A.2.2.3 Department of Transportation Act Section 4(f) Consultation

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 12:58 PM
To: blytheisland@glynncountyga.gov; glynnrec@glynncountyga.gov; dwaters@glynncounty-ga.gov
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Ms. Waters:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Blythe Island County Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 1:04 PM
To: trail@coastalgeorgiagreenway.org; johickson@coastalgeorgiagreenway.org
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Ms. Hickson:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that the Coastal Georgia Greenway may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 1:07 PM
To: psaleisureservices@tds.net
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Mr. Brunson:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Harriett's Bluff Community Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 1:09 PM
To: Tommy.Turk@dnr.ga.gov
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Mr. Turk:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Crooked River State Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Stacey.Zee@faa.gov [mailto:Stacey.Zee@faa.gov]
Sent: Monday, September 18, 2017 11:56 AM
To: Faure, Benjamin <Benjamin.Faure@dep.state.fl.us>
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Mr. Faure:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Fort Clinch State Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 1:07 PM
To: psaleisureservices@tds.net
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Mr. Brunson:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Harriett's Bluff Community Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Monday, September 18, 2017 1:10 PM
To: bcarswell@jekyllisland.com
Subject: Spaceport Camden: Section 4(f) Coordination

Dear Mr. Carswell:

The Federal Aviation Administration (FAA) is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website: https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Jekyll Island State Park may meet the criteria for protection as a Section 4(f) property. In the near future, a representative from ICF—our environmental consultant—will contact you to request more information about the property, and address any questions you may have. On the FAA's behalf, they will confirm that you are the official with jurisdiction over the property (as defined in 23 CFR 774.17 [https://www.ecfr.gov/cgi-bin/text-idx?SID=5fd09bad9cb5bce74a94d8e7deb1de9d&node=se23.1.774_117&rgn=div8]); inquire about the primary purpose of the property; and request information about the activities, attributes, and features of the property. By obtaining this information, it will allow the FAA to make a determination about whether or not the property is protected under Section 4(f), and if so, what are the potential impacts to the property's attributes, activities, and features.

Thank you in advance for your consideration and cooperation.

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

From: Zee, Stacey (FAA)
Sent: Tuesday, September 19, 2017 10:57 AM
To: Fry, John <john_fry@nps.gov>; 'Wright, Steven' <steven_m_wright@nps.gov>; Gary Ingram <gary_ingram@nps.gov>
Subject: Spaceport Camden - 4f Consultation

NPS folks –

This email is to initiate Section 4f consultation.

As you know, the FAA is evaluating a proposal from the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The County intends to apply to the FAA for a Launch Site Operator License, which requires the FAA to conduct a review of their license application per 14 Code of Federal Regulations (CFR) Part 420.

Under the Proposed Action, the FAA would issue a Launch Site Operator License to the County to construct Spaceport Camden at the proposed site in Camden County and to conduct commercial space operations, including the integration, test, and launch of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. More information about the proposed Spaceport Camden project can be found on the FAA's website:
https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/.

The FAA's review of the project requires consideration of impacts to properties that may be protected under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)). The FAA is reaching out to gather more information about properties that may be eligible for protection under Section 4(f) and that could be affected by the proposed Spaceport Camden project, specifically by noise impacts associated with commercial space launch and landing activities.

Based on the FAA's preliminary review of potentially affected properties, we believe that Cumberland Island National Seashore may meet the criteria for protection as a Section 4(f) property. We would like to schedule a conference call to discuss the property and Section 4f process. Based on previous conversations, we understand that the DOI Solicitor's Office will become involved in the Section 4f process for this project; however, we have not heard from them since the initial outreach. Please let me know if we can coordinate with your offices or if we need to reach out to DOI.

Thank you in advance for your consideration and cooperation.

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

From: Stacey.Zee@faa.gov [mailto:Stacey.Zee@faa.gov]
Sent: Thursday, October 12, 2017 9:19 PM
To: john_fry@nps.gov; steven_m_wright@nps.gov; gary_ingram@nps.gov
Subject: FW: Spaceport Camden - 4f Consultation for Cumberland Island National Seashore

Gary, John and Steve -

I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about the Cumberland Island National Seashore.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss the Cumberland Island National Seashore in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over the Cumberland Island National Seashore, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you and I look forward to talking to you all soon!

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

Questions Regarding Cumberland Island National Seashore

1. Can you confirm that you are the *official with jurisdiction* over the Cumberland Island National Seashore?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that the Cumberland Island National Seashore is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When are the recreational facilities within the property open and accessible to the public? For example, are there days or times that they are closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov [mailto:Stacey.Zee@faa.gov]
Sent: Thursday, October 12, 2017 9:34 PM
To: bcarswell@jekyllisland.com
Cc: jhooks@jekyllisland.com; njensen@jekyllisland.com; dstrowe@jekyllisland.com
Subject: RE: Spaceport Camden: Section 4(f) Coordination - Jekyll Island State Park

Thanks Ben –

We recognize that folks have been busy dealing with the hurricane recovery so have outlined initial questions in the email below. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for us to begin consultation on Section 4(f).

As I mentioned in my earlier email, the Camden County Board of Commissioners (the County) proposes to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Jekyll Island State Park.

Rather than arranging a time to discuss Jekyll Island State Park in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Jekyll Island State Park, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you so much for your time.

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

Questions Regarding Jekyll Island State Park

1. Can you confirm that you are the *official with jurisdiction* over Jekyll Island State Park?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that Jekyll Island State Park is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When is the property open and accessible to the public? For example, are there days or times that it is closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov [mailto:Stacey.Zee@faa.gov]
Sent: Thursday, October 12, 2017 9:37 PM
To: Tommy.Turk@dnr.ga.gov
Subject: Spaceport Camden: Section 4(f) Coordination - Crooked River State Park

Dear Mr. Turk:

As noted below, I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Crooked River State Park.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss Crooked River State Park in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Crooked River State Park, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you again for your time and consideration of this matter.

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

Questions Regarding Crooked River State Park

1. Can you confirm that you are the *official with jurisdiction* over Crooked River State Park?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that Crooked River State Park is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When is the property open and accessible to the public? For example, are there days or times that it is closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov
To: psaleisureservices@bds.net
Subject: RE: Spaceport Camden: Section 4(f) Coordination
Date: Thursday, October 12, 2017 9:39:50 PM
Attachments: 20171006_Glossary_Section_4f_Key_Terms.docx

Dear Mr. Brunson:

As noted below, I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Harriet's Bluff Community Park.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss Harriet's Bluff Community Park in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Harriet's Bluff Community Park, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you again for your time and consideration of this matter.

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

Questions regarding Harriett's Bluff Community Park

1. Can you confirm that you are the *official with jurisdiction* over Harriet's Bluff Community Park?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that Harriet's Bluff Community Park is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When is the property open and accessible to the public? For example, are there days or times that it is closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov
To: trail@coastalgeorgiagreenway.org; johickson@coastalgeorgiagreenway.org
Subject: RE: Spaceport Camden: Section 4(f) Coordination
Date: Thursday, October 12, 2017 9:50:21 PM
Attachments: 20171006_Glossary_Section_4f_Key_Terms.docx

Dear Ms. Hickson:

I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about the Georgia Coastal Greenway.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss the Georgia Coastal Greenway in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you again for your time and consideration of this matter.

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

Questions Regarding Georgia Coastal Greenway

1. Between Brunswick and St. Mary's, which of the planned segments of the Georgia Coastal Greenway have been constructed and have had ownership and management turned over to local governments?

2. Of the segments identified in response to question 1 above, can you identify the *official(s) with jurisdiction*?

3. Can you provide or direct us to current management plans or other official documentation regarding the Georgia Coastal Greenway?

Ms. Water

From: Stacey.Zee@faa.gov
To: blytheisland@glynncountyga.gov; glynnrec@glynncountyga.gov; dwaters@glynncounty-ga.gov
Subject: Spaceport Camden: Section 4(f) Coordination
Date: Thursday, October 12, 2017 9:52:16 PM
Attachments: 20171006_Glossary_Section_4f_Key_Terms.docx

Dear Ms. Waters:

I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Blythe Island County Park.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss Blythe Island County Park in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Blythe Island County Park, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have.

Thank you again for your time and consideration of this matter.

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

Questions Regarding Blythe Island County Park

1. Can you confirm that you are the *official with jurisdiction* over Blythe Island County Park?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that Blythe Island County Park is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When is the property open and accessible to the public? For example, are there days or times that it is closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov
To: Heath.Alboher@dep.state.fl.us
Subject: Spaceport Camden: Section 4(f) Coordination
Date: Thursday, October 12, 2017 9:56:45 PM
Attachments: 20171006_Glossary_Section_4f_Key_Terms.docx

Dear Mr. Alboher:

I recognize folks are busy after the hurricane. Rather than arranging a time to discuss Fort Clinch State Park in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

Per the email below, we emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Fort Clinch State Park.

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Fort Clinch State Park, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have. Thank you again for your time and consideration of this matter.

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

Questions Regarding Fort Clinch State Park

1. Can you confirm that you are the *official with jurisdiction* over Fort Clinch State Park?
2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?
3. Can you confirm that Fort Clinch State Park is publicly owned and that it is open and accessible to the general public?
4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?
5. For the purposes of Section 4(f), is this a *significant* property?
6. Can you provide or direct us to current management plans or other official documentation regarding the property?
7. When is the property open and accessible to the public? For example, are there days or times that it is closed?
8. Do you know how many people visit the property on an annual basis?
9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?
10. What types of existing noises might a typical visitor experience?

From: Stacey.Zee@faa.gov
To: nvoit@fbfl.org
Subject: RE: Spaceport Camden
Date: Thursday, October 12, 2017 9:58:57 PM
Attachments: 20171006_Glossary_Section_4f_Key_Terms.docx

Dear Ms. Voit:

I recently emailed you regarding the proposal by the Camden County Board of Commissioners (the County) to construct and operate Spaceport Camden, a commercial space launch site, on the Atlantic seaboard in Georgia. The email provided a brief overview of the County's proposal, explained the role of the Federal Aviation Administration (FAA) in issuing a Launch Site Operator License for the County's proposal, and described the requirements for FAA to consider the potential for *use* of properties that may be protected under *Section 4(f)* of the Department of Transportation Act of 1966. As noted in that email, FAA and their environmental contractor planned to contact you to request more information about Egan's Creek Greenway.

I transmitted similar emails to other contacts to inquire about a number of properties in the area. In several cases, I received replies indicating that people are very busy dealing with the recovery from Hurricane Irma and may not be available to participate in a discussion with us at this time.

Rather than arranging a time to discuss Egan's Creek Greenway in the near future, I have outlined questions to you below in this email. Terms in blue, italic text are defined in a glossary attached to this email. A number of links and other useful background resources are also included in the attachment. I hope this is a more convenient way for you to begin coordinating with FAA on Section 4(f).

One of the most important initial steps for FAA is to identify the *official(s) with jurisdiction* over Egan's Creek Greenway, as the Section 4(f) regulations require coordination specifically with that official. For this reason, if you believe you are not the *official with jurisdiction* over the property, feel free to limit your reply to questions 1 and 2.

Please review these questions and reply as your schedule allows. In the upcoming weeks, you will receive a Doodle poll to arrange a date and time for a follow-up call with me and representatives from ICF, my environmental contractor. During this follow-up call, we can discuss the questions in more depth and address any questions you may have. Thank you again for your time and consideration of this matter.

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

Questions Regarding Egan's Creek Greenway

1. Can you confirm that you are the *official with jurisdiction* over Egan's Creek Greenway?

2. If you are not the *official with jurisdiction*, do you know who we should contact to identify the official(s) with jurisdiction?

3. Can you confirm that Egan's Creek Greenway is publicly owned and that it is open and accessible to the general public?

4. What kinds of activities and functions take place in the property and which of these constitute the *primary purpose* of the property?

5. For the purposes of Section 4(f), is this a *significant* property?

6. Can you provide or direct us to current management plans or other official documentation regarding the property?

7. When is the property open and accessible to the public? For example, are there days or times that it is closed?

8. Do you know how many people visit the property on an annual basis?

9. Please describe the important features and attributes of the property. Is serenity and quiet an important attribute of the property?

