This document contains redacted information. The FAA’s written public comment form included the following statement regarding personal identifying information: “Please Note: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.” A good faith effort was made to remove personal identifying information from the comment submissions provided during the public scoping comment period.
Just interested in your evacuation plan if needed. Concern also for Big and Little Cumberland Islands as they, I understand, are in the range of the projectile pattern.
I realize this is an economic incentive for Camden County and Georgia, however, am concerned for the environment and the safety of all within the area.

Resident of Fernandina Beach, FL

Sent from my iPhone
Dear Ms. Zee

I am writing to you in support of the Camden Spaceport project. I am unable to attend the December 7th FAA meeting so please accept this letter as a pledge of my support.

Many opportunities come with a successful spaceport the biggest, as I am sure you are aware, are jobs. Camden needs jobs. This could shift us from being somewhat of a bedroom community to being more of a job ready community. As a Realtor, I work with many families who travel outside of Camden for employment opportunities. Imagine the change that this project could bring to Camden County. More jobs, more revenue, more housing, more money staying in Camden County, and etc.

I have lived in Camden County for about 15 years but my husband's family has been here for 3 generations. While we enjoy the small town atmosphere that, for the most part, still exists in all parts of Camden, we also know that time means change and to be a thriving community we need jobs.

On behalf of myself and my family, we support Camden Spaceport.

Thank you,
I would like to share the EXPLOSION OF THE DAY, as seen at Should Camden Co. Reject Spaceport? You are cordially invited to visit!

Today we will remember the catastrophic explosion of the Antares Orb3 rocket in Wallops Island, Virginia on 10/26/14. After more than a year and a paltry expenditure of FIFTEEN MILLION DOLLARS, the pad, where there was once a crater 50 to 60 feet wide, has finally been repaired, though there won't be another attempt at a launch until March.

This we DO NOT NEED in Camden County! Operative phrase? "FIREBALL THAT COULD BE SEEN FOR MILES!" Do you want to see a fireball from Jekyll? Sea Island? St. Simons? Brunswick? St. Marys? Of course not. No one wants to see the area in which they live in danger.

And here's a FIFTEEN MILLION DOLLAR question: Why are they going to allow essentially the same company that made the exploding rocket, Orbital Sciences Corp. (now merged with another company, Alliance Techsystems, Inc., to form OrbitalATK), back onto their pad to experiment with the NEXT rocket they're supposedly launching in March? 'Stick with a loser' doesn't seem like a very good business plan. But neither does spending massive amounts of money for very little - or NO - return. We here in Camden could even incur a loss much, much bigger than the pit left by the ORB3's untimely demise!
Please tell everyone you know about this possible impending fiasco, and encourage them to speak out for Camden County. Friends, neighbors, people you know on Facebook or elsewhere, and public officials of all stripes. For instance, today I called the Governor’s (404-656-1776) and Lt. Governor's (404-656-5030) offices, and will be sending this email to them. And please, if you haven’t already, contact the FAA’s chosen representative, Leidos, to let them know how untenable an idea this spaceport is, consider taking a few moments to do so. We don’t want rockets exploding in Harriet’s Bluff, or as they’re flying over the people who live on Cumberland Island, or anywhere near here. The address is FAACamdenSpaceportEIS@Leidos.com. The cutoff date for comments on environmental matters is January 4, 2016, but we will be pursuing this matter until we get solid answers and a decision that’s the best for Camden County is made.

Thank you so much for your time and efforts!

Should Camden Co. Reject Spaceport? Facebook
Dear Ms. Zee,

Once again, I appreciate the opportunity to provide comment to the EIS process scoping process re the proposed commercial rocket launching and retrieval site in Camden County, Georgia as part of the extended comment period.

In addition to my previous comments I would like to offer two further comments.

1.) Firstly, I have realized that the FAA and the EIS contractors probably have little information regarding the nature of the community of persons on Little Cumberland Island. As the EIS process develops information regarding the community of persons who own and manage Little Cumberland Island (LCI), please feel free to contact me if I can help put the investigation team in touch with the appropriate individuals.  LCI is a rather unique, largely self sufficient, isolated community with a maximum of 100 home sites (I recall I sent you a PDF map some months ago).  LCI is separated from Cumberland Island by Christmas Creek and an extensive salt marsh.  The LCI Homes Association is governed by an elected board of directors with input from various committees which are composed of community members. The organizational reference by which the Little Cumberland Island Homes Association is governed is a set of by-laws and another set of 'guidelines' which have been in place since the mid-1960's. The environmental covenants that are referenced in these documents contributed in large part to the 1972 agreement between the Department of the Interior and the LCIHA to permit private ownership of LCI in perpetuity with the understanding that existing environmental covenants are maintained. Most of the interior of the island is maintained as 'green space'. Basically, the DOI-LCIHA agreement recognizes that the environmental status of LCI shall remain in a protected, stable environmental status under existing private ownership and that LCI's inclusion within the boundaries of the Cumberland Island National Seashore since 1972 recognizes that established level of environmental protection and stability, without additional expense of Park Service maintenance or purchase.

The membership of the LCIHA is diverse. Several families are now into a fourth generation of membership. Although many of the families have additional direct links within Georgia, LCIHA members and families work and have second homes in various states of the U.S. For example, my wife and I are retired civil servants, having enjoyed careers at the Centers for Disease Control and Prevention, in Atlanta. Another LCIHA member is a Senior Advisor to Conservation International. LCI is proud to have initiated and maintained the longest running sea turtle nest monitoring program in the world, begun in 1964 by Professor James Richardson (UGA) and continued on in cooperation with the GA DNR Sea Turtle Cooperative as the Little Cumberland Island Sea Turtle Project. In addition to the Sea Turtle Project, LCIHA has helped sponsor several conservation-oriented PhD projects over the years. The environmental legacy and relative pristine nature of the island are well recognized among those familiar with the Georgia barrier islands. Guests who visit the island further expand the network of people with a deep appreciation for the unique resource.

As a relatively self-sufficient entity, the LCI community enjoys access to electricity and our water comes from wells that tap into local aquifers. We tend to eat a lot of local fish. We organize the maintenance of the one dirt track roads on the island and are responsible managing other community resources, such as access by one of two community boats on and off the island. We seldom ask for, or require, services from Camden County or
the State of Georgia, although we obviously pay our taxes. This perhaps apparently 'low profile' on the county and state-wide level should not be misconstrued as the absence of a dedicated and fiercely loyal community.

2.) Secondly, many of the comments that may have been previously submitted referenced concerns re known toxic land fill site(s) on the Dow Chemical Company property. There is what I believe to be reasonable concerns that the toxic materials within these known waste sites could be disturbed by construction, rocket activity, and perhaps even enter either aquifers (via fault lines) or tidal streams at an accelerated rate due to vibration associated with rocket launches. Recently, it has been recognized that there is an ongoing attempt by Camden County government and Dow Chemical to amend or circumvent an existing environmental covenant that exists on the Dow Chemical property that limits drilling wells and other possible deleterious water management practices.

All of this attention on issues associated with the Dow Chemical property may have unfortunately drawn attention away from what isn’t known about the environmental contamination on the Bayer Crop Sciences property; a property that appears to have largely escaped public environmental scrutiny up until now but which may have as least as serious toxic waste problems. It is imperative that the EIS process researches, tests, and evaluates potential environmental contamination from the Bayer Crop Science site with at least as much or more vigor than will be applied to the Dow Chemical property and for at least many of the same reasons that concern possible accelerated dispersal of toxic materials into ground water sources and nearby salt water streams. The public, which both lives in the area and which is providing the tax revenue to potentially buy this land, deserves to know this information prior to any sale of land for use as a spaceport.

Thank you once again for your attention. If you or anyone from the team of EIS contractors would like to visit Little Cumberland Island, please let me know so I could act as your host.

Sincerely,
Dear Ms. Zee,

We so appreciate your efforts for Camden County, Georgia. There are serious concerns surrounding having a spaceport here.

Continuing with requests for investigation into our bird species and their habitats, numbers, needs, and sensitivities: It is advised not to use eBird data in risk assessment. Furthermore, using inferential data from a site that has similar characteristics is also not considered acceptable.

The Migratory Bird Treaty Act should be followed, with attention paid to possible death of birds and/or destruction of nests or eggs. Some actions or by-products of spaceport activity may have an adverse affect on nests, eggs, or birds themselves, such as noise, vibration, fuel, fumes, and other impacts. These may alter behavior or cause loss of habitat. When a spaceport can be located at a large number of places other than Camden, there's no reason to have it here, if it will adversely affect our wildlife, not to mention our land and water.

**Migratory Bird Treaty Act of 1918 (excerpt)**

Public Law 95-616 also ratified a treaty with the Soviet Union specifying that both nations will take measures to protect identified ecosystems of special importance to migratory birds against pollution, detrimental alterations, and other environmental degradations. (See entry for the Convention Between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment; T.I.A.S. 9073; signed on November 19, 1976, and approved by the Senate on July 12, 1978; 92 Stat. 3110.) [http://www.fws.gov/laws/lawsdigest/migtrea.html](http://www.fws.gov/laws/lawsdigest/migtrea.html)

Thank you very much, and I hope you have a wonderful holiday!

Should Camden Co. Reject Spaceport? Facebook
Please see my attached letter re: Camden Spaceport EIS
Thank You.
Attn:  Ms. Stacey M. Zee, FAA Environmental Specialist  
Re:  Comments regarding Spaceport Camden EIS

Dear Ms. Zee,

I appreciate having the opportunity to comment on the environmental impacts of a proposed commercial rocket launch and recovery site (“Spaceport Camden”) in Camden County, Georgia. Hopefully my comments will contribute to encouraging the thorough preparation of an EIS.

I am a homeowner and part of the association that has collectively managed Little Cumberland Island (LCI) for over 50 years, under an agreement with the Department of the Interior and the National Park Service (Cumberland Island National Seashore) to maintain the island in as natural a state as possible. Our nearby island would be to some degree downrange from the rocket launching facility if it were approved and I will have serious concerns about my safety, the safety of my family, the safety of my property, the safety of the National Seashore, and adjacent coastal areas. It is my understanding that it would be unprecedented for vertical launches to launch over nearby private properties. I would not plan to voluntarily evacuate my private property or surrender private property rights to accommodate the commercial interests of private aerospace investors.

Most sincerely,

These questions were generated and by a home owner and member of our LCI association, and I inserted some of my own questions.

I. Environmental and cultural

II. Safety, Access, and Risk to Property

III. Socioeconomic concerns: the project and the community

IV. Boca Chica EIS; relevance to the proposed Camden County project EIS

I. Environmental and cultural
A. Vibration and pressure waves during launch, re-entry, and from possible explosions

If the EIS process decides vibration and pressure waves would be unavoidable, and that these would likely have adverse impacts on historic structures, collapsing sand dunes, and native wildlife, would sorts of mediation would be meaningful and realistic?

B. Marsh and Creek Dredging

Floyd Creek is narrow and only between 11-21 feet deep (depending on the maps I have seen) at the site suggested for a rocket facility deep-water port (as presented in the Spaceport Camden Conceptual Plan). This area experiences a regular tidal flux of 7-9 feet. As it exists today, the Bayer Crop Science dock location could hardly seriously be considered a “deep-water” port, especially at low tide. Dredging and other construction presumably would be required. Would dredging be permitted? If so, how much material would be dredged and where would it be placed? What would be the changes in sedimentation profiles that might result in large scale dredging of Floyd Creek, for example further downstream closer to Kings Bay Naval Base, or around Jekyll, LCI, and Cumberland Island, and St. Andrews Sound? Could dredging and related (perhaps unanticipated) bank erosion contribute to leaching of contaminated soil on the property into the Floyd Creek or nearby Todd Creek?

AND WHAT TYPES OF CONTAMINENTS WOULD BE RELEASED WHEN DREDGING OCCURS AT THE POLUTED PROPOSED SITE?

C. Wildlife disturbance, air space, Wilderness designation

Cumberland Island has over 9,000 acres of designated Wilderness and UNESCO has declared that Cumberland is part of the Carolinian-South Atlantic Biosphere Reserve because of the incredible biological diversity including, beaches, sand dunes, salt marsh, maritime forest, tidal creeks, and fresh and brackish water ponds. It provides important nesting, wintering, and migratory habitat for rare and endangered wildlife including loggerhead sea turtles, brown pelicans, piping plovers, least terns, bald eagles, Wilson’s plover, red knots and peregrine falcons. Loss or damage to the Cumberland Island barrier island environment would be devastating.

Bald eagles and their nests are protected under the Bald and Golden Eagle Protection Act. Multiple bald eagle nests exist in areas adjacent to the proposed Camden County rocket facility and these nests are used on a yearly basis from approximately November to June. Nestling, but flightless, eaglets spend months hanging out on the edges of their nests. Sudden noises (e.g., rocket engine blasts, sonic booms, explosions associated with rocket failure) could potentially startle flightless eaglets (and other young birds, such as wood storks) from nests and must be avoided.

Light pollution in the form of a skyline glow mimics the starlight that emerging sea turtles use to orient to the open sea and hence can severely disorient young turtles during and after their attempt to reach the ocean. Currently, there are essentially no artificial lights visible on the beaches of either sides of Little Cumberland Island (by community
agreement) or Cumberland Island. The absence of sources of artificial lights and other human disturbance is thought to contribute to the success of the these islands being responsible for the largest number of endangered loggerhead sea turtles nests along the Georgia coast. The EIS must acknowledge and reject the possibility of sources of bright nighttime artificial lights to the west of the barrier islands and the marsh.

The coastal waters immediately offshore of Cumberland Island are designated “critical” habitat for endangered Northern Right Whales. There are only an estimated 450 Northern Right Whales left in the world and the waters off Cumberland Island are their only known calving grounds in the entire world. The whales migrate to these waters every December through March to give birth before returning to the North Atlantic for the summer. A narrow band of the critical whale habitat does extend to just beyond Cape Canaveral Florida, however, this is the southern extremity of whale habitat, and whales are rarely present that far south. In contrast, waters off of Cumberland Island are the very heart of the right whale calving grounds. Almost all right whale mother-calf pairs are spotted in these waters each year. Cetaceans are acoustically sensitive. Any negative impact to the whales or the habitat upon which they depend would be inappropriate and also tragic. The EIS should investigate possible impact of low frequency noise, such as from rocket engines and sonic booms, on mother-calf whale behavior, as well as potential impact of unplanned releases of rocket fuels and other contaminants associated with rocket failures on normal whale function, including the impact of toxic materials on the health of right whales and their ability to breath and feed normally.

Diamond terrapins, gopher tortoises, and federally threatened eastern indigo snakes are all found on the mainland and near marshes and are especially susceptible to increased vehicular traffic mortality, habitat fragmentation, and construction disturbance. The EIS should describe the impact of increased vehicle traffic, construction, maintenance, and rocket procedures on these reptile species and suggest mechanisms for effective mitigation of adverse impacts.

Air space over CINS, including areas designated as Wilderness, is currently restricted to prevent wildlife disturbance. How would this restrict over-flights by rockets as well as associated surveillance aircraft and drones?

**AND HOW DO YOU PLACE A VALUE ON ENVIRONMENTAL DAMAGES AND STRESS TO THESE SPEICES AND WHO DO YOU PAY THOSE DAMAGES TO?**

**D. Coastal vulnerability to flooding**

According to the *Camden County Hazard Mitigation Plan*, “Severe flooding has inflicted significant damage in Camden County in the past due to heavy rainfall and river rising events”, “Camden County is located in a known floodplain”, and “coastal flooding has the potential to cause severe flooding that not only dampens but destroys exposed structures”. The proposed rocket-launching site is only a few feet above mean high tide level, with saltwater marsh on two sides and adjacent to the Satilla River. Traditional flood mitigation measures, such as “retention ponds” and “storm water
“drainage”, are meaningless when a site is flooded at sea level. The county’s hazard mitigation plan recommends to “Determine the elevation of critical facilities in known flood areas and seek funding to relocate if necessary” and further advocates using such flood prone land for open space. The EIS should note that the priorities of the county’s hazard mitigation plan appear to be inconsistent with the placement of a “critical” facility on the proposed site.

E. Clean up of Existing Toxic Waste and Unexploded ordnance

What progress would be made, prior to developing the site, to identify and clean up the existing toxic wastes and unexploded ordnance left by former industries at the site, including Bayer Crop Science, Union Carbide, and Thiokol Chemical, who manufactured explosive and incendiary chemicals, as well as pesticides such as aldicarb (Temik) at the site? Would a Phase 2 Environmental Site Assessment of the Bayer Crop Science tract be completed in time for the FAA to consider its consequences for the spaceport licensing process? The EIS should seriously evaluate if the existing pollution of the site and adjoining, sequestered properties is too great to safely operate a publically owned spaceport? Are all the types of chemical dangers and their locations known on the property, including on the Bayer Crop Science property? If not, what effort would be made to find them, clean, isolate, or otherwise manage them and notify the public? The EIS should require that on-site environmental remediation should be complete before construction of Spaceport Camden is considered; if not, why not?

WHO IS PAYING FOR THE SITE TO BE CLEANED UP? AND WHAT HAPPENS IF THE SITE IS NOT CLEANED EFFECTIVELY AND THE CONTAMENENTS ARE SPREAD BY THE ROCKET LAUNCH EXPLOSION? WHO IS RESPONSIBLE FOR THAT CONTAMINATION?

