IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

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	Civil Action No
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COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

NATURE OF THE CASE

1. The Federal Aviation Administration ("FAA") issued a launch site operator license (the "License" or "Launch Site Operator License") authorizing Camden County (the "Applicant" or the "County") to operate Spaceport Camden, a proposed commercial spaceport that would launch rockets directly over a national seashore and populated areas. The FAA's decision to license a site where rockets would launch over people, homes, and Cumberland

Island National Seashore ("the National Seashore") is contrary to the agency's regulations for licensing launch sites and is unprecedented in the history of the United States' commercial space program.

2. In issuing this license, the FAA failed to properly evaluate the project as required by the National Environmental Policy Act ("NEPA"), Section 4(f) of the Department of Transportation Act ("Section 4(f)"), Section 106 of the National Historic Preservation Act ("Section 106"), the FAA's regulations at 14 C.F.R. Part 420 (License to Operate a Launch Site), and the enabling legislation for Cumberland Island National Seashore. When the County changed the project to focus on more failure-prone small rockets, the FAA failed to revisit its environmental review despite its own conclusion doing so is unlawful. The FAA based its review of this revised project on a non-existent rocket proposed by the County for the sole purpose of trying to satisfy the FAA's safety regulations. And even then, the FAA violated the plain language of its own regulations in issuing the License.

JURSDICTION AND VENUE

- 3. This action arises under the Commercial Space Launch Act, 51 U.S.C. § 50901 *et seq.*, NEPA, 42 U.S.C. § 4321 *et seq.*, Section 4(f), 49 U.S.C. § 303 *et seq.*, Section 106, 54 U.S.C. § 306101. *et seq.*, the enabling legislation for Cumberland Island National Seashore, 16 U.S.C. § 459i et seq., and the Administrative Procedure Act (the "APA"), 5 U.S.C. § 701–706.
- 4. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (federal question) and may issue a declaratory judgment and grant further relief pursuant to 28 U.S.C. §§ 2201–2202. Plaintiffs bring this action pursuant to the APA. 5 U.S.C. § 702.
- 5. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(e)(1)(A),(B), and (C). A substantial part of the events and omissions giving rise to this Complaint

occurred in this judicial district, Plaintiff National Parks Conservation Association is a resident of this district, and the Defendants are residents of this district.

PARTIES AND STANDING

The Conservation Group Plaintiffs

- 6. Plaintiff National Parks Conservation Association is a nonprofit organization dedicated to protecting and enhancing America's National Park System for present and future generations. National Parks Conservation Association has 1.6 million members and supporters across the country. National Parks Conservation Association's principal place of business is located in Washington, D.C.
- 7. National Parks Conservation Association believes that the shortcomings in the FAA's review of Spaceport Camden and its decision to issue the License has harmed and will continue to harm its organizational interests and the interests of its members. This harm includes impeding access to the National Seashore and limiting recreational opportunities there, exposing visitors to risk of injury or death, and jeopardizing the historic and natural resources found on Cumberland Island. National Parks Conservation Association and its members believe their use and enjoyment of Cumberland Island and the surrounding areas will be diminished as a result of the FAA's decision to issue the License.
- 8. National Parks Conservation Association relies on information and access to the National Seashore to conduct its organizational activities, including member outreach and events. As recently as 2019, National Parks Conservation Association conducted a group outing for key donors and supporters on Cumberland Island. This trip required extensive scheduling and advance planning. National Parks Conservation Association would like to conduct similar trips in the future, but believes that the lack of information regarding Spaceport Camden's operations

and the potential access restrictions required for its operation will make it more difficult to conduct trips like this in the future.

- 9. National Parks Conservation Association also has members and staff that visit, recreate, use, and enjoy the National Seashore and surrounding areas. These members and staff intend to continue using this area in the future, but believe their use and enjoyment of the area, including the northern part of Cumberland Island and the adjacent marsh, will be diminished. Plaintiff and its members believe that these concerns would be addressed by a favorable resolution of this suit.
- 10. One member of National Parks Conservation Association has lived on Cumberland Island for over four decades. Her home is on the northern end of the Island and one of the few private residences on the Island. It is located directly under the proposed flightpath of launches from Spaceport Camden. She has advocated for the preservation of Cumberland Island, its diverse ecosystems, and its ecological value for decades. She participates in a variety of scientific research regarding sea turtles and other species on the Island. She also recognizes and values the importance of the Island's wilderness character, and that people come to Cumberland for a respite from the over-developed mainland. She is concerned Spaceport Camden and the License will result in damage to her property; the historical hazardous waste at the launch site; landowner and visitor access; safety within the "limited access area;" noise and light impacts; harm to wildlife and habitat; impairment of wilderness values; and catastrophic rocket failures. She is also concerned that Spaceport Camden and the License will have a negative impact on the health of the salt marsh in the area. She fears that rocket failures and the resulting cleanup will damage the marsh. She also fears that damage that will occur during normal operations because publicly-owned salt marsh is contained in the site's debris dispersion area.

- Washington, D.C. but has a family house in coastal Georgia. She has visited Cumberland Island at least eight times and has boated extensively in the area. Among other areas, she has boated in the Intracoastal Waterway along Cumberland Island and in Christmas Creek. She has participated in right whale, shorebird, and sea turtle research on Cumberland Island, Little Cumberland Island, and surrounding waterways. She is concerned that Spaceport Camden and the License will have a negative effect on Cumberland Island and its natural resources. She fears that Spaceport Camden and the License will make it more difficult for visitors like her to visit and enjoy the island. Now that she lives elsewhere, visiting Cumberland Island requires extensive advance planning that will be thwarted due to the planned access restrictions. She plans to visit Cumberland Island with her children in the near future, potentially during a planned visit to coastal Georgia in August 2022.
- 12. Plaintiff One Hundred Miles is a nonprofit organization focused on protecting and preserving Georgia's 100-mile coast. One Hundred Miles' advocacy and education teams work hand-in-hand with its members and public to ensure that they have the knowledge and tools to make their voices heard for the coast they love. One Hundred Miles' principal place of business is located in Brunswick, Georgia.
- 13. One Hundred Miles believes that the shortcomings in the FAA's review of Spaceport Camden and its decision to issue the License has harmed and will continue to harm its organizational interests and the interests of its members. This harm includes impeding access to the National Seashore and limiting recreational opportunities there, exposing visitors to risk of injury or death, jeopardizing the historic and natural resources found on Cumberland Island, and risk of damage to coastal marsh areas. One Hundred Miles and its members believe their

use and enjoyment of Cumberland Island and the surrounding areas will be diminished as a result of the FAA's decision.

- 14. One Hundred Miles also relies on information and access to the National Seashore to conduct its organizational activities, including member outreach and events. Plaintiff One Hundred Miles has conducted a group outing for key donors and supporters on Cumberland Island. These trips require extensive scheduling and advance planning. Plaintiff One Hundred Miles plans to conduct similar trips in the future, believes that the lack of information regarding Spaceport Camden's operations and the potential access restrictions required for its operation will make it more difficult to conduct trips like this in the future. The lack of information regarding Spaceport Camden and the License also prevents One Hundred Miles from providing its members with complete information regarding the project and how it will affect Georgia's coastal resources.
- 15. One Hundred Miles also has members and staff that visit, recreate, use, and enjoy the National Seashore and surrounding areas. These members and staff intend to continue using this area in the future, but believe their use and enjoyment of the area, including the northern part of Cumberland Island and the adjacent marsh, will be diminished. Plaintiff and its members believe that these concerns would be addressed by a favorable resolution of this suit.
- 16. One member of One Hundred Miles lives in St. Marys, Georgia. He owns a historic home and rents out rooms to guests. Almost every guest is traveling to or from Cumberland Island. He also has a captain's license and offers chartered boat trips to Cumberland Island. He is currently upgrading the boat to allow for easier access to more remote portions of the Island. He is concerned restrictions on access to Cumberland Island, or even uncertainty around access, will cause guests to cancel their reservations and will negatively affect his rental

and boat charter businesses. He has these same concerns for access restrictions on the Intracoastal Waterway.

- 17. Another member of One Hundred Miles retired to St. Marys, Georgia because of her love for the treasure that is Cumberland Island. She has visited Cumberland Island nearly twenty times in the last several years. She values its ecological, historical, and architectural resources as well as the mental health benefits of visitation to green spaces. She has traveled up the trail to the northern end of the Island in the morning and come down the beach on the way back. One of her concerns with Spaceport Camden is the recurring closures of waterways and portions of Cumberland Island, and the impacts these restrictions will have on her access and travel plans. She would hate to lose the ability to plan her trips and experiences on the Island in advance. She also has concerns that Spaceport Camden will negatively affect the remote and undisturbed experience of Cumberland Island, because there are not many places left without paved roads and cell phones.
- 18. Collectively, Plaintiffs National Parks Conservation Association and One Hundred Miles are referred to herein as the "Conservation Group Plaintiffs."

The Homeowner Plaintiffs

19. Plaintiff Little Cumberland Island Homes Association, Inc. ("LCIHA") was formed in 1965 with the primary purpose that Little Cumberland Island be "maintained in its natural state, including wildlife preservation," with provision for shareholders to build homes that must preserve the Island in as close to a natural state as possible. LCIHA's shareholders are the owners of 100 residential lots on Little Cumberland Island. Forty-three lots have private homes and fifty-seven lots have been left in their natural state. LCIHA owns the remaining property on Little Cumberland Island as common area for its shareholders.

- 20. LCIHA is responsible for ensuring that Little Cumberland Island remains in its natural state. If any conflict arises between a shareholder's use of Little Cumberland Island and the conservation of the Island's natural state, the natural state of the Island controls.
- 21. When Congress established Cumberland Island National Seashore, it included Little Cumberland Island within its boundaries. In 1975, LCIHA entered an Agreement with the United States governing the management of Little Cumberland Island. This agreement acknowledged that LCIHA has the primary right and obligation for preservation of the Island.
- 22. Little Cumberland Island is approximately three miles long and is immediately north of Cumberland Island, separated by a tidal creek named Christmas Creek. It is bordered by the Atlantic Ocean on the east, the Intracoastal Waterway on the west, and St. Andrews Sound to the north. The Little Cumberland Island Lighthouse was built in the 1800s to guide ships across St. Andrew's Sound and is listed in the National Register of Historic Places.
- 23. Little Cumberland Island is accessible by boat using a dock maintained by LCIHA in Shell Creek, a tidal creek off the Cumberland River/Intracoastal Waterway. The interior of Little Cumberland Island is primarily prehistoric sand dune ridges with occasional ephemeral, freshwater sloughs. Maritime oak and pine forest dominates the tree canopy, with a saw palmetto understory. Unlike most other Georgia barrier islands, Little Cumberland Island was never subjected to intensive agricultural activities, so the ecosystem is relatively undisturbed. LCIHA's shareholders use Little Cumberland Island for its aesthetic, ecological, historic, and recreational values, and its primitive character. These will all be lessened by the FAA's license to operate a launch site at Spaceport Camden.
- 24. LCIHA shareholders enjoy the Island's dark skies for viewing planets and stars, but this activity will be impaired by light from the Spaceport's operation. The Final EIS states

launch pad light towers would "rise above the surrounding forest" and be visible from Cumberland Island National Seashore. Final EIS at 4-33. The Final EIS recognized that Spaceport Camden "would introduce light emissions into an area that is dark and part of a valued viewshed for the Cumberland Island National Seashore." Final EIS at 4-34. Light from these towers and noise and light from rocket launches will impair the primitive character, solitude, and unimpaired natural resources of Little Cumberland Island that are valued by LCIHA's shareholders.

- 25. The FAA's failure to consider reasonably foreseeable impacts associated with operating a launch site, and the agency's consequent uninformed decision, increased the risk of harm to LCIHA and its shareholders. LCIHA and its shareholders believe that the shortcomings in the FAA's review of Spaceport Camden and its decision to issue the License has harmed and will continue to harm their interests. The FAA's issuance of the License for Spaceport Camden and the prospect of unprecedented overflight of residences and people on Little Cumberland Island have had material negative impacts on LCIHA and its shareholders.
- 26. Spaceport Camden's operations, as described in the Final EIS, present conflicts with LCIHA's rights and obligations under the 1975 Agreement with the United States.

 LCIHA's shareholders are concerned about the increased risk of fire from a launch failure over Little Cumberland Island. The LCIHA Board of Directors has determined that it would likely be impossible to protect the natural environment of Little Cumberland Island and the homes of its shareholders if a rocket launch failure occurs over the Island. The prospect of rockets being launched from Spaceport Camden over the Cumberland Island National Seashore has resulted in a material negative impact on the value of property owned by LCIHA and its shareholders.

 LCIHA's shareholders are concerned that their rights to use and enjoy their properties and the

common property owned by LCIHA will be restricted by requirements that shareholders preregister their visits and proceed through law enforcement monitored checkpoints to reach Little
Cumberland Island. The Final EIS indicates that the entirety of Little Cumberland Island and the
surrounding waters would be within hazard areas that will be off-limits to the public, yet the
Applicant has determined that Little Cumberland Island owners and their family members and
guests will be treated differently than the public and subjected to unprecedented risks of being
launched over.

LCIHA has sole responsibility for maintenance of the buildings and infrastructure 27. on the Island, a task made more challenging by the Island's lack of road access to the mainland, the limited boat access, and the few motorized vehicles. Wildfires pose a constant and substantial risk to both the homes and natural resources on the Island. Lightning strikes occasionally trigger wildfires on the island, and the dense vegetation allows these first to spread quickly. To address this threat, LCIHA maintains and operates limited fire suppression equipment and tools on the Island. The equipment available includes two portable water tanks, water spraying backpacks, rakes, fire flaps and tools to create fire breaks. These water tanks and backpacks are filled from wells on the island. These fire suppression resources have proven adequate in the past to extinguish or control fires resulting from the infrequent lightning strikes or other natural sources, but LCIHA wouldn't be able to extinguish multi-point fires ignited by launch failures if debris landed in more than one or two locations. LCIHA's Board and shareholders are especially concerned about a launch vehicle causing a catastrophic fire because the palmetto understory burns hot and fast. The Island is inaccessible two hours before and after each low tide, so LCIHA's Board and shareholders are worried that firefighting assistance from the government would be irreparably delayed.

- 28. Despite LCIHA raising these concerns about fire to the FAA in its comments to the Draft EIS and Final EIS, the FAA failed to address these concerns and instead issued the Record of Decision and the License. The FAA's issuance of the License over the objections and concerns of LCIHA has adversely impacted LCIHA and its shareholder property owners.
- 29. Twice Plaintiff LCIHA undertook the cost and expense of traveling to Washington, D.C. to meet with staff from the FAA's Office of Commercial Space

 Transportation. These trips were made in an effort to obtain information related to Spaceport

 Camden's safety and potential risks because this information was not contained in the Draft EIS.
- 30. Harm to LCIHA and its shareholders would be redressed by setting aside the FAA decisions and the License, and requiring the FAA to undertake a hard look at the impacts of and feasible alternatives to Spaceport Camden.
- 31. Plaintiff Caretta Foundation, Inc. ("Caretta Foundation"), is 501(c)(3) non-profit corporation founded by members of the Little Cumberland Island community to support coastal research and conservation efforts. Caretta Foundation's operations are governed by a Board of Directors charged with carrying out its mission of supporting research and conservation initiatives that impact coastal resources. Most of Caretta Foundation's research and conservation projects have focused on Little Cumberland Island but there is no formal affiliation between LCIHA and Caretta Foundation.
- 32. The Caretta Foundation manages the Little Cumberland Island Sea Turtle Project, the longest running loggerhead sea turtle research project in the world. Other research projects operated and managed by the Caretta Foundation include research related to coastal geology, ornithology, and archeology.