10. What types of existing noises might a typical visitor experience?

A.2.2.4 Coastal Zone Management Act Consistency Determination

From: Ezelle, Charles <ezelle.c@thomasandhutton.com>
Sent: Tuesday, June 20, 2017 7:52 AM
To: kelie.moore@dnr.ga.gov
Cc: Utsey, Tara D.; Akstulewicz, Kevin D.; Steve Howard; Andrew Nelson

Subject: EXTERNAL: Spaceport Camden County - Coastal Consistency Determination (CCD) submittal to Georgia Dept. Natural Resources CZMP
Attachments: 20170614_SCC Final CCD_V2-reduced.pdf

Ms. Moore:
I am writing to follow up on our phone call on Monday June 19th. On behalf of Camden County (applicant) please see attached Spaceport Camden County Coastal Consistency Determination document submittal to the Georgia Dept. Of Natural Resources.
Please review and let us know when we may set up a time to coordinate and respond.
Sincerely,
Charles

CHARLES EZELLE, PE | Principal/Regional Director
THOMAS & HUTTON
p 912-466-0536 m 912-667-0850
e ezelle.c@thomasandhutton.com
a 1503 Newcastle St.; Suite A | Brunswick, GA 31520
vCard | Website | LinkedIn | Facebook | Twitter | Instagram

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From: Akstulewicz, Kevin D. [mailto:KEVIN.D.AKSTULEWICZ@leidos.com]
Sent: Wednesday, June 14, 2017 1:28 PM
To: Ezelle, Charles <ezelle.c@thomasandhutton.com>; Steve Howard <showard@co.camden.ga.us>; Andrew Nelson (
Cc: Utsey, Tara D.
Subject: RE: SCC- Final Coastal Consistency Determination (CCD)

Please also note to provide us with any correspondence with GDNR regarding the CCD so that we can add it to the Administrative Record and include it in the Draft EIS. The CCD POC for the GDNR is:

Kelie Moore
Coastal Zone Management Program
Department of Natural Resources
One Conservation Way, Suite 300
Brunswick, GA 31520
(912) 262-2334
kelie.moore@dnr.ga.gov

Please contact me with any questions you may have in this regard.

1

Thanks,

Kevin D. Akstulewicz | Leidos
Infrastructure Planning & Management Division
Sr. Environmental Project Manager

| leidos.com/infrastructure

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2

Federal Consistency Determination for Spaceport Camden

Georgia Coastal Management Program

The Coastal Zone Management Act of 1972 (CZMA), 16 United States Code (U.S.C.) §1451 et seq., as amended, requires each Federal agency activity performed within or outside the coastal zone (including development projects) that affects land or water use or natural resources of the coastal zone to be carried out in a manner consistent, to the maximum extent practicable, with the enforceable policies of approved state management programs. To implement the CZMA and to establish procedures for compliance with its Federal consistency provisions, the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, has promulgated regulations, which are contained in 15 Code of Federal Regulations (CFR) Part 930. This Consistency Determination is being submitted in compliance with 15 CFR §930.50 through 930.66.

This Consistency Determination addresses the proposed construction and operation of a commercial space launch site in Camden County, Georgia. The information contained within this Consistency Determination is derived primarily from the Spaceport Camden Environmental Impact Statement (EIS) prepared for the Proposed Action. References to that document are included in some of the discussions regarding the project's compliance with certain individual state statutes. Should further information concerning the Proposed Action be desired, please refer to the EIS, of which this determination is a component.

PROPOSED ACTION / PROJECT DESCRIPTION:

The Federal Aviation Administration (FAA) proposes to issue a Launch Site Operator License to the Camden County Board of Commissioners (the County). The license would allow the County to offer the commercial space launch site, Spaceport Camden, to commercial launch operators to conduct launches of liquid-fueled, small to medium-large lift-class, orbital and suborbital vertical launch vehicles. Development of the launch site includes construction of supporting buildings and infrastructure. Operations would include up to 12 vertical launches and up to 12 associated launch vehicle first stage landings per year. In support of the launches, there would be up to 12 wet dress rehearsals[1] and up to 12 static fire engine tests[2] per year. Launch operators are required to apply to FAA for the appropriate launch licenses and/or experimental permits. Alternatives under consideration include the Proposed Action, the Ocean-Landing Only Alternative (an alternative for ocean-only first stage landings), and the No Action Alternative. The proposed launch site would be constructed within the coastal zone in Camden County, Georgia, in the extreme southeastern part of the state, approximately 11.5 miles due east of the town of Woodbine (Exhibit 1).

The FAA is conducting a National Historic Preservation Act Section 106 consultation with the Georgia State Historic Preservation Officer regarding impacts to historical and archaeological resources from construction-related activities and operations and an Endangered Species Act (ESA) Section 7 consultation with the U.S. Fish and Wildlife Service to assess impacts to federally protected terrestrial species from construction and operation. FAA is also conducting an ESA Section 7 consultation with the National Marine Fisheries Service to assess impacts to federally protected marine species from operation-related activities.

[1] Wet dress rehearsals are launch rehearsals that include loading of propellants but do not include ignition of the first stage engines.
[2] Static fire engine tests are short (two- to seven-second) tests that include firing of the first stage engines.

Spaceport Camden County
Coastal Consistency Determination

June 2017

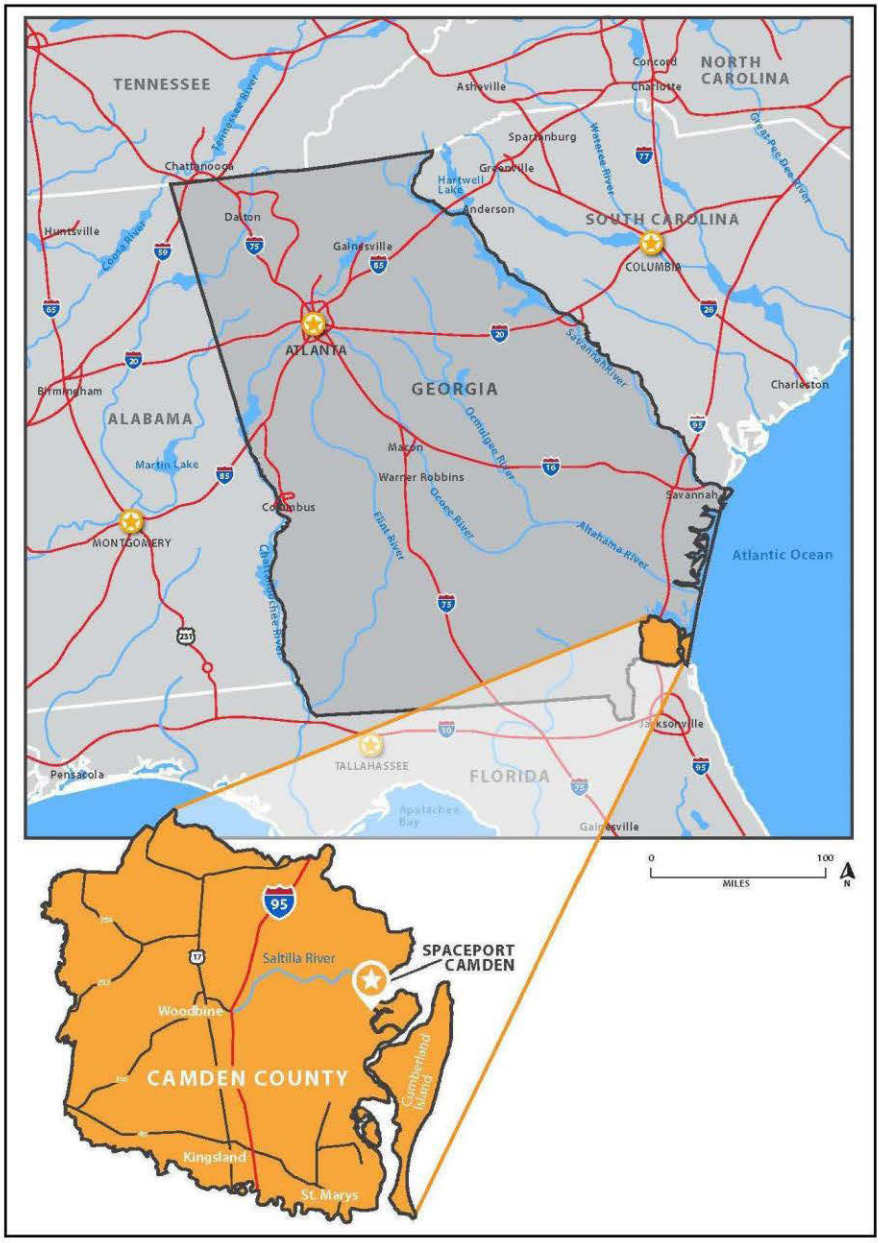

Exhibit 1. Proposed Spaceport Camden Location

Construction

Construction activities would include the construction of four facilities and their associated infrastructure: a Vertical Launch Facility, a Launch Control Center Complex, an Alternate Control Center and Visitor Center, a Landing Zone. These activities are expected to last approximately 15 months, the length of time needed for construction of the Vertical Launch Facility. Construction activities would occur during daylight hours, six days a week; no in-water construction is proposed. Launch site construction activities would not commence until after completion of the EIS, issuance of a Record of Decision, and any required permits or approvals have been granted.

The proposed launch site would be constructed within an existing 11,800-acre industrial site, consisting of property currently owned by the Union Carbide Corporation and Bayer CropScience. Construction of the launch site would occur on approximately 4,000 acres of this industrial site. The total 11,800 acres of this site would provide an appropriate buffer[3] to ensure the safety of the uninvolved public. The proposed Spaceport Camden facilities (footprints shown in Exhibit 2) would encompass less than 100 noncontiguous acres. Table 1 summarizes the permanent vertical structures that would be located at each of the Spaceport Camden facilities, their sizes, and type of construction. The facility size identified for each facility includes the area within a fenced perimeter plus a 25-foot cleared grassy area outside of the perimeter. Table 2 provides summary information for all facilities (total area, occupancy, and construction duration). The Vertical Launch Facility retention ponds would be located outside of the fenced perimeter; this area is included in the Vertical Launch Facility total area. Table 3 provides the facility final construction proposed footprint with the contribution from each of the structures at the facility (buildings, roads, parking areas, supporting foundations [pads], retention ponds). As noted in each of the previous sections, areas temporarily affected by construction (laydown areas) would all be within the fenced perimeter of the facilities. For the construction of these structures, all excavated material (an estimated 126,000 cubic yards) would be reused onsite, primarily as backfill. Note that within the Landing Zone and Vertical Launch Facility, all pads, parking lots, and roads would be concrete, and all others would be asphalt.

Table 1. Proposed Action Permanent Vertical Structures

Facility	Structure	Height (feet)	Footprint (feet)[a]	Construction
Launch Control Complex (facility size: 300 feet x 250 feet)	Launch Control Center	40–45	100 x 50	Pre-engineered metal on concrete foundation
	Payload Processing Building	40–45	100 x 50	Pre-engineered metal on concrete foundation
	Storage building	1 story	20 x 20	Pre-engineered metal or cinder block on concrete foundation
	Storage building	1 story	20 x 20	Pre-engineered metal or cinder block on concrete foundation
	Guard shack	1 story	10 x 10	Pre-engineered metal or cinder block on concrete foundation
Alternate Control Center and Visitor Center	Alternate Control Center	40–45	100 x 50	Pre-engineered metal on concrete foundation
	Visitor Center	40–45	100 x 50	Pre-engineered metal on

[3] Camden County has defined the buffer as the area that exists between the launch point and the launch site boundary, as defined in 14 CFR 420.21, Table 2, and any other additional lands, water, and/or marsh around the launch point determined to be needed to ensure the safety of the uninvolved public. This buffer area would not be constructed upon and would be left in its current condition.

Table 1. Proposed Action Permanent Vertical Structures

Facility	Structure	Height (feet)	Footprint (feet)[a]	Construction
(facility size: 300 feet x 250 feet)				concrete foundation
	Storage building	1 story	20 x 20	Pre-engineered metal or cinder block on concrete foundation
	Storage building	1 story	20 x 20	Pre-engineered metal or cinder block on concrete foundation
	Guard shack	1 story	10 x 10	Pre-engineered metal or cinder block on concrete foundation
Landing Zone (facility size: 700 feet x 700 feet)	Storage/operations building	20	50 x 50	Pre-engineered metal or cinder block on concrete foundation
	Guard shack	1 story	10 x 10	Pre-engineered metal or cinder block on concrete foundation
Vertical Launch Facility (facility size: 1,690 x 800[c])	Vehicle Integration Building	65	300 x 400	Pre-engineered metal on concrete foundation with metal roof and siding
	Office building	45	150 x 200	Pre-engineered metal or cinder block on concrete foundation with metal roof
	Warehouse/storage/shop building	45	150 x 200	Pre-engineered metal or cinder block on concrete foundation with metal roof
	Guard shack	1 story	10 x 10	Pre-engineered metal or cinder block on concrete foundation
	Water tower	250		Metal frame
	Lightning towers[a] (four)	250	60 x 60 x 85	Metal frame
	Chemical storage tanks[b]			
	Liquid oxygen	14	150 x 135	
	Rocket Propellant-1	12	135 x 135	
	Helium/nitrogen	10	80 x 160	

Notes: a Footprint dimensions are for the concrete pads for these structures.
b Tank diameters were used for structure height; footprint dimensions are for the concrete pads for these structures.
c Facility is not rectangular; the fenced perimeter consists of an 800-foot x 1,000-foot rectangular area and an area that is roughly triangular with an 800-foot base and a height of 690 feet.