F. Contamination or Release into nearby Waters, Air and Soil

How would the possible migration of contamination or release into nearby waters, air and soil be monitored and publically reported, especially for toxins on the Bayer Crop Science tract (since the Union Carbide site is already under the requirements of a RCRA permit)? Would a seismic (vibration) test be done to detect damage to the legacy toxic landfill now being managed on Union Carbide Company property (including damage to the cap, acceleration of the movement of polluted groundwater toward Todd Creek, or acceleration of nearby bank erosion on Todd Creek)? Besides the hazardous landfill under RCRA permit, would vibration cause the movement of other existing toxic wastes and unexploded ordnance on the Bayer Crop Science or Union Carbide tracts, or interfere with their management, remediation, or containment?

G. Catastrophic Event Smoke Plumes

In a catastrophic launch or landing failure at or near the proposed rocket site, what is the chance that a toxic smoke plume could form and drift over spectators, or inhabited areas (e.g., similar to the massive smoke cloud that developed and drifted north-easterly following the 2014, Antares disaster at Wallops Island)?
H. Volatilization of Hazardous Waste: Clean Air Act

Would spaceport construction, launch and landing operations, or general operations volatilize existing hazardous wastes causing their release into air in dangerous quantities, or resulting in a Clean Air Act violation? Has adjacent offsite testing of air been done to establish whether or not there has been a Clean Air Act violation? Is perchlorate contamination already on the site in dangerous quantities, owing to the use of solid rocket fuel by Thiokol in the 1960s? If so, what measures would be taken to remove, or prevent mobilization of perchlorate during construction of a spaceport and the vibration caused by rocket launches and landings?

I. Withdrawal of Deep Groundwater (aquifers)

If deep groundwater is withdrawn from the site, such as from the Floridian Aquifer, what tests would be done to insure that vibration does not cause contamination from shallow groundwater to enter the water so withdrawn, or contaminate drinking water off site? Has adjacent offsite testing of groundwater seepage, interstitial water in sediments, or surface water runoff been tested for possible contaminants originating from the proposed spaceport property to establish whether or not there has been a Clean Water Act violation?

Would the additional, large-scale use of fresh water from aquifers contribute to local, perhaps sporadic but permanent, saltwater intrusion into the existing cones of depression in the fresh water aquifers? Has this been thoroughly evaluated by the GA Environmental Protection Division and USGS in light of the well-documented saltwater intrusion nearby in the Brunswick area?

Some shallow groundwater at the site is contaminated, and groundwater withdrawal is currently restricted at least on some of the site. If deeper water withdrawal is allowed, what steps would be taken to insure that any shallow groundwater would not be drawn down into the deeper water or the Floridian Aquifer either via cracks in well seals or fractures in the natural barrier between shallow and deep water, especially given the expected amount of seismic vibration during launches and landings?

What would be done with large amounts of water (e.g., 100,000+ gallons) used during each launch? Would it need to be monitored and treated? Would it be reused? If water is reused or discharged off site, to what level or standards would it be treated? Would treatment be to drinking water standards, colorless, clear, and of ambient temperature and pH? Who would be responsible for the infrastructure, operation, and expense to supply and treat water used at the site? Would water withdrawals or discharges impact the quality or quantity of water used by people, wildlife, or ecosystems, including wetlands? Would National Pollution Discharge Elimination System (NPDES) permits be sought in order to discharge treated water off site? If so, where would the discharge be placed? What monitoring of water pollution would be done to ensure compliance with all standards of public safety and environmental health?

WHAT KIND OF WASTE WILL BE RELEASED FROM THE LAUNCH SITE?
HOW WILL EXCESSIVE WASTE BE MANAGED?
J. Possible Future Actions

In what condition would the site be left in the event that the spaceport failed or otherwise ceased operations temporarily or permanently? How would deactivation be controlled, monitored, funded, and managed?

WILL THE SPACEX PROGRAM HAVE AN INSURANCE POLICY THAT WILL COVER ENVIRONMENTAL DAMAGES? WHAT IS ITS LIABILITY COVERAGE?

K. Factoring future demand for recreation

The population of Camden County and the south coast of Georgia is expected to continue to increase. As populations in the SE increase, demand for nature-based recreation will continue to grow. Due to the positive economic impact visitors to Cumberland Island National Seashore, Crooked River State Park, and Jekyll Island State Park have on adjacent communities, the EIS should analyze the impact of maritime and other launch closures on current and future revenue over the short and long terms.

HOW WILL LOCAL RECREATION BUSINESSES SUCH AS THE FISHING CHARTER COMPANIES BE COMPENSATED FOR THE DAYS THEY CAN NOT OPERATE? HOW WILL THE LOCAL BOATING DOCKS, HOTELS, ETC BE COMPENSATED?

L. Clarification of thresholds for concern

The Spaceport Camden EIS should clarify what level of ecologic and cultural concerns are considered sufficiently significant to trigger recommendations for ‘no action’, or alternatively to require mediation to minimize impact. The EIS should include site-specific studies, done over a meaningful span of time prior to licensure (e.g., for a full season or more for nesting species) and not rely on studies that would only commence after granting a site license and after potential damage may have begun. Studies should provide meaningful data on potential impact of a facility on the coastal environment, barrier islands, and human communities prior to licensure. The EIS should include benchmarks for successful environmental mediation and recommendations for independent monitoring of benchmarks by responsible parties, if a launch facility is permitted and constructed.

WHAT KIND OF RESEARCH WILL BE DONE TO MEASURE THE IMPACT OF THE LAUNCHES AND WHO WILL BE PAYING FOR THE RESEARCH?

II. Safety, Access, and Risk to Property

A. Vertical Rocket Launches over Populated Areas

Launching over nearby inhabited areas of Little Cumberland Island, Cumberland Island, or Jekyll Island would set a new precedent for the FAA. If it were to be deemed acceptable to launch over inhabited, environmentally unique barrier islands, the EIS should articulate why would it likewise not be equally or more acceptable to consider launching over other inhabited but less environmentally unique, inland areas?
The Camden County spaceport EIS must articulate what specific FAA legal directives apply to risks for persons and property when launching and landing commercial rockets over nearby inhabited areas. Do rockets, which are used for private economic gain, assigned the same risk allowances as those tax-payer funded rockets used for the ‘public good’? Are the rights of private citizens and property owners equal to or greater than the financial interests of an out-of-state investor in a commercial rocket? These important details must be explained with regard to how they concur with the FAA’s mandate to protect the public from potential harm.

B. Trajectories

Specific projected launch trajectories that might originate from the Camden County facility are unspecified, other than they presumably would be in an easterly direction. Working launch trajectories would be agreed upon as part of the secondary licensing process to launch rockets (separate from the site license procedure). It is impractical to consider permitting a site for a commercial rocket-launching facility when the full range of launch and reentry trajectories is not being recognized and analyzed and when various trajectories constitute various environmental impacts. The EIS must evaluate several possible trajectory ‘windows’, for example to include Jekyll Island and the Kings Bay Naval Base, as well as Little Cumberland and Cumberland Islands. This wider spectrum launch and reentry analysis should include public safety considerations and recommendations for each window. **In the absence specific launch trajectories it is impossible to meaningfully plan for the future, or to fully understand possible environmental impacts of the project.** The ‘one trajectory example model’ for commercial rocket site licensure (such as has been prepared as part of the Spaceport Camden concept model) is next to meaningless when possible alternative trajectories (e.g., passing over or near other barrier islands) would have significantly different environmental impacts. If only one trajectory is considered in the current EIS, addition of possible alternative future trajectories presumably would trigger multiple, new EIS processes.

The EIS must be clarified whether or not 1st stage rocket parts would attempt to use essentially the same reverse trajectory/lift-off exclusion zone(s) as used during liftoff and if novel risks might be involved in this process.

In the absence of a significant amount of industry experience with successful attempts to recover rocket parts from spacecraft launched towards orbit, the EIS should investigate how would risk be evaluated, to persons, property, and environmental and cultural features, over which such parts would pass?

C. Evacuations and access

Closures of the Intracoastal Waterway and possible island evacuations would impact residents and visitors to the various nearby islands potentially including Jekyll, Little Cumberland, and Cumberland Islands. Parameters of closures and other measures must be clarified for inhabited areas prior to launches, rehearsals, static firings, and first-stage
recoveries. The EIS should clearly describe all possible trajectories, the clearing, closing, and reopening process and clarify who would be responsible.

Little Cumberland Island is accessible only by water transportation during high tide, so time away for evacuation would likely be a minimum of three days, if the launch goes as scheduled and there are no changes to the launch schedule. If occupants and employees of such remote areas were evacuated, how would they be compensated for travel, their own time away from home, and employee non-productive time? Who would be responsible for this compensation? If an evacuation is not necessary but waterways are temporarily closed to limit traffic in the area, how would medical or emergency evacuations be handled from such remote places?

Infrastructure on Little Cumberland Island and Cumberland Island does not include roads or access suitable for emergency management vehicles. What plans would be in place to manage fires, fallout of possibly toxic debris, or recovery of possible rocket components? If only part of an island requires evacuation, how are residents in other parts of the island protected from possible wild fire danger associated with a potential catastrophic launch failure?

IN 1996 AN AIRPLANE STRUCK A HOUSE ON THE ISLAND AND THE HOUSE BURNED TO THE GROUND BECAUSE OF THE LIMITED FIREFIGHTING SERVICES. WITH THE ROCKET LAUNCH INCREASING THE POSSIBILITY OF DESTRUCTIVE FIRES ON THE ISLAND, WOULD A FIRE FIGHTING SERVICE BE FUNDED? WHAT KIND?

D. Liability and Property Values

In case of the need for liability claims from injury or damage caused by spaceport operations, could a responsible party acknowledge legal responsibility in advance (prior experience on the same industrial site reminds us that government and private industry has been reluctant to acknowledge responsibility for catastrophic accidents)? The cost of insurance coverage to Camden County should be acknowledged as part of the EIS as a factor of socioeconomic impact on citizens who will pay for this. Would the County, or aerospace launch company, provide injury/damage/fire insurance to inhabitants in the launch hazard zone and under the launch exclusion zone?

The EIS should articulate, if property values were to decrease as a result of a nearby spaceport, how would owners be compensated for their loss and if so, by whom?

The EIS should articulate, if property insurance costs were to increase as a result of a nearby spaceport, who would bear the burden?

IF THE PROPERTY VALUE SUFFER DUE TO ANY OF THE EFFECTS OF THE ROCKET LAUNCHES OR ECONOMICAL RAMIFICATIONS< WHO WILL COMPENSATE THE HOME OWNERS?

E. Catastrophic rocket failure
The prospect of catastrophic rocket failure is clearly not hypothetical. Failures can include uncontrolled burning fuel, disintegrating parts, and potentially toxic substances, some of which rains down on whatever is underneath or nearby. The shock wave from the explosion of the 1997 Delta II rocket blew out windows 10 miles away, started a fire on the ground, and destroyed property in the area. A similar scenario would be far more catastrophic were it to occur over an island with little or no infrastructure for fire suppression or hazardous material management, or proximal to a Navy base with sensitive equipment and other significant assets.

AND IN THE CASE WHERE HUMAN INJURIES ARE INCURRED, WHO WILL BE PREPARED FOR THE EVACUATION, AND TRANSPORTATION AND WHO WILL COVER THESE COSTS?

Little Cumberland Island (LCI) has a 50+ year legacy of being carefully maintained as one of the most ‘untouched’ and least developed, of East-coast barrier islands, even before the island was incorporated within the boundaries of the larger Cumberland Island National Seashore (CINS) in the 1970’s. LCI is the home of the world’s longest continuously running sea turtle monitoring project (52+ years). CINS is considered one of the jewels of the National Park Service and a unique resource for the study of the ecology of barrier islands. Jekyll Island is largely owned by the State of Georgia as a state park. CINS, LCI, and Jekyll Island all have legacies of preserving fragments Georgia barrier islands in varying degrees of naturalness.

HOW DO YOU MEASURE THE LOSS OF RESEARCH PROGRAMS CONDUCTED ON OUR ISLAND: SEA TURTLE, ENDANGERED BIRD, etc…

*If all other concerns were omitted from EIS consideration, even the remote risk to these rare examples of barrier island ecology, or the remote risk of damage to the Kings Bay Naval Station, would outweigh possible financial benefit to any corporate aerospace company. Other safer, currently unused potential launch sites exist. A primary mandate of the FAA is to protect the safety and interests of the public.*

### III. Socioeconomic concerns: the project and the community

#### A. Spaceport Demand

Is there sufficient demand to keep a Camden County spaceport in full operation for its maximum 12 launches per year over the site’s projected design life in years? How many launches per year must occur for Camden County taxpayers to ‘break even’ on the spaceport investment? Has the ‘break even’ number of launches been consistently achieved at other established commercial rocket launching facilities (e.g., Spaceport America in New Mexico; Mid-Atlantic Regional Spaceport, Wallops Island, VA; Cecil Field, Jacksonville, FL)?

How do economic expectations for the Camden County commercial rocket-launching facility significantly differ for other existing commercial facilities (e.g., Boca Chica, TX,
Spaceport America, NM, Wallops Island, VA) that have not realized expected community-wide economic prosperity as a result of the presence similar facilities?

HOW MUCH DO YOU EXPECT THE DAMAGE OF EACH LAUNCH TO COST?

B. Commercial Impact

Would business activity at the Port of Brunswick, Georgia be delayed during launches or landings, or business at US Navy Submarine Base Kings Bay, or at ports in Fernandina Beach, Florida or Jacksonville, Florida? Aerial launch exclusion zones would presumably interrupt airplane traffic along the Atlantic corridor from Florida north, including air traffic bound for Miami and Jacksonville International Airport as well as local air traffic to Brunswick, St. Simons, Jekyll, and St. Mary’s airports; what would be the cost to the community of such possible closures/delays/rerouting?

Ecotourism is recognized as an important part of St. Marys’ and Kingsland’s existing economies. The cities are described as “the gateway to Cumberland Island National Seashore” and nearby Crooked River State Park. What impact would the intermittent interrupting of access to CINS have on St. Marys’ economic wellbeing?

How would the companies that use the proposed Camden County commercial rocket facility be taxed and how much would Camden County taxpayers expect the companies using the Spaceport to pay in taxes per year?

C. Camden County Liability

What contribution would Camden County taxpayers make towards liability for damage to persons, or private and public property caused by launches, landings, testing, and accidents, and catastrophic failures, including fire, collision with debris, exposure to toxic materials, noise and vibration damage, or dispersal of ionizing radiation?

D. Implications of County ownership

Camden County would own “Spaceport Camden”. Currently, Camden County derives private property taxes from the same land. What would be the impact of a decrease in property taxes paid to Camden County, if the county owns the title to the land?

Would Camden County purchase the property before having a contract in place with a private launch partner(s)? Would Camden County taxpayers pay initial construction costs and how much of expenditures would the county expect to recoup from private users/tenants? Would the county seek a private partner to fund construction and not proceed unless/until they find one? Would taxpayers be responsible for subsequent launch site operation and maintenance of the facility, including during possible hiatuses in between aerospace clients?

E. “Space Tourism” Implications

Spaceport Camden promoters have frequently cited “space tourism” as a key financial driver for justification for additional commercial spaceports. However, the medium
sized vertical launch rockets, such as those referenced in the FAA’s Spaceport Camden Notice of Intent, are not considered large enough to carry significant human payloads.

What kind of tourism is being considered under this site license? The EIS should investigate and reconcile the expectation for space tourism and the need to launch larger rockets. Are there plans that have been discussed with the FAA, but not yet been made public, re the use of much larger rockets?

F. Status and meaning of a Site Licenses

It is important for Camden County residents to know what is the anticipated ‘half-life’ for a commercial rocket launching site license? What meaning does a site license have to local residents with regard to a reasonable understanding of expectations for the future? What changes to the Camden County site license could Camden County residents reasonably expect; e.g., more than 12 launches per year, larger rockets, how many more launch platforms? For the benefit of the environment and the community, the EIS should explore the potential that the primary site license is a ‘foot in the door’ for more impactful development.

G. Alternatives

Many alternative potential commercial rocket-launching sites already exist in locations that do not require launching or landing over nearby inhabited property or environmentally unique areas, e.g., SpaceX and Blue Origin both have already leased government sites at Cape Canaveral and elsewhere. The EIS needs to clearly articulate whether there is truly a need for additional launch sites that would operate with increased risk to the public and the environment. Alternatively, is there a commercial imperative for new cheaper launch sites that increase profit margins for commercial aerospace companies? If the answer is ‘cheaper’, the EIS should articulate what elements related to safety and quality control at a commercially operated site would be different from existing sites that fall under federal government oversight.

As a tax-paying, proud ex-public servant and citizen, I consider contributions from for-profit companies to reimburse our federal government, in return for the option to utilize existing facilities, as a legitimate and proper source of public income and not something to be undercut. The EIS needs to consider existing sites, with equal or lower inherent risks, as viable and appropriate alternatives, irrespective of potential profit margins for aerospace investors.

If it is decided that there is little or no risk to persons or property under the immediate flight path of ascending commercial rockets, the EIS should articulate why ships in existing maritime exclusion zones are regulated.