- 33. Caretta Foundation and its volunteers derive enjoyment from undertaking research within the Little Cumberland Island's undisturbed ecosystem, and enjoy the Island's aesthetic, ecological, and scientific values. These will all be lessened by the FAA's License to operate a launch site at Spaceport Camden.
- 34. Access restrictions during launches will impair Caretta Foundation's research. Caretta Foundation is concerned that shortcomings in the FAA's review of Spaceport Camden and its decision to issue the License has harmed and will continue to harm its interests. The Final EIS describes restrictions on visitation to Little Cumberland Island and Cumberland Island that will adversely affect researchers' ability to complete their projects and will threaten their safety during launch events. Further, Caretta Foundation is concerned that a launch failure will impact loggerhead sea turtles and shorebirds, and the habitat they rely upon. The Caretta Foundation's mission and purpose is put at direct risk because of the FAA's issuance of the License.
- 35. Caretta Foundation is concerned about harm to wildlife and habitat caused by the light towers from operating Spaceport Camden. Turtles are especially sensitive to lights during nesting season. Caretta Foundation is concerned that the light towers above the forest canopy on a site that is currently dark will interfere with the nesting and viability of turtles.
- 36. The FAA's failure to properly analyze how operating Spaceport Camden will impact Little Cumberland Island and other parts of Cumberland Island National Seashore greatly impairs Caretta Foundation's interest in protecting coastal resources.
- 37. Harm to Caretta Foundation would be redressed by setting aside the FAA's decisions and the License, and requiring the FAA to undertake a hard look at the impacts of and feasible alternatives to Spaceport Camden

38. Collectively, Little Cumberland Island Homes Association, Inc. and Caretta Foundation, Inc. are referred to herein as "the Homeowner Plaintiffs."

Defendants

- 39. Defendant Federal Aviation Administration is an agency of the United States and is responsible for compliance with federal law for its civil works projects. The FAA's Office of Commercial Space Transportation is a branch of the Federal Aviation Administration and is located at 800 Independence Avenue SW, Room 331, Washington, DC 20591.
- 40. The FAA's Office of Commercial Space Transportation's responsibilities include licensing commercial space projects, including the License at issue in this suit.
- 41. Defendant Daniel Murray is the Executive Director of the Office of Operational Safety in the Office of Commercial Spaceport Transportation. Mr. Murray signed the Record of Decision and the Final Environmental Impact Statement prepared on behalf of the FAA for Spaceport Camden. Mr. Murray also signed the Section 106 Programmatic Agreement entered by the Federal Aviation Administration regarding Spaceport Camden. Mr. Murray's principal place of business is 800 Independence Avenue SW, Room 331, Washington, D.C., 20591. Mr. Murray is sued in his official capacity.
- 42. Defendant James Repcheck is a Manager in the Safety Authorization Division of the FAA's Office of Commercial Space Transportation. Mr. Repcheck signed the License on behalf of the FAA. Mr. Repcheck's principal place of business is in the FAA's Office of Commercial Space Transportation at 800 Independence Avenue SW, Room 331, Washington, DC 20591. Mr. Repcheck is sued in his official capacity.
- 43. The FAA and Defendants Murray and Repcheck shall be referred to herein as the "FAA."

CUMBERLAND ISLAND NATIONAL SEASHORE AND LITTLE CUMBERLAND ISLAND

- 44. The Spaceport Camden site would be located inland from Cumberland Island. Cumberland Island is a seventeen-mile-long barrier island on the southern end of the Georgia coast. The National Seashore's beach is among the largest undeveloped beaches on the Atlantic Seaboard. Moving inland, sand dunes line much of the eastern side of the Island. In the center of the Island, upland areas are covered with thick vegetation including live oak and pine trees with saw palmetto understory. On its western side, the National Seashore includes large expanses of coastal marsh, creeks, and shellfish beds. This combination of different, and largely undisturbed, habitats make the National Seashore home to a variety of rare species including migratory birds and sea turtles. These same features make the National Seashore an appealing destination and draw nearly 60,000 visitors to the park every year. The National Seashore an environmental and recreational treasure.
- 45. Cumberland Island is not only one of the largest and most ecologically diverse barrier islands on the Atlantic coast, but also one of the few protected as part of the federal park system. The National Seashore was created by Congress in 1972 to "provide for public outdoor recreation use and enjoyment of certain significant shoreline lands and waters of the United States, and to preserve related scenic, scientific, and historical values." 16 U.S.C. § 459i. Except for certain areas reserved for recreation, Congress decreed that "the seashore shall be permanently preserved in its primitive state." 16 U.S.C. § 459i-5(b). Congress added additional protections to portions of Cumberland Island by designating them as part of the Federal Wilderness Preservation System under the Federal Wilderness Act. Public Law 97-250 (96 Stat. 709) (September 8, 1982) and 16 U.S.C. 1131 et seq. In total, approximately 56% of the upland and marsh in the National Seashore is designated as wilderness under the Wilderness Act.

- 46. Cumberland Island National Seashore is managed by the National Park Service as a unit of the National Park System. The National Seashore includes Little Cumberland Island and Cumberland Island, and contains over 50 miles of trails and 18 miles of pristine, undeveloped beaches. Outdoor recreational opportunities include camping, hiking, biking, fishing, birdwatching, and beachcombing. The National Park Service operates facilities on the island including the Sea Camp Ranger Station, the Ice House Museum, the Dungeness Ruins, five campgrounds, the remains of Robert Stafford's plantation and cemetery, Plum Orchard Mansion, Cumberland Wharf, the Settlement, and First African Baptist Church.
- 47. There are no roads or bridges connecting Cumberland Island to the mainland, so the island is only accessible boat or airplane. Final EIS at 3-38.
- 48. Cumberland Island includes several historic districts and sites listed in the National Register of Historic Places. The High Point-Half Moon Bluff Historic District is located on the northern end of the island, under the proposed rocket flight path and is listed in the National Register of Historic Places. The High Point-Half Moon Bluff Historic District includes a variety of wood frame buildings used by African American inhabitants of the Island including former homes and the First African Baptist Church.
- 49. The National Park Service prepares a variety of documents to guide its management of the National Seashore. These include a "foundation document" prepared for every unit of the national park system, a Fire Management Plan, and a Transportation

Management Plan.¹ The National Park Service conducted NEPA review of these documents before they were adopted.²

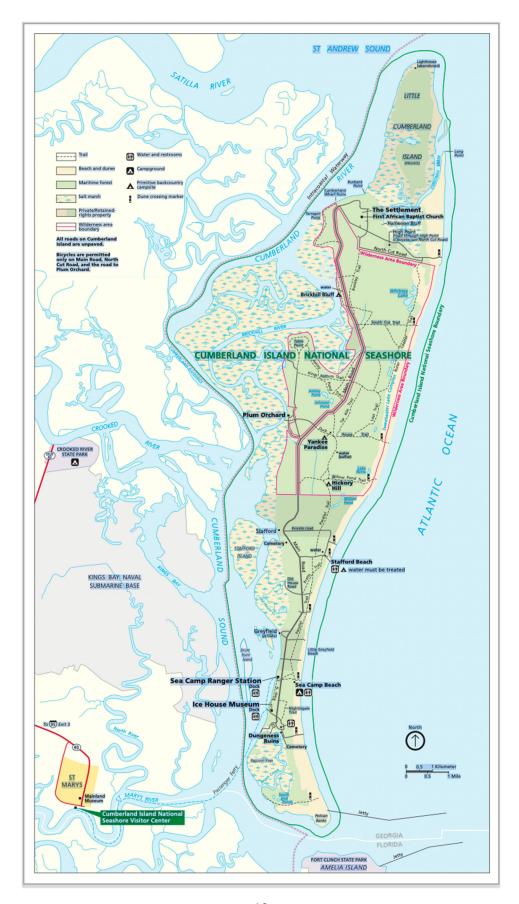
- 50. Like Cumberland Island, the interior of Little Cumberland Island is composed primarily of prehistoric sand dune ridges, occasionally interspersed by ephemeral, freshwater sloughs. Maritime oak and pine forest dominates the tree canopy, and the understory is primarily saw palmetto. Unlike most other Georgia barrier islands, Little Cumberland Island was never subjected to intensive agricultural activities (e.g., indigo, rice, or cotton) during its history, thus contributing to its current, relatively undisturbed, ecology. Little Cumberland Island and Cumberland Island National Seashore are designated as a United Nations-sanctioned "International Biosphere Reserve."
- 51. Little Cumberland Island and the National Seashore are important waypoints for migratory birds, including such long-distance migrants as red knots, whimbrels, and long-billed curlews. Threatened and endangered species that nest on Little Cumberland Island include least terns, Wilson's plovers, and occasional American oystercatchers. Migratory shorebird species that winter on Little Cumberland Island include piping plovers. Little Cumberland Island is typically home to three nesting pairs of bald eagles. In 2016, Little Cumberland Island was designated a part of the 100th "Landscape of Hemispheric Importance" for shorebirds by the Western Hemisphere Shorebird Reserve Network and is also recognized as part of an Audubon Society sanctioned "Important Bird Area."
- 52. The Little Cumberland Island Lighthouse was built in 1838 and was maintained and operated by lighthouse keepers and assistant keepers until 1915. Its purpose was to guide

¹ Cumberland Island National Seashore Management Documents. National Park Service https://www.nps.gov/cuis/learn/management/cumberland-island-management-documents.htm (visited Feb. 3, 2022).

² *Id*.

ships over the constantly changing St. Andrew's Sound. LCIHA has done several major renovation and maintenance projects throughout the years, most recently in 2015. The lighthouse is listed on the National Register of Historic Places.

53. The map below shows Cumberland Island and Little Cumberland Island and accurately reflects the boundaries of Cumberland Island National Seashore:



FEDERAL STATUTORY AND REGULATORY BACKGROUND

The FAA and the Commercial Space Launch Act

- 54. The Launch Site Operator License, LSO 21-020, was issued under the Commercial Space Launch Act, 51 U.S.C. § 50901 *et seq.*, and its regulations found in 14 C.F.R. Part 420 (License to Operate a Launch Site). The License authorizes the operation of the Spaceport Camden launch site. 14 C.F.R. § 420.41. Individual rocket launches will require a separate license under other Parts of the FAA's Title 14 Subchapter C (Licensing) regulations. The Commercial Space Launch Act directs that efforts to promote and encourage commercial space transportation must be balanced with the need to "protect the public health and safety, safety of property, and national security and foreign policy interests of the United States." 51 U.S.C. § 50901.
- 55. The FAA requires separate licenses for operating spaceport sites and launching individual rockets. The License at issue in this case is a "launch site operator license" issued under 14 C.F.R. Part 420 and authorizes the operation of the spaceport site itself. The County has not applied for, and the FAA has not issued any "launch licenses" for Spaceport Camden.
- 56. FAA regulations define "launch vehicle" as a vehicle built to operate in, or place a payload in, outer space or a suborbital rocket. 14 C.F.R. § 401.5.3 Launch vehicles are further classified by characteristics including: weight class (small, medium, large); whether it is expendable or reusable; whether the launches would be orbital or suborbital; and whether it would be guided or unguided. 14 C.F.R. § 420.19(a)(2). The FAA's licensing requirements differ depending on the characteristics of the launch vehicle. *Passim*, 14 C.F.R. Part 420.

³ Thus, the term "launch vehicle" encompasses a range of technologies including rockets and reusable aircraft like the Space Shuttle. For simplicity and clarity, this Complaint will use the terms "launch vehicle" and "rocket" interchangeably.

- 57. A central component of the FAA's review of new spaceports under its Part 420 regulations is the "Launch Site Location Review," which is intended "to avoid the development of launch sites that can never support launches due to the proximity of population." *Licensing and Safety Requirements for Operation of a Launch Site*, 65 Fed. Reg. 62812, 62831 (Oct. 19, 2000). Accordingly, applicants must demonstrate that "at least one" launch vehicle can be safely launched from the site. 14 C.F.R. § 420.19. If the applicant intends to launch more than one type of launch vehicle, it must demonstrate that each type can be safely launched from the site. *Id.* at § 420.19 (b) and (c).
- 58. A site is considered safe if the applicant can demonstrate that the risk from launching a rocket would not be expected to exceed one in 10,000 casualties to the collective members of the public exposed to hazards from each flight. *Id.* at § 420.19(a)(1).
- 59. The Launch Site Location Review relies on a geographic area called the "flight corridor" to evaluate the safety of planned launches from a site. *Id.* at § 420.23(a). The flight corridor is the geographic area needed to contain the hazardous debris from launches, both when the launch performs as planned or if it fails in some respect. *Id.* at § 420.5. The flight corridor will be different based on the details of a launch vehicle and the planned launch. *Id.* at § 420.23(a)(3).
- 60. One critical component of the flight corridor is the Overflight Exclusion Zone ("OEZ"). The OEZ is the portion of the flight corridor where the risk of casualty would be expected to exceed one in 10,000 per launch if a single person is present in the area. *Id.* at § 420.23(a)(2). The OEZ is the area within the flight corridor where the risk to the public is the greatest. Given that a single person in the OEZ would exceed the FAA's risk threshold for

human casualties, FAA regulations require that the OEZ remain clear of the public during launches. *Id.* at §§ 420.5 and 420.27(j).

- 61. Another element of the FAA's Launch Site Location Review is the site boundary. *Id.* at § 420.21. FAA regulations require a minimum distance between the launch point and the launch site boundary, and this distance must be "at least as great as the debris dispersion radius of the largest launch vehicle type and weight class proposed for the launch point." *Id.* at § 420.21(a). "Debris dispersion radius" is defined as "the estimated maximum distance from a launch point that debris travels given a worst-case launch vehicle failure and flight termination early in flight." *Id.* at § 420.5. The FAA has defined the "debris dispersion radius" for small class, orbital, expendable launch vehicles as 7,300 feet. *Id.* at § 420.21(b) and Table 2.
- 62. FAA regulations impose additional requirements for the launch of "unproven launch vehicles." "An applicant for a license to operate a launch site for an unproven launch vehicle shall provide a *clear and convincing* demonstration that its proposed launch site location provides an equivalent level of safety" to the requirements in 14 C.F.R. Part 420. *Id.* at § 420.29 (emphasis added). This heightened review of unproven launch vehicles is necessary because:

Historically, the flights of new vehicles have demonstrated failure rates much higher than design analyses indicated.

. . .

A launch site that is safe for proven launch vehicles may not be safe for new vehicles. The probability of failure is likely to be higher, and the risk to populated areas may increase significantly.

