative examples of the family cemetery type displaying character-defining features such as box tombs, obelisks, and iron gates and masonry walls. Additionally, HFD is unable to concur that the 1960s-era Thistle Chemical Company portion of CMC-31 is not eligible for listing in the NRHP without additional information. HFD requests detailed information regarding the types, numbers, and locations of structures that are no longer present.

Furthermore, HFD is unable to concur with the NRHP-eligibility determination for the Dover Bluff Club. Based on the minimal information provided, it is HFD's opinion that the development displays coastal iterations of house types with character-defining features such as screen porches, type-specific layouts, and orientation towards the water providing an integration of indoor and outdoor space. Additionally, HFD would like to note...
that a resource does not have to be exceptional or extraordinary to be a good and representative example nor is a house type required to display a style in order to be significant. Therefore, HPD finds that the Dover Cliff Club is eligible for listing in the NRHP under criterion C for architecture as a good and representative example of coastal versions of Bungalow, Ranch, and other vernacular house types.

HPD looks forward to receiving the requested information and working with the FAA as this project progresses. HPD recommends including within the subsequent submittal, documentation and images to support the claim that resources 15, 18, and 20 are no longer extant.

Please refer to project number HF-151117-001 in any future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at jennifer.dixon@fha.us.ga.gov or (706) 380-7851.

Sincerely,

Jennifer Dixon, AIA, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

Cc: Lupita McClamning, Coastal Georgia Regional Commission
November 22, 2017

Daniel Murray
Manager, Space Transportation Development Division
Federal Aviation Administration
800 Independence Avenue SW
Washington DC 20591
Attn: Stacey Zee, FAA Project Lead

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

Dear Mr. Murray:

The Historic Preservation Division (HPD) has reviewed the draft report entitled, Addendum to
Determinations of Eligibility Report for the Proposed Spaceport Camden Project in Camden County,
Georgia, prepared by Cultural Resource Analysts, Inc. and dated October 19, 2017. Our comments are
offered to assist the Federal Aviation Administration (FAA) in complying with the provisions of Section
106 of the National Historic Preservation Act (NHPA).

Based on the additional information contained in the addendum report and information contained in the
initial report (June 13, 2017), HPD concurs that the Thistle Hill Chemical Plant Site and continues to
concur that Camden County, as a cultural landscape, are not eligible for listing in the National Register of
Historic Places (NRHP). Additionally, HPD continues to concur that Bellevue/Andover House, Charles
Rinaldo Burial Site, Floyd Family Cemetery, Cabin Bluff Cumberland River Retreat historic district,
Dover Bluff Club historic district, Cumberland Island as a cultural landscape, and resource 16 are eligible
for listing in the NRHP and within the proposed project’s area of potential effect (APE). Furthermore,
HPD continues to concur that the NRHP listed High Point-Half Moon Bluff Historic District and Mam
Road are within the proposed project’s APE.

HPD looks forward to receiving an assessment of effects report for the above noted NRHP-eligible and
listed resources, once available, and working with the FAA as this project progresses. Please refer to
project number HP-151117-001 in any future correspondence regarding this project. If we may be of
further assistance, please do not hesitate to contact me at jennifer.decom@dnr.ga.gov or (770) 380-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

Cc: Lupita McClennan, Coastal Georgia Regional Commission
**Figure 1. Proposed Spaceport Boundary and Infrastructure**
Figure 2. Spaceport Camden Range of Launch Trajectories
This map contains sensitive archaeological site information and has therefore been redacted.