Table 2. Proposed Action Facility Summary

Facility	Total Acreage[a] (square feet/acres)	Occupants (normal/surge)	Construction Duration (months)
Launch Control Complex	105,000 / 2.4	25 /100	12
Alternate Control Center and Visitor Center	105,000 / 2.4	10/50 15/150 (visitors)	12
Landing Zone	563,000 / 12.9	2/20 1 (visitor)	9–10
Vertical Launch Facility	1,270,000 / 29.2	40/150	15
Launch site roads	924,000 / 21.2	N/A	6–7

[1] Total acreage includes area for roads. (Water, drainage, and electric would be placed within the cleared areas along the roads. The sewer system is included in the acreage of its associated facility.) Construction duration is for all components of the infrastructure: water, sewer, drainage, electric, and roads.

Table 3. Spaceport Facilities Component Footprints

Vertical Launch Facility Components	Component Footprint (square feet)		Launch Control Center Components	Component Footprint (square feet)
Vehicle Integration Building	**120,000**		**Launch Control Center Building**	**5,000**
Office building	**30,000**		**Payload Processing Building**	**5,000**
Warehouse/storage/ shop building	**30,000**		**Guard shack**	**100**
Water tower	**0**		**Storage buildings (two)**	**800**
Guard house	**100**		**Parking area**	**22,500[c]**
Launch pad	**19,200**		**Access drive**	**600**
Launcher track	**100,000**		**Retention ponds (two)**	**7,200**
Flame trench	**3,000**		**Total footprint (structures/pavement)**	**33,900[b]**
Lightning tower pads (four)	**7,200**		Alternate Control Center and Visitor Center Components	Component Footprint (square feet)
Parking lots (five)	**132, 000**		**Alternate Control Center Building**	**5,000**
Chemical storage tank pads			**Visitor Center**	**5,000**
Liquid oxygen	**20,300**		**Guard shack**	**100**
Rocket Propellant-1	**18,200**		**Storage buildings (two)**	**800**
Helium/nitrogen	**12,800**		**Parking area**	**22,500[c]**
Interior roads	**56,800**		**Access drive (two)**	**1,200**
Facility perimeter road	**48,900**		**Retention ponds (two)**	**7,200**
Retention ponds (two)	**100,000**		**Total footprint (structures/pavement)**	**34,500[b]**
Total footprint[a] (Structures/pavement)	**598,000[b]**		Landing Zone Components	Component Footprint (square feet)
Launch Site Roads[e]	Component Footprint (square feet)		**Storage/operations building**	**2,500**
Launch site perimeter road (west side of site)	**150,000**		**Landing pad**	**160,000**
Interior regular roads	**312,000**		**Side wings (two)**	**80,000**
Interior heavy use roads	**462,000**		**Access road**	**20,000**
Total road footprint	**924,000**		**Parking lot**	**9,500[d]**
			Retention ponds (two)	**31,500**
			Total footprint (structures/pavement)	**272,000[b]**

Notes:

a Facility would not be rectangular; the fenced perimeter consists of an 800-foot x 1,000-foot rectangular area and an area that is roughly triangular with an 800-foot base and a height of 690 feet.

b Total does not include retention pond area.

c Paved area of parking lot encompasses the two larger buildings. Paved area excludes area associated with the buildings.

d Paved area of parking lot encompasses the storage/operations building. Paved area excludes area associated with the building.

e The perimeter road would be one lane; all others two lanes. Lanes on regular use roads would be 12 feet wide and 14 feet wide on heavy use roads. An additional 6 feet of grassy area would be provided on each side of the roads. Construction duration is for all utilities (road, electric distribution, and water distribution).

Spaceport Camden County
Coastal Consistency Determination

June 2017

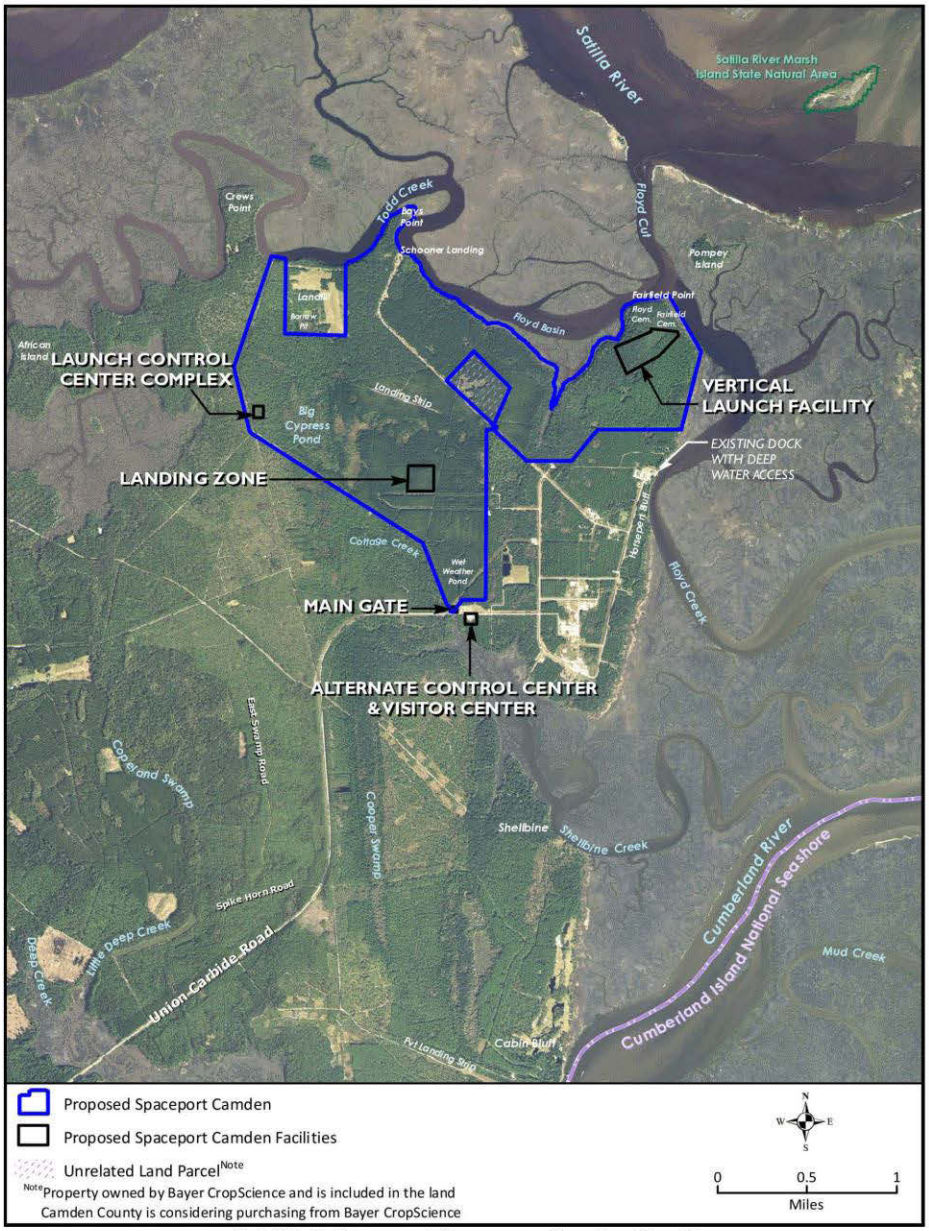

Exhibit 2. Proposed Spaceport Camden Site Plan

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Operation

Spaceport Camden would accommodate up to 12 vertical launches and up to 12 associated launch vehicle first stage landings per year. All vehicles would launch generally to the east over the Intracoastal Waterway, Cumberland Island National Seashore, and the Atlantic Ocean. Any first stage landings would return to the launch site from the east. In addition, in support of the launches, there would be up to 12 wet dress rehearsals and up to 12 static fire engine tests per year. For purposes of impact analysis, FAA is considering a range of launch and landing trajectories ranging from 83 to 115 degrees from true north. This range is depicted in Exhibit 3.

Launch Vehicle Description

Spaceport Camden would be available to a range of launch operators, each of which offers various launch vehicles. While these vehicles would include small and medium-large lift class and use liquid propellants, they would have different design and operating specifications. Since a specific launch vehicle cannot be identified until a launch operator is identified and a variety of launch vehicles would be candidates to be launched from the launch site, a representative launch vehicle is used in this Consistency Determination to evaluate the potential environmental impacts of launches from the launch site. The design features identified for the launch vehicle described in the following paragraphs were selected as representative for a medium-large lift-class launch vehicle. A medium-large lift-class launch vehicle may have a gross liftoff weight of approximately 750,000 to 1,500,000 pounds with an approximate length of 200 to 250 feet. The representative launch vehicle considered for purposes of this Consistency Determination uses liquid oxygen and a special grade of kerosene known as Rocket Propellant (RP)-1 as propellants.

First stage: The first stage would be approximately 10 to 14 feet in diameter and between 125 to 175 feet long and may include one or two large engines or as many as nine smaller engines. For purposes of this analysis, it is assumed that the representative launch vehicle uses multiple engines producing approximately 1,800,000 pounds of thrust. It is further assumed the representative launch vehicle would use liquid oxygen and RP-1 as its main propellants, and those propellants are stored onboard in two internal aluminum tanks: one of approximately 60,000 to 65,000 gallons for liquid oxygen and one of 35,000 to 40,000 gallons for RP-1. The first stage of the launch vehicle could land at the launch site (recovered), in the Atlantic Ocean on a barge 200-300 miles off shore (recovered), or in the water (unrecovered).

Second stage: The second stage would be similar in diameter to the first stage and between 35 and 50 feet long, not including the fairing (the top portion of the vehicle where the payload[4] is enclosed) and payload. The typical second stage would use one or two engines, one engine being more typical. It is assumed that a single second stage engine would be used to provide approximately 150,000 pounds of thrust. The fairing[5] would be between 12 and 18 feet in diameter by 30 to 40 feet long, although smaller versions may also be used. The second stage is assumed to use approximately 15,000 gallons of liquid oxygen and 9,000 gallons of RP-1 stored onboard in one aluminum tank each.

[4] Launch vehicles are classified based on payload weight in pounds according to orbital inclination; at 90-degrees inclination: *small* is less than or equal to 3,300 pounds; *medium* is greater than 3,300 to less than or equal to 8,400 pounds; *medium-large* is greater than 8,400 to less than or equal to 15,000 pounds.
[5] The top portion of the vehicle where the payload is enclosed