Licensing and Safety Requirements for Operation of a Launch Site, 65 Fed. Reg. 62812, 62831 and 62840 (Oct. 19, 2000). The FAA has expressly declined to define what constitutes an "unproven" vehicle for purposes of this regulation, and instead makes this determination "on a case-by-case basis based on the facts available." *Id.* at 62831.

- 63. Each Part 420 requirement applies unless an applicant "clearly and convincingly demonstrates that an alternative approach provides an equivalent level of safety" to those requirements. 14 C.F.R. § 420.1(b). Equivalent level of safety is "an approximately equal level of safety as determined by qualitative or quantitative means." *Id.* at § 401.5.
- 64. The FAA must include an "equivalent level of safety determination" as part of any license issued under this provision. *Updates to Rulemaking and Waiver Procedures and Expansion of the Equivalent Level of Safety Option*, 83 Fed. Reg. 28528, 28531 (June 20, 2018).
- 65. The FAA's Office of Commercial Space Transportation operates with a financial incentive to increase the perceived demand for spaceport sites and launch licenses. According to the Government Accountability Office:

FAA's budget requests for its commercial space launch activities generally have been based on the number of projected launches. However, in recent years, the actual number of launches has been much lower than the projections.

Commercial Space Launch Industry Developments Present Multiple Challenges, United States Government Accountability Office, GAO-15-706, Report to the Chairman, Committee on Science, Space and Technology, House of Representatives (August 2015).⁴

National Environmental Policy Act

66. NEPA declared a broad national commitment to protecting environmental quality and directed agencies to consider how to: preserve historic, cultural, and natural resources; avoid risk to health or safety; and prevent other undesirable or unintended consequences. 42 U.S.C. § 4331.

⁴ https://www.gao.gov/assets/gao-15-706.pdf (Visited May 15, 2022).

- 67. NEPA requires federal agencies to take a "hard look" at all reasonably foreseeable impacts before taking action that may significantly affect the environment. 42 U.S.C. § 4332(C)(2).
- 68. To implement NEPA, the Council on Environmental Quality ("CEQ") promulgated regulations binding on all federal agencies. 40 C.F.R. §§ 1500–1508 (1978); 40 C.F.R. § 1500.3.⁵ The FAA adopted Order 1050.1F to implement and supplement the CEQ's NEPA regulations and "to ensure agency compliance with the National Environmental Policy Act." FAA Order 1050.1F at 1-1.
- 69. Agencies must prepare a "detailed" and thorough Environmental Impact Statement ("EIS") before undertaking any major action that would significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C). "Human environment' shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment." 40 C.F.R. § 1508.14.
- 70. Agencies must "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action. 40 C.F.R. § 1502.14. The alternatives analysis must consider direct, indirect, and cumulative effects. *Id.* §§ 1502.16 and 1508.7 (1978). Direct effects are the effects "caused by the action and occur at the same time and place." *Id.* § 1508.8(a) (1978). In contrast, indirect effects "are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable." *Id.* § 1508.8(b) (1978).

⁵ In July 2020, CEQ promulgated new NEPA regulations applicable to "any NEPA process begun after September 14, 2020." 40 C.F.R. § 1506.13 (2020). For any ongoing activities or environmental documents begun before September 14, 2020, agencies can apply either the 1978 or 2020 CEQ NEPA regulations. *Id.* Spaceport Camden's NEPA review was initiated prior to September 2020, and the FAA elected to apply the 1978 regulations. Record of Decision at n. 1.

Cumulative effects are "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." *Id.* § 1508.7 (1978).

- 71. Agencies must provide public officials and citizens with "high quality" information about reasonably foreseeable environmental impacts and reasonable alternatives "before decisions are made." *Id.* at §§ 1500.1(b) and 1502.14 (1978).
- 72. Agencies must "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." *Id.* at § 1502.24 (1978). "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." *Id.* at § 1500.1(b) (1978).
- 73. "Diligent efforts" must be made to involve the public during the NEPA process, including providing notice and opportunity to comment when there are "substantial changes" in the proposed action, or "significant new circumstances or information" related to the proposed action or its impacts. 40 C.F.R. §§ 1502.9(c), 1506.6 (a) and (d) (1978).
- 74. Agencies must consider reasonably foreseeable effects "which have catastrophic consequences, even if their probability of occurrence is low." *Id.* at § 1502.22 (1978).
- 75. The analysis of environmental effects must also include practicable means to avoid or minimize environmental harm from the proposed action. *Id.* § 1505.2(c) (1978). Mitigation measures must be discussed in sufficient detail to evaluate their effectiveness and ensure that environmental consequences have been fully evaluated.

Section 4(f)

76. Section 4(f) of the Department of Transportation Act of 1966 requires the FAA to take "special effort... to preserve the natural beauty of the countryside and public park and

recreation lands, wildlife and waterfowl refuges, and historic sites." 49 U.S.C. § 303(a). ⁶ The Secretary of Transportation, through the FAA, must "cooperate and consult" with relevant entities to ensure that transportation projects "include measures to maintain or enhance the natural beauty of the lands traversed." *Id.* at (b).

- 77. Section 4(f) prohibits the "use" of public parks, recreation areas, and historic sites by transportation projects unless: (1) there are no prudent and feasible alternatives, and (2) all possible planning is done to minimize harm to the 4(f) properties. *Id.* at § 303(c).
- 78. The FAA treats the Federal Highway Administration's Section 4(f) regulations, 23 C.F.R. Part 774, as guidance to the extent relevant to aviation. FAA Order 1050.1F at B-2.⁷
- 79. The Federal Highway Administration regulations define Section 4(f) "use" in three ways: direct; temporary; and constructive use. 23 C.F.R. § 774.17. Direct use occurs when property is permanently incorporated into the project. *Id.* Temporary use occurs when the project requires temporary occupancy of land that is adverse in terms of the statute's preservation purpose. *Id.* Constructive use occurs when a transportation project does not physically incorporate the Section 4(f) property, but substantially impairs its protected activities, features, or attributes. *Id.* at § 774.15(a). A constructive use determination must be made based on consideration of the "activities, features, or attributes" which qualify the Section 4(f) property for protection, and only after consultation with the official with jurisdiction over the property. *Id.* at (d). Certain circumstances are presumptively deemed to constitute constructive use if they

⁶ These provisions, found at both 23 U.S.C. § 138 and 49 U.S.C. § 303, were originally enacted as Section 4(f) of the Department of Transportation Act of 1966 and are still commonly referred to as "Section 4(f)."

⁷ Available at https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/5-dot-act-section4f.pdf (visited May 19, 2022).

substantially impair use of the property, including: noise; impairment of aesthetic features or attributes; access restrictions; vibration; and ecological intrusions. *Id.* at (e).

80. The Federal Highway Administration regulations require the potential for Section 4(f) use to be evaluated "as early as practicable in the development of the action when alternatives to the proposed action are under study." *Id.* at § 774.9(a).

National Historic Preservation Act

- 81. Section 106 of the National Historic Preservation Act requires federal agencies to consider the impact of their actions on historic, archeological, and cultural resources. 54 U.S.C. § 306108.8 The Advisory Council on Historic Preservation ("Advisory Council") promulgated regulations that guide federal agencies and public participants in the Section 106 process. 54 U.S.C. § 304108 and 36 C.F.R. Part 800.
- 82. Section 106 requires agencies to identify whether an undertaking has the potential to cause adverse effects on historic properties. The first step in this analysis is to identify an undertaking's area of potential effect and any historic resources located in that area. 36 C.F.R. §§ 800.3 and 800.4. If historic resources in that area may be adversely affected, the agency must identify "alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties." *Id.* at §§ 800.5 and 800.6. Throughout this process, the federal agency must consult with other interested parties, including the relevant state historic preservation office and the public. *Id.* at § 800.3 *et seq.*
- 83. "The views of the public are essential to informed Federal decisionmaking in the section 106 process." *Id.* at § 800.2(d). Agencies "shall seek and consider the views of the public," as well as "the likely interest of the public in the effects on historic properties." *Id.*

⁸ In 2014, the Act was moved from Title 16 of the U.S. Code to Title 54 without substantive changes.

Agencies must "provide the public with information about an undertaking and its effects on historic properties and seek public comment and input." *Id.* at § 800.2(d)(2).

- 84. Agencies are directed to coordinate their review under Section 106 and NEPA, and to perform their Section 106 review "as early as possible" in the NEPA process. *Id.* at § 800.8(a)(1). Agencies are encouraged to coordinate their public engagement under both statutes, but they can only rely on NEPA public engagement to fulfill Section 106's requirements "if they provide adequate opportunities for public involvement consistent with" the Section 106 regulations. *Id.* at § 800.2(d)(3). Section 106 does not exempt agencies from any NEPA requirement. 54 U.S.C. § 306111(b).
- 85. Section 106 allows agencies to use a "programmatic agreement" to resolve potential adverse effects to historic properties that are unresolved because they result from complex projects or multiple undertakings. 36 C.F.R. § 800.14(b). The public participation requirements found in Section 800.6 also apply to programmatic agreements. *Id.* at § 800.14(b)(3).

Administrative Procedure Act

- 86. The Commercial Space Launch Act, NEPA, Section 4(f), and Section 106 do not contain citizen suit provisions, and the FAA's regulations do not provide an administrative remedy to challenge the agency's action, so Plaintiffs' claims are brought under the Administrative Procedure Act ("APA").
- 87. The APA provides that a "person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute" to seek judicial review of that decision. 5 U.S.C. § 702. Reviewing courts should "hold unlawful and set aside agency action, findings, and conclusions" that are "arbitrary, capricious, an abuse

of discretion, or otherwise not in accordance with law," "without observance of the procedure required by law," or "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." *Id.* § 706(2).

88. An agency action is arbitrary and capricious under the APA if "the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

FACTS

- 79. To obtain a license to operate Spaceport Camden, the County was required to demonstrate that a launch vehicle can be launched safely from the site. 14 C.F.R. § 420.19. The County could only make this showing by using a conceptual launch vehicle that does not exist. 9 But the FAA didn't apply the more stringent standard of review required for unproven launch vehicles. 14 C.F.R. § 420.29 (requiring a clear and convincing demonstration that the proposed launch site location provides an "equivalent level of safety" to that required by 14 C.F.R. Part 420.)
- 80. The single rocket evaluated in Spaceport Camden's License does not exist.

 Instead, the County relied on a rocket smaller than any in commercial operation for the sole purpose of trying to satisfy FAA's safety regulations and obtaining the License.

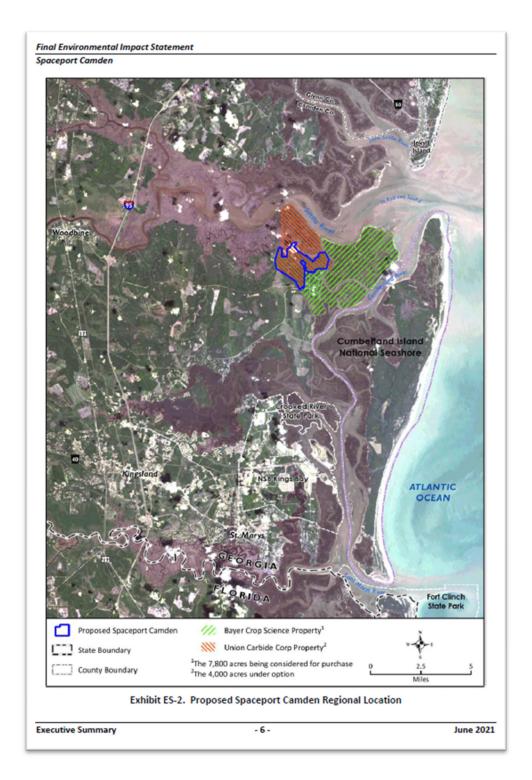
The FAA licensed Spaceport Camden despite lacking key information on the facility's

⁹ FAA documents use the terms the "conceptual" and "representative" interchangeably to describe the launch vehicle identified in the launch site operator license application. *See, e.g.*, Final EIS at A-2033 and Record of Decision at 5. More colloquially, former FAA Associate Administrator Wayne Monteith referred to them as "paper rockets" in conversations.

operations and its likely impact on environmental, recreational, and historic resources. The FAA declined to evaluate the anticipated effects of a rocket failure – perhaps the single most important question for rocket launches conducted over a populated area. The FAA repeatedly dismissed requests from the Department of Interior for more information and more comprehensive review of Spaceport Camden's effects on the National Seashore.

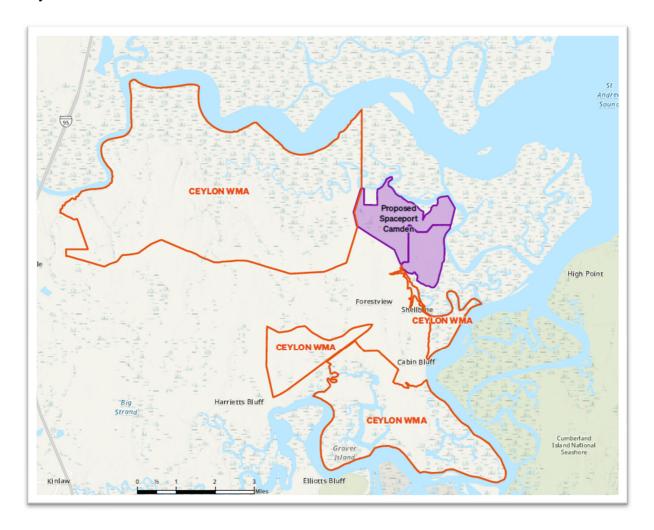
Spaceport Camden and The Launch Site

- 81. Spaceport Camden is proposed by Board of Commissioners of Camden County, Georgia and would be located at the confluence of the Satilla River and the Intracoastal Waterway, inland from Cumberland and Little Cumberland Islands. Record of Decision at 3. The proposed site would encompass approximately 11,800-acres spanning two properties, one currently owned by the Union Carbide Corporation, and one formerly owned by Bayer CropScience LP.
- 82. The Union Carbide and Bayer CropScience properties were previously used for heavy industrial activities including: the production of rocket engines; production of silicone coatings and sealants; production of tear gas, canister clusters, trip flares, and other military munitions; and the manufacture of pesticides. Final EIS at 3-47. Neither the FAA nor the County has surveyed the site to determine the location and extent of hazardous waste on these properties. *Id.* at § 3.7.3. However, the planned location of Spaceport Camden's Vertical Launch Facility the actual launch pad was the incineration site for off-specification explosives and contains empty chemical drums. *Id.* at 3-48 and 3-49.
- 83. The map below accurately reflects the Spaceport Camden site with respect to Cumberland Island and other geographic features.



84. Immediately to the west and south of the Spaceport Camden site is the Ceylon Wildlife Management Area ("Ceylon WMA"). Ceylon WMA is owned by the Georgia Department of Natural Resources and is open to the public for outdoor recreation including

hunting, fishing, hiking, and camping. The map below accurately reflects the boundaries of the Ceylon WMA.