Figure 3. Direct APE (as provided in Archaeology Survey Report – 15 February 2017)
Figure 4. Indirect APE (as provided in Historic Property Survey Report – 13 June 2017)
<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Description</th>
<th>NRHP Eligibility</th>
<th>Location in APE</th>
<th>Findings of Effect</th>
<th>Potential Source of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>9CM30</td>
<td>Shell scatter &amp;</td>
<td>Potentially</td>
<td>Vertical Launch</td>
<td>If eligible,</td>
<td>Construction: Ground</td>
</tr>
<tr>
<td></td>
<td>pottery, pre-</td>
<td>eligible,</td>
<td>Facility</td>
<td>adverse effect?</td>
<td>disturbance</td>
</tr>
<tr>
<td></td>
<td>contact</td>
<td>Criterion D</td>
<td></td>
<td></td>
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<tr>
<td>9CM64</td>
<td>Shell midden &amp;</td>
<td>Potentially</td>
<td>Vertical Launch</td>
<td>If eligible,</td>
<td>Construction: Ground</td>
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<tr>
<td></td>
<td>pottery, Mississippian</td>
<td>eligible,</td>
<td>Facility</td>
<td>adverse effect?</td>
<td>disturbance</td>
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<td>Criterion D</td>
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<td>9CM570</td>
<td>Shell midden &amp;</td>
<td>Potentially</td>
<td>Vertical Launch</td>
<td>If eligible,</td>
<td>Construction: Ground</td>
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<tr>
<td></td>
<td>pottery, Woodland</td>
<td>eligible,</td>
<td>Facility</td>
<td>adverse effect?</td>
<td>disturbance</td>
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<tr>
<td></td>
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<td>Criterion D</td>
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<tr>
<td>9CM571</td>
<td>Shell midden &amp;</td>
<td>Potentially</td>
<td>Vertical Launch</td>
<td>If eligible,</td>
<td>Construction: Ground</td>
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<tr>
<td></td>
<td>pottery, Woodland</td>
<td>eligible,</td>
<td>Facility</td>
<td>adverse effect?</td>
<td>disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Criterion D</td>
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</tbody>
</table>

Historic Properties In the APE for Direct and Audible and Visual Effects: Proposed Spaceport Camden Boundary

<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Description</th>
<th>NRHP Eligibility</th>
<th>Location in APE</th>
<th>Findings of Effect</th>
<th>Potential Source of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>9CM24</td>
<td>Shell scatter, Late Archaic - Mississippian</td>
<td>Potentially eligible, Criterion D</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>9CM25</td>
<td>Shell midden, Woodland, Mississippian</td>
<td>Potentially eligible, Criterion D</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>9CM26</td>
<td>Shell mounds, Woodland</td>
<td>Potentially eligible, Criterion D</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No effect</td>
<td>n/a</td>
</tr>
</tbody>
</table>
## Table 1. Initial FAA Finding of Effect on Historic Properties of Proposed Spaceport Camden

<table>
<thead>
<tr>
<th>Resource Number</th>
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<th>NRHP Eligibility</th>
<th>Location in APE</th>
<th>Findings of Effect</th>
<th>Potential Source of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-CO 31, Resource A</td>
<td>Anchor House ruins, early 19\textsuperscript{th} century</td>
<td>Eligible, Criterion C</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise Construction: visual</td>
</tr>
<tr>
<td>CM-CO 31, Resource B</td>
<td>Charles Rinaldo Floyd Burial Site, 1845</td>
<td>Eligible, Criteria B &amp; C, Criteria Consideration C</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise Construction: visual</td>
</tr>
<tr>
<td>CM-CO 31, Resource C</td>
<td>Floyd Family Cemetery, early to mid-19\textsuperscript{th} century</td>
<td>Eligible, Criteria A &amp; C, Criteria Consideration D</td>
<td>Outside of construction area, within proposed Spaceport Camden boundary</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise Construction: visual</td>
</tr>
</tbody>
</table>