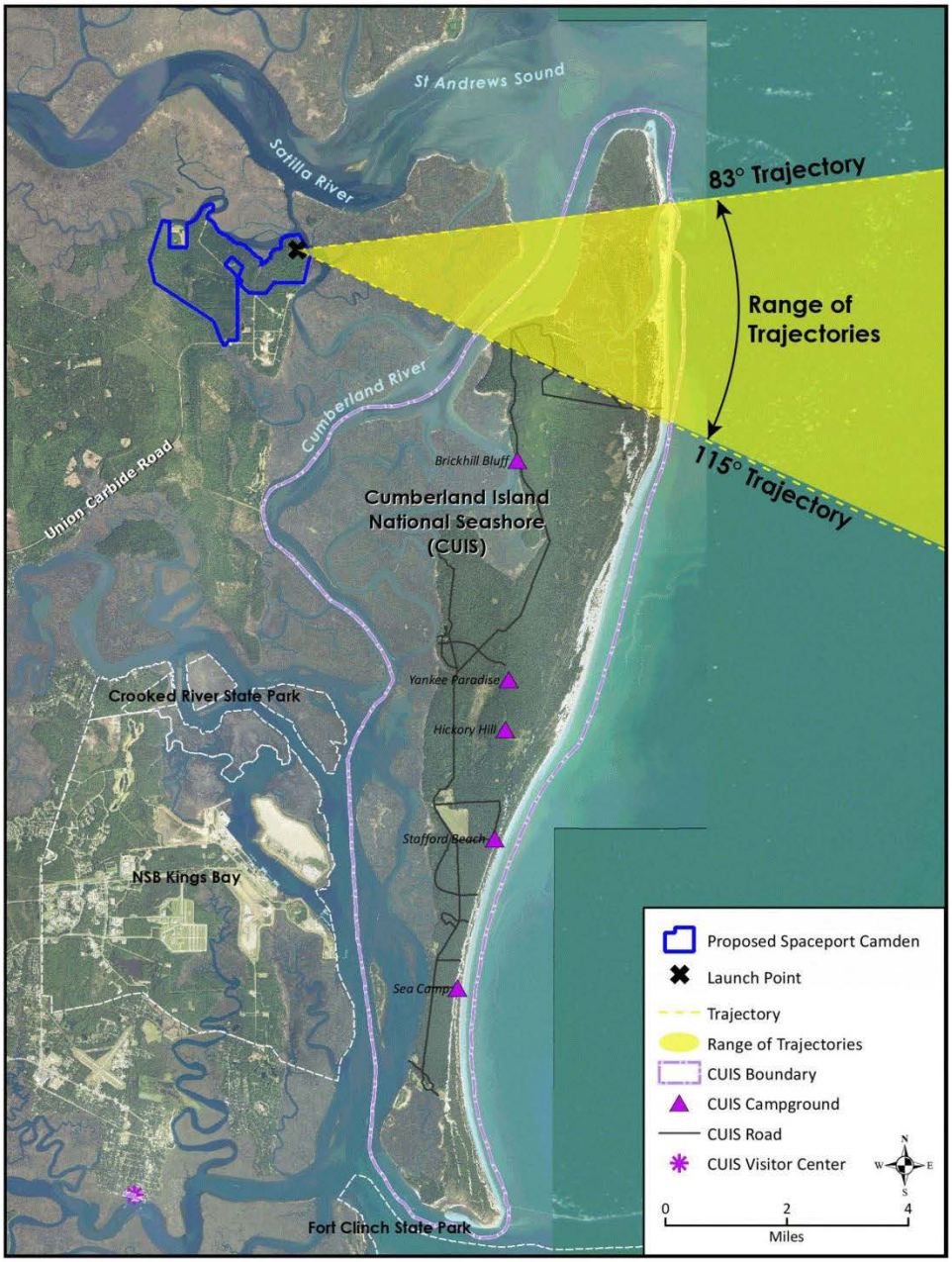

Exhibit 3. Spaceport Camden Range of Launch Trajectories

Common subsystems in Stages 1 and 2: Most medium-large lift-class launch vehicles use high-pressure helium as purge gas (to clear components of residual fluids, such as propellants) or pressurants for propellant tanks (pressurants maintain pressure in the tanks as the propellant is used). Therefore, it is assumed that both stages of the representative vehicle would use helium gas stored in high-pressure cylinders to pressurize the propellant tanks for both stages. It is further assumed that both stages include radio frequency transmitters to receive control signals and send monitoring and status data. Electronic control systems are used to control valves and monitor equipment on the vehicles.

Flight termination system: Launch vehicles are equipped with safety systems, called flight termination systems, intended to cause the destruction of the launch vehicle in the event that the vehicle does not perform as intended and subsequently strays from the intended trajectory. Activation of the system would be intended to limit the location of a vehicle (or vehicle debris) impact to the identified hazard area.

Launch Vehicle Assembly

The first and second stages would typically be transported to the site separately by oversized truck (similar in size to a mobile home) with two security escorts and would be placed in the Vehicle Integration Building at the Vertical Launch Facility. Once there, the stages and engines would be checked and prepared for mating. During vehicle operations, vehicle integration, and checkouts, information on vehicle status (transmitted on radio frequency channels) would typically occur.

Launch Operations

Launch operations consists of pre-launch, launch, and first stage landing activities. Most launches and landings would be conducted during the day. However, up to one launch and one landing per year could be conducted during the late-night time period between 10:00 p.m. and 7:00 a.m. All static fire events would take place during daylight hours.

Pre-Launch Activities

Pre-launch activities would include mission rehearsals, static fire engine tests, and coordination with governmental agencies and media outlets to provide notification of these launch operation activities and establish secure areas in the vicinity of the vertical launch area. A Security Plan, developed by Camden County in cooperation with the launch operator, would outline a process (e.g., the establishment of closure areas) to prevent the public and other nonauthorized personnel from accessing the area during hazardous operations in accordance with 14 CFR Parts 417 and 420.

Mission Dress Rehearsals

Mission rehearsals are performed to verify that all vehicle and ground systems are functioning properly and that all procedures are properly written. After final systems checkout, there would typically be two mission rehearsals. One dry dress rehearsal (a launch rehearsal performed without loading propellants onboard the launch vehicle) and one wet dress rehearsal (a launch rehearsal performed with vehicle propellant loading[6]) would be performed to verify full launch readiness. During a wet dress rehearsal, the launch procedures would be followed up to a pre-programmed abort just prior to first stage engine ignition. Following each rehearsal, the integrated launch vehicle would be returned from the launch pad to the Vehicle Integration Building. Upon conclusion of the wet dress rehearsal, all propellants loaded during the rehearsal would be removed from the launch vehicle and returned to their storage tanks at the Vertical Launch Facility.

[6] Propellants loaded onto the launch vehicle include the main engine fuel (RP-1), liquid oxygen, and any other fuels (such as hydrazine).

Static Fire Engine Tests

Static fire engine tests are performed to verify engine control and performance as well as launch pad systems performance. Static fire engine tests include all of the activities associated with a wet dress rehearsal, with the additional action of igniting the first stage engines. During a static fire engine test, the launch vehicle engines would typically be ignited for approximately two seconds, but could be ignited for up to seven seconds, then shut down. The launch vehicle would be held in place during the test to prevent launch. The launch vehicle would be defueled of propellants not consumed during the static fire test, and those propellants would be returned to their storage tanks at the Vertical Launch Facility upon conclusion of the test.

Launch

After a final check, the integrated launch vehicle would be launched. For launches where the first stage would be recovered, the return of the first stage (either landing at the Landing Zone or returned by vessel after landing on a barge in the Atlantic Ocean) and first stage refurbishment would complete the launch operations.

First Stage Landing

The incorporation of a Landing Zone at Spaceport Camden would allow for the landing of the launch vehicle first stage after it has successfully separated from the upper stages of the vehicle. Up to 12 launch vehicle first stage landings per year could be made. Security and safety zones from the vehicle launch would be maintained for the return of this portion of the launch vehicle. First stage landings would occur approximately 10 minutes after launch and, therefore, would not appreciably extend the length of time security and safety zones would need to be maintained.

Not all launches would involve landing the first stage at the launch site. First stages may drop in the Atlantic Ocean or land on a barge 200 to 300 miles off the coast of Georgia in the Atlantic Ocean once a year.[7] During a landing (either at the launch site or on a barge at sea), the first stage engines would be used to control the descent of the vehicle. In the event of a landing on a barge, the first stage could be returned to the launch site, utilizing the existing dock on Floyd Creek shown in Exhibit 2.

Public Notification of Launch Operations

Public access in the vicinity of the launch site would be restricted during launches, wet dress rehearsals, and static fire engine tests. Closures would involve securing both land and water areas (referred to as a closure areas, the sizes of which would vary for each operation). Public notification would be required prior to establishing the closure areas.

Approximately one to three months in advance of a launch operation requiring public notification (i.e., actual launch, wet dress rehearsal, or static fire engine test), the appropriate county officials (including police, fire, and rescue personnel) would be notified of the proposed date, the expected closure dimensions, times, and backup closure dates and times. Camden County and/or the launch operator would post written notices of the date, time, and the proposed closure area at several locations in the area as well as an advertisement in local newspapers. Camden County and/or the launch operator would also coordinate with local government agencies with regard to launch operations requiring public notification.

Camden County and/or the launch operator would notify the public approximately one to three months prior to a launch operation that would require a closure. Notices would be put out through local media

[7] In the event that the first-stage is dropped into the Atlantic Ocean, the first stage would not be recovered and would sink in the Atlantic Ocean hundreds of miles offshore.

and through the use of Notices to Mariners (NOTMARs) and Notices to Airmen. Camden County and/or the launch operator would also notify other appropriate agencies of the launch operation and associated closures.

Security and Safety Zones

As part of the licensing process, Camden County and the launch operator would jointly develop a Security Plan that defines the process for ensuring that any unauthorized persons, vessels, trains, aircraft, cars, trucks, all-terrain vehicles, or other vehicles are not within the FAA-approved hazard area or, if they are, that they conform to criteria in 14 CFR Parts 417 and 420. (The hazard area encompasses all of the areas that could potentially be affected by debris from a launch failure. In the event of a launch failure, it is assumed that only some portions of the hazard area would be impacted.) The Security Plan would include safety and security personnel for each launch operation activity and roadblocks and other security checkpoints. Camden County and/or the launch operator also would develop and implement agreements and plans with local authorities whose support is needed to ensure public safety during all launch processing and flight, in accordance with 14 CFR parts 417 and 420.

The Spaceport Camden Security Plan would describe the procedures for securing a closure area, thus limiting public access in the area on the day of a launch. The closure area would be expected to include areas around the access points to the launch site and the waterways surrounding the launch site, in addition to parts of Cumberland Island extending along the trajectory and out to sea. Each launch would have an individually defined closure and hazard area, according to the specific type of vehicle, the trajectory, and the mission.

Area closures could last up to 12 hours on a launch day, with four to six hours being the typical closure time for a nominal launch. The 12-hour closure period allows for potential aborts and contingencies. A closure for a wet dress rehearsal or static fire engine test would be shorter than for a launch, typically three hours or less, and would include only those areas within a 2-mile radius of the launch pad, and the closure area would not reach water areas in the Atlantic Ocean. Camden County Sheriff Department boats would be used to secure the river, streams, and ocean checkpoints.

Exhibit 4 and Exhibit 5 show possible hazard and closure areas for a launch based on two representative trajectories.[8] Additional trajectories, all in a generally easterly direction, could be used for launches from this launch site. As can be seen from Exhibit 3 and Exhibit 4, differences in the locations of the hazard areas could result in changes to the defined closure areas. In addition to land checkpoints, waterborne checkpoints could be located along the Satilla River/St. Andrews Sound area (O_1, O_2, and O_3 on Exhibit 4 and Exhibit 5), the Atlantic Ocean (O_4 and O_5), and the Cumberland River (O_6 and O_7).

During a closure, monitoring would be done by vehicles (car/truck) along existing roads such for land areas or by a U.S. Coast Guard (USCG) boat for water areas, as well as by video surveillance (e.g., high-definition video cameras with zoom lenses placed well above ground level on the water tower and/or lightning towers). Camden County, the launch operator, and/or law enforcement would monitor the area to the east of the checkpoints to ensure that the area would remain clear.

[8]Three trajectories were used in the analyses for the EIS: a northern (83°), a middle (100°), and a southern (115°). Exhibits 4 and 5 show hazard and closure areas for the northernmost and southernmost of these three trajectories. Other trajectories proposed by launch operators would be assessed to determine the need for additional environmental impact analysis and documentation. Closure and hazard areas would be determined as part of the FAA launch approval process for each launch.