If there is little or no risk to persons or property under the immediate flight path of an ascending commercial rocket, the EIS must consider alternative launch site properties, further inland, which could serve to launch commercial rockets over inhabited areas but which don’t include nearby unique environmental and cultural features, such as exist on coastal landscapes and barrier islands.
Since the prospective clients for Spaceport Camden would be private companies (rather than a U.S. government agency), what assurance do citizens of Camden County have that these clients would not exercise their own option to ‘alternatives’ and move operations to facilities that offer greater profit margins (e.g., abroad) when doing so becomes economically attractive?

It would be useful if the EIS could explore why there are currently so many unused launch platforms (e.g., in Florida and New Mexico) and then investigate why, in contrast, a single launch platform in Camden County would reasonably be expected be competitive with, or have a longer working life than, other, currently unsued, facilities?

In direct reference to another possible aerospace facility in Camden County, Stephen Fleming, Georgia Tech University vice president for Economic Development and Technology Ventures and Aerospace, is quoted by the Atlanta Business Chronicle (2015/06/12) as saying “We need more launches. We don’t need more launch pads”

The various aspects of the socioeconomic impact on the community must be considered as a critical aspect of the EIS. Without an economic risk-benefit analysis, there is no way residents of Camden County (or anyone else) can have a realistic understanding of various possible socioeconomic scenarios.

IV. Boca Chica EIS: relevance to the proposed Camden County project EIS

A. Inherent differences between Boca Chica and the proposed Spaceport Camden

Because of the single owner-operator status of the Boca Chica facility, the EIS document prepared for that site is able to specifically reference rocket types, specifications, and trajectories and even look forward in a realistic manner to launching other larger rocket formats. The Camden County EIS cannot refer to specifics of rocket types or expected trajectories (since the identity of the potential Camden County partner aerospace launch companies are not known or under contract). This is a significant difference between the two sites and EIS processes.

Due to the location, uniquely sensitive public assets, and larger local population, the Camden County EIS process will very likely attract more public attention and be more closely scrutinized by concerned citizens and partners than was the Boca Chica EIS process.

B. Boca Chica EIS document as an example for Camden County: Wildlife

The Boca Chica EIS document appears to do a good job recognizing possible adverse impacts of rocket launching activities on native wildlife, including threatened species (e.g., piping plovers, migrating red knots, various species of nesting sea turtles, ocelots). However, after acknowledging such concerns, a recurrent theme of the Boca Chica EIS document is encapsulated in the last sentence of the EIS: “These [adverse] changes
would affect Boca Chica Village residents, the surrounding parks, cultural resources, and National Wildlife Refuges. However, as discussed in Chapter 6.0, Mitigation and Special Conservation Measures, measures would be implemented to reduce the impacts. Typically, the responsibility for implementing the “measures” are ascribed to the launch site owner who clearly has a strong commercial interest in launching rockets but no obvious incentive to protect wildlife or the environment. There is little attempt in the EIS to quantify how much mitigation measures might reduce negative environmental impacts and what benchmarks for mitigation would be considered as successful. Some of the mitigation measures lack biologically relevant specificity or meaning. For example, the misguided requirement that occasional beach trash pick-up and “pre-launch security patrols, security vehicles or other necessary equipment on the beach will be driven above the "wet line" to minimize disturbance of birds and protect feeding and roosting areas”; most Southern coastal resource managers would agree this “measure” constitutes a potential disaster for both nesting shorebirds and turtles which nest above the wet line between the months of April-November (at least in Georgia).

The Boca Chica “special conservation measures” chapter 6.8.2 includes the optimistic note: “With the above-mentioned Special Conservation Measures, impacts to biological resources would be avoided or minimized; therefore, no addition [sic] mitigation measures are needed.” How could the authors of the Boca Chica EIS have come to such a blanket conclusion without having done or required 1) the meaningful, proactive environmental baseline studies, 2) projections of spaceport impact on the local environment informed by baseline studies, and 3) without establishing bench marks for mitigation success and/or a requirement for impartial monitoring of mediation or follow-up studies?? [As a brief aside, the existing polluted-toxic status of the Camden County site is a testimonial to corporate America’s occasional willingness to ignore the interests of the environment over which corporations have control.] As a concerned biologist-citizen (albeit with little experience in evaluating EIS documents) it is hard to understand how the Boca Chica EIS document could have been considered a meaningful and true “environmental impact statement” other than in a limited bureaucratic sense. Hopefully, the model of the Boca Chica EIS can serve as a basic level starting point for a much more insightful, informative, proactive, and meaningful Camden County spaceport Environmental Impact Statement.

C. Boca Chica launch safety issues

In a few brief references to launch safety in the Boca Chica EIS document it is written that private homeowners of Boca Chica Village, within the gated launch hazard zone (within 2-3 miles of the launch pad), can remain within the launch hazard zone during rocket launches: e.g., “Restrict access to all but property owners and authorized personnel at T-6 hours”. The proposed Camden County commercial rocket launching facility would launch and recover rockets over nearby inhabited property; EIS clarification is imperative regarding the requirements or expectations to evacuate from under the projected exclusion zones (see also II C above). The Spaceport Camden EIS should clearly articulate what is FAA policy and what directives inform policy.
WHAT TYPE OF ENVIRONMENTAL DAMAGE HAS OCCURRED IN OTHER ROCKET LAUNCH AREAS, AND WHO IS RESEARCH THE IMPACT? ARE THERE ANY OTHER LAUNCH SITES THAT ARE SHOOTING ROCKETS OFF OVER NATIONAL PARKS? IF SO, WHAT HAS THE IMPACT BEEN TO THE WILD LIFE?
I am submitting the following comments about the proposed commercial rocket-launch facility known as the “Camden Spaceport” on behalf of the Center for a Sustainable Coast, a non-profit organization founded in 1997 dedicated to advocating responsible decisions that sustain coastal Georgia’s environment and quality of life.

Additional written comments on specific issues will follow if my request for a deadline extension, submitted earlier today, is approved.

Note that the following comments augment remarks that I made at the hearing in Kingsland, Georgia on December 7. I have not seen the transcript of those comments, although I was told that they were properly transcribed despite reported problems with the recording equipment. I would appreciate being provided a copy of my transcribed comments so that I can verify that they are accurate and complete before submitting additional written comments.

Overall procedures, assumptions & methodology

Although we believe that the preponderance of evidence amply justifies that the project should not be approved, we are concerned about the general methods used in determining and evaluating mitigation options for predicted project impacts. Too often in preparing EIS reviews, the range of mitigation options is overly perfunctory and therefore limited. Moreover, there are seldom sufficient methods for accurately predicting mitigation effectiveness and very rarely adequate assessment of mitigation outcomes after they occur. It is essential that the practical consequences of alternative mitigation options are fully explored, investigated and cost-estimated as they would apply to this project location and vicinity affected (impact area). Routine methods and ‘boiler-plate’ mitigation techniques must be avoided, not only because they may not work as intended but also because they may cost far more than expected due to unique site conditions and adverse impacts, especially related to developed areas and other resources/activities that would be at risk within the launch trajectory zones.

Likewise, ecosystems such as the tidal marsh must not be dismissed as a ‘buffer area’ because such complex biological systems perform extremely valuable services that are useful, if not vital, to humans.

For instance, marine biologists estimate that about 70% of marine species depend on tidal marshes during at least a portion of their life cycle, due to either habitat or food-web functions. Furthermore, tidal marshes provide increasingly important protection for upland areas against damage caused by storm surge and flooding – a threat of growing significance as sea-level rises. Renowned ecologist, Eugene Odum, reported that an average acre of tidal marsh produces some $15,000 of ecosystem services. [Updated to reflect price-index recalibrations since 1974 when his calculation was made.]
The annualized value of any damage or risk to these marshes must be taken into account in all aspects of the proposed activity's evaluation. Among the risks to these resources would be the spill of liquid rocket fuel, which would become a toxic contaminant spread across an extensive impact area.

Similarly, the standard method of ‘discounting’ used to determine the ‘present value’ of future costs and benefits should be carefully scrutinized, because the relative value of various costs and benefits may greatly differ over the impact assessment period. For instance, site-specific ecosystem services are likely to rise significantly in societal benefits over the review period compared with the marginal economic value of space-flight capabilities, and (additionally) opportunity costs for surrounding development may be significant and disproportional over time due to risks imposed by the project. A flat rate, one-size-fits-all approach to discounting will not take such deviations into account, leading to false and misleading conclusions about the costs and benefits of the project. Since final conclusions about the project’s assessment and its mitigation are based largely on cost-benefit analysis, the entire review process could be corrupted by misleading assumptions and procedures applicable to relative future values.

End of initial written comments on general procedures, methods, and assumptions. More written comments to follow, pending my review of my transcribed comments made at the December 7 hearing in Kingsland.

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Advocating responsible decisions that sustain Coastal Georgia’s environment and quality of life.

Look for us on Facebook
Again, bounced back as did prior message due to keyboard entry error – this brief message modifies a point made in previous submittal.

Note that the referenced value of marsh ecosystem services is an annualized amount, that is $15,000 in service value annually.

We believe that estimate to be low, perhaps extremely low, due to the increasing benefit of protecting upland areas that have become far more developed since the time when the original estimate was made in 1974. Shorefront and marsh-front property has skyrocketed in value during the intervening decades, meaning that the protection of such areas has increased in value proportionally.

Advocating responsible decisions that sustain Coastal Georgia’s environment and quality of life.
Dear Ms. Zee,

Please accept these comments on behalf of One Hundred Miles, Satilla RiverKeeper, and the Southern Environmental Law Center. Please let me know if you have questions or concerns about any of the information presented in this comment letter.

Thank you and happy New Year!!!
Megan

Megan J. Desrosiers
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One Hundred Miles is a coastal advocacy organization dedicated to protecting, preserving and enhancing the 100-mile Georgia coast. Sign up to receive email updates from One Hundred Miles.
January 4, 2016

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

Via email: FAACamdenSpaceportEIS@leidos.com

Re: Comments Regarding FAA Notice of Intent to Prepare an Environmental Impact Statement to Evaluate Spaceport Camden

Dear Ms. Zee,

These comments are provided by One Hundred Miles, Inc., Satilla RiverKeeper, and the Southern Environmental Law Center in response to the Notice of Intent to prepare an Environmental Impact Statement (EIS) by the Federal Aviation Administration (FAA) to evaluate the potential environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site ("Spaceport Camden") as set forth in the Federal Register on November 6, 2015. Pursuant to the Notice and the National Environmental Policy Act (NEPA), these comments reflect our questions and concerns regarding the project’s potential adverse impacts to significant local, regional, and national environmental and community resources, including endangered and threatened wildlife. These comments supplement oral comments provided by One Hundred Miles and the Satilla RiverKeeper at the scoping meeting held on December 7, 2015. The Draft EIS should address these concerns and questions.

One Hundred Miles is a membership organization whose mission is to preserve, protect, and enhance Georgia’s 100-mile coast. Satilla RiverKeeper is a membership organization with a mission to protect, restore, and educate about the ecological values and unique beauty of the Satilla River. The Southern Environmental Law Center is a non-profit organization dedicated to using the power of the law to champion all we love about the South’s natural resources and special places. We are jointly submitting these comments because we share common concerns about Spaceport Camden and its impacts on...
Georgia’s valuable coastal resources, including the Cumberland Island National Seashore, the Satilla River and its tributaries and estuary, the Floridan Aquifer, and important wildlife habitat.

According to the FAA’s notice of intent, the potential environmental impacts of all proposed construction and operational activities, including those from launching orbital and suborbital vertical launch vehicles, will be analyzed in the EIS. The EIS will evaluate the potential environmental impacts associated with air quality; biological resources (including fish, wildlife, and plants); climate; coastal resources; Department of Transportation Act, Section 4(f); farmlands; hazardous materials, solid waste, and pollution prevention; historical, architectural, archeological and cultural resources; land use; natural resources and energy supply; noise and noise-compatible land use; socioeconomics, environmental justice, and children’s health and safety risks; visual effects; and water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers). NEPA requires the FAA to thoroughly and objectively review these impacts and to consider reasonable alternatives to this project. Within each impact category, the FAA must analyze direct, indirect, and cumulative impacts. We will elaborate on specific impact areas below.

**Spaceport Camden Purpose and Need:**
A Purpose and Need Statement is a fundamental requirement when developing a proposal that will require future NEPA documentation, including an EIS. According to NEPA CEQ regulation, Section 1502.13, a project Purpose and Need statement “shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.”

While we understand that Spaceport Camden is still in its project infancy, we are gravely concerned that the purpose and need for the project have been fabricated by the county. To date, there is no evidence in the public record that private spaceport operators are interested in locating in Camden County. Furthermore, the FAA’s Notice of Intent states that Camden County will construct and operate the spaceport. We see this fact as evidence that demonstrates that there is little private sector need for a spaceport on the south Georgia coast.

**Air Quality:**
The proposed action is for the FAA to issue a Launch Site Operator License that would allow commercial launch providers to conduct launch operations of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles. Spaceport Camden would accommodate up to 12 vertical launches, up to 12 associated launch vehicle first-stage landings, up to 12 static fire engine tests, and up to 12 wet dress rehearsals per year.

Rural Camden County is blessed with relatively fresh, uncontaminated air. Unfortunately, Camden County contains multiple toxic sites, including the property on P.O. Box 2056, Brunswick, Georgia 31521 (912) 264-4111
which Spaceport Camden would be located. We urge the FAA to consider the impacts to local and regional air quality that 12 vertical launches, 12 associated launch vehicle first-stage landings, 12 static fire engine tests, and 12 wet dress rehearsals per year would cause. We also request that the FAA consider if these operations, which may result in excessive vibration and additional chemical contamination, could volatize any existing hazardous wastes on the site that may cause harmful releases of toxins into the air. Furthermore, the FAA should analyze whether this project will impact attainment of Clean Air Act standards, particularly the existing nonattainment area for sulfur dioxide located in Nassau County, Florida.

**Biological Resources (including fish, wildlife, and plants):**

According to the FAA Notice of Intent, Spaceport Camden is to be located in unincorporated Camden County, approximately 11.5 miles due east of the town of Woodbine, GA. While the site location is a former industrial site, the area around the proposed facility is rural and relatively pristine. Furthermore, the proposed site sits at the juncture of the Satilla River and the Intracoastal Waterway, near Little Cumberland Island and Cumberland Island, both of which provide critical habitat to threatened and endangered species.

Given that the proposed launch facility would be located on an undeveloped parcel of land and near valuable wildlife habitat that is currently used for recreation and commercial purposes, we are concerned that the construction and operation of Spaceport Camden would adversely affect terrestrial, riverine, and marine biological habitat and species on and around the site. Furthermore, given that the launches would extend upon an unknown trajectory over the Atlantic Ocean, we are also concerned that the operation of Spaceport Camden would adversely affect marine habitat and species far away from the site in the Atlantic Ocean. Some of the terrestrial, riverine, and marine species are listed below.

- Gopher Tortoise (Gopherus polyphemus)
- Loggerhead Sea Turtle (Caretta caretta)
- Green Sea Turtle (Chelonia mydas)
- Kemp’s Ridley Sea Turtle (Lepidochelys kempii)
- Leatherback Sea Turtle (Dermochelys coriacea)
- Piping Plover (Charadrius melodus)
- Kirtland’s Warbler (Dendroica kirtlandii)
- Wood Stork (Mycteria Americana)
- Red-Cockaded Woodpecker (Picoides borealis)
- Right Whale (Eubalaena glacialis)
- Humpback Whale (Megaptera novaeangliae)
- West Indian Manatee (Trichechus manatus)
- Red Knot (Calidris canutus)
- American Oystercatcher (Haematopus palliatus)
- Least Tern (Sternula antillarum)
Bottlenose Dolphin (Tursiops truncatus)  
Round-Tailed Muskrat (Neofiber alleni)  
Eastern Wood Rat (Neotoma floridana)  
Bald Eagle (Haliaeetus leucocephalus)  
Osprey (Pandion haliaetus)  
Southeastern American Kestrel (Falco sparverius paulus)  
Pelican  
Ibis  
Egret  
Heron  
Roseate Spoonbill (Platalea ajaja)  
Swallow Tailed Kite (Elanoides forficatus)  
Black Skimmer (Rynchops niger)  
Gull-Billed Tern (Gelochelidon nilotica)  
Wilson’s Plover (Charadrius wilsonia)  
Shortnose Sturgeon (Acipenser brevirostrum)  
Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus)  
Eastern Indigo Snake (Drymarchon couperi)  
Flatwoods Salamander (Ambystoma cingulatum)  
Gopher Frog (Rana capito)  
Striped Newt (Notophthalmus perstriatus)  
Southern Hognose Snake (Heterodon simus)  
Alligator Snapping Turtle (Macrochelys temminckii)  
Diamondback Terrapin (Malaclemys terrapin)  
Hairy Rattleweed (Baptisia arachnifera)

We urge the FAA to evaluate the direct, indirect, and cumulative impacts (including vibration, noise, odor, sight and movement of objects) of the proposed project on these and other valuable biological resources, including species, habitats, and land used for hunting, agriculture, timber management, fishing, kayaking, boating, cycling, and other recreational activities.

Climate:
According to the FAA’s Notice of Intent for the Spaceport Camden project, the project would accommodate up to 12 vertical launches, up to 12 associated launch vehicle first-stage landings, up to 12 static fire engine tests, and up to 12 wet dress rehearsals per year. We request that the FAA consider how these operations increase the greenhouse gas and ozone depleting emissions occurring in Camden County. We also urge the FAA to consider the impacts that sea level rise may have on the site.