**Historic Properties In the APE for Indirect Audible and Visual Effects: 5-mile Radius**

<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Description</th>
<th>NRHP Eligibility</th>
<th>Location in APE</th>
<th>Findings of Effect</th>
<th>Potential Source of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>[No number for historic district]</td>
<td>Dover Bluff Club Historic District (DBC HD)</td>
<td>Eligible HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #1</td>
<td>Linear Ranch, 1960</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CM-DB 9</td>
<td>Southern Bungalow, c. 1930</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CM-DB 10</td>
<td>Single-story, hip-roof residence, c. 1890</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #2</td>
<td>One-and-one-half-story, side-gable residence, 1967</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Description</td>
<td>NRHP Eligibility</td>
<td>Location in APE</td>
<td>Findings of Effect</td>
<td>Potential Source of Effect</td>
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<tr>
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</tr>
<tr>
<td>CRA #3</td>
<td>Linear Ranch, 1971</td>
<td>Contributing to</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td></td>
<td></td>
<td>DBC HD, Criterion C</td>
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<tr>
<td>CM-DB 12</td>
<td>Southern Bungalow, c. 1940</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #4</td>
<td>Single-story, front-gable residence, 1950</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #6</td>
<td>Compact Ranch, 1970</td>
<td>Contributing to</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td></td>
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<td>DBC HD, Criterion C</td>
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<tr>
<td>CM-DB 13</td>
<td>Southern Bungalow, c. 1900-1918</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CM-DB 14</td>
<td>Single-story, front-gable residence, c. 1944</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #8</td>
<td>Single-story, front-gable residence, c. 1938</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #9</td>
<td>Compact Ranch, 1960</td>
<td>Contributing to</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DBC HD, Criterion C</td>
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</tr>
<tr>
<td>CM-DB 16</td>
<td>Southern Bungalow, c. 1940</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Description</td>
<td>NRHP Eligibility</td>
<td>Location in APE</td>
<td>Findings of Effect</td>
<td>Potential Source of Effect</td>
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</tr>
<tr>
<td>CM-DB 17</td>
<td>Single-story, front-gable residence, c. 1940</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #10</td>
<td>Linear Ranch, 1953</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #11</td>
<td>Compact Ranch, 1973</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #12</td>
<td>Single-story, front-gable residence, 1936</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #14</td>
<td>Single-story, side-gable residence, c. 1900-1915</td>
<td>Contributing to DBC HD, Criterion C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #16</td>
<td>Tabby Ruins</td>
<td>Contributing to Black Hammock Plantation (outside APE, of unknown NRHP eligibility), Criteria A &amp; C</td>
<td>Dover Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #15</td>
<td>Cabin Bluff Cumberland River Retreat HD</td>
<td>Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Description</td>
<td>NRHP Eligibility</td>
<td>Location in APE</td>
<td>Findings of Effect</td>
<td>Potential Source of Effect</td>
</tr>
<tr>
<td>-----------------</td>
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<td>----------------------------</td>
</tr>
<tr>
<td>CRA #15, Resource A</td>
<td>Main Lodge, 1928</td>
<td>Contributing to CBCRR HD, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource B</td>
<td>Cabin Bluff Outfitters, c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #15, Resource C</td>
<td>Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource D</td>
<td>New Hope Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource E</td>
<td>Pine Tree Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #15, Resource F</td>
<td>Heritage Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource G</td>
<td>Shellbine Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource H</td>
<td>Cumberland Cabin c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>CRA #15, Resource I</td>
<td>Coolidge Tavern c. late 1920s-early 1930s</td>
<td>Contributing to CBCRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
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<tr>
<td>Resource Number</td>
<td>Resource Description</td>
<td>NRHP Eligibility</td>
<td>Location in APE</td>
<td>Findings of Effect</td>
<td>Potential Source of Effect</td>
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</tr>
<tr>
<td>CRA #15, Resource N</td>
<td>Bocce Ball Court, c. late 1920s-early 1930s</td>
<td>Contributing to CBRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource P</td>
<td>Floyd Cabin, c. late 1920s-early 1930s</td>
<td>Contributing to CBRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>CRA #15, Resource Q</td>
<td>Wharf/Boat House, c. 1990s</td>
<td>Contributing to CBRR HD, Eligible, Criteria A &amp; C</td>
<td>Cabin Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise</td>
</tr>
<tr>
<td>#78000265, Resource A</td>
<td>First African Baptist Church, 1937</td>
<td>Contributing to HP-HMB HD, Criterion A</td>
<td>CUIS: Half Moon Bluff</td>
<td>No adverse effect</td>
<td>Operation: Vibration, noise, visual</td>
</tr>
</tbody>
</table>
### Table 1. Initial FAA Finding of Effect on Historic Properties of Proposed Spaceport Camden