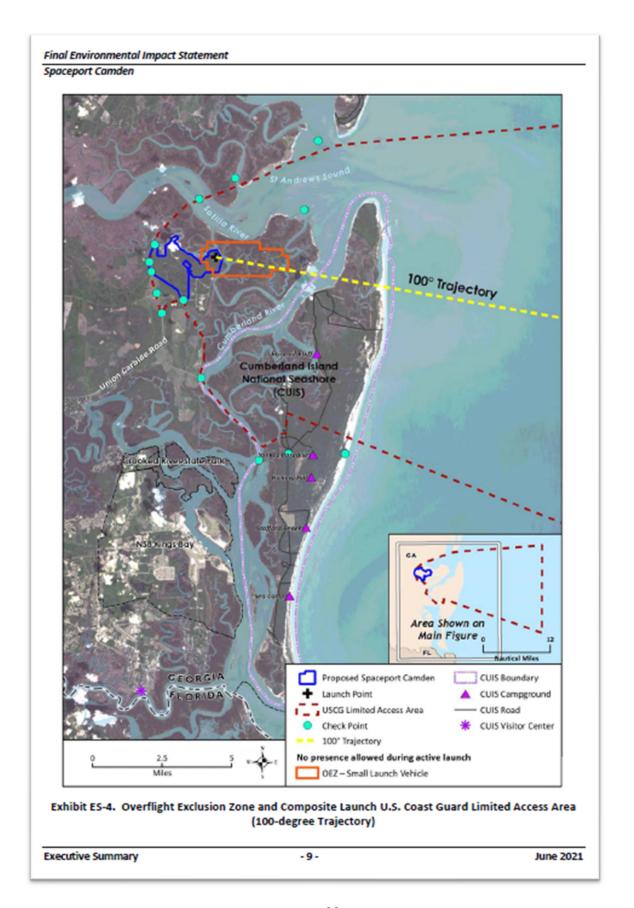
85. The Spaceport Camden site includes both upland and lowland areas, and approximately 82 acres of proposed facilities would be constructed in flood zones. Final EIS at Table ES-1 and Exhibit 3.14. The Vertical Launch Facility would be located in the floodplain and would be used to store flammable and volatile chemicals. *Id*.

Spaceport Camden's Operations

86. The License authorizes the County to "offer Spaceport Camden to commercial launch operators to conduct launches of liquid-fueled, small, orbital, vertical-launch vehicles." Record of Decision at 3. Operations would consist of up to twelve launches, up to twelve static

fire engine tests, and twelve wet dress rehearsals per year. Id. at 5. The License limits the authorized flight trajectories to the 100-degree azimuth. License at 2.

- 87. Spaceport Camden intends to use a "Limited Access Area" to monitor and control public access to the launch site and downrange areas during launch activities. The Limited Access Area would extend approximately twelve nautical miles east from the launch site into the Atlantic Ocean. Little Cumberland Island and the northern half of Cumberland Island are within the Limited Access Area, including the High Point / Half Moon Historic District, the Brickhill Bluff campground, and most of the Cumberland Island Wilderness area.
- 88. A portion of the primary approach used by maritime shipping traffic entering and exiting the Port of Brunswick, Georgia is located within the Limited Access Area. Final EIS at Ex. 3.12-2.
 - 89. A true and accurate map of the Limited Access Area from the Final EIS is below.



- 90. FAA regulations do not require a Limited Access Area. Instead, the County proposed it as a mechanism to monitor and limit the number of people potentially present in areas downrange from Spaceport Camden during launches to satisfy the FAA's safety review.
- 91. The implementation and enforcement of the Limited Access Area will be determined by the County and site operator as part of a "security plan" for each launch. Final EIS at 2-26. Members of the public will be categorized as either "authorized" or "unauthorized personnel." Authorized personnel would be allowed to enter or remain in the Limited Access Area during launch activities, "provided that the launch operator has successfully demonstrated to the FAA that the risk to those persons is compliant with FAA regulations." Final EIS at 1-8. Anyone else will be designated as "unauthorized personnel" and excluded from the Limited Access Area during launch activities.
- 92. The term "authorized personnel" is not used in the FAA's regulations and is not defined in the Final EIS. Instead, "authorized personnel" will be defined by the County and the U.S. Coast Guard on a launch-by-launch basis. *Id.* at 1-8.
- 93. The Final EIS anticipates that the Limited Access Area may require monitoring visitors to the National Seashore and Cumberland Island Wilderness Area by land, sea, and air. *Id.* On navigable waters, access would be monitored and restricted by the U.S. Coast Guard, county, and state law enforcement. *Id.* Terrestrial checkpoints will be operated in the National Seashore and Cumberland Island Wilderness Area to monitor public access into the Limited Access Area. *Id.* at 2-31. Security sweeps would be conducted on the National Seashore's beaches using motorized vehicles. *Id.* at 2-29 and 2-31. Low-flying aircraft and drones may be used to monitor the location of visitors to the National Seashore and Cumberland Island Wilderness Area. *Id.* at 2-31.

- 94. The Limited Access Area would be imposed during launch events and may also be needed for preparatory activities like wet dress rehearsals and static fire engine tests. *Id.* at 2-31.
- 95. The National Seashore and Cumberland Island Wilderness Area are not currently subject to any of the management activities required to implement, monitor, or patrol the Limited Access Area.
- 96. The National Park Service has not authorized any of the activities described by the County and the FAA as part of the Limited Access Area, including the operation of checkpoints, use of drones or other aircraft, or limiting of visitor access to portions of the National Seashore.
- 97. The National Park Service repeatedly sought clarification regarding the activities the County and the FAA assume will occur within the National Seashore and Cumberland Island Wilderness Area as conditions of the License. But the FAA was unable or unwilling to provide this information. *Infra* at PP 172, 197, 198.
- 98. The Wilderness Act and the National Seashore Act prohibit the National Park Service from authorizing some of the planned actions, such as the operation of checkpoints, drones, aircraft, and motorized vehicles. 16 U.S.C. § 1131 and 16 U.S.C. § 459i-5.

THE FAA'S ENVIRONMENTAL AND SAFETY REVIEW OF SPACEPORT CAMDEN

99. In November 2015, the FAA published a notice of intent to prepare an environmental impact statement for Spaceport Camden and opened a public scoping period on the project. 80 Fed. Reg. 68893 (Nov. 6, 2015). In response to the FAA's scoping notice, the public (including Plaintiffs) raised concerns about the project including its potential effects on

the National Seashore, its risk to the public, land, and wildlife from accidents, and the lack of specific information about the spaceport's planned operations. Final EIS at Appendix A, A-13.

- 100. Over the next several years, the FAA worked to prepare a Draft EIS for the project. In doing so, the FAA delegated key responsibilities to the County and failed to independently verify information submitted by the County.
- 101. This resulted in the County performing a number of key NEPA actions "out of order" including: conducting scoping prior to developing an initial description of the proposed action and alternatives; developing the proposed action and proposing alternatives prior to developing the purpose and need statement; and proposing to conduct field work prior to establishing the range of reasonable alternatives. Email from S. Howard to S. Zee (June 8, 2016).
- 102. Further, the FAA relied on memoranda prepared by the County to evaluate the viability of potential alternative sites for Spaceport Camden. Final EIS at Section 2.3. However, the FAA failed to independently verify the information and conclusions contained in these memoranda as required by FAA policy and procedures. FAA Order 1050.1F ₱ 2-2.1(d). Specifically, the FAA accepted without verification the County's assertions regarding: (i) the market demand for additional launch site capacity; (ii) the ability for alternate sites to satisfy the FAA's Part 420 regulations; and (iii) site development and acquisition costs of alternate sites. The FAA did not verify the County's conclusions regarding these topics.
- 103. The FAA circulated a preliminary Draft EIS for review by other agencies in late 2017 or early 2018, and the National Park Service submitted comments on that document.

 Among other issues, the National Park Service raised concerns regarding closures, catastrophic effects of rocket failures, funding burdens, and impacts on the Wilderness Area.

- 104. Discussing the National Park Service's comments internally, FAA staff and contractors concluded that the proposed changes to the Draft EIS would require "significant work and adjustments in the EIS which of course we don't have the time or \$ for." Email from S. Zee to K. Akstulewicz (Feb. 5, 2018). Further, FAA staff and consultants concluded that these critiques were "way outside the bounds of practicality" and that the FAA "won't know a lot of this information until an operator comes along." *Id*.
- 105. On March 16, 2018, the FAA released the Draft EIS for Spaceport Camden for public review. The FAA conducted two public hearings on the Spaceport Camden Draft EIS on April 11 and 12, 2018. Representatives of Plaintiffs participated in these meetings and submitted public comments on the Draft EIS.
- 106. At these public meetings, the FAA was repeatedly asked about the lack of public safety information in the Draft EIS. Responding to these questions, the FAA's representative (Pam Underwood) advised those in attendance that the FAA's policy is to exclude safety information from its NEPA review:

The environmental review by nature is a public process. The safety review is not. That's our job. That's what we do. That's part of the licensing process. We don't have that information from the county yet. They will do the analysis and we will check it when we get to that point in the process. ¹⁰

107. Responding to an email from Plaintiff LCIHA regarding the absence of safety information in the Draft EIS, the FAA again explained its policy regarding safety information:

The safety analysis is not something that is included in the dEIS, and thus not part of the public review.... The safety review is part of the FAA license evaluation and is not a public process – unlike the dEIS under NEPA.

¹⁰ Mary Landers, "Spaceport gets a hearing, but not answers," Savannah Morning News (April 13, 2018) https://www.savannahnow.com/story/news/2018/04/13/camden-county-spaceport-gets-hearing-but-not-answers/12694746007/ (visited May 16, 2022)

Email from P. Underwood to J. Renner (April 4, 2018). In internal emails following this exchange, FAA staff asked: "Once we meet with one concerned individual ... what is stopping all other concerned members of the public from requesting us to provide similar analysis to them, not just for this site, but all potential sites [in] the future? Is this our role or the applicant's?" K. Branham to P. Underwood (April 5, 2018).

108. The FAA's policy to exclude safety information from its NEPA review is also explained in the Federal Register.

Safety issues are better addressed in the licensing process where safety standards exist. When the question of safety comes up during the FAA's environmental review process, the FAA notes in the environmental documentation that safety issues are addressed in the licensing process.

Licensing and Safety Requirements for Operation of a Launch Site, Federal Aviation Administration, 65 Fed. Reg. 62812, 62817 (Oct. 19, 2000).

- 109. The FAA applied this policy and excluded significant public safety information from its NEPA review of Spaceport Camden and the Spaceport Camden EIS.
- 110. In March 2018, Counsel for the Conservation Group Plaintiffs submitted a FOIA request to the FAA seeking all documents related to the Draft EIS and Spaceport Camden's hazard analysis. After seven months and repeated failed attempts to elicit any response from the FAA, counsel for the Conservation Group Plaintiffs filed suit under FOIA. Initially, the FAA denied possessing any documents related Spaceport Camden's hazard analysis and claimed that only a handful responsive email documents existed. But, after conducting a search for responsive documents under the oversight of counsel and the court, the FAA identified and released thousands of pages of responsive documents including many of the emails cited here.

- 111. A month after the public meetings, the County published a blog post related to the FAA's safety review of Spaceport Camden titled "The ABCs of OEZs." This document purports to explain the FAA's safety regulations and asserts that Spaceport Camden satisfies the FAA's safety regulations.
- 112. The FAA staff concluded that the article was "misleading." Email from T. Braun to D. Murray (May 23, 2018), but the agency never informed the public of this conclusion.

 Instead, the FAA allowed the County to fill the information void created by the omission of public safety information from the Draft EIS.
- 113. On May 29, 2018, members of Plaintiff LCIHA traveled to Washington D.C. to meet with Office of Commercial Space Transportation staff. At this meeting, Plaintiff LCIHA posed questions related to the FAA's safety review of Spaceport Camden, the site's ability to comply with the FAA's regulations, and its potential effects on Cumberland and Little Cumberland Islands.
- 114. In June 2018, Plaintiffs submitted written comments on the Draft EIS. Plaintiffs raised concerns about: the lack of safety information in the Draft EIS; the likelihood and environmental effects of failed launches; the risk of wildfire; how public access would be managed during launch events; whether additional launch site capacity was needed or could be better met at other sites; and the risk to the site from sea level rise and storm surges.
- 115. The National Park Service also submitted comments on the Draft EIS, and again questioned the FAA's Section 4(f) review, the meaning of "authorized persons," its role in managing public access, and the need to review the FAA's safety analysis. Final EIS at A-528.

¹¹ <u>https://spaceportcamdenblog.com/2018/05/14/the-abcs-of-oezs-understanding-spaceport-camdens-safety-criteria/</u> (Visited May 2, 2022).

- 116. The County submitted its Launch Site Operator License Application (the "Application") to the FAA on January 29, 2019. The Application contained a variety of information that was being provided to the FAA for the first time, including details on the launch vehicle and the safety risk it would pose to adjacent areas. The Application, and the new information it contained, was submitted to the FAA nearly nine months after the release of the Draft EIS.
- 117. On January 31, 2019, Counsel for the Conservation Plaintiffs submitted a FOIA request seeking Spaceport Camden's Launch Site Operator License Application. After six months of delay, the FAA responded that the entire Application, including all attachments, were exempt from release to the public under FOIA as confidential information. Ltr. from M. McElligott to B. Gist (July 8, 2019). Only after this improper assertion of privilege was brought to the attention of the FAA's counsel in the ongoing FOIA suit did the FAA agreed to release Spaceport Camden's License Application subject to minor redactions.
- 118. Upon receipt of the Application, the FAA advised the County that its submission was incomplete and additional information was needed "pertaining to the environmental review, mitigation of potential risk of fire, analysis of individual risk, and the ability to account for and manage the population." Ltr. from K. Wong to J. Starline (Feb. 12, 2019). The FAA's concerns about wildfire were new and were not addressed in the Draft EIS.

As a result of our application review, and a site visit conducted by [Office of Commercial Space Transportation] personnel, it was determined the risk from fire should be included in the LSOL risk analysis. Little Cumberland Island (LCI) is heavily lined with saw palmetto underbrush, and firebreaks are difficult to maintain. If a fire were to start due to a mishap or incident, it could quickly spread and would be difficult to contain. LCI's existing firefighting capability is limited.

- 119. The County subsequently provided additional materials to the FAA relating to wildfire and the safety risk to residents of Little Cumberland Island. Ltr. from C. White to K. Wong (March 14, 2019) and Ltr. from J. Starline to K. Wong (May 20, 2019).
- 120. In March 2019, members of Plaintiff LCIHA again traveled to Washington, D.C. and met with FAA staff including former Associate Administrator Monteith, Defendant Murray, Mr. Wong, and Mr. Seawright. Plaintiff LCIHA again raised questions and sought information regarding the FAA's safety review of Spaceport Camden including the risk of launch failures, how wildfires would be controlled, and how the access to the Island would be managed.
- 121. Plaintiff LCIHA also questioned Spaceport Camden's commercial viability given the potential risk to the public, cost, and operating restrictions that would be required. In the presence of his colleagues, former Associate Administrator Monteith responded that Spaceport Camden was not a commercially viable launch site and that "some spaceports just want to sell hats and t-shirts."
- 122. On May 29, 2019, the FAA again advised the County that it lacked the information necessary regarding Spaceport Camden's "environmental review," "mitigation of potential risk of wildfire," "analysis of individual risk," and the ability to "account for and manage population." Ltr. From K. Wong to J. Starline (May 29, 2019).
- 123. The County submitted additional materials to the FAA in June 2019. Only at this point did the FAA conclude that Spaceport Camden's Application was "complete enough" to commence its review period under 14 C.F.R. § 413.15.