Coastal Resources:  
The Coastal Barrier Resources Act was passed in 1982 to achieve three main goals:  
1. Minimize loss of human life by discouraging development in high risk areas;  
2. Reduce wasteful expenditures of federal resources; and
3. Protect the natural resources associated with coastal barriers.

According to the map of federally designated coastal barrier resources, the proposed site, Little Cumberland Island and Cumberland Island are located in the Coastal Barrier Resources System. We request that the FAA consider the risks associated with operating a commercial spaceport within the coastal Barrier Resources System. We also ask that FAA evaluate the impacts of the project on Georgia’s coastal marshlands, which are protected under state law.

Transportation:
The FAA must undertake comprehensive assessments of nearby properties protected by Section 4(f), including schools, parks, historic sites, and other important cultural resources. The project must minimize impacts to these resources and avoid them altogether if feasible and prudent alternatives exist.

The cumulative transportation impacts from the proposed Spaceport Camden project could be significant. We request that the FAA investigate potential impacts to various aspects of Florida’s and Georgia’s transportation network.

1. We are concerned that the transportation of materials for the construction and operation of Spaceport Camden, including office buildings, space flight vessels, heavy machinery, etc. will impact Florida and Georgia roads, waterways, railroads, and air.
2. Commerce may be restricted and/or delayed due to increased traffic. This commerce may be reliant on available waterways, highways, railways, or airways.
3. Road networks may need to be expanded to accommodate additional truck traffic. These expansions may have additional environmental impacts.
4. Waterways may need to be dredged or otherwise altered to accommodate barge traffic necessary for the construction or operation of Spaceport Camden. These alternations may have additional environmental impacts.

Farmland:
According to the University of Georgia Cooperative Extension Service and the Carl Vinson Institute of Government, in 2012 there were 69 farms and a total of 15,739 acres in farmland in Camden County. The Georgia Forestry Commission estimates that approximately 64% (258,506 acres) of Camden County is currently being managed for silviculture. We advise the FAA to determine the impact that the proposed Spaceport Camden project will have on the ongoing management and harvest of crops and timber in the county and surrounding area. This analysis should include impacts from vibration, noise, pollution, and other launch side effects on livestock and poultry and management practices such as controlled burning for timber and habitat management.

Hazardous Materials, Solid Waste, and Pollution Prevention:
Documentation is available that reveals the contamination of the property proposed for the spaceport development. Contaminated groundwater, a hazardous waste landfill, unexploded ordinances and other toxic substances are currently present on and nearby the property. The containment of some of these toxins is currently being jeopardized by an eroding streambank at Todd’s Creek and movement of groundwater. Furthermore, commercial spaceports are known for also leaving a legacy of contamination at launch sites. We remain concerned about the interaction between Spaceport Camden construction and operation activities and the current contamination of the site. We respectfully request that the FAA consider how construction and ongoing launch activities will disrupt both documented and undocumented toxins currently on the site. We also urge the FAA to evaluate whether future contamination with toxins produced/released as a result of operations at Spaceport Camden will volatize the existing site contaminants. Finally, the FAA should evaluate the potential effects contamination from ongoing operations at Spaceport Camden as well as a potential catastrophic event will have on the Floridan Aquifer, Brunswick Aquifer, Satilla River and its tributaries, and the Atlantic Ocean.

Historical, Architectural, Archeological and Cultural Resources:
Spaceport Camden is proposed within proximity of critically valuable state and federally protected properties, National Historic Landmarks (NHL), and sites listed on the National Register of Historic Places (NRHP). We urge the FAA to evaluate the impacts of the proposed construction and operation of Spaceport Camden on the following community resources.

Jekyll Island State Park
Crooked River State Park
Cumberland Island National Seashore
Gullah Geechee Heritage Corridor
Fort Clinch State Park (Florida)
Kings Bay Submarine Base
Greyfield (NRHP, Cumberland Island)
Kingsland Commercial Historic District (NRHP, Kingsland)
Orange Hall (NRHP, 311 Osborne St., St. Marys, GA)
St. Marys Historic District (NRHP, St. Marys)
High Point-Half Moon Bluff Historic District (NRHP, Cumberland Island)
Main Road (NRHP, Cumberland Island)
Duck House (NRHP, Cumberland Island)
Crooked River Site (NRHP, St. Marys)
Rayfield Archeological District (NRHP, St. Marys)
Stafford Plantation Historic District (NRHP, Cumberland Island)
Table Point Archeological District (NRHP, St. Marys)
Plum Orchard Historic District (NRHP, Cumberland Island)
Dungeness Historic District (NRHP, Cumberland Island)
Little Cumberland Island Lighthouse (NRHP, Little Cumberland Island)
Faith Chapel (NRHP, Jekyll Island)
Jekyll Island Club (NHL and NRHP, Jekyll Island)
Horton-duBignon House (NRHP, Jekyll Island)
Rockefeller Cottage (NRHP, 331 Riverview Drive, Jekyll Island, GA)
St. Simons Lighthouse (NRHP, 600 Beachview Drive, St. Simons Island, GA)
King and Prince Hotel (NRHP, 4201 First St., St. Simons Island, GA)
Merrick-Simmons House (NRHP, 102 S. 10th St., Fernandina Beach, FL)
Fairbanks House (NRHP, 227 S. 7th St., Fernandina Beach, FL)
Bailey House (NRHP, 7th and Ash St., Fernandina Beach, FL)
Tabby House (NRHP, 7th and Ash St., Fernandina Beach, FL)
Fernandina Beach Historic District (NRHP, Fernandina Beach)
Palmer, John Denham House (NRHP, 1305 Atlantic Ave, Fernandina Beach, FL)
Original Town of Fernandina Historic Site (NRHP, Fernandina Beach)
Amelia Island Lighthouse (NRHP, 215 Lighthouse Circle, Fernandina Beach, FL)
Nassau County Jail (NRHP, 233 S. 3rd St, Fernandina Beach, FL)

In addition to these protected historical sites, there are other documented historical tabby structures (i.e. the Anchor House) and a historic cemetery on the same property of the proposed Spaceport Camden. Other notable historical sites are on surrounding properties. These should be considered when determining the impacts of Spaceport activities on historic resources.

**Land Use:**
This project has the potential to alter existing land use patterns, particularly given its likely growth-inducing indirect impacts. The EIS must thoroughly examine these foreseeable changes and their impacts on land use and existing transportation and utility infrastructure. The direct impacts of Spaceport Camden are more easily quantified and evaluated than the potential, indirect impacts that will likely result from increased transportation, sewer, water, and other infrastructure upgrades that will be necessary to serve Spaceport Camden. Additionally, the availability of large tracts of land nearby the proposed development will likely facilitate the further industrialization of the area. These impacts must be considered and addressed in the EIS.

**Natural Resources and Energy Supply:**
Spaceport Camden is an operation that may involve a higher demand for energy and/or natural resources than what is currently on the site. An increase in infrastructure may also cause increased growth in the region from the development of businesses and buildings associated with the site, putting future increased demand on water, energy and natural resource supplies. We urge the FAA to determine the amount, types (fuel, electricity, water, etc.) and sources of energy (coal, gas, solar, etc.) that may be required at the Spaceport Camden site and how this infrastructure will be made available and planned sustainably for the future of the region. Also, we urge the FAA to determine what methods of transportation and infrastructure will be needed to provide these energy sources, such as rocket fuels and potable drinking water supplies.
Water consumption for the proposed Spaceport Camden activities, such as wash down areas during launches, drinking water, etc. is a concern due to the amount that may be required for these activities and the existing groundwater contamination at the proposed site. It is unknown what the potential impacts of groundwater use by the project will have on neighboring communities that rely on the shallow and deep aquifers as their sole source of drinking water. One such concern is the potential movement of existing groundwater contamination into other groundwater aquifers or into nearby surface waters. It is also a concern that with any potential growth in the region due to Spaceport, demand of potable groundwater may exceed supply of these resources and have a negative impact on neighboring communities such as Cumberland Island, Harrietts Bluff, etc. We urge the FAA to study the groundwater, surface water, and sewage capabilities of the area to determine if these will be safe, sustainable and not negatively impact surrounding uses or needs with the development of a Spaceport facility.

**Noise and Noise-Compatible Land Use:**
Noise from launches, tests, maintenance, construction, and operation of the proposed spaceport has a strong likelihood of impacting nearby natural areas, including wilderness areas, as well as private property values. The EIS should document the existing soundscape conditions and calculate the noise impacts associated with the construction and operation of Spaceport Camden. These impacts should be thoroughly accounted for and disclosed, along with all proposals for minimizing these impacts. We are specifically concerned about noise impacts on the residents in communities along Harriett’s Bluff Road, Billyville Road, and on the recreational activities, like hunting and fishing, on nearby properties, including Cabin Bluff.

**Socioeconomics, Environmental Justice, and Children’s Health and Safety Risks:**
We urge the FAA to consider the economic impacts this project will have on the county. This evaluation should examine both the benefits in terms of jobs and potential tax revenue that would be available to Camden County as well as the potential costs of necessary capital improvements of new infrastructure and ongoing maintenance and upkeep of county facilities necessary to support spaceport operations. We also request that the FAA consider the impact of increased property taxes on residents of the Harriett’s Bluff community and surrounding areas. Finally, we urge the FAA to consider the daily quality of life changes that will occur if Spaceport Camden comes to fruition. These quality of life changes will be felt most by those who live within the closest proximity to the project location and may include the need for evacuation, noise impacts, odor, contamination, vibration, and other unpleasant disruptions.

**Visual Effects:**
The FAA should evaluate the impact that Spaceport Camden will have on Camden County’s intracoastal vistas as well as the impact the project’s lighting will have on dark skies, which are necessary for wildlife migration of bird and sea turtle species.
lighting impacts from unshielded light in close proximity to the water and indirect light pollution from sky glow should both be considered. We urge the FAA to document the existing lighting conditions and analyze the lighting impacts of construction and operation of Spaceport Camden.

**Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers):**
The activity proposed at the Spaceport Camden site has the potential to impact ground and surface water quality and quantity, both directly and indirectly. We urge the FAA to determine the water use amounts and sources that are needed for the proposed Spaceport project, and how conservation and reuse can help preserve and protect these water resources. It should also be determined what impact the proposed activity will have on nearby wetlands, streams, groundwater quality, wildlife or local communities, either directly or indirectly, through the water use on site.

Wetlands and streams on site may be directly impacted by any discharge or runoff from the facility, particularly from impervious surfaces, construction activity, launches and landings, and chemical spills or releases. Erosion and sedimentation control measures, as well as other critical pollution control measures, should be considered to protect and preserve local surface waters.

Both the shallow and deep groundwater at the proposed Spaceport site may be susceptible to overuse and contamination. Drawdown of the aquifer water from any wells on site may affect groundwater levels or introduce contamination of this aquifer from nearby groundwater toxins and therefore threaten public drinking water supply, such that public health may be adversely affected. There is also a concern regarding saltwater intrusion that may be caused by groundwater use, similar to what has occurred in neighboring counties. The reduction of infiltration to recharge groundwater due to impervious surfaces may impact the ability for recharge and presence of any faults or fissures in the geology may cause a change in movement and quality of the groundwater.

We urge the FAA to also consider potential wastewater and drinking water treatment operations, their water use amounts and sources, and whose responsibility it will be for maintaining these systems. Also, the Spaceport Camden site should avoid building or placing materials/fuels, etc. in a flood zones or hurricane storm surge prone locations, as the environmental consequences could be catastrophic. The protection of navigability of waters in the ICW for commerce and recreation are also important to consider, as are the potential impacts that a barge port may have on water quality and wildlife resources.

**Catastrophic Occurrences:**
The FAA must consider worst-case scenarios. As such, the EIS should describe potential catastrophic occurrence scenarios, potential damage to nearby property, wildlife,
human health, and water, and Spaceport Camden’s planned response. This response should include the development and implementation of emergency management plans to be coordinated with local authorities, National Park Service, and others.

We are grateful for the opportunity to have input into the scoping process for the Camden County. Thank you for considering our comments. Please contact us if you have questions about any of the comments we have provided.

Sincerely,

Megan Desrosiers
Executive Director
One Hundred Miles
megan@onehundredmiles.org
(912) 223-8608

Ashby Nix Worley
RiverKeeper
Satilla RiverKeeper
riverkeeper@satillariverkeeper.org
(912) 510-9500

Gil Rogers
Senior Attorney
Southern Environmental Law Center
grogers@selcga.org
(404) 521-9900
Dear Ms. Zee,

I am the general manager of the McFadden LLC that owns 3 homes and 90 acres on Cumberland Island. We are very concerned about the potential building of a space launch pad so close to one of the most pristine national Seashore/Wilderness area in all of America. The atlantic coast is constantly under pressure from real estate development and pollution. Cumberland Island has been set aside by Congress for the public to enjoy and for scientists to study as a small piece of what has been undisturbed.

Our concerns range from effects of the successful launches on the environment of Cumberland Island and it’s waterways, our homes and land values, and the effects of the unsuccessful launches on the same. There is so much unknown about how the vibrations, lights, noise and water used in a launch will affect the animals, birds, sea life and endangered right whales. It’s your job to investigate every possibility and reaction. We want you to consider the effects of a failed launch on the environment, habitat, flora and fauna and as landowners - our property values and increased insurance rates. The possibility of a crash into the Kings Bay sub base should be enough to stop this nonsense. Burning
falling debris and fuel on to the wilderness area should be enough to halt the launch pad.

Today is the last day for comments for the EIS, but you should read everyone’s comments again and again so you know how important this decision is for the Georgia coast. We are relying on you to study the environmental impact of this launch site that will send rockets over our heads and homes and over the incredibly beautiful and protected Cumberland Island.

We are putting our faith in you and your study.

Sincerely,

landowners on Cumberland Island
Ms. Zee:
Attached you will find the Georgia Conservancy Comment for the referenced project. We look forward to working with you to develop a complete and comprehensive EIS for the Spaceport. Please do not hesitate to contact me if I may lend assistance in any manner.

Charles H. McMillan, III
Coastal Director
The Georgia Conservancy
428 Bull Street, Suite 210
Savannah, Georgia 31401
Office (912) 447-5910  Cell (404)414-2514
cmcmillan@gaconservancy.org

Support our work for a Georgia where people and the environment thrive. Please join today!
www.georgiaconservancy.org
January 14, 2016

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

RE: Georgia Conservancy comments regarding Spaceport Camden, Environmental Impact Statement

Dear Ms. Zee:

The Georgia Conservancy is pleased to provide comments related to the proposed Spaceport Camden, located in the northeast corner of Camden County near the confluence of the Satilla River and Saint Andrews Sound in Georgia. This area is one of the highest functioning estuarine ecosystems on the East Coast of the United States and, as such, has extensive value to plants, animals and the people of Camden County and the State of Georgia.

Founded in 1967, The Georgia Conservancy is one of Georgia’s oldest nonprofit conservation organizations. Working to protect our coast for almost 50 years, The Georgia Conservancy is a statewide conservation organization whose goal is to develop practical solutions for protecting Georgia’s environment. We develop policy decisions under a vision statement centered on a Georgia where people and the environment thrive. The magnitude of the proposed spaceport, at this critical location, is of significant concern. The comments and questions in this letter are derived from our Coastal Policy and are based on the limited amount of development and operation data available at this early stage of design/implementation.

We applaud Camden County, the local citizens and the Federal Aviation Administration on the exemplary manner in which the federal Environmental Impact Statement (EIS) process has been handled to date. We look for a judicious and comprehensive review of all questions submitted to date.

Our concerns center on the following general topical areas:
- Environmental issues at a larger scale (regional, continental),
- Impacts to adjoining sites and landscape scale natural resources, and
- Site-specific development, mitigation and conservation measures.
Environmental issues at a larger (county, Georgia/Florida, ocean ecosystem) scale include:

- Georgia’s estuarine and saltmarsh ecosystems, which adjoin the Spaceport Camden site, provide a nursery for commercially and recreationally valued species of fish, shellfish and other wildlife, as well as a valuable recreation resource. These coastal land and water resources provide habitat for more threatened and endangered species than any other region of the state. The sum of these resources is a highly integrated, interdependent ecosystem that is vitally linked to Georgia’s economy and quality of life.

How will the spaceport operations address migration patterns, foraging and local nesting areas for threatened and endangered bird species? How will the survey and consultation for the EIS specifically address high priority species such as the bald eagle, glossy ibis, black-crowned night heron and local wading bird colonies?

How will the operational and contingency plans for the Spaceport Camden address fisheries and marine mammal (right whale and manatee) impacts?

- It is important for southeast Georgia and Camden County to have an economy that offers diverse options including healthy, sustainable nature-based businesses such as commercial fishing and recreation-based tourism.

In what ways will the project benefit the local economy? In what ways will it have economic costs (public, private and ecosystem services)? Will the EIS process include the results of planned economic studies that the Spaceport Camden Steering Committee or other groups undertake as part of this project?

Impacts to adjoining sites and landscape scale natural resources include:

- Barrier island wilderness, refuges and other coastal public lands are an incomparable resource that provide clean air and water, safeguard biological diversity, offer people a safe haven for solitude, enjoyment and spiritual renewal; and preserve an unspoiled natural heritage for future generations.