<table>
<thead>
<tr>
<th>Resource Number</th>
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<th>NRHP Eligibility</th>
<th>Location in APE</th>
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<th>Potential Source of Effect</th>
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</thead>
<tbody>
<tr>
<td>#78000265, Resource E</td>
<td>North Cabin, late 1970s</td>
<td>Contributing to HD, criterion D</td>
<td>CUIS: Half Moon Bluff</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>#78000265, Resource F</td>
<td>Landling Strip, c. 1958-1979</td>
<td>Contributing to HD, criterion D</td>
<td>CUIS: Half Moon Bluff</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>#78000265, Resource G</td>
<td>Hangar, c. 1958-1979</td>
<td>Contributing to HD, criterion D</td>
<td>CUIS: Half Moon Bluff</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>#78000265, Resource H</td>
<td>Cumberland Wharf, c. 1880</td>
<td>Contributing to HD, criterion D</td>
<td>CUIS: Half Moon Bluff</td>
<td>No effect</td>
<td>n/a</td>
</tr>
<tr>
<td>#78000265, Resource I</td>
<td>Cemetery, c. 1880</td>
<td>Contributing to HP-HMB HD, Criterion A</td>
<td>CUIS: Half Moon Bluff</td>
<td>No adverse effect</td>
<td>Operation: Noise, visual</td>
</tr>
<tr>
<td>#78000265, Resource J</td>
<td>High Point Road, c. 1880</td>
<td>Contributing to HP-HMB HD, Criterion A</td>
<td>CUIS: Half Moon Bluff to High Point</td>
<td>No adverse effect</td>
<td>Operation: Noise, visual</td>
</tr>
<tr>
<td>#84000941</td>
<td>Main Road, c. 1800-1870</td>
<td>Listed Individually (no HD), Criterion A</td>
<td>North end of CUIS</td>
<td>No adverse effect</td>
<td>Operation: Visual</td>
</tr>
<tr>
<td>[no number]</td>
<td>Cumberland Island Cultural Historic Landscape</td>
<td>Eligible as Historic Landscape (no HD), Criteria A, B, C, &amp; D</td>
<td>CUIS</td>
<td>No adverse effect</td>
<td>Operation: Noise, visual</td>
</tr>
</tbody>
</table>
### Table 1. Initial FAA Finding of Effect on Historic Properties of Proposed Spaceport Camden

<table>
<thead>
<tr>
<th>Resource Number</th>
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</thead>
</table>

Resource data and NRHP eligibility determinations based on the results of the two identification efforts: Phase 1 Archaeological Survey of the Proposed Spaceport Camden, Camden County, Georgia (Cultural Resource Analysts, Inc. [CRA] 2017a) and Historic Resources Survey for the Proposed Camden Spaceport Project in Camden County, Georgia [CRA 2017b, and including a 2017 addendum].

Notes:

1. If project design cannot avoid this resource, then further investigations will determine if it is eligible for listing on the NRHP; if eligible then there will be an adverse effect on historic properties.

2. Abbreviations: CBCRR = Cabin Bluff Cumberland River Retreat; CUIS = Cumberland Island National Seashore; c. = circa; DBC = Dover Bluff Club; HD = historic district; HP-HMB = High Point-Half Moon Bluff; n/a = not applicable; NRHP = National Register of Historic Places.
Figure 6. Composite of $L_{A,eq}$ Contours for an MCLV Landing at Spaceport Camden
Figure 7. $L_{A,max}$ contours for an MCLV Static Fire Engine Test at Spaceport Camden.
Figure 8. Composite of I_max contours for a MCLV launch at Proposed Spaceport Camden
Figure 9. Composite of Lmax Contours for a MCLV Landing at Proposed Spaceport Camden.
FIGURE 10. LIMAX CONTOURS FOR A MCLV STATIC FIRE ENGINE TEST AT PROPOSED SPACEPORT CAMDEN
FIGURE 11. COMPOSITE OF SONIC BOOM PEAK OVERPRESSURE CONTOURS FOR AN MCLV LAUNCH FROM SPACEPORT CAMDEN.
FIGURE 12. COMPOSITE OF SONIC BOOM PEAK OVERPRESSURE CONTOURS FOR AN MCLV LANDING AT SPACEPORT CAMDEN
FIGURE 13. REPRESENTATIVE VISUAL ANALYSIS OBSERVATION POINTS IN THE AREA SURROUNDING PROPOSED SPACEPORT CAMDEN