- 124. On or around October 3, 2019, the County released a document titled "Flight Safety Analysis for Spaceport Camden County," claiming it demonstrated that the site met the FAA's safety requirements. ¹²
- 125. Two weeks later the FAA advised the County that it lacked "sufficient information to find that Camden County has satisfied the requirements" for a Launch Site Operator License. Ltr. from K. Wong to S. Howard (Oct. 17, 2019). Specifically, the FAA cited the County's inability to comply with Section 420.27(j)'s OEZ requirements. *Id*.
- 126. The FAA never notified the public of its conclusion and did not correct the County's contradictory public statements regarding Spaceport Camden's safety made two weeks earlier. Instead, the FAA continued treating its review of Spaceport Camden as a "non-public" process and allowed the County to continue spreading misleading information about the facility's safety.
- 127. After several weeks of discussions and meetings, the County eventually requested that the FAA "toll" its review of the Application and proposed changing the Application to focus exclusively on small launch vehicles. Ltr. from J. Starline to K. Wong (Dec. 14, 2019). In this letter, the County acknowledged that the FAA planned make an adverse decision on the Application. In other words, the FAA planned to deny it.
- 128. Yet days later, the County issued a press release claiming that the Application was changed to focus on small rockets due to "market demands." The press release omitted any

¹² <u>https://www.camdencountyga.gov/DocumentCenter/View/11327/Camden-County-Releases-ITAR-Compliant-Flight-Safety-Analysis-for-Spaceport-Camden</u> (visited Feb 14, 2022).

reference to Application's inability to satisfy the FAA's safety regulations and the prospect of an adverse decision.¹³

- 129. The FAA not only failed to publicly correct the County's inaccurate explanation for the application change but repeated it in the Final EIS. Final EIS at 1 (Application changed based on "further feasibility analyses based on perceived market demand as well as, in part, public input."). Further, the FAA included this statement about market demand in the Final EIS without conducting any review of market demand to verify its accuracy. Final EIS at A-1815 (Spaceport Camden's "viability is outside the scope of the FAA's mandate" and County is "responsible for conducting its own due diligence.")
- 130. By refusing to publicly acknowledge the safety issues with the prior application, the FAA withheld important safety information from the public and intentionally excluded it from the NEPA process.
- 131. In fact, the FAA knows that the vast majority of small rocket launch site capacity already licensed by the FAA goes unused every year. Between 2015 and 2020, the FAA licensed approximately eighteen launches of the orbital, liquid-fueled, small lift class launch vehicles proposed for Spaceport Camden. During that time, the FAA had licensed approximately 164 launch slots for this type of launch vehicle. Thus, approximately 90% of the launch slots available for the type of rocket Spaceport Camden plans to launch went unused in recent years. There is no market demand for additional small rocket launch site capacity.
- 132. The FAA granted the County's request to toll review but noted several "issues/concerns that have not yet been satisfactorily resolved," including the risk of wildfire:

¹³ <u>https://www.camdencountyga.gov/DocumentCenter/View/11459/Camden-County-Outlines-Decision-to-Refocus-FAA-Review-to-Small-Launch-Vehicles</u> (visited April 20, 2022)

<u>Fire</u> - A launch accident may cause an uncontrollable fire on LCI [Little Cumberland Island] or Big Cumberland Island. Access to LCI for firefighting and egress from LCI for evacuation are limited.

Letter from K. Wong to J. Starline (Dec. 16, 2019).

Spaceport Camden's Small Rocket Application

- 133. On January 14, 2020, the County submitted a revised Launch Site Operator License Application limited to small class launch vehicles (the "Small Rocket Application").
- 134. The Record of Decision characterizes the conceptual launch vehicle proposed in the Small Rocket Application as "similar in design and performance" to a launch vehicle called the "Electron" operated by a company called Rocket Lab. Record of Decision at 5. But the Small Rocket Application's conceptual launch vehicle differs from the Rocket Lab Electron in virtually every respect. Vehicle weight, fuel capacity, thrust, and thrust to weight ratio are important vehicle parameters in analyzing the environmental effects of a launch vehicles. Final EIS at 8. The Small Rocket Application's conceptual launch vehicle weighs less, has less thrust, a lower thrust to weight ratio, and carries less payload than the Rocket Lab Electron.
- 135. The table below is a true and accurate comparison of the Small Rocket Application's conceptual launch vehicle and the Rocket Lab Electron.¹⁴

	Spaceport Camden Conceptual Vehicle	Rocket Lab Electron
Thrust (ft-lbs)	18,500	43,000
Weight (lb)	13,332	28,660
Thrust to Weight Ratio	1.4 : 1	1.5 : 1
Payload (lb)	100–300	661

¹⁴ https://www.rocketlabusa.com/launch/electron/ (visited Feb 22, 2022)

Height (ft)	40–60	59

- 136. The Small Rocket Application's conceptual launch vehicle is also smaller, weighs less, has less thrust, and has a lower thrust to weight ratio than the launch vehicle in Spaceport Camden's original Application.
- 137. In fact, the Small Rocket Application's conceptual launch vehicle is smaller, weighs less, has less thrust, and has a lower thrust to weight ratio than any small lift class launch vehicle licensed by the FAA for commercial operation.
- 138. There is no small lift class launch vehicle in commercial operation with the specifications identified in Spaceport Camden's Small Rocket Application. The Small Rocket Application's conceptual launch vehicle does not exist.
- 139. The FAA understood that the County selected the parameters of the Small Rocket Application's conceptual launch vehicle to minimize the perceived risk of launches from the Spaceport Camden site including reducing the size of the OEZ.
- 140. The FAA anticipates that the County will seek to launch rockets from Spaceport Camden specifications different from those of the Small Rocket Application's conceptual launch vehicle.

Launch Failure Rate

141. The Draft EIS anticipated a 2.5–5% failure rate per launch for medium-large class rockets. Draft EIS at 2-34 and 2-40. But instead of updating this information in the Final EIS to reflect the higher failure rate of small lift class vehicles and unproven launch vehicles, the FAA replaced it with a discussion of the County's "assumptions" and "beliefs":

For the purposes of analysis for this EIS, Camden County has assumed that a launch failure will eventually occur. However, the County believes that the

probability of a failure occurring that would have the potential to adversely affect the environment or public health and safety is a significantly lower percentage of the overall failure rate.

Final EIS at 2-35.

- 142. As the Small Rocket Application's conceptual launch vehicle does not exist, the FAA possesses no information regarding its performance, including its failure rate.
- 143. Upon information and belief, including the Small Rocket Application, FOIA responses, and discussions with agency officials, the FAA possesses no data, information, or analysis to support its assertion in the Final EIS that Spaceport Camden's conceptual launch vehicle will "perform" in a similar manner to the Rocket Lab Electron. Final EIS at 10.
- 144. In internal discussions, FAA staff expressed their opinion that small lift class vehicles have a higher probability of failure than medium-large lift class vehicles. Email from T. Braun to D. Murray (Oct. 31, 2018) ("[S]maller vehicle (i.e. Rocket Lab) would reduce the casualty area, but the reliability would be less (increasing the POF [Probability of Failure])") and Email from T. Braun to S. Jackson (Oct. 12, 2018) ("A smaller vehicle (most likely at Camden) will have a smaller debris list, but a higher [Probability of Failure].").
 - 145. Small lift class rockets are less reliable than medium-large lift class rockets.
- 146. Small lift class rockets have a higher probability of failure than medium-large lift class rockets.
- 147. The Small Rocket Application anticipates a higher probability of failure than disclosed in the Draft EIS. The Small Rocket Application assumes a "total failure rate of 20%" per launch compared to the 2.5–5% failure rate in the Draft EIS for medium-large lift class rockets. Small Rocket Application at Attachment 2 (Launch Site Location Review) p. 15 and Draft EIS at 2-34.

- 148. The County's "Flight Safety Analysis" reaches the same conclusion, stating that medium-large lift class vehicles are less likely to fail than "newer, small launch vehicle with less reliability." Spaceport Camden Flight Safety Analysis at 27, *supra* at n. 12.
- 149. Peter Beck, the Chief Executive Officer of Rocket Lab, doubted that launches could be conducted safely at Spaceport Camden:

"We have a very deep commitment to public safety here, so we certainly would not ever endanger the public in that way. It's just — not cool. But, I mean, there's just no way that the FAA would agree to that. I just can't imagine how that would ever happen." ¹⁵

The FAA's Review of the Small Rocket Application

- 150. On February 4, 2020, the Conservation Plaintiffs submitted a comment letter to the FAA regarding the Small Rocket Application. Among other issues, the letter raised concerns about the need for supplemental NEPA review given the changes to the project. Ltr. from B. Gist to W. Monteith (Feb. 4, 2020).
- 151. On several occasions, Plaintiff LCIHA contacted FAA staff regarding the Small Rocket Application, the FAA's OEZ regulations, and Spaceport Camden's proposed OEZ.
- 152. On May 26, 2020, the FAA sent an update to Spaceport Camden's public information email list. The FAA stated its intention to prepare a "revised" environmental impact statement and conduct additional public engagement based on the changes to Spaceport Camden's application.
- 153. Shortly after this announcement, the County retained a lobbying firm called Capitol Hill Communications for the purpose of persuading the FAA not to prepare the revised environmental impact statement. Mr. Rick Rodgers with Capitol Hill Communications conveyed

¹⁵ Alex Marvar, "*The Imaginary Rocket Driving A Small-Town Spaceport*," The Verge, (Sept. 22, 2021). https://www.theverge.com/22682978/camden-georgia-spaceport-cumberland-island-faa-astra-rocket-debris (Visited Feb 14, 2022).

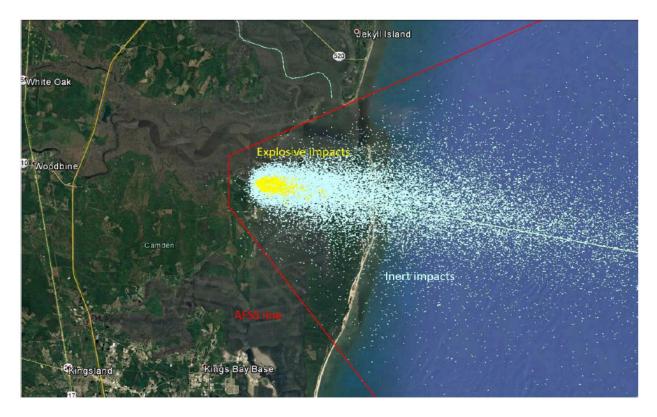
this request to Ms. Anne Reinke and Mr. Sean Poole with the U.S. Department of Transportation. In response, Ms. Reinke stated that the FAA's Office of Commercial Space Transportation believed it would be illegal to proceed without a revised environmental impact statement:

The amended application for a spaceport license has a completely different scope than the original application. Full environmental evaluation of small vehicles was not conducted, only the larger vehicles that were originally proposed. In order to comply with NEPA for this pending Federal action (issuance of the license), FAA must revise the existing Draft EIS to outline the potential environmental impacts from the change in the scope of the proposed project. Going forward without conducting the revised environmental would probably be subject to a legal challenge from Little Cumberland Island residents who oppose this; and there's a pretty good chance, as I understand, that they would win challenging the action on process grounds if we didn't perform the revised environmental.

May 29, 2020 Email from N. Rodgers to S. Howard (emphasis added). A true and accurate copy of this email is attached as Ex. 1.

- 154. But in September 2020, the FAA reversed course and informed the public information list that it no longer intended to prepare a revised EIS. Email from W. Monteith to Spaceport Camden Public Information List (September 11, 2020). The FAA relied on Executive Order 13927, which was revoked before the Record of Decision and issuance of the Launch Site Operator License. The FAA also claimed "revised analyses" showed that the Small Rocket Application's environmental effects were "subsumed" within the Draft EIS. But, in response to a FOIA request from Counsel for the Conservation Group Plaintiffs, the FAA acknowledged it didn't have any such "revised analyses." A true and accurate copy of the FOIA Request and the FAA response is attached as Ex. 2.
- 155. The FAA consulted with the U.S Department of Defense regarding Spaceport Camden's potential impacts on the Kings Bay Naval Submarine Base, located several miles south of the Spaceport Camden site.

156. On October 26, 2020, the County provided the FAA and the Department of Defense a memorandum including a "debris dispersion map" showing where debris is most likely to land based on a statistical analysis of Spaceport Camden launch failures. The image below is a true and accurate version of the October 26 debris dispersion map.



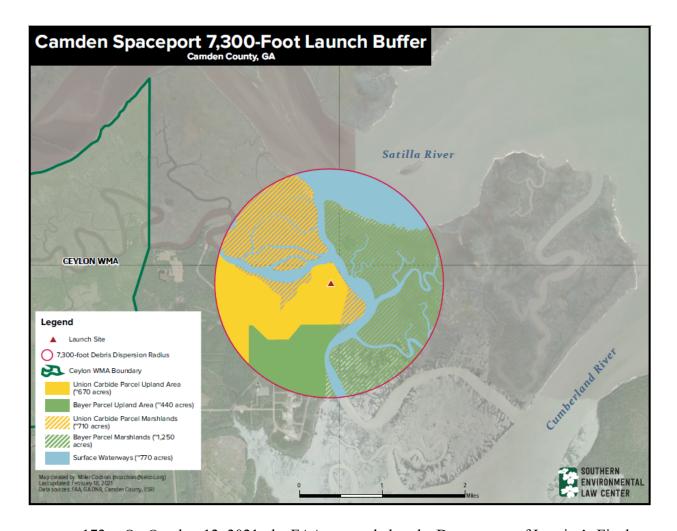
- 157. This debris dispersion map was not provided to the Advisory Council, the National Park Service, the Georgia Historic Preservation Division, or the public.
- 158. This debris dispersion map was received by the FAA after the Draft EIS and was never released to the public through the NEPA process.
- 159. On December 15, 2020, counsel for the Conservation Group Plaintiffs submitted a letter again questioning the sufficiency of the FAA's review of Spaceport Camden under NEPA and other statutes.

- 160. Over the next nine months, the FAA occasionally provided updates to the Spaceport Camden public information email list. In these update emails, the FAA stated that its Section 4(f) review had been completed.
- 161. The FAA purportedly signed a written re-evaluation of Spaceport Camden's Draft EIS on June 8, 2021. A written re-evaluation "is a document used to determine whether the contents of a previously prepared environmental document (i.e., a draft or final EA or EIS) remain valid or a new or supplemental environmental document is required." FAA Order 1050.1F at 9-1.
- 162. This document was not released to the public at that time, was not posted to the project's NEPA website, and was not attached to the Final EIS. The written reevaluation was released to the public for the first time as part of the Record of Decision.
- 163. FAA Order 1050.1F states that the level of analysis in a written reevaluation "should be commensurate with the potential for environmental impacts of a nature or extent not evaluated in the EA or EIS." Order 1050.1F at § 9.2. Spaceport Camden's written reevaluation contains no analysis to support its conclusions.
- 164. Although the written re-evaluation references "extensive" analyses supporting its decision, a FOIA response provided by the FAA three days later stated that no documents exist related to its decision not to prepare a supplemental EIS. *Supra* at P 154.
- 165. Based on the written re-evaluation and its response to Plaintiff's FOIA requests, the FAA did not prepare a written comparison of the environmental effects of the Small Rocket Application versus the environmental effects disclosed in the Draft EIS.