What will be the project related impacts to Cumberland Island, Jekyll Island, Raccoon Key and Little Cumberland Island?

How will property rights issues be enforced for privatized spaceport operations related to the exclusion zones and other limitations on offsite property?

- It is important for Camden County and other coastal communities to use smart growth practices to promote compact patterns of growth that: 1) are located away from environmentally unsuitable areas (i.e., sensitive coastal resources and areas prone to flooding and storm surge); 2) are sited, designed and constructed to respect, restore and maintain ecosystem functions; and 3) engender respect by the people who live there for the land and water around them.
How will the County Comprehensive Land Use Plan (CLUP) be updated to reflect the conservation, residential, recreational and industrial uses planned in and around this project? Will a local planning study guide the related industrial development that provides economic benefits to Camden County? Will overlay zoning or local tax incentive districts (TAD, CID, etc.) be used as part of the planning and incentives package for local spaceport related businesses?

- A sustainable coastal ecosystem is vital to the Georgia’s prosperity. It is essential to promote a healthy, resilient and diverse coastal ecosystem that can endure natural and human disturbances, continue to perform its functions, and support self-sustaining populations of native fish, birds, wildlife and plants.

How will this project and the related development impact the critical habitat (see figure below) that is located on this site and adjoining properties (Bayer, Ceylon, Cabin Bluff, etc.)? Construction of site roads, support supplier facilities, and future expansion of the spaceport industry in Camden County will have a direct impact on the habitat that supports the gopher tortoise, indigo snake and a number of other rare plants and animals. Much of the habitat in this area is rank G2 and G3 under the NatureServe habitat ranking system. This includes unusual combinations of proximate mesic longleaf pine on higher sandy soils and rare forested (hydric) wetlands, which benefit wildlife greatly.
These habitat types are similar to those found on Cumberland Island, Little Cumberland Island and other wilderness areas that are already protected and compose vital components of the landscape scale ecosystem.

- Responsible planning for growth and conservation of sensitive coastal lands is essential to preserving the integrity of natural coastal systems and, in turn, the health and welfare of coastal Georgians.

What specific sound mitigation and operational measures will be taken to protect surrounding properties and wildlife?

Has consideration been given to creative use of conservation resources (easements, transfer of density rights, development boundaries, etc.) in the preservation of sensitive habitat and buffering of the site? Compatible use buffers at nearby Fort Stewart and Townsend Bombing Range have served conservation efforts well.

What role have Stratford Properties (Ceylon) Cabin Bluff and other adjoining property owners played in the planning of site design, conservation and mitigation measures?

Site specific development, mitigation and conservation measures:

- The State of Georgia has a unique stewardship role with respect to coastal marshlands, waterbottoms and estuarine systems that is critical to preserving the integrity of the saltmarsh ecosystem and the public’s safe access and enjoyment of our common coastal treasures.

- Every water body has a carrying capacity in terms of point and nonpoint pollution inputs, bank erosion and safe navigation. Potential harm to marine mammals from spaceport operations is a critical limiting factor that must be respected.

How will “lessons learned” from other recent spaceport construction projects be incorporated into the Spaceport Camden Project? Is it feasible for the site design at Spaceport Camden to reuse the existing onsite industrial footprint and facilities (roads/wastewater/fire suppression)? How will sewage and industrial wastewater be treated at the spaceport site? How will related (offsite) industries that locate near the spaceport on adjoining sites treat their waste water?

What will be the total impact to streams, wetlands and marshes for the spaceport and related facilities? What mitigation measures are planned?

What site specific site measures will be taken to treat stormwater to the current codes and standards as outlined in the Coastal Supplement of the Georgia Stormwater Manual? Will the site be brought up to current development codes for storm water and operational runoff? Will both storm water quality treatment and detention be provided?
Will the information related to the recent Todd’s Creek stream bank stabilization project be included in the EIS considerations? How will sea level rise considerations be incorporated into the site design?

What are the site related planning and permitting issues for waterfront areas and over-water operations (flights, explosions, etc.)? Will the design documentation for the site include an assessment of both site-specific and cumulative impacts with an eye toward the overall carrying capacity of our estuaries?

Rigorous application and coordination of existing laws and regulations — especially Georgia’s Coastal Marshlands Protection Act, Shoreline Protection Act, Coastal Management Plan and Program Guidelines, as well as the federal Clean Water Act — are critical to preserving the coast’s ecological integrity as human activity expands.

For the reasons stated above, the Georgia Conservancy has significant concerns related to the development and operations for Spaceport Camden and the related ancillary development that will support the enterprise. We look forward to working with federal, state and local agencies to address these concerns.

Sincerely,

Charles H. McMillan III
Coastal Director
Clay Montague, Chairman of the Spaceport Committee, suggested I send my comments directly to you, too.

Clay,

A few questions for the FFA about the Spaceport and a clarification.

Clarification - My comment about nuclear payloads is in relation to a worst case scenario, the launch vehicle and payload being destroyed, the nuclear material being distributed over the area, and the environmental impact from such an accident. The scenario should use actual past accidents and the actual nuclear payloads launched.

Questions

Oyster Public Harvest Areas – The EIS should evaluate the impacts to public oyster harvest areas from the deposition of launch fuel residues and the worst case scenarios where a launch vehicle goes off course and is destroyed. The area of impact should be calculated using the maximum launch winds and the corresponding altitudes where vehicle destruction could be initiated. “Throw” of material down range and the cone of deposition should be described.

The land modification to accommodate the launch facility (forest fire prevention, firefighting, security, and for any other scenarios for which land will be modified for the Spaceport) should be identified BEFORE the EIS is produced, and these land modifications or land use restrictions be incorporated into the EIS.

Any land use prohibitions or requirements should be identified in the EIS and the implication to the environment.

In the event of an aborted launch and launch vehicle destruction the debris will need to be recovered. The EIS should identify the methods to be used in the estuarine environment to recover materials. This would include marsh (soft liquid mud and sediments, Spartina sp., black rush, tidal creeks, and flats) and the environmental impacts to each by the various removal methods.

What will be the limits of the insurance policy for environmental damage and who will be responsible for taking out the policy? Will the EIS quantify environmental damages and the cost of FULL restoration and monitoring in 2016 dollars?

What is the definition of “de minimus” when describing environmental damage related to the Spaceport. What are the examples of de minimus environmental impacts from the Spaceport and what would the cumulative impacts be over a number of years.
Please list all the chemicals released via a launch and indicate whether they are biologically hydrophilic or lipophilic, the degradation pathway in biota (renal, hepatic...), and the time to be eliminated. What are the breakdown or byproducts from the biological process of elimination? Which of the parent or byproduct chemicals will bioaccumulate? Which of the chemicals have estrogenic or hormonally active properties?

Please describe the baseline monitoring plan for evaluating any environmental impacts from launches or related activities. Will the baseline monitoring be conducted before the EIS is written? If not, how will the authors of the EIS know the scope of environmental impacts possible around the Spaceport?

Will a port facility be part of the launch complex? If so, where will the dock be located and what will be the environmental impacts (dock/bulkheads, dredging, filling, canal construction, roads to the Spaceport).

How will the launch vehicles and payloads be transported to the Spaceport? What are the related environmental impacts?

Thank you for consideration of my questions.
I attended last night's FAA Spaceport Hearing but could not hear the hearing! While I appreciate the attempt to accommodate a large crowd, the choice of the Rec Center / gymnasium over the auditorium (as in audio??) was unfortunate.
Dear Ms. Zee,

I've already sent you an email about various catastrophic failures we've seen in the rocket industry. Based on the Fish and Wildlife Services' technical assistance letter for Shiloh (http://www.fws.gov/uploadedFiles/ShilohScopingComments.pdf), I feel that more needs to be added concerning this very important subject.

A failed launch at the proposed spaceport site in Harriet's Bluff/Floyd's Neck in Camden County could have a significant impact on human safety for Cumberland Island, Little Cumberland Island, Jekyll Island, St. Simons Island, Little St. Simons, Sea Island, Brunswick, Fernandina Beach, and the Harriet's Bluff/Woodbine/St. Marys/Kingsland areas, too, depending on how far the rocket got, which direction it went, how big it is, etc. And there's that little matter of having Kings Bay Naval Submarine Base less than 10 miles away. We know from the Discovery Channel presentation on the XiChang disaster that errant rockets can kill hundreds of people and devastate large numbers of physical dwellings in one fell swoop (https://www.youtube.com/watch?v=LUtn0Y9gBLw, https://www.youtube.com/watch?v=bGoU1GgkrKg.)

How this project ever got this far is still a wonder to many. It needs to be stopped now, in good conscience.

Because of the tremendous damage and impact a catastrophic failure, accidental or purposeful, by authorized personnel or not, could have on humans, the above mentioned areas, facilities, infrastructure, wildlife, and the environment, include a probabilistic risk analysis that systematically and comprehensively analyzes a feasible catastrophic outcome of proposed launch activities. The Environmental Impact Statement should describe the planned response and the level of potential damage to adjacent land, water, wildlife, humans, as well as how the determination would be made to reopen the area and how damage and losses to the above mentioned areas would be mitigated. Those who are pushing this ill-advised project should coordinate with local agencies, including the Fish and Wildlife Service, National Park Service, NASA, and appropriate local authorities to develop an emergency response plan to include actions for assessment and mitigation of impacts to infrastructure, natural and cultural resources, and the public in the event of a catastrophic mishap...or more than one.

Thank you very much for your time and efforts.
Should Camden Co. Reject Spaceport? Facebook
I am in favor of the Spaceport in Camden Co
Dear Ms. Zee,

I think the proposed spaceport in Camden County, GA is a beneficial proposal. I cannot speak to the environmental impact, for which I know that is your duty to oversee. However I know that a project like that could only bring beneficial economic development and prosperity. I hope that you take those impacts into account as you move forward.

Sincerely,
As the President of the McIntosh county industrial development authority I would like to go on record of support.
Terri,

I thought it was critically important to share with everyone you e-mailed the following facts:

The Board of County Commissioners is participating in a **2-year due diligence option period** concerning the subject property mentioned below in your e-mail. The Board of County Commissioners has negotiated **refundable terms** if grantor is unsuccessful in subdividing the retained land and resolving other concerns of agreement by Grantor and Grantee. The project is an ambitious and complex project concerning a “Stranded Asset” within the unincorporated area of Camden County, Georgia. The Due Diligence period is designed to allow the Board of County Commissioners to investigate findings of fact and other independent analysis to be conducted concerning the subject property over a 2-year period. On another note there is a great feature in **Georgia Trend Magazine December edition** on the cover “Georgia’s aerospace industry is thriving as companies collaborate to reach deeper into space” according to Hogencamp “**Georgia, as it turns out, may be just as much the space state as the peach state**. You can find that article at [www.georgiatrend.com](http://www.georgiatrend.com)

Yours for a better Camden County,
Spaceport Legally Prohibited Practically on TOP of Toxic Waste Dump? (also sent to most Georgia senators and representatives)

Dear Friends,

The following comment was posted by [redacted] on the Facebook page "Should Camden Co. Reject Spaceport?" The answer to that question may be "Due to 'activity and use limitations' found in Section Six of an Environmental Covenant between Union Carbide and the Georgia Environmental Protection Division, it would be legally prohibited to have a
If that’s true, efforts to have one need to stop now, because they will be egregiously wasting the Camden County taxpayers’ money, time, and efforts, which could be better spent on something suitable and safe.

"SUBMITTED EPA COMMENT"

"These comments are related to issues involving the HAZARDOUS LANDFILL ON THE PROPOSED SPACEPORT PROPERTY

"A 58.16 acre hazardous waste site is identified on the proposed spaceport site. The waste site is under a recorded Environmental Covenant ("Covenant") between Union Carbide and Georgia Environmental Protection Division

"The Covenant clearly states in section 6. Activity and Use Limitation(s). Any activity on the area (4,011.54 acres), including the RCRA [Resource Conservation and Recovery Act] landfill that may result in the release or exposure to hazardous wastes, hazardous constituents, hazardous waste constituents or the constituents of concern that were contained as part of the post-closure care and corrective action program, or create a new exposure pathway, is prohibited.

"In addition to the normal discussion about toxic waste sites on spaceport sites, several concerns are specific to this waste site:

A. Sponsors of the site have previously stated that the landfill would be excluded from the site purchase agreement. GEPD expressly included all 4,011.54 acres of the site in the Covenant for the purpose of protecting the landfill from future development on any part of the site. To technically remove the site in a property transaction would not remove the site from its location and proximity to the launch danger zone.

B. Camden County does not have the financial resources to remediate the landfill.

C. Spaceport Camden plans include both launch pad and landing pads that are currently proposed respectively 1.6 and 1.0 miles from the landfill and could very well fall within a required launch and landing blast exclusion zone. The proximity of the landfill, irrespective of its ownership, must be considered a significant risk and is unique to this site.

D. There appears to be no recorded experience or studies that have been conducted on the SEISMIC effects on toxic landfills in soil composition such as that found on the Union Carbide site.

a. Union Carbide has acknowledged that it is responsible for additional toxic chemicals not originally thought to be at the RCRA landfill.

b. There is evidence that toxic materials have leached deeper into the subsoil.

c. The effects of seismic disturbance caused by normal rocket launches and landing must be considered at this unique siting. If soil stabilization is necessary at the launch site (as it is at Boca Chica) then it is also possible that soil liquefaction can occur at the RCRA landfill.

d. There is no way to predict how any site-based seismic activity would affect the downward or sideward migration of toxins into the ground and subsequently into the aquifer, or into Todd Creek.

e. A catastrophic and entirely likely eventual launch failure or landing would cause an impact seismic vibration of unknown magnitude that may cause failure of the landfill containment.

f. A launch or landing accident could impact in the immediate vicinity of the landfill."

"Respectfully submitted, December 28, 2015. ( )"
Thank you for your kind attention to this important matter, and may God bless you and yours in 2016!

Should Camden Co. Reject Spaceport? Facebook
Georgia has a very broad Public Records Law. Virtually all written communications to or from State and Local Officials and employees are public records available to the public and media upon request. Camden County policy does not differentiate between personal and business emails. E-mail sent on the County system will be considered public and will only be withheld from disclosure if deemed confidential pursuant to State Law. If you have received this email in error please notify the Camden County, Georgia IT Division at 912-576.5640.
Dear Sir/Ma’am,

I am an owner of Golden Isles Aviation, the FBO at McKinnon Airport on St. Simons Island, GA and I wanted to register my support for the Spaceport that is being considered for Camden County.

I understand from a technical standpoint that East Coast space launches have a benefit over other geographic options. There is also seemingly a struggle to cleanly lease from the present Cape Canaveral as private industry has looked to work together with the federal government in that regard. Therefore, I would support the venture and wanted to state my support.

Thank you very much for the consideration.

[Name]
President
As an 18 year resident and tax payer of Camden County I would like to express my support in favor of Spaceport Camden.

This Spaceport project has the likely possibility of not only improving our local economy, but also the ability to obtain and sustain some great people already working within our community and/or going to State University's such as Georgia Tech.

The site under consideration has already been used for industrial purposes as well has already seen one launch in the 60's.

It is my belief that Camden County is at a time and point where movement in this direction is critical and just makes perfect sense and should continue traversing this avenue of potential economic growth.
Dear Sir, Madame,

I am a EMI, Lightning suppression engineer and fully support the construction of Georgia Spaceport in Camden County.

This project will generate jobs in GA where we have SEVERE lack of high tech jobs.

I did a small FAA bldgs. lightning & ESD & EMI hardening project and pursuing a "Lightning Threat zones & mitigation techniques for FAA next gen. IT equipment" white paper FAA project.

Lastly, I worked many years in CA for HP and Cisco. I saw first hand how CA LOST jobs due to some environmentalist trying to protect some bird species, CAL OSHA rulings etc.

How can a state, US JOBS compete against China, India where there is NO environmentalist, CAL OSHA?

Please look into FULLY supporting Georgia Spaceport in Camden County = MAKING GA JOBS.

Outsourced Jobs from China, India are NOT coming back, please look out for our own people and making local jobs.

Respectfully submitted
Ladies & Gentlemen,

Below and attached is my letter expressing Support for the Spaceport Initiative and addresses concerns. Citizen -

Today, I am so very proud of our community as we jointly approach the Spaceport Initiative with all eyes wide open. I applaud our County’s leadership as they forge forward in their quest to bring this great economic opportunity to Camden County and further promote possible developing research which may prove beneficial to mankind. Their approach of educating the masses about Spaceport to date has been outstanding and transparent. So effective that it stirred public interest and motivated them beyond a point of curiosity to active involvement. Our citizens have begun educating themselves not only about the project but looking around at the natural resources we take for granted and looking toward the future preservation of those resources. This is more than I could ever have hoped for - a joint non-partisan venture, Spaceport.

My family has been a member of this community dating back to slavery. So, I am in no way an invited guest or a transit to the area. I have been here either in blood or in person hundreds of years. Thiokol Chemical Plant purchased the land from Georgia Pacific in 1960 for the development of their rocket launching mission. Transportation was one of those pluses in their pursuit. One need recognized early on was to improve the highway infrastructure. My family was among the few here in Camden County that had to yield to the greater good by giving up land for the development of Interstate I-95. Was it heartbreaking to sell ancestral land owned for 90 plus years at that time, yes it was. The land was sold to the state in the 1960s and yet no development happened. But, when the disaster occurred at Thiokol Chemical Plant in 1971 and I saw people driving highway 17 at high speed, I understood why we needed Interstate I-95. Let us now be prepared for that “Oh My GOD” moment.