Spaceport Camden County
Coastal Consistency Determination

June 2017

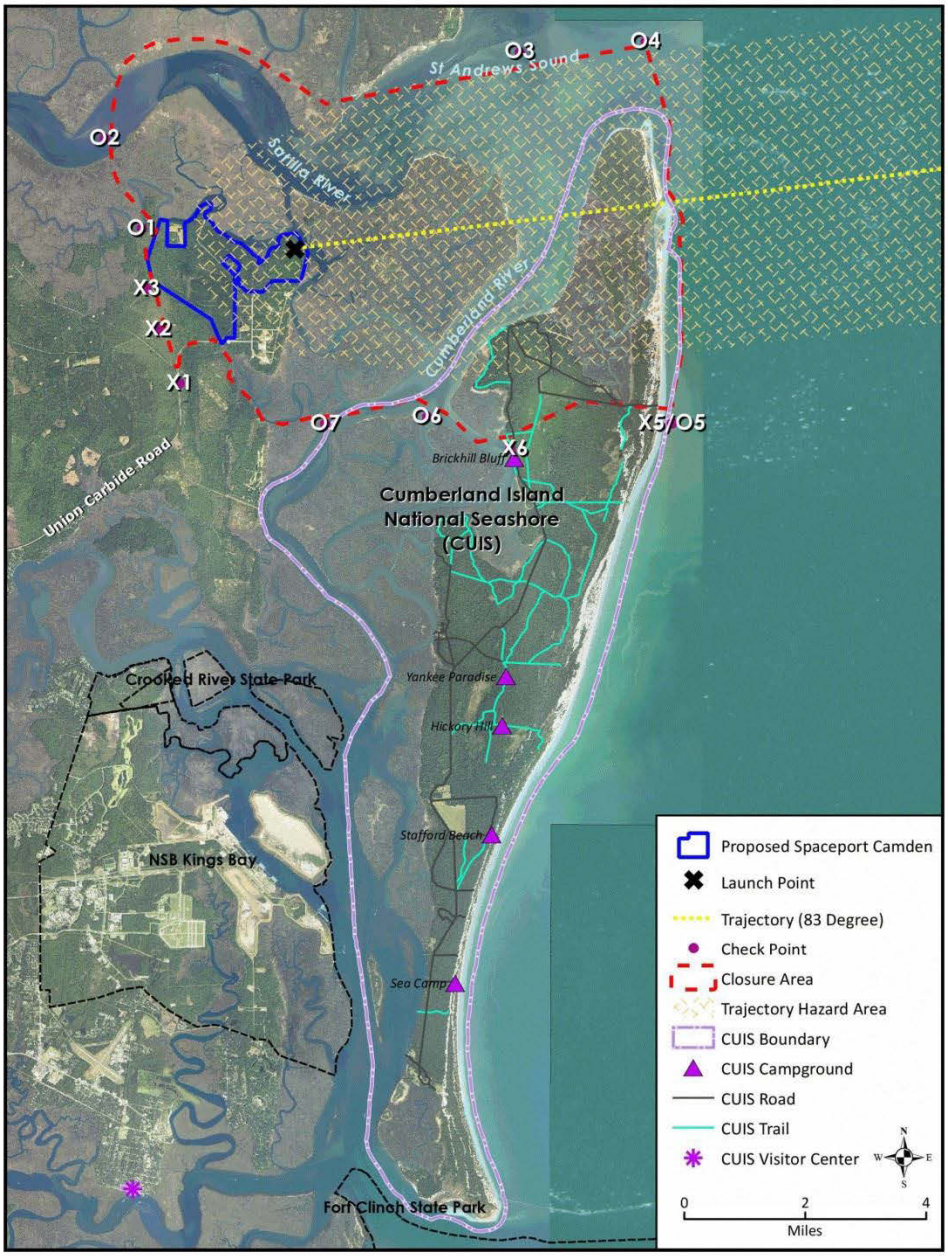

Exhibit 4. Representative Trajectory (83 Degree) with Hazard and Closure Areas

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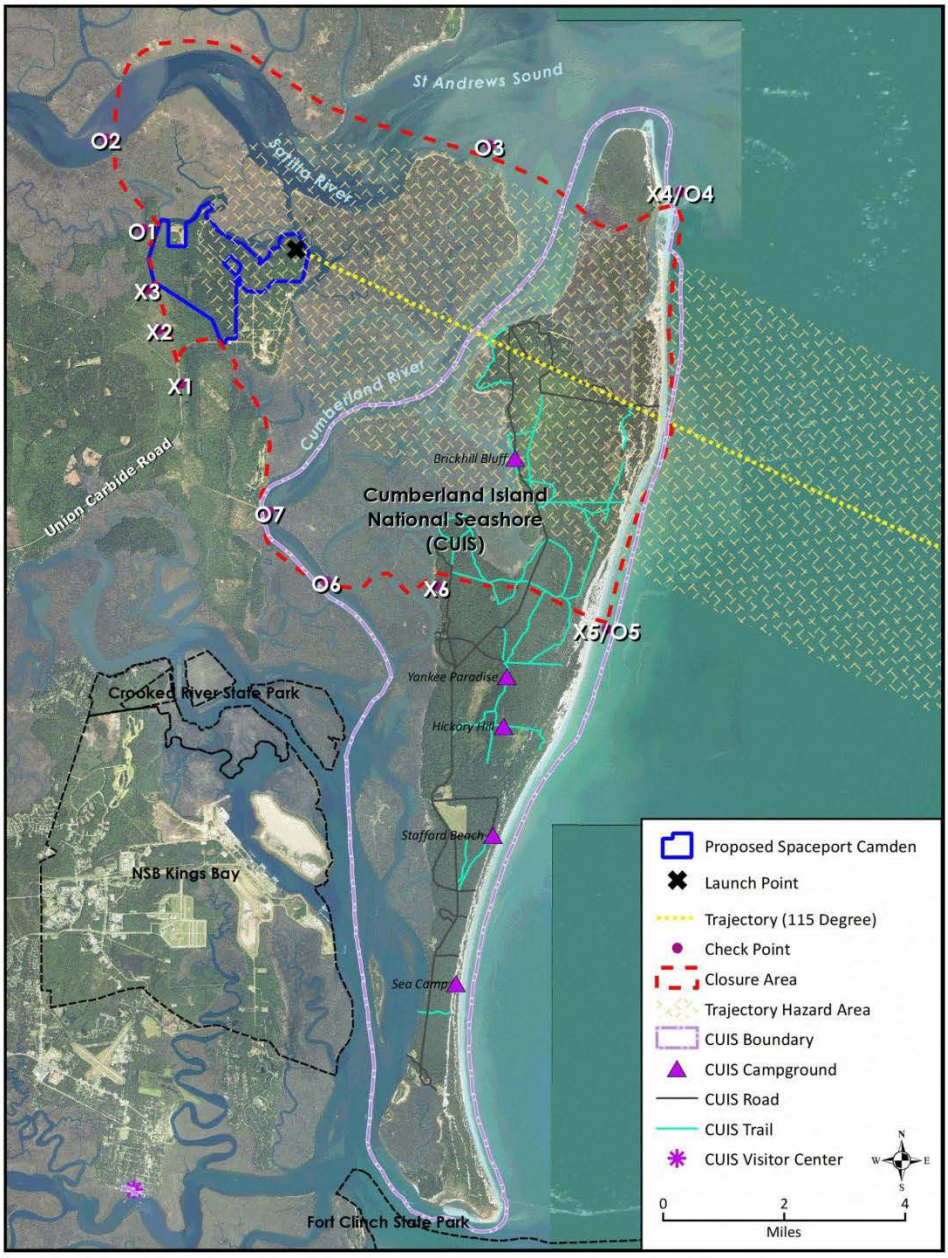

Exhibit 5. Representative Trajectory (115 Degree) with Hazard and Closure Area

Table 4 lists actions that would be conducted to ensure the closure and security of the area prior to an actual launch. The same actions and activities would occur for other launch operations requiring a closure (i.e., wet dress rehearsal and static fire engine test), but the start time, area size, and durations would be different since these other launch operations are not expected to last as long or impact as large an area as an actual launch.

Table 4. Representative Security Activities on Day of Launch

Action	Purpose	Start Time	End Time
Establish checkpoints and take down checkpoints	Set up for launch and remove after launch. Commence monitoring of traffic flow.	T[1] –6 to 12 hours	T +5 to 30 minutes
Establish hard checkpoints	Restrict access to owners and authorized persons only in closure areas.	T –3 hours	T +5 to 30 minutes
USCG/other waterborne law enforcement on station	USCG and/or other local waterborne law enforcement sweep areas and restrict boating access.	T –3 hours	T +5 to 30 minutes
Security sweeps	Security sweeps responsible areas (e.g., beach, island Main Road, logging roads near launch site, rivers and creeks). Verify by video, UAV, or ATV as needed.	T –2 hours	T –1 hour 40 minutes
Trajectory sweep	Verify with visual and/or airborne sweep.	T –1 hour	T –40 minutes
Final sweep	Check land and water checkpoints for activity; review video one last time.	T –1 hour	T –40 minutes
Close airspace	In accordance with agreed-upon procedure, Jacksonville FL ARTCC closes appropriate airspace.	T –15 minutes	T +5 to 30 minutes

Notes: ATV = all-terrain vehicle; FL ARTCC = Florida Air Route Traffic Control Center; UAV = unmanned aerial vehicle; USCG = U.S. Coast Guard

[1] "T" implies the anticipated time of engine firing, with start and end times measured before (minus *x* hours or minutes) or after (plus *x* hours or minutes). End times dependent on whether a first stage landing is planned.

The Security Plan would include a procesfas for clearing offshore areas, such as coordinating with the USCG, issuing a NOTMAR, and clearing the offshore area in order to ensure public safety. The USCG could conduct a boat patrol to sweep the offshore area to make sure the area is clear; sweeps would continue until the launch operator is ready to load propellant to the vehicle (approximately three hours prior to launch). If necessary, a final sweep of the closure areas by manned fixed-wing aircraft or unmanned aerial vehicle could be implemented at this time to ensure the areas are clear.

After the launch operation (and landing at the launch site, if planned) is completed or postponed, Camden County and/or the launch operator and FAA would notify law enforcement that the area has been deemed safe, allowing them to reopen the closure areas. In the event that the launch would be postponed, closure and hazard areas would be reestablished for the rescheduled launch.

Launch Failures

Failures, while unlikely, are possible. Launch failures would occur either on the launch pad or during flight. Failures on the launch pad would be expected to result in the complete destruction of the launch vehicle and payload. The ensuing explosion would consume most, if not all, of the propellants carried on the vehicle. Because FAA regulations (14 CFR §420.21) require launch pads to be at least 10,600 feet (for medium-lift-class to large-lift-class launch vehicles) from the launch site boundary, vehicle debris from the explosion would be expected to be confined to the launch site.

Failures in flight could result in the destruction of the vehicle either due to the failure itself or as the result of a destruct signal generated by a flight termination system. The flight termination system is

designed to destroy the vehicle in the event that the vehicle veers from the planned flight trajectory. This system is employed to ensure that any debris from the destruction of the vehicle would land within the FAA-approved hazard area. Most propellants are expected to be consumed during the destruction of the vehicle, but some may escape and be released into the atmosphere. Although this process is intended for the vehicle to be totally destroyed, some of the vehicle components could survive relatively intact. Any debris or surviving components would be expected to impact within the launch site boundary or on land or in water within the hazard zone. Components and debris impacting water could sink intact or break up into smaller pieces before sinking. Should any propellant tanks survive a water impact relatively intact, the propellant would, if not recovered, eventually leak out of the tanks and into the water.

State Enforceable Policies

The goals of the Georgia Coastal Management Program are attained by enforcement of the policies of the State as codified within the Official Code of Georgia Annotated (O.C.G.A.). "Policy" or "policies" of the Georgia Coastal Management Program means the enforceable provisions of present or future applicable statutes of the State of Georgia or regulations promulgated duly thereunder (O.C.G.A. 12-5-322). The statutes cited as policies of the Georgia Coastal Management Program were selected because they reflect the overall program goals of developing and implementing a balanced program for the protection of the natural resources, as well as promoting sustainable economic development of the coastal area.

The list of state laws shown in Table 5 and Table 6, along with their associated regulations, describe the legal authority for the State's regulation of its salt marshes, beaches and dune fields, and tidal water bottoms. Each of the coastal resources and use areas of concern is discussed separately. For each statute, a scope is provided with a direct citation to Georgia law. The laws are not cited in their entirety. Instead, the purpose of the statute, or a pertinent section of the statute, is cited. The statutes cited here are, therefore, supported by legally binding laws of the State of Georgia, through which Georgia is able to exert control over impacts to the land and water uses and natural resources in the coastal area. The statutes referenced herein can be found in the Official Code of Georgia Annotated. Table 5 presents the statutes that are not applicable to the Proposed Action. Statutes listed in Table 5 are not addressed further. Statutes addressed as part of the Georgia Coastal Zone Management Program consistency review and considered in the analysis of the Proposed Action are discussed in Table 5.

In accordance with the CZMA, 16 U.S.C. §1456(c), as amended, it has been determined that the proposed construction and operation of the launch site would be carried out in a manner fully consistent with the enforceable policies of the Georgia Coastal Management Plan. This determination applies to the Proposed Action and the effects of the Proposed Action on the land uses, water uses, or natural resources of the coastal zone, as directed by 15 CFR §930.39.

Table 5. Statutes Not Applicable to the Proposed Action

Statute	Scope [a]	Applicability
O.C.G.A. 27-4-251 *Aquaculture Development*	Provides for the establishment of the Aquaculture Development Commission to study aquaculture development in Georgia.	Not applicable; this statute addresses cultivation of aquatic organisms for the state.
O.C.G.A. 12-5-370 *Safe Dams*	Provides for the inspection and permitting of certain dams to protect the health, safety, and welfare of Georgia residents.	Not applicable; the Proposed Action would not involve dam construction.