- 166. Based on the written re-evaluation and its response to Plaintiff's FOIA requests, the agency did not conduct "extensive analyses of the environmental impacts of small launch vehicles" as stated in its written re-evaluation and the September 2020 email.
- 167. On or around June 17, 2021, the FAA released the Final EIS for Spaceport Camden.
- 168. The Conservation Group Plaintiffs and the Property Owner Plaintiffs both submitted comments to the FAA regarding the adequacy of the Final EIS. These letters identified numerous deficiencies in the Final EIS and the FAA's NEPA process, including the risk of wildfire, the lack of risk and public safety information, the risk climate change poses to the site, and the potential effects of the Limited Access Area.
- 169. On July 22, 2021, the Department of Interior submitted comments to the FAA regarding the Final EIS. Ltr. from S. Tryon to D. Murray (July 22, 2021), These comments continued to seek information about Spaceport Camden and questioned the sufficiency of the FAA's review. The Department of Interior identified numerous aeras where the FAA's conclusions lacked documentation, were unsubstantiated, or where the Department of the Interior otherwise did not agree.
- 170. On August 8, 2021, Plaintiff LCIHA again questioned the FAA's application of its OEZ regulations. Email from K. Lang to S. Zee (August 8, 2021). In this email, Plaintiff provided the FAA with a map illustrating the OEZ drawn using the procedures set forth in Part 420 Appendix A. A fair and accurate copy of the image provided by Plaintiff LCIHA to the FAA is below.



171. On September 21, 2021, Plaintiff LCIHA submitted a letter to the FAA regarding its application of the debris dispersion radius found in 14. C.F.R. § 420.21. Ltr. from K. Lang to D. Murray (Sept. 21, 2021). Plaintiff provided a map demonstrating that the 7,300 foot radius required for Spaceport Camden's proposed launch vehicle extends well beyond the property boundary. In fact, over 70% of the area within this radius are public trust marsh and water bottoms owned by the State of Georgia. A true and accurate copy of the map provided in this letter is below.



172. On October 12, 2021, the FAA responded to the Department of Interior's Final EIS comment letter. The FAA asserts that the effects of launch failures "are impossible to predict before a failure occurs" so "the potential for a failure to result in a Section 4(f) use of [the National Seashore] cannot be evaluated at this time." Ltr. from D. Murray to S. Tryon (Oct. 12, 2021). Instead, the FAA proposes to conduct additional Section 4(f) review *after* Spaceport Camden is constructed and, conduct additional Section 4(f) analysis after a launch failure occurs. *Id*.

173. On December 20, 2021, the FAA issued the License and the Record of Decision for Spaceport Camden. The FAA also released the written re-evaluation of the March 2018 Draft EIS and the Final Section 106 Programmatic Agreement for the first time.

Section 106 Consultation

- 174. The FAA initiated its Section 106 consultation for Spaceport Camden in 2016. Final EIS at A-1929.
- 175. The Draft EIS discussed the potential for noise and light from Spaceport Camden to impact historic resources on Cumberland Island, but did not consider the effects of launch failures on this Island's historic resources. Draft EIS at 5-7. The Draft EIS stated that the Section 106 consultation was ongoing. *Id.* at 4-53.
- 176. The FAA invited Plaintiff LCIHA, the National Park Service, and other stakeholders to participate as consulting parties in the Section 106 process. The Advisory Council also joined the Section 106 consultation. Final EIS at 3-60. Over the following months, the consulting parties met and exchanged correspondence with the FAA.
- 177. After the project changed to focus on small rockets, the FAA asked the Advisory Council and the Georgia Historic Preservation Division to concur with its proposed finding of no adverse effect. Initially, they both refused. Final EIS at A-2131 and A-2024.
- 178. After several months of meetings, correspondence, and additional information provided by the FAA, the Georgia Historic Preservation Division concurred with the finding of no adverse effects. Final EIS at A-2050. These materials were provided to the Section 106 consulting parties but were not provided to the public at large.
- 179. On May 7, 2021, the FAA circulated a draft programmatic agreement for review and comment by the consulting parties. Plaintiff LCHIA provided comments and raised concerns about the shortcomings of this document.
- 180. In June 2021, the National Park Service commented on the draft programmatic agreement and again objected to the lack of information "regarding the development and

operation of Spaceport Camden as it pertains to the safety of our visitors and the preservation of natural and cultural resources." The letter recommended that, if the FAA "is unable to address these questions, then we strongly suggest that the process should not move forward until such time as answers can be provided." Ltr. from G. Ingram to D. Murray (undated) (emphasis added).

181. The Advisory Council also commented on the programmatic agreement, and questioned the FAA's plans for public engagement around the document:

Lastly, with the release of the FEIS imminent, we understand that the draft PA will likely not be included in that document. What opportunities will FAA provide to meet its responsibility to involve the public, pursuant to 36 CFR Section 800.6(a)(4)?

Email from J. Loichinger to S. Zee (June 10, 2021). The Advisory Council also submitted extensive recommended changes to the programmatic agreement.

- 182. The FAA released the Final EIS the following week and attached the draft programmatic agreement. Final EIS at A-2053. The version of the draft programmatic agreement attached to the Final EIS did not reflect the recommendations proposed by the Advisory Council, the National Park Service, or Plaintiff LCIHA.
- 183. On August 6, 2021, the FAA responded to the Advisory Council's June 2021 email. The FAA explained that it "has no information sufficient to support an environmental review of an actual launch vehicle at this time or in the foreseeable future." Ltr. from D. Murray to J. Loichinger (Aug. 6, 2021).
- 184. On September 20, 2021, the Advisory Council sent a letter to the FAA regarding the programmatic agreement and again emphasized the need for additional public engagement.

As the FAA is aware, public involvement is a critical component of Section 106 process. Accordingly, FAA should consider how it will make the draft PA available to the public to express their views on the undertaking's resolution of adverse effects. Given the

magnitude of the undertaking and the nature of its effects on historic properties, FAA may benefit from considering additional efforts to ensure that the standards of 36 CFR § 800.2(d) are met.

Ltr. from J. Loichinger to D. Murray (Sept. 202, 2021).

- 185. The FAA did not make this new version of the programmatic agreement available to the public or otherwise conduct public engagement on the document.
- 186. Instead, the final Section 106 Programmatic Agreement was signed on December 9, 2021, and first made available to the public with the Record of Decision and the License on December 20, 2021.
- 187. The FAA invited the National Park Service to sign the Programmatic Agreement as an "invited signatory" under 36 C.F.R. § 800.6(c)(2), but the National Park Service refused to sign the document.
- 188. The Programmatic Agreement does not conclude Spaceport Camden will have no adverse effects on Section 106 properties. To the contrary, the Programmatic Agreement states that a variety of activities "still need to be evaluated for effects to historic properties." Spaceport Camden Programmatic Agreement at Section X(A). The unevaluated activities include plans for operating the facility (including the fire mitigation plan) and future launch license applications. *Id.* The Programmatic Agreement makes clear that the FAA may conclude that there are adverse effects on Section 106 properties when it receives this additional information. *Id.* at Section X(D)(3) and X(F).

Section 4(f) Consultation

189. Early in its review of Spaceport Camden, the FAA recognized that the project's proximity to the National Seashore posed a significant threat under Section 4(f) and could "kill" the project. Email from D. Murray to S. Zee (April 4, 2019). Not only would Spaceport Camden

be the first spaceport to launch over a populated area, but the populated area would be a Section 4(f) property (Cumberland Island National Seashore). Further, the FAA struggled to reconcile Section 4(f)'s obligation to evaluate "potential" use as early as practicable, 23 C.F.R. § 774.9(a), with the agency's practice of deferring consideration of the effects of launches until the launch license stage. Unable to reconcile its preferred process with its legal obligations, and facing a potentially fatal legal requirement, the FAA adopted a shifting and inscrutable approach to its Section 4(f) review.

190. In the Draft EIS, the FAA expressly declined to consider whether Spaceport Camden's operations would result in constructive use of Section 4(f) properties.

The need for, and extent and duration of closures can be ascertained only when a number of important launch variables are known. These include, among other factors, the time of launch, the trajectory of the launch, and the specific type and payload of the launch vehicle. At the time when individual launch licenses are applied for, FAA will evaluate the potential for restrictions in access and closures for parks and recreational areas that qualify for protection under Section 4(f) to result in a constructive use of the properties.

DEIS at 4-29 (emphasis added).

- 191. FAA staff repeatedly questioned whether this bifurcated approach allowed for adequate Section 4(f) review. Email from J. Johnson to S. Zee (Nov 30, 2017) ("It's the once [sic] they get the [launch site operator] license then how can we deny the vehicle license...") and Email from K. Branham to P. Underwood (April 5, 2018) ("[W]hat happens when a vehicle comes along and gets a different figures [sic] due to a significant list of variables? Would that cause complications in the future for licensing?")
- 192. In June 2019, the FAA changed course and decided that the "additional individual risk information provided by the County" allowed it to move forward under the "assumption" that Spaceport Camden's operations would not require restricting individuals on Cumberland

Island. Email from S. Zee to C. Clarkson (June 25, 2019). This conclusion relied on information in the Application and supplemental materials – information unavailable to the FAA at the time of the Draft EIS.

- 193. Based on this information and assumption, the FAA prepared a memorandum documenting its Section 4(f) conclusions. On April 23, 2021, the FAA advised the Spaceport Camden Public Information Email List that its Section 4(f) review was complete.
- 194. The Final EIS concluded that Spaceport Camden will not result in the use of any Section 4(f) properties. The FAA reached this conclusion even though its NEPA and Section 106 reviews were ongoing, and over the objections of the Department of the Interior.
- 195. The Final EIS concluded that Spaceport Camden will not result in Section 4(f) constructive use of historic resources because they "will be evaluated and protected under the [Section 106] Programmatic Agreement." Final EIS at 4-35. Yet the Final EIS also stated that the impact of Spaceport Camden's operations on historic properties was "unknown." Final EIS at 4-60. Further, when the Programmatic Agreement relied on for the FAA's Section 4(f) conclusion was completed six months later, it expressly stated there was a potential for adverse effects. *See*, *supra* at 188.
- 196. The Final EIS acknowledged the Limited Access Area would "restrict and/or limit access to areas near the spaceport during launch activities," but implausibly concluded it would not result in "closures of, or restricted access to, any Section 4(f) properties." Final EIS at 13. The FAA did not address the fact that the Limited Access Area contains Section 4(f) properties and therefore would limit access to these areas.
- 197. The Department of Interior continued to dispute the FAA's flawed Section 4(f) analysis. Ltr. from S. Tryon to D. Murray (July 22, 2021), *supra* at ₱ 169.

- 198. On October 12, 2021, the FAA responded to the Department of Interior's Final EIS comments and its Section 4(f) concerns. With respect to access restrictions, the FAA continued to maintain that the Limited Access Area "would not result in closures of, or restricted access to, any Section 4(f) properties," despite the fact that the National Seashore is a Section 4(f) and is located in the Limited Access Area. Ltr. from D. Murray to S. Tryon (Oct. 12. 2021) at 3. With respect to the potential for launch debris damage to Section 4(f) properties on the National Seashore, the FAA deferred consideration of this issue until after the site is constructed and a launch failed occurs. *Id.* at 3.
- 199. In written comments submitted on December 15, 2020, counsel for the Conservation Groups also informed the FAA that its Section 4(f) review also failed to consider potential effects on a newly created Section 4(f) property (Ceylon WMA).
- 200. Ceylon WMA was created after the Draft EIS and is located adjacent to the proposed spaceport site on two sides. *Supra* at \mathbb{P} 84.
 - 201. The Ceylon WMA is a public park, wildlife refuge, and recreation area.
- 202. Given its location adjacent to the Spaceport Camden site, the FAA was required to evaluate Spaceport Camden's Section 4(f) impacts on Ceylon WMA. But the FAA failed to update its Section 4(f) review to include Ceylon WMA and evaluate whether the facility would result in Section 4(f) use of Ceylon WMA.
- 203. The Record of Decision repeats the FAA's conclusion that Spaceport Camden will not result in a constructive use of Section 4(f) properties. However, it also suggests that "a new Section 4(f) evaluation" will be performed for any launch License to identify effects of launches from Spaceport Camden on Section 4(f) properties. Record of Decision at 12–13. The

Record of Decision also repeats the FAA's intention to consider the effects of launch failures on Section 4(f) properties *after* the launch failure occurs. *Id*.

Lack of Transparency and Public Engagement

- 204. Throughout its review of Spaceport Camden, the FAA withheld information regarding the project's safety from the public and treated its safety review as a "non-public" process. By withholding information from the public and allowing the County to disseminate inaccurate information, the FAA violated its obligations under NEPA, Section 106, and, Section 4(f).
- 205. For example, FAA staff discussed whether "there [is] something we should be doing or advising Camden County of with regard to marking documents to preclude them having to be provided for a FOIA request to the FAA? The Camden County LSOL application is not without controversy...." Email from S. Zee to P. Underwood (May 25, 2016).
- 206. FAA leadership also instructed a staff member delivering a presentation at a local university to claim incorrectly that all information about Spaceport Camden was "proprietary" and therefore could not be discussed in the presentation. Email from P. Underwood to M. Beavin (Oct 18, 2017).
- 207. In conjunction with the hearing on the Draft EIS, the FAA received repeated inquiries regarding the meaning of the term "authorized users" but FAA leadership declined to clarify this term:

Bottom line. Authorized personnel is NOT an FAA term or definition. It is something the proponent, Camden County, put in the dEIS...

Email from P. Underwood to H. Price (April 2, 2018).

Launch Site Operator License LSO 21-020

- 208. The License authorizes Camden County to operate a launch site at Spaceport Camden with up to twelve launches per year. License at 1 and Record of Decision at 1 and 5
- 209. A launch site operator license authorizes the licensee to offer its launch site for a "type" and "weight class" of launch vehicle. 14 C.F.R. § 420.41(b).
- 210. The "type" licensed for Spaceport Camden is "orbital expendable launch vehicle," and the "weight class" licensed for Spaceport Camden is up to 3,300 pounds. 14 C.F.R. § 420.19(a)(2) and Table 1. In other words, the License authorizes the County to offer Spaceport Camden for the launch of orbital, expendable launch vehicles with a payload capacity up to 3,300 pounds.
- 211. The Final EIS limited its environmental review to the conceptual, unproven launch vehicle described in the Small Rocket Application launched on the 100-degree azimuth. Final EIS at 8.
- 212. The Final EIS did not consider the environmental effects of any other launch vehicles or any other trajectories. Final EIS, *passim*.
- 213. Yet the FAA anticipates that "Spaceport Camden would be available to a range of launch operators, each of which offers various launch vehicles. Although these vehicles would include only small launch vehicles and use liquid propellants, they would have different design and operating specifications." Record of Decision at 5.
- 214. There is no small lift class launch vehicle in commercial operation with the specifications of the Small Rocket Application's conceptual launch vehicle.