I recommend that every cadres of the emergency response plan be executed. An emergency response plan specifically designed for the Spaceport Facility. If one has not been formulated and tested in the region, then partner with Homeland Security and create a specified plan of response. Whether it be an emergency caused by nature, man-made, or a terrorist nexus let’s exercise each scenario right now. Then we will be better prepared for that “Oh My GOD” moment.

Secondly, let us begin right here with truth. There is no containment that can effectively remediate past damage done. The only way to repair damage is to remove the source foul or offender, clean-up, and treat. I recommend that the contents of the reserving depositories be removed to a site created for the purpose of containment of such contaminates. Containing this offender in this area will continue inviting a slow progression of an aggressive contaminates. The addition of operating a launch site in the immediate area adds vibration of the host which may cause breach of the containment.

It is understandable that there are concerns and some apprehension about Spaceport. Yet, if we continue the partnership momentum progress then points of enlightenment and agreement can be reached. We have a rare opportunity before us now to strike that distinct balance between colliding interest one being privilege and
power (man) and nature. Yes, this is a great opportunity for our young people to enjoy their childhood home as adults gainfully employed and economically sound raising their own families here. Yet, we also must preserve the blessing of pure abundant bounty. Mankind, God bless him has always been its worst enemy.

Everybody stay awake and involved, because yes *WE* are the people of the United States of America and *WE* are responsible for every act *WE* undertake or allow being undertaken.

May GOD, bless our joint efforts to bring this Spaceport vision into fruition.
Today, I am so very proud of our community as we jointly approach the Spaceport Initiative with all eyes wide open. I applaud our County’s leadership as they forge forward in their quest to bring this great economic opportunity to Camden County and further promote possible developing research which may prove beneficial to mankind. Their approach of educating the masses about Spaceport to date has been outstanding and transparent. So effective that it stirred public interest and motivated them beyond a point of curiosity to active involvement. Our citizens have begun educating themselves not only about the project but looking around at the natural resources we take for granted and looking toward the future preservation of those resources. This is more than I could ever have hoped for - a joint non-partisan venture, Spaceport.

My family has been a member of this community dating back to slavery. So, I am in no way an invited guest or a transit to the area. I have been here either in blood or in person hundreds of years. Thiokol Chemical Plant purchased the land from Georgia Pacific in 1960 for the development of their rocket launching mission. Transportation was one of those pluses in their pursuit. One need recognized early on was to improve the highway infrastructure. My family was among the few here in Camden County that had to yield to the greater good by giving up land for the development of Interstate I-95. Was it heartbreaking to sell ancestral land owned for 90 plus years at that time, yes it was. The land was sold to the state in the 1960s and yet no development happened. But, when the disaster occurred at Thiokol Chemical Plant in 1971 and I saw people driving highway 17 at high speed, I understood why we needed Interstate I-95. Let us now be prepared for that “Oh My GOD” moment.

I recommend that every cadre of the emergency response plan be executed. An emergency response plan specifically designed for the Spaceport Facility. If one has not been formulated and tested in the region, then partner with Homeland Security and create a specified plan of response. Whether it be an emergency caused by nature, man-made, or a terrorist nexus let’s exercise each scenario right now. Then we will be better prepared for that “Oh My GOD” moment.

Secondly, let us begin right here with truth. There is no containment that can effectively remediate past damage done. The only way to repair damage is to remove the source foul or offender, clean-up, and treat. I recommend that the contents of the reserving depositories be removed to a site created for the purpose of containment of such contaminants. Containing this offender in this area will continue inviting a slow progression of an aggressive contaminates. The addition of operating a launch site in the immediate area adds vibration of the host which may cause breach of the containment.

It is understandable that there are concerns and some apprehension about Spaceport. Yet, if we continue the partnership momentum progress then points of enlightenment and agreement can be reached. We have a rare opportunity before us now to strike that distinct balance between colliding interest one being privilege and power (man) and nature. Yes, this is a great opportunity for our young people to enjoy their childhood home as adults gainfully employed and economically sound raising their own families here. Yet, we also must preserve the blessing of pure abundant bounty. Mankind, God bless him has always been its worst enemy.

Everybody stay awake and involved, because yes WE are the people of the United States of America and WE are responsible for every act WE undertake or allow being undertaken.

May GOD, bless our joint efforts to bring this Spaceport vision into fruition.
Ms. Stacey M. Zee  
FAA Environmental Protection Specialist  
Spaceport Camden County EIS c/o Leidos  
20201 Century Boulevard, Suite 105  
Germantown, MD  20874  

Dear Ms. Zee,

Full disclosure: Our home is on Little Cumberland Island. We are taxpayers and voters in Camden County who have listened with great interest to news about a potential spaceport just a few miles from our home. We have concerns about possible negative environmental impacts and about how the spaceport will impact us as Camden County property owners and taxpayers.

The spaceport site is highly polluted. Will it be cleaned up in preparation for the spaceport? If so, who will clean it up and at what cost? Has there been a study by a qualified person to determine the cost of a cleanup? And who will pay these costs — the current owners, past owners, Camden County, the state or federal government? If the present owner is liable, what will it cost in legal fees to force a cleanup?

Rocket launches typically pollute the sites from which they are launched. For example, a Google search of “pollution” “rockets” and “Cape Canaveral” turns up a great deal of worrisome data about the dangers of a spaceport to the surrounding area. (http://usatoday30.usatoday.com/tech/science/space/2011-07-31-nasa-environmental-cleanup_n.htm) Has the county investigated these dangers and does it have a plan to mitigate the damage that launches will be likely to create? If not, will there be such a plan and when will it be made public?

Little Cumberland Island is home to the oldest sea turtle protection project in the world and is a community that values the preservation of all of God’s species including the Right Whale — there are less than 500 of them left, they communicate with each other by sound and they bear their young just off the coast of Cumberland Island National Seashore. Has the county provided expert research on the impact that the noise, light and debris from rocket launches will have on the Right Whale, the Loggerhead Turtle (also an endangered species) and the multitude of other species that thrive on our coast?

Turning to another subject, information from Camden County indicates that there could be up to 12 launches per year. Even a successful launch may involve falling debris. What is the nature of this debris and the debris that falls when a launch fails? A recent failed launch (http://www.csmonitor.com/USA/USA-Update/2015/0630/Beachgoers-beware-Hazardous-SpaceX-debris-floating-off-Florida-and-Georgia-video/) resulted in a field of hot, toxic debris that extended 5 miles. In fact, the last three launch attempts have resulted in failure. Data shows that launch failures are not uncommon and with 12 launches per year, there would be a high
probability of a failure within a period of only a few years. A failure over Little Cumberland or over the Cumberland Island National Seashore, for example, could result in forest fires that would be very difficult to control and potentially very destructive. What are Camden County’s plans for fire management? Fire management at Spaceport America costs $2.9 million per year. [https://en.wikipedia.org/wiki/Spaceport_America/](https://en.wikipedia.org/wiki/Spaceport_America/) What will it cost in Camden County and how will the cost be covered? How will the cost impact our property taxes? How has the increased risk of fire increased homeowner’s insurance in other settings and how is it likely to increase homeowner’s insurance in Camden County and surrounding areas?

At other areas near launch sites such as Brownsville, Texas, local residents are forced to evacuate prior to launches, which has caused considerable public consternation. [http://www.bloomberg.com/news/articles/2015-09-09/elon-musk-making-enemies-fast-in-town-hosting-space-x-launches/](http://www.bloomberg.com/news/articles/2015-09-09/elon-musk-making-enemies-fast-in-town-hosting-space-x-launches/)

Steve Howard, in his presentation at the October board meeting of the Little Cumberland Homes Association, showed a slide with a typical launch trajectory and another one that stated that residents of Little Cumberland would not be required to leave their homes. But Little Cumberland is directly east of the prospective launch site and in an earlier presentation that some of us heard, the typical launch trajectory went directly over Little Cumberland. What, in fact, will the typical launch trajectory be? Will it encompass inhabited areas such as Little Cumberland Island? If so, is the FAA comfortable with rockets being launched over inhabited areas? Has the FAA ever approved launching rockets over inhabited areas? If so, what are the requirements for evacuating people in and near the launch trajectory? How will evacuations and environmental damage impact our property values and, if so will there be compensation to owners for such losses?

In a similar but perhaps even more serious vein, an accident that resulted in significant damage at King’s Bay Naval Base, home base for the entire Atlantic fleet of nuclear submarines, would be catastrophic. Is there well-researched information to show that we can be reasonably certain that the threat of such an accident can be reduced to an acceptable minimum? (And given the catastrophic nature of such a possibility, what is an acceptable minimum?) If such information is available, when will it be made public? If it is not available, will the research be done before the spaceport is approved?

Rocket launches will also be likely to have an economic impact on Cumberland Island. The Cumberland Island National Seashore is a popular destination for people from all over the country who enjoy camping and hiking and who make reservations as much as a year in advance. What will happen when reservations must be cancelled at the last minute due to launches? How will this impact the bottom line for the Cumberland Island National Seashore? Have these potential negative economic impacts been studied and, if not, shouldn’t such a study be undertaken before a decision about the spaceport is made?

In his presentation on Little Cumberland, Steve Howard mentioned the establishment of a satellite campus of Georgia Tech as a possible positive economic impact of the establishment of Spaceport Camden. This is also mentioned on the county website. Has there been any commitment or official statement of interest in establishing such a campus by the administration at Georgia Tech? Georgia Tech established a satellite campus in Savannah in the late 1990’s but closed it after several years because it did not succeed in its projected goals. Is there evidence that a satellite campus in Camden County would succeed where the Savannah campus failed?

In his remarks at Little Cumberland in October, Jimmy Starline, Chair of the Camden County Commissioners, spoke of the need for more industry as part of the tax base of Camden County but it shouldn’t be taken as a foregone conclusion --- especially in the light of the economic woes of another domestic spaceport (Spaceport America) --- that the impact of Spaceport Camden will necessarily be positive. Since the Camden County Commission has embarked on this expensive project with an increased tax base in mind, shouldn’t there first be an economic impact study to determine impartially what the likely effect on the tax base will be and whether the effect, if indeed it turns out to be positive, is worth the environmental costs and other risks to which
we have alluded? Has the county done the appropriate research to ensure that the venture will be profitable and not a drain on taxpayer dollars? If so, when will it be available for public scrutiny?

Spaceport Camden will be like Spaceport America in that both are the result of local governments acting like private developers. In the case of Spaceport America, the local governments in both Dona Ana and Sierra Counties in New Mexico played the role of developer by building a spaceport and then hoping to attract private businesses as clients. If the FAA approves Spaceport Camden, it will follow the same model. (This is unlike one of the launch sites at Cape Canaveral, leased by Blue Origin where a $220 million dollar facility is planned, and unlike the Spaceport in Brownsville, Texas where SpaceX owns and operates a private launch site and facility.) How will Camden County avoid the pitfalls that have left Spaceport America with revenue far below projections? For example, the expensive government-built facility at Spaceport America has an annual deficit of $500,000. (https://en.wikipedia.org/wiki/Spaceport_America/)

In view of these issues, shouldn’t the county have a subcommittee to study the economics of the spaceport, so that we have some reasonable assurance that this venture will bring the economic boom that is expected by its proponents rather than the economic bust that has occurred elsewhere? The committee could do the sort of market research that any sound private business would require by answering questions such as the following:

Who is likely to use Spaceport Camden? How often and at what cost?

How many spaceports worldwide would be in competition with Spaceport Camden and given the number of competitors is there, in fact, a viable market for another such enterprise? Would foreign spaceports, which lack the kinds of safety and environmental requirements imposed by U.S. agencies such as the FAA and the EPA be more attractive to new private space ventures than Spaceport Camden? Since the prospective client for Spaceport Camden would be a private company (rather than, say, a state or federal agency), what assurance do we have that the client would not be able to move operations abroad if and when doing so becomes economically attractive? As already mentioned is it possible to establish what cleaning up the site will cost----who is qualified to determine that and how much would such study cost?

Who will pay the cleanup costs and how will the revenues to finance the cleanup be raised? If the cleanup costs are to be borne by the private companies, is that possible, without an expensive and protracted legal battle to force the companies to bear these expenses? What will the county have to spend on constructing the Spaceport itself --- costs such as creating infrastructure like improving roads or creating other facilities? How will a tax increase to support the bonds necessary for such construction impact Camden County’s bond rating? What was the impact in Dona Ana and Sierra Counties, NM? What kinds of inducements would be necessary to attract a client and spin-off industries for the spaceport? In the case of other such enterprises, tax incentives have been necessary to attract a tenant. How much would this cut into the envisioned revenue to our county? What is the magnitude and type of spin-off development at other commercial spaceports? What kinds of increases in property taxes can we expect in support of the Spaceport? What has been the impact on property taxes in other spaceport locations? How will the companies that use the Spaceport be taxed and how much can we expect the companies using the Spaceport to pay in taxes per year? How many of the expected jobs will require the kind of training that local people are likely to have? How many jobs might local people expect? By what percentage will Spaceport Camden decrease the unemployment rate in Camden County? What would an analysis to determine these things cost and how long would it take?

At the meetings we have attended so far, we have been told that the data to answer most of these questions is scanty or unavailable. But we respectfully submit that these questions --- both about the safety/environmental impact and the economic feasibility of Spaceport Camden --- are important and that none of us can be confident that investing taxpayer money in a spaceport is a good idea until we have gathered and analyzed the data to answer them. We therefore hope that the FAA and Camden County will see fit to address these issues.

Sincerely,
Sources:
http://www.usatoday.com/videos/tech/2015/02/03/22784109/
https://en.wikipedia.org/wiki/Spaceport_America/
Dear Ms. Zee,

I appreciate having the opportunity to comment on the environmental impacts of a proposed commercial rocket launch and recovery site (“Spaceport Camden”) in Camden County, Georgia. Hopefully my comments will contribute to encouraging the thorough preparation of an EIS.

I am a supporter and visitor of Little Cumberland Island. This nearby island would be to some degree downrange from the rocket launching facility if it were approved and I will have serious concerns about my safety, the safety of my family, the safety of the neighboring property, the safety of the National Seashore, and adjacent coastal areas. It is my understanding that it would be unprecedented for vertical launches to launch over nearby private properties. I would not plan to voluntarily evacuate any property or surrender private property rights to accommodate the commercial interests of private aerospace investors.

I am most concerned with the impact on wildlife and the surrounding wilderness. Cumberland Island has over 9,000 acres of designated Wilderness and UNESCO has declared that Cumberland is part of the Carolinian-South Atlantic Biosphere Reserve because of the incredible biological diversity including, beaches, sand dunes, salt marsh, maritime forest, tidal creeks, and fresh and brackish water ponds. It provides important nesting, wintering, and migratory habitat for rare and endangered wildlife including loggerhead sea turtles, brown pelicans, piping plovers, least terns, bald eagles, Wilson’s plover, red knots and peregrine falcons. Loss or damage to the Cumberland Island barrier island environment would be devastating.

Please take this concerns into consideration as your move forward with what is best for the land and for the people.

Most sincerely,
Can you show me where it is proposed

Sent from my iPad
Comments have been received about the noise level of rocket launches, which are anticipated to occur not more than 12 times per year. The sounds from these launches can be heard from the ground for no more than 60 seconds, less than 30 seconds of which noise a person of average hearing would consider loud. According to the National Lightning Safety Institute, thunder typically registers at about 120 dB in close proximity to a lightning ground stroke. In the area of the proposed facility, there are often thunderstorms during the summer, and at its peak, a typical thunderstorm produces three or more strikes to the Earth per minute (Uman, Martin A., All About Lightning. Dover Publications, Inc. pp. 103–110). Since this type of lightning is the third most common, this means there are more than 10 strikes per minute in a typical thunderstorm, or more than 300 in a 30-minute storm.

It is therefore unreasonable to have great concern about occasional 30-second periods of noise similar in volume to that produced by lightning in an area that likely experiences thousands of lightning strikes each year.
Leidos ALERT - Any message containing links, attachments or asking for personal information could be a potential phishing attack. Please use caution when following links received in email messages.