Table 5. Statutes Not Applicable to the Proposed Action

Statute	Scope [a]	Applicability
O.C.G.A. 27-1-3 *Game and Fish Code*	Provides the ownership of, jurisdiction over, and control of all wildlife to be vested in the state of Georgia. Declares custody of all wildlife in the state vested with the GDNR for management and regulation.	Not applicable; the Proposed Action includes no feature to hunt, trap, fish, possess, or transport any recreational or commercial fish or wildlife species.
O.C.G.A. 12-4-40 *Oil and Gas and Deep Drilling*	Regulates oil and gas drilling activities to provide protection of underground freshwater supplies and certain environmentally sensitive areas.	Not applicable; the Proposed Action would not involve oil or gas exploration.
O.C.G.A. 12-4-100 *Phosphate Mining*	Provides policy regarding the State's management of phosphate deposits; provides licenses to dig, mine, and remove phosphate deposit.	Not applicable; the Proposed Action would not involve phosphate mining.
O.C.G.A. 50-16-61 *Revocable License Program*	Provides authority to the GDNR to issue revocable licenses for recreational docks on State-owned tidal water bottoms.	Not applicable; the Proposed Action would not require license for recreational dock.
O.C.G.A. 12-3-110 *Scenic Trails*	Authorizes the GDNR to establish a scenic trails system in Georgia.	Not applicable; this statute pertains to the establishment of trails by the State.
O.C.G.A. 27-4-190 *Shellfish*	Requires commercial shellfish harvester to have a license, issued by the GDNR. Authorizes shellfish growing areas for commercial harvest under guidelines established by the National Shellfish Sanitation Program.	Not applicable; this statute is for commercial shellfish activities.
O.C.G.A. 12-4-70 *Surface Mining*	Regulates all surface mining in Georgia, including the coastal zone.	Not applicable; the Proposed Action would not include surface mining activities.
O.C.G.A. 12-13-1 *Underground Storage Tank*	Provides the authority to define State criteria for operating, detecting releases, corrective actions, and enforcement of the utilization of underground storage tanks.	Not applicable; the Proposed Action would not utilize underground storage tanks.
O.C.G.A. 12-6-170 *Wildflower Preservation*	Provides for the designation of and protection of plant species that are rare, unusual, or in danger of extinction. Protection offered to these species is limited to those that are found on public lands of the State.	Not applicable; the Proposed Action would not include construction on public lands.

Notes: GDNR = Department of Natural Resources; O.C.G.A. = Official Code of Georgia Annotated.
[a] Source: Georgia Department of Natural Resources, State Laws Under Federal Consistency, available at http://www.coastalgadnr.org/msp/fedstatelaws.

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
O.C.G.A. 12-9-1 *Air Quality*	This statute provides authority to the Environmental Protection Division to promulgate rules and regulations necessary to abate or to control air pollution for the state as a whole or from area to area. Establishes ambient air quality standards, emission limitations, emission control standards, and other measures necessary to provide standards.	Potential impacts to air quality from the Proposed Action are analyzed in the EIS, Section 4.1, *Air Quality*. The estimated emissions from construction of the Launch Control Center Complex, Vertical Launch Facility, Alternate Control Center and Visitor Center, and facility roads represent small percentages of the Camden County and regional emissions and would not cause an exceedance of any National Ambient Air Quality Standards (NAAQS). For the duration of the construction period (approximately 15 months), construction activities would increase greenhouse gas (GHG) emissions by 9,848 tons carbon dioxide equivalent (CO_2e) over the annual baseline for the region. This increase would compose less than 0.03 percent of GHG emissions in the Air Quality Control Region and less than 1.51 percent in Camden County. The operational emissions for the proposed vertical launch and the control center areas represent small percentages of the Camden County regional emissions and would not cause an exceedance of any NAAQS. This area is in attainment; therefore, the General Conformity Rule does not apply. Operational activities would increase GHG emissions by 42,983 tons CO_2e over the annual baseline for the region. This increase would compose less than 0.15 percent of the GHG emissions in the Air Quality Control Region and less than 6.51 percent in Camden County. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding air quality.
O.C.G.A. 52-7-1 *Boat Safety*	Provides enforceable rules and regulations for safe boating practices on Georgia's lakes, rivers, and coastal waters. Establishes boating safety zones for a distance of 1,000 feet from the high water mark on Jekyll Island, Tybee Island, St. Simons Island, and Sea Island.	A launch event may increase boat traffic during USCG clearance of ocean areas and from spectators watching launch events. The number of potential spectators on boats is unknown and would likely vary between each launch event. Spectators would not be allowed within the closure area identified for each launch. Security patrol boats associated with launch or landing activities would follow established safety zone rules and regulations. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations for safe boating practices.
O.C.G.A. 12-5-320 *Coastal Management*	Provides enabling authority for the State to prepare and administer a coastal management program.	State and regional agencies will be provided the opportunity to review and comment on the Spaceport Camden EIS. This CZMA Consistency Determination

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
	Establishes procedural requirements for the GDNR to develop and implement a program for the sustainable development and protection of coastal resources.	ensures that the Proposed Action is consistent with Georgia's Coastal Management Program.
O.C.G.A. 12-5-280 *Coastal Marshlands Protection*	Provides the Coastal Resources Division with the authority to protect tidal wetlands. Limits certain activities and structures in marsh areas and requires permits for other activities and structures.	The site is a combination of 1,200 acres of uplands and 2,800 acres of marshlands. Spaceport Camden would be constructed on approximately 100 noncontiguous acres of the approximately 1,200 acres of uplands on the Union Carbide property. The remainder of the property would be part of the spaceport boundary, although there are no plans for constructing supporting facilities in these areas at this time. Additionally Camden County has no plans to conduct dock improvements/modification within marshlands at this time. However, should dock improvements/modifications be required in the future a Coastal Marshlands Protection Committee permit may app which is facilitated through GA DNR/CRD and approved by the Committee. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations for coastal marshlands.
O.C.G.A. 12-5-170 *Safe Drinking Water*	Establishes rules and policies for the administration of drinking water management programs.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. None of the aquifers located in Camden County are considered U.S. Environmental Protection Agency (USEPA) sole source aquifers. Construction activities are not anticipated to require significant amounts of groundwater, and water usage would be less than that anticipated for the operation of the proposed launch site. Other potential impacts to groundwater during construction include contamination from spills or leaks associated with construction vehicles and machinery. Fuels and other petroleum products would be stored and transferred onsite during construction activities. Spill prevention plans would be in place to minimize the potential for spills and to quickly clean up any spills that would occur. Proposed construction activities would not occur in any areas in or near water bodies that have a direct, known relationship with groundwater recharge. Earth-

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
		disturbing construction activities would not occur within the vicinity of existing groundwater wells. No impacts to groundwater are anticipated from construction-related activities. The confined nature of the aquifers in the vicinity of the project site limits the potential for spills to migrate into these aquifers. The operation of the proposed Spaceport Camden is anticipated to annually withdraw 16.3 million gallons of water. This is based on a nominal water usage of 11,500 gallons per day with peak usage of approximately 405,000 gallons per day (peak usage would be dominated by the activation of the water deluge system, which could use up to 250,000 gallons per launch). The site is currently permitted to withdraw 1.7 million gallons of water daily from two existing groundwater wells. Camden County is in the portion of the Georgia Coast Region that does not restrict additional withdrawals from the Floridan aquifer. Proposed storage of hazardous materials would not occur in any areas in or near water bodies that have a direct, known relationship with groundwater recharge nor would storage of these materials occur in the vicinity of existing groundwater wells. No significant adverse impacts to groundwater are anticipated from activities related to the operations of Spaceport Camden. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding drinking water management programs.
O.C.G.A. 27-3-130 *Endangered Wildlife*	Provides for identification, inventory, and protection of animal species that are rare, unusual, or in danger of extinction. Protection is limited to species that are found on public lands of the State.	Potential impacts to biological resources from the Proposed Action are analyzed in the EIS, Section 4.2, *Biological Resources*. Potential impacts to protected species from the construction and operation of Spaceport Camden may include direct physical impacts, habitat loss/degradation/fragmentation, and harassment from noise and human presence. As a result of potential impacts to protected species, FAA has prepared an Endangered Species Act Section 7 consultation for the USFWS and NMFS. All conservation measures and/or terms and conditions resulting from these consultations will be followed; these measures would serve to protect State-listed species as well. Therefore, the Proposed Action would be consistent

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
		with Georgia's statutes and regulations regarding the protection of endangered species of the state, even though the proposed project would not include construction or operation on public land.
O.C.G.A. 12-16-1 *Environmental Policy*	Requires that all State agencies and activities prepare an Environmental Impact Report as part of the decision-making process. Required for all activities that may have an impact on the environment.	This Consistency Determination is a component of the EIS, which evaluates the impacts of the proposed construction and operation of Spaceport Camden. State and regional agencies will be provided the opportunity to review and comment on the Spaceport Camden County EIS. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding the environment.
O.C.G.A. 12-7-1 *Erosion and Sedimentation Control*	Requires that each county or municipality adopt a comprehensive ordinance establishing procedures governing land-disturbing activities. Permits are required for specified land disturbing activities.	During construction, a Stormwater Pollution Prevention Plan (SWPPP) and sediment and erosion control plan would be required in compliance with Georgia National Pollution Discharge Elimination System (NPDES) requirements and Georgia's Erosion and Sedimentation Act of 1975. Operational stormwater discharges would be permitted under NPDES Industrial Stormwater General Permit Number GAR050000. The County would be required to submit a notice of intent to discharge under this permit no less than seven days before commencing to discharge. Permit conditions would specify best management practices and mitigative measures required to prevent fugitive soil, sediment, and other potential contaminants from entering water bodies and wetlands. There would be a vegetated buffer of at least 25 feet along all state waters (per Georgia state laws 12-7-6[b]15[A] and 12-7-6[b][16] and 12-7-6[b][17][A]). Three retention ponds would be installed at the Vertical Launch Facility, two retention ponds would be installed at the Launch Control Center Complex, and two retention ponds would be installed at the Alternate Control Center and Visitor Center for stormwater runoff control. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding erosion and sedimentation control.
O.C.G.A. 12-5-90 *Groundwater Use*	Administers rules and regulations relating to the conduct, content, and submission of water conservation plans, including water conservation practices, water drilling protocols, and specific rules for withdrawal and utilization of groundwater.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. None of the aquifers located in Camden County are considered USEPA sole source aquifers. Construction activities are not anticipated to require significant amounts of groundwater, and water usage would be

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Statute	Scope [a]	Consistency
		less than that anticipated for the operation of the proposed spaceport. Other potential impacts to groundwater during construction include contamination from spills or leaks associated with construction vehicles and machinery. Fuels and other petroleum products would be stored and transferred onsite during construction activities. Spill prevention plans would be in place to minimize the potential for spills and to quickly clean up any spills that would occur. Proposed construction activities would not occur in any areas in or near water bodies that have a direct, known relationship with groundwater recharge. Earth-disturbing construction activities would not occur within the vicinity of existing groundwater wells. No impacts to groundwater are anticipated from construction-related activities. The confined nature of the aquifers in the vicinity of the project site limits the potential for spills to migrate into these aquifers. The operation of the proposed Spaceport Camden is anticipated to annually withdraw 16.3 million gallons of water. This is based on a nominal water usage of 11,500 gallons per day with peak usage of approximately 405,000 gallons per day (peak usage would be dominated by the activation of the water deluge system, which could use up to 250,000 gallons per launch). The site is currently permitted to withdraw 1.7 million gallons of water daily from two existing groundwater wells. Camden County is in the portion of the Georgia Coast Region that does not restrict additional withdrawals from the Floridan aquifer. The confined nature and depths of the aquifers in the vicinity of the project site limits the potential for spills to migrate into these aquifers. Proposed storage of hazardous materials would not occur in any areas in or near water bodies that have a direct, known relationship with groundwater recharge nor would storage of these materials occur in the vicinity of existing groundwater wells. No significant adverse impacts to groundwater are anticipated from activities related to the operations of Spaceport Camden. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding groundwater use.

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Statute	Scope [a]	Consistency
O.C.G.A. 12-8-60 *Hazardous Waste Management*	Establishes a comprehensive, statewide program to manage hazardous wastes through regulating hazardous waste generation, transportation, storage, treatment, and disposal.	Potential impacts from hazardous materials and waste generated from the Proposed Action are analyzed in the EIS, Section 4.7, *Hazardous Materials, Solid Waste, and Pollution Prevention*. Because more than 1,320 gallons of petroleum would be stored onsite, a federally mandated Spill Prevention, Control, and Countermeasure (SPCC) Plan would be developed and implemented. The SPCC Plan would describe all oil-handling operations, spill prevention practices, discharge or drainage controls, and training requirements, as well as the personnel, equipment, and resources at the facility that would be used to prevent oil spills. Additional chemical-specific spill response plans would be developed for other hazardous materials stored onsite. Spaceport Camden would coordinate with, and obtain approval from, the State Fire Marshall regarding the onsite storage of any flammable materials (e.g., diesel, gasoline, propane). Additionally, Spaceport Camden would comply with the Emergency Planning and Community Right-to-Know Act (EPCRA) hazardous materials reporting requirements. Under EPCRA Sections 311 and 312 (Community Right-to-Know Requirements) facilities handling or storing any hazardous chemicals in excess of applicable reporting thresholds must submit Material Safety Data Sheets and annual inventory (Tier II) forms to State and local officials and local fire departments. In Georgia, the reporting threshold is 10,000 pounds for most common chemicals, with lower thresholds for chemicals identified as extremely hazardous substances (e.g., hydrazine). Georgia follows Federal hazardous waste management regulations, which allow the disposal of hazardous waste generated by conditionally exempt small-quantity generators (CESQGs) in municipal waste landfills permitted by the State (such as the Camden County construction and demolition [C&D] and Industrial Waste Landfill). The regulations governing hazardous waste management are found Georgia Administrative Code 391-3-11, Hazardous Waste Management. Generation rates for an CESQG (i.e., less than 220 pounds per month) would have a negligible impact on disposal capacity on this landfill or on other landfills in the region.