215. The FAA authorized construction of Spaceport Camden with knowledge that conducting launches at the facility will necessarily involve the use of launch vehicles other than the conceptual vehicle described in the Final EIS and ROD.

CLAIMS FOR RELIEF

COUNT I NEPA

A. Failure to Supplement the Draft EIS

- 216. Draft Environmental Impact Statements serve an important purpose by providing public notice for: an agency's proposed action; all feasible alternatives; and all reasonably foreseeable environmental impacts. 40 C.F.R. §§ 1502.9(a), 1502.14, 1503.1, 1508.7, 1508.8 (1978).
- 217. A Draft EIS "must fulfill and satisfy to the fullest extent possible" the requirements for a Final EIS. 40 C.F.R. § 1502.9(a) (1978).
- 218. Agencies shall prepare a supplement to a draft EIS if: (i) the agency makes substantial changes to the proposed action that are relevant to environmental concerns; or (ii) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. 40 C.F.R. § 1502.9(d)(1)(i)–(ii) (1978).
- 219. The "proposed action" in the Spaceport Camden Draft EIS is the launch of "Medium Class Launch Vehicles." Draft EIS at 4-70. The Draft EIS states that the launch failure probabilities for these Medium Class Launch Vehicles were "assessed to be in the range of 2.5 to 6 percent." Draft EIS at 2-34.
- 220. After the public comment period for the Draft EIS closed, the County submitted its Launch Site Operator License Application. The County later revised this application by submitting the Small Rocket Application.

- 221. Small lift class rockets are less reliable and have a higher probability of failure than medium-large lift class rockets.
- 222. The Small Rocket Application assumes a probability of failure of 20 percent per vehicle launched. Small Rocket Application, Attachment 2 (Launch Site Location Review) at p. 15.
- 223. Revising the Spaceport Camden proposal to launch small rockets was a substantial change and was relevant to environmental concerns.
- 224. The change to small rockets, and the consequent increase in expected failure rate, were significant new circumstances and information relevant to the reasonably foreseeable impacts of operating Spaceport Camden.
- 225. Regarding this change, the FAA's Office of Commercial Space Transportation believed a supplemental Draft EIS was required:

The amended application for a spaceport license has a completely different scope than the original application. Full environmental evaluation of small vehicles was not conducted, only the larger vehicles that were originally proposed. In order to comply with NEPA for this pending Federal action (issuance of the license), FAA must revise the existing Draft EIS to outline the potential environmental impacts from the change in the scope of the proposed project.

Supra at Ex. 2.

- 226. The FAA did not supplement the Draft EIS as required by 40 C.F.R. § 1502.9 (1978).
- 227. The Small Rocket Application disclosed new information about wildfire and restricting access to Cumberland Island National Seashore during launches. Small Rocket Application, Attachments 10 (Population Monitoring and Management Plan) and 11 (Little Cumberland Island Fire Mitigation Plan).

- 228. The FAA prepared a written re-evaluation concluding that the change in the project after the Draft EIS did not require preparation of a supplemental EIS. This document did not contain supporting analysis and did not consider the new information provided in the license applications.
- 229. The FAA's failure to supplement the Draft EIS was arbitrary, capricious, and otherwise not in accordance with the law.

B. Failure to Disclose Probability of Launch Failure in Final EIS

- 230. The Final EIS failed to disclose the increased risk of launch failure by small rockets.
- 231. The section of the Final EIS that purports to address the likelihood of launch failures stated:

For the purposes of analysis for this EIS, Camden County has assumed that a launch failure will eventually occur. However, the County believes that the probability of a failure occurring that would have the potential to adversely affect the environment or public health and safety is a significantly lower percentage of the overall failure rate.

Final EIS, Section 2.1.2.7 at 2-35 and Section 4.1.1.3 at 4-4.

- 232. Stating the County's belief that only a portion of launch failures may adversely affect the environment or endanger the public is not a meaningful discussion of expected launch failure rate at Spaceport Camden.
- 233. The Final EIS states that the "potential for adverse impacts associated with launch failures is discussed qualitatively since these impacts are not planned as part of the operations and would be unlikely." Final EIS § 4.1.1.3 at 4-4.
- 234. The FAA's failure to disclose quantitative data in the Final EIS to estimate the probability of launch failures was contrary to the agency's duty to take a hard look at the

proposed operation of Spaceport Camden, including its duty to use "high quality" information and "[a]ccurate scientific analysis." 40 C.F.R. § 1500.1 (1978).

- 235. If incomplete information is relevant to reasonably foreseeable significant adverse impacts, and essential to selecting an alternative, the agency "shall include the information" in the EIS unless the costs of obtaining it are "exorbitant." 40 C.F.R. § 1502.22(a).
- 236. If the costs are exorbitant or the means to obtain the incomplete information are unknown, the agency must (1) state within the EIS that the information is incomplete or unavailable; (2) state the information's relevance to evaluating reasonably foreseeable significant adverse impacts; (3) summarize the existing credible scientific evidence; and (4) evaluate impacts based upon generally accepted theoretical approaches or research methods. 40 C.F.R. § 1502.22(b) (1978).
- 237. "[R]easonably foreseeable' includes impacts which have catastrophic consequences, even if their probability of occurrence is low...."40 C.F.R. § 1502.22(b) (1978).
- 238. The FAA erred by failing to include information about the probability of launch failures in the EIS as required by § 1502.22(a).
- 239. The FAA acknowledged that it lacked "information sufficient to support an environmental review of an actual launch vehicle" but the agency erred by failing to include a statement within the EIS with the information required to justify issuing an EIS with incomplete or unavailable information. Ltr. from D. Murray to J. Loichinger (Aug. 8, 2021).
- 240. The FAA asserts that the conceptual launch vehicle will be similar in design and performance to the RocketLab Electron launch vehicle, but the Final EIS does not evaluate the effects of launching the RocketLab Electron at Spaceport Camden. Record of Decision at 5.

- 241. The FAA violated NEPA by relying on unverified information, hypothetical scenarios, and speculation when more reliable information exists. 40 C.F.R. § 1502.24 (1978).
- 242. The FAA's failure to evaluate and disclose the probability of launch failure in the Final EIS was arbitrary, capricious, and otherwise not in accordance with the law.

C. Failure to Disclose Reasonably Foreseeable Impacts from Launch Failure

- 243. The FAA failed to adequately assess the potential impacts of launch failures, including harm to the environment and endangering the public.
- 244. The FAA erred by limiting its consideration of environmental effects to a single conceptual launch vehicle that does not exist and was conceived for the purpose of understating its perceived risk and adverse environmental effects. In doing so, the FAA improperly engaged in unlawful "best case scenario" analysis and failed to take a hard look at the facility's reasonably foreseeable impacts.
- 245. The FAA erred by failing to take a hard look at the cumulative risks and cumulative environmental effects of multiple launches from Spaceport Camden every year over the life of the facility.
- 246. The FAA erred by failing to take a hard look at the indirect effects of Spaceport Camden, such as wildfires triggered by failed launches. 40 C.F.R. §§ 1502.16, 1508.7 (1978).
 - 247. The FAA erred by failing to fully evaluate the risk and effects of launch failures.
- 248. The FAA's failure to properly consider the environmental effects of the License was arbitrary, capricious, and otherwise not in accordance with the law.

D. Failure to Assess Impacts of Launching Rockets Authorized by the License

- 249. The License authorizes the County to offer Spaceport Camden to launch operators for orbital expendable launch vehicles with a payload capacity up to 3,300 pounds. 14 C.F.R. §§ 420.19(a)(2) and 420.41(b).
- 250. But Final EIS' assessment of environmental effects for launch failure was based on the Application's conceptual launch vehicle (100 300 lb. payload capacity). Final EIS at 8.
- 251. Although smaller rockets have a higher probability of failure, a launch failure by a larger rocket would cause a larger debris field and casualty area.
- 252. The Final EIS only evaluated impacts caused by the Application's conceptual launch vehicle even though the FAA anticipates that Spaceport Camden will be used for "various launch vehicles" with "different design and operating specifications." Record of Decision at 5.
- 253. The FAA's failure to assess the environmental effects of launch failures for the range of launch vehicles that the County is authorized to offer to launch operators was arbitrary, capricious, and otherwise not in accordance with the law.

E. Failure to Assess Other Reasonably Foreseeable Impacts

- 254. An EIS must assess direct effects, indirect effects, and cumulative impacts. 1508.25(c) (1978).
- 255. The FAA failed to take a hard look at the proposed action's direct, indirect, and cumulative impacts.
- 256. Direct effects "are caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(e) (1978).
- 257. Indirect effects "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density

or growth rate, and related effects on air and water and other natural systems, including ecosystems." 40 C.F.R. § 1508.8(b) (1978).

- 258. "Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions." 40 C.F.R. § 1508.7(1978).
- 259. The Final EIS failed to analyze the environmental impacts associated with operating the proposed launch site (14 C.F.R. § 420.15(b)); failed to complete an analysis of the environmental impacts associated with operating the proposed launch site (14 C.F.R. § 420.17(a)); failed to evaluate reasonably foreseeable future actions (cumulative impacts at 40 C.F.R. § 1508.7); and failed to evaluate reasonably foreseeable significant adverse effects (indirect effects at 40 C.F.R. § 1508.8(b)).
- 260. The Final EIS failed to adequately evaluate the potential for debris to damage natural and historic resources; the risk of wildfire; the effect of launch failure on wildlife and wildlife habitat; the effects of access restrictions on use of the National Seashore and Wilderness Area; the effects of access restrictions on shipping traffic; the risk of constructing and operating Spaceport Camden on a site known to contain hazardous waste; and risk posed to the site by sea level rise and storm surge events.
- 261. The FAA's failure to take a hard look at reasonably foreseeable direct effects, indirect effects, and cumulative impacts was arbitrary, capricious, and otherwise not in accordance with the law.

F. Failure to Consider Reasonable Alternatives

- 262. NEPA requires agencies to "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. §§ 1502.14, 1502.16(d), and 1508.25 (1978); 42 U.S.C. § 4332(2)(C)(iii).
- 263. "In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981).
- 264. "NEPA requires an applicant to show that it looked at several *feasible* sites based on certain criteria and that it chose one of those sites as the preferred or selected alternative." Final Rule, *Licensing and Safety Requirements for Operation of a Launch Site*, 65 Fed. Reg 62812-01, 62818 (Oct. 19, 2000) (emphasis added).
 - 265. The Application did not identify any feasible alternative to the proposed action.
- 266. The FAA failed to consider the range of reasonable alternatives by: (i) only considering sites in Camden County; (ii) allowing the County to use its prior financial investment in the Union Carbide site to exclude other sites; and (iii) failing to consider sites that would pose less risk to the public and cause less severe environmental impacts.
- 267. The FAA failed to reevaluate its alternatives analysis to determine if previously excluded sites were reasonable after the County submitted a revised Application limited to small class launch vehicles.
- 268. The FAA's failure to conduct a proper alternatives analysis was arbitrary, capricious, and otherwise not in accordance with the law.

G. Mitigation

- 269. NEPA requires agencies to identify whether all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted. If these mitigation measures are not adopted, the agency must explain why not. 40 C.F.R. § 1505.2(c).
- 270. Agencies cannot simply identify potential mitigation measures but must evaluate their effectiveness. Broad generalizations and vague references to mitigation measures do not provide sufficient detail to evaluate the effectiveness of mitigation measures as required by NEPA.
- 271. The mitigation measures identified in the Final EIS regarding light pollution, wildfire risk, access limitations, and the effects of climate change are undefined, incomplete, and speculative. Final EIS at 6-3.
- 272. As a result, the Final EIS did not and could not have evaluated the effectiveness of these mitigation measures.
- 273. The FAA's failure to improperly identify, define, and analyze the effects of potential mitigation was arbitrary, capricious, and otherwise not in accordance with the law.

COUNT II NEPA - Policy to Exclude Safety Information from Public Review

- 274. The FAA has a policy to exclude public health and safety information from its NEPA review of launch site operator license applications.
- 275. At a public meeting for the Spaceport Camden Draft EIS, and in a written response to comments, the FAA stated that its safety review is not a public process and safety information is not included in the NEPA process.
- 276. Issues within the scope of NEPA, including safety, must be considered at every stage in the decision-making process.

- 277. NEPA requires notice to the public and the opportunity to comment on all reasonably foreseeable impacts to the human environment.
- 278. NEPA declares a broad national commitment to protecting environmental quality, including avoiding risk to health or safety. 42 U.S.C. § 4331. "Human environment" includes "the natural and physical environment and the relationship of people with that environment." 40 C.F.R. § 1508.14 (1978) (emphasis added).
- 279. During the Spaceport Camden NEPA review, the FAA applied its policy to exclude public health and safety information.
- 280. In its review of the License, the FAA withheld safety information regarding Spaceport Camden from the public.
- 281. The FAA did not disclose expected risk, debris dispersal, and other safety information for Spaceport Camden in the Draft EIS or the Final EIS.
- 282. The FAA's policy of excluding public health, safety and risk information violates NEPA, and the agency's application of this policy in its review of Spaceport Camden was arbitrary, capricious, and otherwise not in accordance with the law.
- 283. The FAA's failure to include public health and safety information in its NEPA review, and to subject that information to public review through the NEPA process, was arbitrary, capricious, and otherwise not in accordance with the law.

COUNT III Failure to Comply with Part 420 Regulations

A. Unproven Launch Vehicle

284. "An applicant for a license to operate a launch site for an unproven launch vehicle shall provide a clear and convincing demonstration that its proposed launch site location

provides an equivalent level of safety" to the requirements in 14 C.F.R. Part 420. 14 C.F.R. § 420.29.

- 285. This heightened review standard for unproven launch vehicles is necessary because a "launch site that is safe for proven launch vehicles may not be safe for new vehicles. The probability of failure is likely to be higher, and the risk to populated areas may increase significantly." *Licensing and Safety Requirements for Operation of a Launch Site*, 65 Fed. Reg. 62812, 62840 (Oct. 19, 2000).
- 286. To obtain a license to operate a launch site, an applicant must demonstrate that a launch vehicle can be safely launched from the site. 14 C.F.R. § 420.19. The County could only make this showing only by using a conceptual launch vehicle that does not exist. But the FAA didn't treat the Application's conceptual launch vehicle as an unproven launch vehicle and did not apply the more stringent review standard for unproven launch vehicles.
- 287. There is no launch vehicle in commercial operation with the specifications described in Spaceport Camden's Small Rocket Application. The conceptual launch vehicle described in the Small Rocket Application does not exist.
- 288. There is no track record of performance for the conceptual launch vehicle described in the Small Rocket Application.
- 289. The FAA's decision not to treat the launch vehicle in Spaceport Camden's Small Rocket Application as an "unproven launch vehicle" for purposes of 14 C.F.R. § 420.29 was arbitrary, capricious, and otherwise not in accordance with law.

B. Launch Site Boundary

290. FAA regulations require that the distance between a proposed launch point and the closest launch site boundary must be "at least as great as the debris dispersion radius of the

largest launch vehicle type and weight class proposed for the launch point." 14 C.F.R. § 420.21(a).