This message has been identified as a POSSIBLE SPAM OR PHISHING ATTEMPT. Do not open any attachments or links unless you are comfortable they are from a trusted sender. If you have questions about suspicious emails, please contact the Leidos Service Desk at (855) 953-4367

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**THIS NOTE IS IN RESPONSE TO THE FAA MEETING IN EARLY DECEMBER: THE MEETING WAS POORLY PLANNED AND A LOT OF TAXPAYERS AND INTERESTED PARTIES WERE APPALLED WHEN THEY FOUND OUT THAT THIS WAS A GOP PEP RALLY. WE HOPE THAT THIS PROJECT IS NOT GOING TO BECOME A POLITICAL THING AIMED AT THE VOTES RATHER THAN CONCRETE FACTS, THIS IS A VERY ENVIRONMENTAL AREA, AN ABORTED MISSION COULD DAMAGE BEYOND REPAIR A LARGE CHUNK OF CAMDEN COUNTY. THE PIECE OF PROPERTY BEING CONSIDERED HAS BEEN CONTAMINATED BY EVERY ONE THAT HAS OWNED IT SINCE THE 1960'S. THE SOLID ROCKET FUEL PROJECT PRODUCED WASTE THAT IS BURIED SOMEWHERE, TEMIK PRODUCED ONE OF THE MOST POISONOUS LANDFILLS IN THE USA. THERE IS UNEXPLODED ORDNANCE SCATTERED ALL AROUND. THE MARSHES, CREEKS, AND RIVERS ARE A VITAL PART OF A LARGE ENVIRONMENTAL NURSERY. THE COUNTY COMMISSIONERS ARE AT THE MERCY OF THE COUNTY ADMINISTRATOR WHO MAY BE PASSING ON ONLY THE PEACHY SIDE OF THIS PROJECT. THIS SITE THAT IS BEING CONSIDERED IS IN A FLOOD PLANE, THERE ARE NATIVE AMERICAN SITES AND BURIALS.**
HERE. TRAFFIC WILL BE AN ISSUE TO RESOLVE. WE HAVE MAJOR LANDOWNERS THAT SURROUND THIS SITE. IT IS HARD TO GET ANY INFO ABOUT THE TYPE OF FUEL TO BE USED. DO WE EVEN HAVE A COMPANY UNDER CONTRACT TO BUILD THIS LAUNCH FACILITY. THE COMBUSTION OF THE ROCKET FUEL PRODUCES SOME LESS THAN DESIRABLE FALLOUT, THE USED ENGINE HAS TOXIC RESIDUE THAT WASHES AWAY WHEN IT HITS THE OCEAN. THERE ARE SALAMANDERS (POCKET GOPHERS) AND GOPHER TURTLES TRYING TO MAKE IT IN THIS ALREADY HOSTILE ENVIRONMENT. ANY MANUFACTURING IS GOING TO PRODUCE WASTE THAT WILL HAVE TO BE DISPOSED, THIS COULD WILL PROBABLY RESULT IN WASTE WATER TO BE RELEASED IN THE LOCAL WATERWAYS. I HOPE THAT WE COULD HAVE A BETTER PLANNED MEETING TO DISCUSS THE NEGATIVE ISSUES SINCE IT APPEARS THAT ALL THE PEACHY STUFF IS GETTING LOTS OF PUBLICITY FROM THE GOP THANKS
Dear Sir, I am a member of the Little Cumberland Home Association. I have enjoyed the peace and beauty of LCI, Cumberland Island, Jekyll island and St Simons for many years. Your proposed space port may interfere with that peace and beauty. LCI is due east of your proposed site. What do you plan to mitigate the damage? How will this site affect the wildlife, enjoyment of beaches and other tourist activities that are the life blood of the area? What are you planning to clean up the site and prevent future contamination? I am concerned because you do not mention any of the barrier island in your proposals. Sincerely,
I am in support of the Spaceport Camden project, and wanted to provide input into the EIS Scoping Phase of the project. The Spaceport is an important opportunity for Camden County. The county is facing challenging economic times ahead without a new economic engine for smart growth. Traditional Camden County industries such as pesticides, munitions and paper manufacturing are not what we want in our future. We need innovation-driven industries such as aerospace, biotech, and high tech research. The spaceport is an opportunity that could help achieve these aims. The proposed site of the spaceport is an old industrial site that manufactured pesticides using dangerous chemicals like MIC (methyl isocyanate) and earlier manufactured munitions. The spaceport will be a low environmental impact operational site that will use limited quantities of industrial chemicals that are much more safer overall than prior (and potential future) site uses. Please consider the improved operational profile of the site usage versus traditional uses in your analysis. The proposed site used to draw upwards of 1.7 Million gallons of water per day from the Floridan Aquifer. The new spaceport proposes to use only 100-150,000 gallons of water per launch (once per month), plus low levels of water for building facilities and grounds, with an expected savings of over 50 million gallons per month over prior uses. Today’s operators such as SpaceX state they test and, if necessary, thoroughly clean the water before it is recycled for use again. Please consider these positive environmental impacts in your analysis. The site is not a pristine natural site, but much of the property (approximately 1600 acres of upland and 10,000 acres of marshland) will not be used by spaceport operations, and will be a natural buffer for wildlife, fisheries, and a safety buffer. The spaceport shoreline and marsh areas are wonderful opportunities for nesting bird habitats and fisheries that can co-exist with envisioned operations, where other property uses such as pesticide manufacturing does not promote such co-existence. Other U.S.
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I support the timely approval of this project!
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December 7, 2015

Ladies and Gentlemen, the Honorable Congressman Carter,

I am [full name] and I believe that Space-X at Boca Chica, Texas and the entire Space-X programs has some issues that we need to take the lead in identifying and we need to take the lead in resolving. It is just our nature as the United States Second oldest city we are pioneers by nature.

The main issue that I see is that the FAA has the responsibility to protect the public from launch hazards but lacks any capability to do that. The Air Force and NASA both have the expertise but not the range or analytical assets or the jurisdiction. Elon Musk and Space-X are by nature interested in the dollar not the rules. I propose that Federal legislation be proposed to have NASA in charge of all space related launches and recoverings, the Air Force be given the power to conduct oversite and monitoring of the commercial space program and the FAA to monitor NASA and the Air Force as a fresh set of eyes. As it is now in the event of a failure we would have finger pointing and nothing learned. We must be proactive in safety not reactive in these areas.

In the areas of safety, there is a distance focusing over pressure-a shock wave from a launch that can damage buildings and can be fatal to people. The property values on Amelia Island may very well fall as the Beaches and Jacksonville International Air patterns are secured due to these damaging blast. It also may very likely cause a “microburst” scenario aboard Sub Base, Kings Bay. Set rules of a 15 hour launch window and a limit of 12 launches a year would be prudent first steps. Don’t overlook landing issues-sonic booms, and precautions should a Columbia style tragedy occur. It is interesting to note that Kings Bay and
already this Space-X site are designed with vast areas of trees to absorb potential shock waves and both are also considering solar panel farms that would remove these trees. I think Space-X needs the trees. This is one of those areas where NASA has the expertise. The area that is most dangerous is the closest 2 miles to the launch site by the way. Noise pollution has to be addressed. Along with the shock wave is a debris impact hazard, as a hazard to maritime navigation and the recovery of booster rocket stages is not an exact science. Again NASA has the expertise in this area not the FAA and the Air Force has some experience in it. There is the issue of Toxic Effluent Exposure, the rocket propellents may injure people on the ground, and the heavy contamination of the Thiokel site may be akin to throwing a match on a pile of oily old rags. In a historical note in 1962 an accident from pad 17 at Cape Canaveral resulted in the death of a Cuban cow, when dealing in terms of space travel we are close neighbors. This you may recall was the famous $2 Million dollar cow that the United States paid to quiet Fidel Castro and Russia from talk of “Imperialist aggression”. A launch from the proposed site may be incorrectly read as a launch from Kings Bay. In our day add North Korea, China and Iran to the mix and we could have World War Three. The site will require an investment of $100 Million dollars some of it from Federal funding, to produce an estimated 100 jobs for 5 years. We the people might demand more of a commitment from Space-X. They could produce more positions in site security, a longer stay, more positions in safety. The FAA, NASA and the Air Force should all have a presence on site. Space X appears to be going the route of maximum profits, minimum staffs and acts of God. At Boca Chika, Space-X still has several non-trivial issues to resolve before they can launch. I recommend an Embry-Riddle Scholary Commons article written by Eleazer and Ellegood on this topic. Sincerely, PS Why yes I was a Science teacher at one time...and History also...
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<th><strong>Full Name</strong></th>
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<td><strong>E-mail</strong></td>
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<td><strong>Message</strong></td>
<td>I believe this Spaceport is the future of Ga and should be allowed to proceed in Camden County. Southeast GA needs this more than ever.</td>
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January 17, 2016

Leidos,
2021 Century Boulevard, Suite 105
Germantown, MC 20874
FAACamdenSpaceportEIS@Leidos.com
attn: Ms. Stacy M. Zee, FAA Environmental Specialist

Re: Additional Comments regarding SpacePort Camden EIS

Dear Ms. Zee,

Thank you for the opportunity to provide comments on the proposed SpacePort in Camden County.

I have owned property on Little Cumberland Island, Camden County, GA since 1976 and am an active user of the Island. I routinely visit once a month for 4-5 day weekends plus usually 7-10 days on two other occasions during the year. During these visits, I bring family and friends so altogether I have an estimated 90 days each year that I am on Little Cumberland and I have an estimated 50 family and friends who join me. My use of the Island mirrors other members who total 100, and who have an estimated 500 family and friends visit Little Cumberland annually. This means our island is actively used by 100 owners plus our guests throughout the year. This is significant usage and the Camden County proposal that states that Little Cumberland Island has only 2 residents is just plain wrong.

I have had business experience with hazardous waste sites and I am very concerned with Camden County proposing to purchase the contaminated land from the owners who have not done an EIS statement on the contamination. This is a very toxic property which is why it has not sold to others as no business owners want to accept the tremendous liability for contaminated property as the liability is total. The potential ground water seepage is tremendous with the existing hazards, and could affect all coastal areas north and south from the site. Adding in rocket launches from the site will only add additional waste from the spent rocket fuel, not to mention failed launches.

I also have business experience with satellite/rocket launches as my bank considered financing one a number of years ago. The requirement is that two satellites be on site for every one launch as the failure rate on launches is so high that the second one must be ready as soon as possible. The recent failed launch at Kodiak, Alaska is a great example of a failed launch, with rocket debris scattered all over Kodiak Island. I have been to Kodiak which is otherwise unspoiled and what a travesty to have the satellite mess there.

With other SpacePort sites in the US, none have made any money, and all have required additional funding by local taxpayers. There have been minimal jobs created, despite claims by proponents of the "large number" of jobs that will be created in a rural county.

I will not leave my home for a rocket launch. This is my retreat into nature and the unspoiled wilderness of approximately 2,200 acres with wild horses, endangered Sea Turtles, alligators, deer, armadillos, raccoon, coyote and bob cats. We have the oldest Sea Turtle Rescue Project on the East Coast, one which is more than 50 years old. We also
have an endangered nesting shore bird project. Having rocket launches over this wilderness will create havoc for the wild animals, sonic booms which will spoil the quiet I routinely enjoy.

If this project goes forward and there are failed launches with damage to any part of my property, including air and water, I will expect full reimbursement for any damage to my property and for any damage on Little Cumberland Island.

As a taxpayer in Camden County I am vehemently opposed to increased liability that this project will entail, especially with the environmental hazards that currently exist in addition to more from the launches themselves. It is frankly beyond my comprehension that the Camden County Commissioners are considering the SpacePort proposal which will cost us tax payers an untold huge amount in environmental liability claims, with minimal job creation. This is a lose/lose for everyone in Camden County and I strongly oppose the project.

I strongly urge you to turn down this ill-conceived proposal for a SpacePort in Camden County, especially as there already are active launch sites in Texas and Florida that are underutilized and which do not entail launches over active residential and wilderness areas, and which do not entail purchase of highly contaminated property.

Thank you,

[Name]

Little Cumberland Island property and homeowner Camden County, GA
Dear FAA,

My name is [redacted] and I have a home on Cumberland Island where Space Port has proposed to launch rockets. There are multiple residential homes on this island not to mention all the NPS visitors. The delicacy of with this National Seashore could not handle these launches. This land is the most untouched undeveloped piece of land on the east coast. Reagan even signed a bill to protect this beautiful land and stated the importance of protecting our unique wilderness on Cumberland Island. By launching these rockets what is the potential to harm the island?

Could the lighting can be harmful to the wildlife it can especially be dangerous to the sea turtle who nest here? What is the potential issue for contamination of salt marshes, beaches, fishing and shrimping industry? The risk contamination of a land that has been so careful preserved and wildlife that has been protected?

The historical delicacy of the island is no small matter either! There is so much history on this island including the historical homes that have had so much money put into preserving and restoring them.

The ecosystem is also so delicate and these rockets could spend up the erosion on the island.

What is the potential of these rockets to cause irreversible damage with their with vibration, potential explosions, and acoustic energy?

I also don't understand how this could pass if it is putting people like me in danger?

This is a public safety issue as well! There could be major contamination from rocket degree and fuel. This also effects the wildlife in the marshland and on the island.

How could the FAA possible protect us and our property? This trajectory would also directly interfere with my families income! How could they compensate us for this?

How will they suppress a fire from a launch failure? Or an fuel spill? Who is paying for the clean up of the launch site? Do we know what is really on that site now! My family pays taxes in Camden County. We don't want to pay for this!

I grew up on this beautiful Island and still own a residence. How could you take the sanctity of the island away from the residence of the island and the public who come to this great wilderness to experience it wonder and beauty.

Who is really prospering from this project? The public? Camden County?
How will this effect the values of our properties?
Will our taxes increase if we have to pay for clean up?
Is Camden County able to cope with a big entity as Spaceport?
Do they really know what they are undertaking?
Is there back up and support from the US Government?

Kings Bay? How does this effect them and our safety?

Thank you for your consideration to all my questions,
I am very worried and concerned!
I believe a good thing to work on next would be the complete unviability of the trajectory. Here's why, from an anonymous contributor: "FAA is responsible for protecting the safety of the uninvolved public. They require a rigorous risk analysis and launch operators must demonstrate a less than 30 out of a million chance of a casualty. Having any person present along the trajectory causes this risk threshold to be exceeded. Therefore, everyone must be removed from an air, sea, and land corridor, the size of which depends on the characteristics of the launch. For example, the October 2014 launch of the Antares rocket from the MidAtlantic Regional Spaceport was scrubbed when a sailboat wandered into the maritime exclusion zone just before, the launch. It seems logical that if a resident refuses to be removed from their property on Cumberland Island, the FAA cannot issue a license to launch over that person's property or an issued license would be invalidated (although the FAA has not confirmed this). This suggests then, that if a private launch operator cannot reach an agreement with every property owner within an exclusion corridor, they will appeal to the county or the state to evict that person from their property and/or take their property by condemnation."

This risk is unconscionable and will not stand. And there is no way, in such a populated area, that the chances of a casualty would be that low. What is going on here? I'm trying to figure out how this project ever get off the ground. Is it worth the cost to keep space projects top of the mind, with no thought to what it will cost our great County, or the counties around us? Those from outside Camden County who are pushing this project should have realized it was a no-go from the start. I believe they have sold us - or are trying to sell us - a bill of goods.

Should Camden Co. Reject Spaceport? Facebook
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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I am in favor on the Spaceport in Camden County Georgia
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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yes I support Spaceport in Camden
I support the Spaceport for Camden County, GA.
Message:

I support the Spaceport for Camden County. It will help bring much needed jobs to our community.
Message:

Move forward with spaceport now, time is money
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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I fully support
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
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Message:
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yes I support spaceport camden
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Message:
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Yes I support Spaceport in Camden
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Message:
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Assuming acceptable environmental impact, I am in favor of Spaceport Camden.
Message:

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YES, MY ENTIRE FAMILY IS FOR CAMDEN SPACEPORT.
Message:
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I do support the space center in camden county, ga
From: [REDACTED]
Sent: Thursday, January 07, 2016 9:13 AM
To: FAACamdenSpaceportEIS
Subject: Message from www.faa.gov: FAACamdenSpaceportEIS@Leidos.com

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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Yes
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http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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Yes, I support Spaceport in Camden County, GA
From: [Redacted]
Sent: Thursday, January 07, 2016 8:10 AM
To: FAACamdenSpaceportEIS
Subject: Message from www.faa.gov: FAACamdenSpaceportEIS@Leidos.com

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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I'm for the spaceport!!
I am in support of the spaceport coming here. I was raised in Camden County, and love it here. Change is often challenging, but also inevitable. To quote an anonymous source, "There is no growth in a comfort zone, and no comfort in a growth zone." Let's grow!
Message:

Please add me to the Camden Spaceport project mailing list. Thank you.
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<td>FAACamdenSpaceportEIS</td>
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Message:
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How do I obtain a copy of the Spaceport Camden EIS Application as submitted?
Message:
Hello I have questions:
1. Will any residences in the county need to be evacuated for launches or tests?
2. How much water will be used for each launch or test and where will it come from?
3. Will access to publicly owned navigable waterways need to be restricted at any time?