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Statute	Scope [a]	Consistency
		The County has not identified any significant adverse impacts associated with hazardous materials, solid waste, or pollution prevention. Landfill capacities would not be exceeded. There is the potential for effects to historical contamination sites. Once the land is acquired by Camden County, these potentially contaminated sites would likely be managed under the Georgia Brownfields Program. In this case, Camden County would be responsible for soil and groundwater investigations and cleanup of soil and source material to meet Georgia risk reduction standards. This would involve preparing a Corrective Action Plan, which would work like a contract for soil and source cleanup at these sites in accordance with State of Georgia requirements. In addition, Spaceport Camden would prepare and implement a Hazardous Materials Emergency Response Plan to ensure that adequate and appropriate guidance, policies, and protocols regarding hazardous material incidents and associated emergency response are available to and followed by all personnel. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding hazardous waste generation, transportation, storage, treatment, and disposal.
O.C.G.A. 12-3-70 *Heritage Trust*	Addresses preservation of certain real property in Georgia that exhibits unique natural characteristics, special historical significance, or particular recreational value.	Potential impacts to historical, architectural, archeological, and cultural resources from the Proposed Action are analyzed in the EIS, Section 4.8, *Historical, Architectural, Archeological, and Cultural Resources*. Consultation with the State Historic Preservation Officer (SHPO) is currently underway for this project and will be completed prior to project initiation. Adverse effects to architectural historic properties, identified through the Section 106 process, would arise from the changes to the audible and visual environment during operation of the spaceport through introduction of elements inconsistent primarily with the historic properties' setting. Within the project area but outside the construction zone, three components of the Floyd's Fairfield and Bellevue Plantations/Union Carbide property that are eligible for listing on the National Register of Historic Places (NRHP) could experience adverse effects from vibration related to noise from wet dress rehearsals, launch, and landing of space vehicles.

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Statute	Scope [a]	Consistency
		Should other archaeological sites be inadvertently discovered from ground-disturbing activities, the SHPO would be notified immediately and further ground-disturbing activities would cease in that area until the resources have been evaluated for NRHP eligibility. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding the archaeological and historical resources of the state. Furthermore, the SHPO will be provided the opportunity to review the EIS.
O.C.G.A. 12-3-50 *Historic Areas*	Provides the GDNR with the powers and duties to promote and increase knowledge and understanding of the history of the state. Requires promotion and assistance in publicizing historical resources.	Potential impacts to historical, architectural, archeological, and cultural resources from the Proposed Action are analyzed in the EIS, Section 4.8, *Historical, Architectural, Archeological, and Cultural Resources*. Consultation with the SHPO is currently underway for this project and will be completed prior to project initiation. Adverse effects to architectural historic properties, identified through the Section 106 process, would arise from the changes to the audible and visual environment during operation of the spaceport through introduction of elements inconsistent primarily with the historic properties' setting. Within the project area but outside the construction zone, three components of the Floyd's Fairfield and Bellevue Plantations/Union Carbide property eligible for listing on the NRHP could experience adverse effects from vibration related to noise from wet dress rehearsals, launch and spaceport landing of space vehicles. Should other archaeological sites be inadvertently discovered from ground-disturbing activities, the SHPO would be notified immediately and further ground-disturbing activities would cease in that area until the resources have been evaluated for NRHP eligibility. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding the archaeological and historical resources of the state. Furthermore, the SHPO will be provided the opportunity to review the EIS.
O.C.G.A. 12-3-90 *Natural Areas*	Authorizes the GDNR to identify areas in the state that are of unusual ecological significance, and to secure the preservation of such areas in an undisturbed	There is one state natural area located within the operational area, the Satilla River Marsh Island Natural Area. No construction-related impacts to the Satilla River Marsh Island Natural Area are anticipated that would adversely impact this river system. The river is

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
	natural state.	located more than 1 mile from proposed construction activities, and the potential for the offsite migration of sediments would be low. The Satilla River Marsh Natural Area occurs within and is surrounded by the Satilla River. As there are no anticipated adverse impacts from operation of the spaceport to surface waters (i.e., Satilla River), then there would also be no adverse impacts to the Satilla River Marsh Island Natural Area. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding natural areas.
O.C.G.A. 52-1-30 *Right of Passage*	Provides the right of use of all navigable waterways of the state by all citizens of Georgia. Establishes the mechanism to remove structures that are capable of being used as a place of habitation, are not used as or are not capable of use as a means of transportation, and do not have a permit under the act.	Temporary closures would be necessary during operation of the spaceport, but no structures would be built within navigable waterways of the state. Temporary restricted access or closures would involve securing both land and water areas. The size of the closures would vary for each operation. In general, restricted access or closures could have a potential impact on various economic activities, most notably public activities on Cumberland Island or recreational and commercial boating. Camden County and/or the launch operator would notify the public approximately one to three months prior to a launch operation that would require a closure. They would coordinate with Glenn County, State of Georgia law enforcement agencies, the USCG, and the appropriate Regional Air Route Traffic Control Center. Notices would be put out through local media and through the use of NOTMARs and NOTAMs. Camden County and/or the launch operator would also notify the City of Brunswick, the National Park Service, Crooked River State Park, the USFWS, the U.S. Navy at Naval Submarine Base Kings Bay, and other appropriate agencies of the launch operation and associated closures. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding the use of waterways.
O.C.G.A. 12-2-1 *River Corridor Protection*	Authorizes the GDNR to develop minimum standards for the protection of river corridors (and mountains, watersheds, and wetlands) that can be adopted by local governments (includes Satilla	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. Significant adverse impacts to surface waters are not anticipated from construction or operations of the

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Statute	Scope [a]	Consistency
	River and St. Marys River in Camden County).	spaceport. This would include adverse impacts to the Satilla River. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding river corridor protection.
O.C.G.A. 12-5-350 *Scenic Rivers*	Defines scenic river as rivers that have valuable scenic, recreational, or natural characteristics that should be preserved for the benefit of present and future generations.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. The closest wild and scenic river to the project is the Wekiva River in central Florida. The Satilla River is listed on the Nationwide Rivers Inventory. Significant adverse impacts to surface waters are not anticipated from construction or normal operations of the spaceport. No direct impacts are anticipated to Satilla Creek in the vicinity of the deep water dock. No modifications to the dock and no dredging activities are planned. Therefore, no adverse impacts to the Satilla River are expected. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding scenic rivers.
O.C.G.A. 31-2-7; O.C.G.A. 31-3-5.1 *Septic Tank Law*	Provides standards and regulations for individual sewage management systems to ensure that leachate from those systems does not infiltrate waters of the state.	Septic systems would be constructed at each of the four facilities to manage sanitary sewage. Commercial grade onsite sewage disposal (septic) systems would be utilized to treat the wastewater generated at each facility. Septic systems are sized based on the anticipated daily sewage flow. The anticipated flow for the launch site would be nearly 60,000 gallons per day (12,500 at the Launch Control Center Complex, 25,000 at the Alternate Control Center and Visitor Center, 2,500 at the Landing Zone, and 19,000 at the Vertical Launch Facility). Septic systems would require a construction permit from the County Health Department for the installation of an onsite sewage management system. Septic systems would be designed and constructed in accordance with the Georgia Department of Public Health, Chapter 511-3-1. In accordance with this rule: septic tanks would be installed at least 50 feet from existing or proposed wells, springs, sink holes, or suction water lines, and tanks shall be located downgrade from wells or springs if physically possible; septic tanks would be installed at least 25 feet from geothermal boreholes, lakes, ponds, streams, water courses, and other impoundments.

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Statute	Scope [a]	Consistency
		Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding sewage management systems.
O.C.G.A. 2-5-230 *Shore Protection*	Provides legal authority for the protection and management of Georgia's shoreline features including sand dunes, beaches, sandbars, and shoals, collectively known as the sand-sharing system. Limits activities in shore areas and requires a permit for certain activities and structures on the beach.	Construction and operation of Spaceport Camden is not expected to impact shoreline systems. Only in the case of an emergency would Camden County and/or the launch operator conduct ground sweeps on Cumberland Island. Spaceport security employees would be briefed on shore protection measures when conducting patrols on or near Cumberland Island. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding shore protection.
O.C.G.A. 12-8-21 *Solid Waste Management*	Regulates solid waste disposal in the state.	Potential impacts from solid waste generated from the Proposed Action are analyzed in the EIS, Section 4.7, *Hazardous Materials, Solid Waste, and Pollution Prevention*. A total of approximately 200,000 square feet of buildings space would be constructed as part of the Proposed Action, with the largest construction associated with the Vehicle Integration Building (120,000 square feet). Using conventional construction methods, approximately 4.34 pounds of C&D debris would be generated for every square foot of building space. This would equate to a total of approximately 435 tons of C&D debris generated (the product of 200,000 [square feet] multiplied by 4.34 [pounds per square feet], divided by 2,000). Building materials, such as asphalt and concrete, would not be expected to generate significant waste since they are produced in the needed quantities and can be recycled in the event that the material or its placement does not meet specifications. In the case of paved surfaces, C&D debris would likely consist mostly of wooden forms that could be recycled. Soil excavated during construction activities would be stockpiled for construction and landscaping uses, while woody debris from land-clearing activities could also be chipped or mulched onsite and used for landscaping. Other non-hazardous waste generated would be the result of construction site operations (e.g., lunch waste, office waste, packaging materials). The quantity of this type of waste would be minor, when compared to the C&D debris generated.

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Statute	Scope [a]	Consistency
		Operations would generate non-hazardous solid waste such as office waste, break room waste, packaging from supplies, and solid waste from maintenance activities that use non-hazardous materials. There would be approximately 75 full-time employees at the facility, with up to 300 staff present during launch operations. Based on an estimated generation rate of 9.2 pounds per worker per day (California Integrated Waste Management Board, 2007), the annual generation would be approximately 250 tons (assuming an average annual staff of 150 personnel). For comparison, the Camden County Municipal Solid Waste Landfill accommodates up to 400 tons per day of solid wastes; consequently, no adverse impacts would be expected. Construction and operational activities would apply pollution prevention measures to the greatest extent possible. These measures may include purchase of environmentally friendly products; recycling cardboard containers and wooden pallets; incorporating energy-efficient building design for cooling, heating, and lighting; and using alternate power sources such as photovoltaic cells. Therefore the Proposed Action would be consistent with Georgia's statutes and regulations regarding solid waste management.
O.C.G.A. 52-1-1 *Protection of Tide Waters*	Establishes the State of Georgia as the owner of the beds of all tidewaters within the state, except where title by a private party can be traced to a valid British Crown or State land grant.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. Construction and operation of the proposed spaceport have the potential to indirectly impact surface waters through potential increases in stormwater discharges from new impervious surfaces and the potential for those discharges to carry pollutants. Stormwater detention has been built into the proposed spaceport facilities and would minimize changes in stormwater runoff. Spill prevention plans would be implemented to minimize the accidental release of pollutants that could then enter stormwater runoff. The proposed Spaceport Camden would require an industrial stormwater permit in compliance with Section 402 of the CWA. This permit would include the creation of an SWPPP to control surface water runoff related to the operations of the spaceport. Therefore, the Proposed Action would be consistent

Table 6. Georgia Coastal Management Program Consistency Review

Statute	Scope [a]	Consistency
		with Georgia's statutes and regulations regarding tide waters of the state.
O.C.G.A. 12-5-20 *Water Quality Control*	Authority to ensure that water uses in the state are used prudently, are maintained or restored to a reasonable degree of purity, and are maintained in adequate supply. Regulates water quality and quantity, permit conditions and effluent limitations, and permissible limits of surface water usage.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. Potential indirect impacts from proposed construction activities could result in additional sediment loads being transported to surface waters in the vicinity of proposed construction. During construction, an SWPPP and sediment and erosion control plan would be prepared in compliance with Georgia NPDES requirements and Georgia's Erosion and Sedimentation Act of 1975. The SWPPP and sediment and erosion control plan would implement the use of management practices to prevent erosion and sedimentation. Implementation of these management practices would minimize indirect impacts, and no significant adverse impacts to surface waters would be anticipated. Operations of the proposed spaceport have the potential to indirectly impact surface waters through potential increases in stormwater discharges from new impervious surfaces and the potential for those discharges to carry pollutants. Stormwater detention has been built into the proposed spaceport facilities and would minimize changes in stormwater runoff. Spill prevention plans would be implemented to minimize the accidental release of pollutants that could then enter stormwater runoff. The proposed Spaceport Camden would require an industrial stormwater permit in compliance with Section 402 of the CWA. This permit would include the creation of an SWPPP to control surface water runoff related to the operations of the spaceport. Surface waters in the vicinity of the Vertical Launch Facility have the potential to be affected by the condensation of the vapor cloud resulting from the deluge water system. The vapor cloud resulting from the use of liquid oxygen and RP-1 propellants would consist of water only and would not contain hazardous materials. Deluge water that is not released in the vapor cloud would be captured in the retention basin at the Vertical Launch Facility. This water would be sampled and analyzed to determine if the water can be discharged under Georgia water quality standards. Should potential contaminants be present, then the water would be disposed of at an approved, offsite,