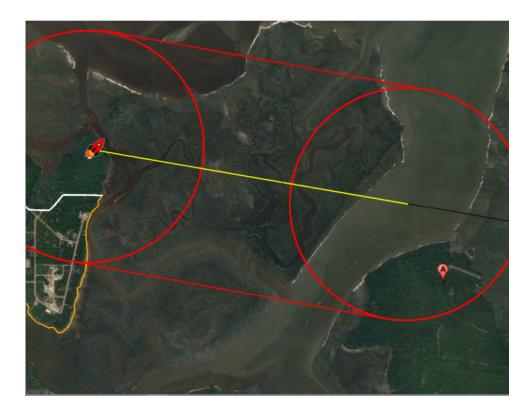
- 291. Debris dispersion radius "means the estimated maximum distance from a launch point that debris travels given a worst-case launch vehicle failure and flight termination early in flight." 14 C.F.R. § 420.5.
- 292. Table 2 in 14 C.F.R. § 420.21 requires a minimum distance of 7,300 feet from the Spaceport Camden launch point to the launch site boundary.
- 293. For Spaceport Camden, a 7,300-foot radius from the proposed launch point extends beyond Spaceport Camden's property boundary and includes coastal marshlands and Satilla River water bottoms.
- 294. The coastal marshlands and Satilla River water bottoms within Spaceport Camden's 7,300-foot debris dispersion radius are public trust lands owned by the State of Georgia (not by the County).
- 295. Each requirement in 14 C.F.R. Part 420 applies unless the applicant "clearly and convincingly demonstrates that an alternative approach provides an equivalent level of safety" to the requirement. 14 C.F.R. § 420.1.
- 296. The License determined that the County's proposal to establish an agreement with the U.S. Coast Guard "to control access to public waterways within 7300" of the launch point provides an equivalent level of safety to 14 C.F.R. § 420.21."
- 297. The Commercial Space Launch Act was enacted, *inter alia*, to protect "public health and safety" *and* to protect the "safety of property." 51 U.S.C. § 50901(a)(7).

- 298. The County did not "clearly and convincingly" demonstrate that controlling access to the debris dispersion radius "provides an equivalent level of safety" toward protecting the coastal marshlands and Satilla River water bottoms within that radius.
- 299. The FAA's determination that controlling access to public trust lands provides an equivalent level of safety to the regulatory debris dispersion radius is arbitrary, capricious, and otherwise not in accordance with law.

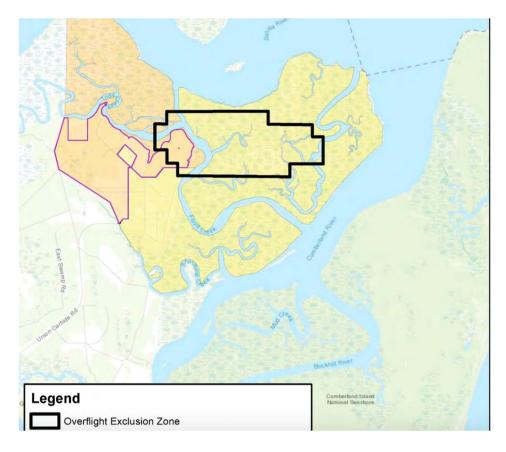
C. Overflight Exclusion Zone

- 300. Applicants for a launch site operator license must define an "overflight exclusion zone" around each launch point. 14 C.F.R. § 420.23.
- 301. An OEZ is the area where the risk of death or serious injury would be expected to exceed one in 10,000 per launch if anyone were in the area. 14 C.F.R. § 420.23(a)(2).
 - 302. The OEZ must remain clear of the public during a launch. 14 C.F.R. § 420.5.
- 303. If an OEZ contains populated areas, the applicant must demonstrate "that there are times when the public is not present or that the applicant has an agreement in place to evacuate the public from the OEZ during a launch." 14 C.F.R. § 420.27.
- 304. The FAA's regulations include calculations to delineate the OEZ for various-sized launch vehicles. 14 C.F.R. Part 420, App. A and App. B.
- 305. Under the regulation's calculation, the OEZ for a small orbital rocket launching east from Spaceport Camden would cover portions of Little Cumberland Island and Cumberland Island, including the home of Carol Ruckdeschel on Cumberland Island. 14 C.F.R. Part 420, App. A.

306. The following image shows the Spaceport Camden OEZ delineated using the 14 C.F.R. Part 420, App. A calculation. Plaintiff LCIHA provided this image to the FAA on May 29, 2018, and illustrates the same geographic area as the image supra at \$\mathbb{P}\$ 170.



- 307. An applicant can use an alternative method to define the OEZ if the applicant "clearly and convincingly" demonstrates the alternative approach provides an "equivalent level of safety" to the Appendix A calculation. 14 C.F.R. § 420.1.
- 308. To keep Little Cumberland Island and Cumberland Island out of the OEZ, the Application used a conceptual, unproven launch vehicle as an alternative method to calculate the OEZ.
- 309. The following image shows the OEZ in Spaceport Camden's Small Rocket Application:



- 310. An applicant for a license to operate a launch site for an unproven launch vehicle has a higher burden of demonstrating the proposed site meets the FAA's safety regulations. 14 C.F.R. § 420.29.
- 311. Even though the FAA accepted the Application's conceptual launch vehicle to define the OEZ, the agency expressly refused to apply the heighted review standard for an unproven launch vehicle. Final EIS at A-2038; 14 C.F.R. § 420.29.
- 312. The conceptual launch vehicle described in the Small Rocket Application should have been reviewed as an unproven launch vehicle because it does not exist.
- 313. The calculations for delineating the OEZ in the Part 420 Appendices are "specifically based on mature vehicles" with much lower and more predictable failure rates than unproven vehicles. *Licensing and Safety Requirements for Operation of a Launch Site*, 65 Fed. Reg. 62812-01, 62831-32 (Oct. 19, 2000).

- 314. The Small Rocket Application did not disclose adequate data to "clearly and convincingly" demonstrate that its conceptual, unproven launch vehicle provides an "equivalent level of safety" compared to the OEZ delineated by Part 420 Appendix A.
- 315. The FAA's decision not to classify the County's conceptual rocket as an unproven launch vehicle, its acceptance of the County's "alternative method" of delineating an OEZ, and its determination that the County's alternative method "clearly and convincingly" ensures an equivalent level of safety was arbitrary and capricious and otherwise contrary to law.

COUNT IV Section 4(f) – Finding of No Use

- 316. Section 4(f) prohibits the approval of transportation projects that involve the "use" of a public park, recreation area, or historic site unless: (1) there are no prudent and feasible alternatives, and (2) all possible planning is done to minimize harm to the 4(f) properties. 49 U.S.C. § 303(c).
- 317. The "potential use" of Section 4(f) property must be evaluated "as early as practicable in the development of the action when alternatives to the proposed action are under study." 23 C.F.R. § 774.9.
- 318. The FAA concluded that the License will not result in the use of any Section 4(f) properties.

A. Closures

- 319. The FAA's Section 4(f) determination was based on a conclusion that the OEZ for the Small Rocket Application's conceptual launch vehicle would not extend to any Section 4(F) properties, and therefore would not any restrictions or closures of those properties. Final EIS at 4-34.
 - 320. The FAA conflated the purpose of an OEZ with its obligations under Section 4(f).

- 321. The FAA's Section 4(f) determination was based on an OEZ for a launch vehicle with a 100 300-pound payload capacity.
- 322. But the License authorizes the County to offer Spaceport Camden to launch operators for launch vehicles up to 3300-pound payload.
- 323. These larger vehicles would require an OEZ that includes portions of Cumberland Island National Seashore.
- 324. The FAA's Section 4(f) determination overlooked this larger OEZ even though the agency anticipates that Spaceport Camden will be used for "various launch vehicles" with "different design and operating specifications." Record of Decision at 5.
- 325. The exterior boundary of Cumberland Island National Seashore extends offshore around the entire perimeter of Cumberland Island and Little Cumberland Island. 16 U.S.C. § 459i.
- 326. The Guard Limited Access Area "would be expected to include "some of the waterways surrounding Cumberland Island and Little Cumberland Island." Final EIS at 2-29.
- 327. The FAA lacked necessary information to evaluate the potential closures the National Seashore due to larger OEZs.

B. Access Restrictions

- 328. Operating Spaceport Camden will require use of the "Limited Access Area" that includes the National Seashore, a Section 4(f) property.
- 329. A "Limited Access Area" covering portions of the National Seashore is a mitigation measure in the Final EIS. Mitigation conditions established in an EIS "shall be implemented." 40 C.F.R. § 1505.3 (1978).

- 330. The FAA's conclusion that the "Limited Access Area" will not limit public access is unsupported, unexplained, and contrary to the reason for establishing the Limited Access Area.
- 331. The FAA has not yet determined how the Limited Access Area will be implemented and has deferred these decisions until the operator of Spaceport Camden submits a "Security Plan" and a "Comprehensive Launch Plan." Final EIS at 2-26 and 2-29.
- 332. The FAA's Section 4(f) conclusion with respect to access restrictions is unlawful, unsupported, erroneous, and misstates the available information.

C. Use of Historic Properties

- 333. The FAA concluded that no use of historic properties on Cumberland Island would occur prior to the conclusion of the Section 106 process.
- 334. The FAA relies on the existence of a Section 106 programmatic agreement to support its conclusion that no Section 4(f) historic resources will not be used. Final EIS at 4-35.
- 335. But the FAA's conclusion regarding Section 4(f) historic resources is inconsistent with the Final EIS, which concludes that the potential for adverse effects on historic resources on Cumberland Island" is "unknown." Final EIS at 4-60. The FAA's conclusion is also inconsistent with the Programmatic Agreement itself, which states that Spaceport Camden's operations on historic resources cannot be fully evaluated.

D. Phased Review

- 336. Agencies are required to consider the potential Section 4(f) at the outset and consider the entire project.
- 337. Even after the Final EIS, the FAA asserted that "the potential for a [launch] failure to result in a Section 4(f) use of [the National Seashore] cannot be evaluated at this time." Ltr. from D. Murray to S. Tryon (October 12, 2021), *supra* at PP 172 and 198.

- 338. The FAA plans to unlawfully phase its determination of Spaceport Camden's effects on Section 4(f) properties, including delaying analysis until the launch license stage and evaluating the effects of Section 4(f) properties after they occur. *Id*.
- 339. The FAA plans to conduct "a new Section 4(f) evaluation" as part of its evaluation of any launch License to identify effects of launches from Spaceport Camden on Section 4(f) properties. Record of Decision at 12–13.
- 340. The FAA is prohibited from delaying review of potential Section 4(f) uses until after the Spaceport Camden launch site is licensed. Section 4(f) requires projects to be evaluated as a whole and not phase-by-phase.

E. Other Uses

341. The FAA failed to properly consider other effects that could result in the use of Section 4(f) properties on Cumberland Island, including the safety risk, damage to wildlife habitat, and interference with its primitive character and wilderness experience. 23 C.F.R. § 774.15 (e).

F. Ceylon WMA

- 342. The Ceylon WMA is a Section 4(f) property and is located immediately adjacent to the Spaceport Camden site.
- 343. Ceylon WMA is likely to experience adverse effects caused by Spaceport Camden's operation including light, noise, vibration, access restrictions, and risk of damage in the event of a rocket failure. Yet the FAA's Section 4(f) analysis did not evaluate the potential use of the Ceylon WMA under Section 4(f).

344. The FAA's conclusion that operation of Spaceport Camden will not result in use of Section 4(f) properties is improperly phased, unsupported by the available information, arbitrary, capricious, and otherwise not in accordance with the law.

Count V Cumberland Island National Seashore Enabling Legislation

- 345. The legislation creating Cumberland Island National Seashore directs that the seashore be "permanently preserved" and prohibits acts that may compromise its primitive state. 16 U.S.C. § 459i-5(b).
- 346. This statutory text unambiguously prohibits projects that would diminish the seashore's primitive state.
- 347. The Final EIS discloses Spaceport Camden will impair the National Seashore's primitive character by "introduc[ing] light emissions into an area that is dark and part of a valued viewshed for the Cumberland Island National Seashore." Final EIS at 5-13.
- 348. Spaceport Camden's Limited Access Area will undermine and impair the National Seashore's primitive character through the use of access restrictions, monitoring of visitors, the operation of drones and low flying aircraft, and operation of motor vehicles.
- 349. The FAA failed to ensure that the National Seashore is "permanently preserved in its primitive state" by issuing the License and exposing the National Seashore to risks damage from rocket failures.
- 350. The FAA's decision to license Spaceport Camden violates the Congressional directive to permanently preserve the National Seashore in its primitive state, and is arbitrary, capricious, and otherwise not accordance with the law.

COUNT VI National Historic Preservation Act Section 106

- 351. Public engagement is "essential" to the Section 106 process. The FAA was required to "provide the public with information" about Spaceport Camden's effects on historic properties and to consider the public's input. 36 C.F.R. § 800.2(d).
- 352. The FAA prevented the public from understanding and participating in the Section 106 process by withholding information regarding safety, the risk of launch failures, the anticipated location of debris, and the risk of wildfire. The FAA provided the public and the Section 106 consulting parties with incomplete, inaccurate, and misleading information.
- 353. The FAA did not conduct any public engagement regarding the Section 106 process outside of the meetings and release of documents that were part of the agency's NEPA review.
- 354. The FAA did not follow the procedure required by 36 C.F.R. § 800.8(c) for using the NEPA process in lieu of the procedures set forth in §§ 800.3 through 800.6.
- 355. The FAA failed to follow the Advisory Council's recommendations to conduct additional public engagement, including public engagement regarding the Programmatic Agreement. The FAA attached a draft, non-final version of the Section 106 Programmatic Agreement to the Final EIS and conducted no additional public engagement regarding the final Programmatic Agreement.
- 356. The FAA failed to conduct any public engagement regarding the Final Programmatic Agreement. 36 C.F.R. §§ 800.14(b)(3), 800.6(a)(4).
- 357. The FAA's failure to conduct adequate public engagement regarding Spaceport Camden's potential impacts on historic, cultural, and archeological resources was arbitrary, capricious, and otherwise not in accordance with the law.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

- A. Issue a declaratory judgment that the FAA's action was arbitrary and capricious, an abuse of discretion, and contrary to NEPA, Section 4(f) of the DOT Act, the FAA's regulations for licenses to operate a launch site at 14 C.F.R. Part 420, the National Historic Preservation Act, and the Cumberland Island National Seashore enabling legislation;
- B. Vacate and set aside FAA Launch Site Operator License LSO 21-020;
- C. Vacate and set aside the Record of Decision;
- D. Vacate and set aside the FAA's Section 4(f) determination of no use;
- E. Vacate and set aside the Section 106 Programmatic Agreement;
- F. Grant appropriate injunctive relief;
- G. Award Plaintiffs the costs of this action, including their reasonable attorneys' fees under the Equal Access to Justice Act, 28 U.S.C. § 2412(d); and
- H. Grant the Plaintiffs any additional relief the Court deems just and proper.

Respectfully Submitted,

This 19th day of May, 2022.

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