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Statute	Scope [a]	Consistency
		industrial waste facility. First stages that are dropped into the Atlantic Ocean may spill residual quantities of RP-1 and liquid oxygen. The small volume of these chemicals in a large open water environment would be anticipated to have minimal impacts. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding water quality.
O.C.G.A. 12-5-120 *Water Wells Standards*	Provides standards for siting, constructing, operating, maintaining, and abandoning wells and boreholes. Requires that individual and nonpublic wells must be located as far removed as possible from known or potential sources of pollutants.	Potential impacts to water resources from the Proposed Action are analyzed in the EIS, Section 4.14, *Water Resources*. Earth-disturbing construction activities would not occur within the vicinity of existing groundwater wells. The operation of the proposed Spaceport Camden is anticipated to annually withdraw 16.3 million gallons of water. This is based on a nominal water usage of 11,500 gallons per day with peak usage of approximately 405,000 gallons per day (peak usage would be dominated by the activation of the water deluge system, which could use up to 250,000 gallons per launch). The site is currently authorized to withdraw 1.7 million gallons of water daily from two existing groundwater wells. Camden County is in the portion of the Georgia Coast Region that does not restrict additional withdrawals from the Floridan aquifer. The confined nature and depths of the aquifers in the vicinity of the project site limits the potential for spills to migrate into these aquifers. Proposed storage of hazardous materials would not occur in any areas in or near water bodies that have a direct, known relationship with groundwater recharge nor would storage of these materials occur in the vicinity of existing groundwater wells. No significant adverse impacts to groundwater are anticipated from activities related to the operations of Spaceport Camden. Therefore, the Proposed Action would be consistent with Georgia's statutes and regulations regarding water wells.

Notes: CWA = Clean Water Act; CZMA = Coastal Zone Management Act; EIS = Environmental Impact Statement; FAA = Federal Aviation Administration; GDNR = Georgia Department of Natural Resources; NMFS = National Marine Fisheries Service; NOTAM = Notice to Airman; NOTMAR = Notice to Mariners; O.C.G.A. = Official Code of Georgia Annotated; RP = rocket propellant; USFWS = U.S. Fish and Wildlife Service; USCG = U.S. Coast Guard.

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Statute	Scope [a]	Consistency

[a] Source: Georgia Department of Natural Resources, State Laws Under Federal Consistency, available at http://www.coastalgadnr.org/msp/fedstatelaws.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION

MARK WILLIAMS
COMMISSIONER

A.G. 'SPUD' WOODWARD
DIRECTOR

The County proposes to construct and operate a commercial space launch site on approximately 400 acres of an existing 11,800-acre industrial site commonly known as the Union Carbide and Bayer CropScience site adjacent to Floyd and Todd Creeks in Camden County.

Construction:
Construction activities include four new facilities and their associated infrastructure, including a Vertical Launch Facility, Launch Control Center Complex, Alternate Control Center and Visitors Center, and a Landing Zone. Construction is anticipated to last approximately 15 months and no in-water construction activity is proposed.

Operation:
Operation activities include up to 12 wet dress rehearsals, 12 static fire engine tests, 12 vertical launches and 12 associated first stage landings per year. Security and Safety Zones, as well as closure areas, would be included as part of a Security Plan developed between the County and any launch operators. Each Plan would identify safety and security personnel for each launch operation activity and roadblocks and other security check points. Closure areas would encompass all areas – land, water and air – that could potentially be affected by debris from a launch failure and would be cleared of and then closed to the public and non-authorized personnel for up to 12 hours during vertical launches and typically up to 3 hours for wet dress rehearsals and static fire engine tests in smaller areas (typically 2 mile radius). Security Zones and associated closure areas would encompass up to approximately 100 square miles of lands, marshes, waterways, beaches, and ocean. During closures, monitoring would be done by vehicles along existing roads or by US Coast Guard boat for water areas, as well as by video surveillance placed on water or lighting towers. Camden County, the launch operator, and/or law enforcement would monitor areas east of the check points to ensure the areas remain clear.

First Stage Recovery:
Various launch vehicles available to a range of launch operators include small and medium-large lift classes using liquid propellants would launch generally to the east, over the Atlantic Intracoastal Waterway, Cumberland Island National Seashore, Little Cumberland Island, and the Atlantic Ocean with trajectories ranging from 83 to 115 degrees from true north. The first stage of the vehicles, typically measuring 10' – 14' in diameter and 125' – 175' long, would return towards the launch site from the east and be recovered at the launch site, recovered on a barge 200-300 miles offshore that would unload at the existing or would land somewhere in the water and be left in place. First stage landing would occur approximately 10 minutes after launch and will not appreciably extend closure area duration. Most launches and landings

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would occur during the day but up to one launch and landing per year could occur between 10:00 p.m. and 7:00 a.m.

Public Notification:
The public and county officials (police, fire and rescue personnel) would be notified of wet dress rehearsals, static engine tests and vertical launches one to three months in advance of the proposed date and given the expected closure area and time as well as a backup closure date and time via local media, written notices, and Notices to Mariner and Notices to Airmen. Local government and other appropriate agencies would also be notified by the County and/or launch operator of upcoming launches.

Considerations:

1. Launch vehicle propellants will be kept in storage tanks at the Vertical Launch Facility adjacent to both Todd and Floyd Creeks and tidally-influenced saltmarsh. Containment areas surrounding the fuel storage tanks and any fueling facilities must be designed to ensure adequate containment or catchment of fuel so that tidal resources would not be impacted by a fuel spill (O.C.G.A. 12-8-60 Hazardous Waste Management Act).

2. In the event that the first stage of a launch vehicle is recovered on a barge 200-300 miles offshore, the first stage may be returned to the launch site by utilizing the existing dock on Floyd Creek. Compliance inspections conducted in 2013 indicated that portions of this facility were not currently serviceable without additional maintenance or improvement. Use of this dock or any work on the dock, including maintenance, must be coordinated with Coastal Resources Division (CRD) to obtain applicable permits/permissions (O.C.G.A. 12-5-280 Coastal Marshlands Protection Act and O.C.G.A. 50-16-61 Administrative Procedures Act/Revocable License Program).

3. Launch activities that include closure areas will introduce extra or unusual hazards to the safety of observers or subject the water and adjoining upland resource to extra or unusual stress from pollution, litter or overuse and may require a Marine Event Permit. Marine Event Permits must be applied for 30-60 days in advance, depending on the number of spectators anticipated, prior to each closure (O.C.G.A. 52-7-19 Boat Safety Act).

4. Closing areas of the Atlantic Intracoastal Waterway, St. Andrews Sound, Todd Creek, Floyd Creek, Atlantic Ocean off Cumberland Island and Little Cumberland Island, and Cumberland and Little Cumberland Island beaches to recreational use for substantial portions of up to 72 days per year[1] will significantly affect local and visiting anglers, boaters and recreationalists. Avoid or minimize launch operations requiring closure areas on weekend, holidays and during organized fishing tournaments in the vicinity and post closure dates/times at all

[1] Up to 12 times per year each for wet dress rehearsals, static fire engine tests and vertical launches plus back-up dates for each

public access points within 10 miles of proposed closure areas, including public boat ramps, 30 days in advance (O.C.G.A. 12-5-320 Coastal Management Act).

5. The proposed site is directly visible from some of the most productive sea turtle nesting areas in coastal Georgia. To protect sea turtles from the adverse effects of artificial lighting, provide overall improvement in nesting habitat degraded by light pollution, and increase successful nesting activity and production of hatchlings, illumination of the sky from the subject parcel must be restricted at nighttime during the nesting season (May 1 through October 31) in the following manner for the protection of nesting females, nests, and hatchling sea turtles hatchlings:

   A. Exterior artificial light fixtures within direct line-of-sight of the beach shall be designed and oriented such that:
      (a.) Fixtures are completely shielded
      (b.) Full cut-off design
      (c.) Oriented in a downward direction

   B. The only lamps/bulbs or other light sources that may be used in exterior light fixtures include:
      (a.) Low pressure sodium (LPS, 18w, 35 w)
      (b.) Amber or red LED (greater than 580 nm)
      (c.) Turtle Safe Lighting, Inc. coated, compact fluorescent (CF) lamps (maximum 13 watts)
      (d.) True red neon
      (e.) Other lighting sources that produce light of 580 nm or longer wavelength.

   C. Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functional role(s). Motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are preferred.

   D. Only low intensity lighting shall be used in parking areas within line-of-sight of the beach, and shall be:
      (a.) Set on a base which raises the source of light no higher than 48 inches off the ground
      (b.) Positioned or shielded so that the light is cast downward and the source of light or any reflective surface of the light fixture is not visible from the beach and does not directly or indirectly illuminate the beach.
      (c.) Bulbs used in parking area fixtures must comply with section (4) a-e.

   E. Parking areas and roadways, including any paved or unpaved areas upon which motorized vehicles will park or operate, shall be designed and located to prevent vehicular headlights from directly or indirectly illuminating the beach.

F. Vehicular lighting, parking area lighting, and roadway lighting shall be shielded from the beach through the use of ground-level barriers. Ground-level barriers must not interfere with marine turtle nesting or hatchling emergence, or cause short- or long-term damage to the beach/dune system.

G. Tinted glass shall be installed on all windows and glass doors of single or multi-story structures within line-of-sight of the beach.

6. North Atlantic right whales are present in the flight path of the proposed launches between November 15th and April 15th each year. Avoid first stage landings directly into the ocean within 50 nm of the coast, restrict all vessel speeds to 10 knots or less when traveling through the North Atlantic Right Whale Critical Habitat, and equip all vessels with AIS (automatic identification system) when operating between November 15th and April 15th (O.C.G.A. 27-3-130 Endangered Wildlife Act).

7. Individual Security Plans that include motorized vehicular use or temporary structures or staging areas on the beach will require beach driving permits and/or Letters of Permission from CRD (O.C.G.A. 12-5 230 Shore Protection Act).

8. Individual Security Plans developed between the County and launch operator must be submitted to DNR Coastal Resources Division to determine if any additional plan-specific authorizations are required prior to implementation (O.C.G.A. 12-5-320 Coastal Management Act).

9. First Stages and any other launch vehicle debris landing in tidally-influenced marsh or State waters out to 3 miles must be recovered when feasible and may require authorization from CRD (O.C.G.A. O.C.G.A. 12-5 230 Shore Protection Act and/or O.C.G.A. 12-5-280 Coastal Marshlands Protection Act and/or O.C.G.A. 50-16-61 Administrative Procedures Act/Revocable License Program).

10. Notify the Program in writing of all launch operations requiring public notification so that we may assist in alerting the affected public of upcoming closures.

In response to the inputs received from the Georgia Coastal Resources Division regarding Coastal Consistency Determination considerations, the following identifies how/where the considerations have been addressed as part of NEPA analyses and associated Endangered Species Act (ESA), National Historic Preservation Act, and Clean Water Act regulations:

Consideration 1: This has been addressed under *Hazardous Materials and Waste* in Section 6.7 of the EIS.

Consideration 2: This has been addressed under *Coastal Resources* in Section 1.4.2 of the EIS.

Consideration 3: This has been addressed under *Safety* in Section 1.4.2 of the EIS.

Consideration 4: This has been addressed under Public Notification of Launch Operations in Section 2.1.2.5, Section 4.9.1.2, and Section 6.9 of the EIS.

Consideration 5: Potential impacts to nesting sea turtles and associated conservation/ mitigations measures to avoid or minimize potential adverse impacts has been addressed in the Biological Assessment (BA) coordinated with, and provided to, the USFWS as part of ESA Section 7 consultation. The BA is included in Appendix A of the EIS.

Consideration 6: Potential impacts to the North Atlantic right whales and associated conservation/mitigations measures to avoid or minimize potential adverse impacts has been addressed in the BA coordinated with, and provided to, the National Marine Fisheries Service as part of ESA Section 7/Marine Mammal Protection Act consultation. The BA is included in Appendix A of the EIS.

Consideration 7: This has been addressed under *Safety* in Section 1.4.2 of the EIS.

Consideration 8: This has been addressed under *Safety* in Section 1.4.2 of the EIS.

Consideration 9: This has been addressed under *Coastal Resources* in Section 1.4.2 of the EIS.

Consideration 10: This has been addressed under *Safety* in Section 1.4.2 of the EIS.