Thanks
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
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Message:
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I own property in Camden County and I wish to register an opinion on the construction of the proposed Spaceport. All systems go ... Full speed ahead
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
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Message:
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I live in groverview subdivision a couple miles away from the proposed site for Spaceport Camden County. Please add me to mailing list and also I would like to know what happens with us and our house since we are so close to launch site. We are the closest subdivision about 5 miles from site. Will we need to move?
From: [redacted]
Sent: Monday, December 07, 2015 7:42 PM
To: FAACamdenSpaceportEIS
Subject: Message from www.faa.gov: FAACamdenSpaceportEIS@Leidos.com

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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The spaceport would generate much economic benefit to the south eastern portion of the state of GA. The construction of the spaceport alone would generate jobs for not only the surrounding counties, but the counties surrounding them as well within driving distance. The final product will mean well paying jobs for a section of the state where there is little industry and bring in other industries to provide more jobs to better the economy of not only SE GA, but the entire state. This economic benefit will be realized in transportation, building of local businesses, education, and long range stability for SE GA. This is a project that is very much needed in this part of the state. I have been monitoring the progress of the process for the project since I first heard about it a couple of years ago and am excited to see it get this point. This project is a must for SE GA!!!
From: [Redacted]
Sent: Thursday, November 19, 2015 1:07 PM
To: FAACamdenSpaceportEIS
Subject: Message from www.faa.gov: FAACamdenSpaceportEIS@Leidos.com

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:

A spaceport in Camden County will become part of my environment. Had I wanted that type of environment I would have settled in Cape Canaveral instead of St. Marys, GA., Instead, I chose this area because of its peaceful, unindustrialized, residential environment. Seems like our government officials will do anything for money...even if it means ruining the community.
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
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Message:
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I am very much in favor of the Spaceport location in Camden County GA. I think it will bring significant economic improvements to the area while preventing high density commercial development and further restrict commercial / public access to Cumberland Island. Similar Government facilities in the area provide significant protections for sensitive plant and wildlife that is not supported by residential or standard commercial development.
As a resident of Camden County and a participant in the regional aviation community, I would like to be apprised of this project as it progresses. Please add me to the mailing list.
From:          
Sent:         Monday, January 11, 2016 6:49 PM 
To:           FAACamdenSpaceportEIS 
Subject:      Message from www.faa.gov: FAACamdenSpaceportEIS@Leidos.com 

This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

Message:
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I live in Camden county GA. I'm looking forward to the space program growing with us in Camden county.
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Message:
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YES, I'm in favor for Spaceport Camden
This email was sent through the Federal Aviation Administration's public website. You have been contacted via an email link on the following page:
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Message:

Dear Ms. Zee,

Thank you for the opportunity to comment on the environmental impacts of the proposed commercial space launch site in Camden County, Georgia.

I was rather surprised to learn that Camden County and the FAA was considering the placement of a space craft launch site as the coast of Georgia, known as the Golden Isles. The Atlantic Coast of Georgia, while only about 100 miles, has the largest marsh system on the Atlantic coast. This is important because the marsh ecosystem is one of the most biologically productive natural ecosystems on earth. Another very important feature of the marsh ecosystem is that the same properties that allow marshes to trap nutrients and provide rich and productive nurseries also make these areas pollution and contaminant traps. Furthermore, the marsh system is highly interconnected with tides moving water in and out of the system daily, which complicates the isolation of any necessary clean up.

This understanding of the vitally important and yet fragile ecosystem is the heart of my concern with the proposed space launch site in Camden County, Georgia. Should the marshes be harmed in Camden County through contamination from this site or unintended contamination from a launch, the affected area would be far greater than what one would find in an inland area or even over a true ocean area, where the effects would diluted (though still harmful).

In light of news that the Kennedy Space Center (KSC) will cost more than $1 Billion in clean up costs and that the process will take decades, the environmental impact statement for this site should look at what caused the contamination at KSC and how similar contamination would impact our fragile marsh ecosystem.

Additionally, this statement should assess the probability of mishap leading to accident or contamination.

Finally, the proposed action states that the marshland would be used a buffer. It is critical that this language be removed. Should a launch site be situated in Camden County, the recommended buffer zone should be based on dry, land only. The marsh system is dynamic and changes over time. The marsh system is highly interconnected, carrying water and contaminants in currents. And the marsh system is a fragile and ecologically and economically vital system for the coast of Georgia.

My final concerns are regarding the human impact of Glynn and Camden County residents. I grew up on the beaches of Glynn County, I have visited Cumberland and Jekyll Island literally hundreds of times, and am a property owner on Little Cumberland Island. My understanding is that residents will be evacuated during launch events based on the flight path of the space craft. This proposal sounds very disruptive to the property owners on Little Cumberland Island, the south end of Jekyll, and to visitors to the National Seashore on Cumberland Island. Additionally, the need to evacuate
residents, highlights the risk in these launches further suggesting that a densely populated area, with a growing population, is not an ideal site for a Spaceport. Finally, an analysis of the consequence of a launch misfire which resulted in disruption of activities at the Kings Bay Submarine Base needs to be addressed in light of human impact of nuclear material, environmental impact and the impact on national security if an accident occurred which prevented the base from operating normally.

Thank you for considering these concerns,

Sincerely,
To whom it may concern,

There are many concerns I have about the proposed spaceport, but most disturbing to me is the close proximity of rocket launches to King’s Bay Naval Base. To my understanding there are multiple nuclear submarines armed with ICBM’s (some of which are equipped with nuclear warheads) stationed there. What would the impact be if a rocket were to crash into one of these submarines?
From: [Redacted]
Sent: Tuesday, December 22, 2015 9:38 AM
To: faa@spaceportcamden.us
Subject: New submission: Spaceport FAA Form

THIS NOTE IS IN RESPONSE TO THE FAA MEETING IN EARLY DECEMBER: THE MEETING WAS POORLY PLANNED AND A LOT OF TAXPAYERS AND INTERESTED PARTIES WERE APPALLED WHEN THEY FOUND OUT THAT THIS WAS A GOP PEP RALLY. WE HOPE THAT THIS PROJECT IS NOT GOING TO BECOME A POLITICAL THING AIMED AT THE VOTES RATHER THAN CONCRETE FACTS, THIS IS A VERY INVIROMENTAL AREA, AN ABORTED MISSION COULD DAMAGE BEYOND REPAIR A LARGE CHUNK OF CAMDEN COUNTY. THE PIECE OF PROPERTY BEING CONSIDERED HAS BEEN CONTAMINATED BY EVERY ONE THAT HAS OWNED IT SINCE THE 1960'S. THE SOLID ROCKET FUEL PROJECT PRODUCED WASTE THAT IS BURIED SOMEWHERE, TEMIK PRODUCED ONE OF THE MOST POISINOUS LANDFILLS IN THE USA. THERE IS UNEXPLODED ORDINANCE SCATTERED ALL AROUND. THE MARSHES, CREEKS, AND RIVERS ARE A VITAL PART OF A LARGE ENVIROMENTAL NURSERY. THE COUNTY COMMISSIONERS ARE AT THE MERCY OF THE COUNTY ADMINISTRATOR WHO MAY BE PASSING ON ONLY THE PECHESY SIDE OF THIS PROJECT. THIS SITE THAT IS BEING CONSIDERED IS IN A FLOOD PLANE, THERE ARE NATIVE AMERICAN SITES AND BURIALS HERE. TRAFFIC WILL BE AN ISSUE TO RESOLVE. WE HAVE MAJOR LANDOWNERS THAT SURROUND THIS SITE. IT IS HARD TO GET ANY INFO ABOUT THE TYPE OF FUEL TO BE USED. DO WE EVEN HAVE A COMPANY UNDER CONTRACT TO BUILD THIS LAUNCH FACILITY. THE COMBUSTION OF THE ROCKET FUEL PRODUCES SOME LESS THAN DESIRABLE Fallout, THE USED ENGINE HAS TOXIC RESIDUE THAT WASHES AWAY WHEN IT HITS THE
OCEAN. THERE ARE SALAMANDERS (POCKET GOPHERS) AND GOPHER TURTLES TRYING TO MAKE IT IN THIS ALREADY HOSTILE ENVIRONMENT. ANY MANUFACTURING IS GOING TO PRODUCE WASTE THAT WILL HAVE TO BE DISPOSED. THIS COULD WILL PROBABLY RESULT IN WASTE WATER TO BE RELEASED IN THE LOCAL WATERWAYS. I HOPE THAT WE COULD HAVE A BETTER PLANNED MEETING TO DISCUSS THE NEGATIVE ISSUES SINCE IT APPEARS THAT ALL THE PEACHY STUFF IS GETTING LOTS OF PUBLICITY FROM THE GOP.

THANKS PAUL CLARK.
I am glad to see that you are asking for input about the proposed Spaceport. I think it's an absolutely horrible idea. This spaceport will be an endangerment to the area and carry a huge risk of accident and catastrophe. Please don't put it in South Georgia. I cherish that area as a beautiful, somewhat isolated, oasis. The water life, the birds, the flora all make it a special place to visit. Please, please, please don't do this.
Dear Sir or Madame,

As a native of the Georgia coast, I wish to express my deep concern over the impacts of the proposed spaceport to coastal Georgia's wildlife and waters. I am concerned also for the residents in the area near the proposed site, since there is an inherent danger of accidents.

I am also deeply concerned about the possible use of huge amounts of water from the aquifer for cooling. I have read that this is a possibility. This would exacerbate the conal depression in the aquifer which would speed saltwater intrusion that is already underway.

Surely there are other safer, less environmentally sensitive areas in which to conduct these activities.

Sincerely,

Tybee Island resident
Questions

1. Full Name: [redacted]
2. E-mail: [redacted]

Message

Comments have been received about the noise level of rocket launches, which are anticipated to occur not more than 12 times per year. The sounds from these launches can be heard from the ground for no more than 60 seconds, less than 30 seconds of which noise a person of average hearing would consider loud. According to the National Lightning Safety Institute, thunder typically registers at about 120 dB in close proximity to a lightning ground stroke. In the area of the proposed facility, there are often thunderstorms during the summer, and at its peak, a typical thunderstorm produces three or more strikes to the Earth per minute (Uman, Martin A., All About Lightning. Dover Publications, Inc. pp. 103–110). Since this type of lightning is the third most common, this means there are more than 10 strikes per minute in a typical thunderstorm, or more than 300 in a 30-minute storm.

It is therefore unreasonable to have great concern about occasional 30-second periods of noise similar in volume to that produced by lightning in an area that likely experiences thousands of lightning strikes each year.
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Ms. Zee,

Attached are NPCA’s comments on the licensing of the proposed Spaceport in Camden Georgia. It was a pleasure to meet you at the scoping meeting earlier this month and I look forward to staying in touch as this process moves forward.

All the best for 2016,

Emily A. Jones  
Sr. Program Manager, Southeast Region, National Parks Conservation Association  
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December 31, 2015

Ms. Stacey M. Zee
FAA Environmental Specialist
Federal Aviation Administration
c/o Leidos
20201 Century Boulevard, Suite 105
Germantown, MD 20874

Re: Comments for Spaceport Camden Environmental Impact Statement

Dear Ms. Zee:

These comments are provided by the National Parks Conservation Association (NPCA) in response to the Notice of Intent to prepare an Environmental Impact Statement (EIS) by the Federal Aviation Administration (FAA) as set forth in the Federal Register on November 6, 2015. The intent is to prepare an EIS to evaluate the environmental impacts of issuing a Launch Site Operator License to the Camden County Board of Commissioners for a proposed commercial space launch site referred to as Spaceport Camden. Pursuant to the Notice and the National Environmental Policy Act, these comments reflect our concerns, potential adverse impacts to significant environmental, historic, and cultural resources, and possible alternative actions.

Since 1919, NPCA has been the leading voice in safeguarding our national parks. NPCA and its more than one million members and supporters work together to protect and preserve our nation’s natural, historical, and cultural heritage for future generations.

As stated in the Notice, the FAA is in the process of developing an EIS prior to issuance of a Launch Site Operator License to the Camden County Board of Commissioners. It states that the Camden County Board of Commissioners has an option to purchase approximately 4,000 acres of an approximately 12,000 acre industrial site on which to construct the spaceport and is considering purchasing another 7,800 acres of adjoining property in the same industrial complex. The Notice describes the property as located in an unincorporated area of Woodbine, on the coast, surrounded by salt marshes to the east and south and the Satilla River to the north. The property is comprised of uplands, salt marshes, and fresh water wetlands. Access to the site is at the eastern termination of Union Carbide Road, an extension of Harriet Bluff Road (Exit 7 off Interstate 95). It also notes that the facilities would be fenced as would approximately 400 acres of uplands.

The Notice indicates that the Launch Operator License would allow the Camden County Board of Commissioners to offer the commercial space launch site, Spaceport Camden, to commercial space transportation companies to launch liquid-fuel, medium-lift class, orbital and suborbital vertical launch vehicles. All vehicles would launch to the east over the Atlantic Ocean. The exact flight path
and air space is unidentified in the Notice, however a quick look at a map shows that Terrapin Point on Cumberland Island National Seashore lies due east of the site. Terrapin Point is within the northeastern boundary of the national seashore’s wilderness area and adjacent to The Settlement and First African Baptist Church, significant historical and cultural resources at the national seashore.

According to the Notice, Spaceport Camden intends up to 12 vertical launches and up to 12 associated landings, as well as 12 static fire engine tests and up to 12 wet dress rehearsals per year. According the National Park Service (NPS) Management Policies (2001) and Director’s Order #47, Sound Preservation and Noise Management, part of the NPS mission is the preservation of natural soundscapes associated with park units. Natural soundscapes exist in the absence of human-caused sound. Launch, landing, and testing activities would result in human-caused sound that may adversely affect wildlife and visitor experiences and should be addressed in this environmental impact statement.

There is no discussion in the Notice as to the proposed security zone anticipated from launches. However, we note the recent EIS for the Space X Texas Launch Site imposed a five-mile closure zone around the launch area. If that were to be imposed at this location it could impact recreational enjoyment of portions of Cumberland Island National Seashore throughout the year. From what we know about this proposed project, there is a great likelihood for direct, indirect, and cumulative adverse impacts to recreational enjoyment, natural resources, endangered and threatened species, and historic and cultural resources at Cumberland Island National Seashore.

**Initial Observations.** As an initial observation, we believe that this project must get over an insurmountable bar established by federal law in order to proceed. The units of the National Park System are protected by the Organic Act from the potential of adverse impacts that would be unavoidable given this proposed site, approximately five miles due west of Cumberland Island National Seashore.

The National Park Service Organic Act (16 U.S.C. 1) sets forth the purpose of the National Park Service "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The EIS must weigh proposed impacts against this very high standard established by Congress.

This project must undergo a review pursuant to the National Historic Preservation Act of 1966. As provided in Section 106 of 16 U.S.C. 470f, "[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register."

The proposed project will also require consultation pursuant to the Endangered Species Act of 1973, due to the large number of listed species in close proximity to the proposed launch site. NPCA advocates that the no action alternative is preferable. While we do not profess to be experts on the national space program, we do note that Kennedy Space Center, and the Mid Atlantic Regional Spaceport are currently authorized for commercial launches as is a site on the Texas Coast. From our
perspective, it is difficult to see how there are no prudent or feasible alternatives to the Spaceport Camden when commercial rockets are currently launching along the Atlantic and Texas Coasts.

**Cumberland Island National Seashore.** Cumberland Island National Seashore (CUIS) was established by Congress in 1972 and is authorized to consist of 40,500 acres, including 9,800 acres of congressionally designated wilderness. Of the Seashore’s current 36,415 acres, approximately 19,565 acres are considered upland, and 16,850 acres contain marsh, mud flats and tidal creeks, some of which is contiguous to the proposed Camden Spaceport site. The purpose of CUIS as stated in P.L.92-536 is to provide for public outdoor recreation use and enjoyment of certain significant shoreline lands and waters of the United States, and to preserve related scenic, scientific, and historical values, there is established in the State of Georgia the Cumberland Island National Seashore… the total acreage within the boundaries shall not exceed forty thousand five hundred acres.

CUIS is more than 18 miles long and is the longest and most diverse of the Georgia barrier islands. It is home to the largest intact maritime forest and coastal wilderness on the East Coast, as well as 9,341 acres of salt marsh. The park is habitat for a range of threatened and endangered species.

The park tells the story of the islands 4,000 years of human history and contains a number of archeological and historic sites from early native people, through Colonial expansion, the Plantation Era and the Gilded Age.

Accessible only by boat, CUIS hosts just over 60,000 visitors each year and is an important site for public recreation and student conservation activities. In addition to hunting and fishing, visitors enjoy star gazing, the night sky, photography, bird watching, beach combing, wildlife viewing, swimming, private boating and biking. Most access the park through a concessioner’s ferry, which launches from St. Marys, Georgia. Fishing and hunting are allowed within the park. CUIS is the southern end of the Southeast Coast Saltwater Paddling trail that extends from Virginia to Georgia.

Each year, volunteers donate hundreds of hours at CUIS. The Student Conservation Association brings college-age students for 12-16 week field-based internships. CUIS also hosts Alternative Spring Break from March to May. The park also works with Historically Black Colleges and Universities to sponsor a backpacking/service unit.

**Threatened and Endangered Species.** The National Environmental Policy Act (42 U.S.C. 4321 et seq.) calls for an examination of the impacts a proposed action may have on all components of affected ecosystems. NPS policy is to maintain all of the components and processes of naturally occurring ecosystems, including the natural abundance, diversity, and ecological integrity of plants and animals (National Park Service Management Policies 2006).

There are a number of listed and otherwise imperiled species within CUIS. These species are protected by the Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act as well as state law. The following species are listed as threatened or endangered under the Endangered Species Act and are known to be present within CUIS:

- American Alligator
- Artic Peregrine Falcon

3
Brown Pelican
Cumberland Island Pocket Gopher
Eastern Indigo Snake
Piping Plover
Red Cockaded Woodpecker
Loggerhead Sea Turtle
Leatherback Sea Turtle
Green Sea Turtle
Kemp's Ridley Sea Turtle
Hawksbill Sea Turtle
Manatee

Other Imperiled Species. The Gopher Tortoise, the official state reptile of Georgia that is found on CUIS, is a candidate species and is protected under state law. CUIS is also significant on a hemispheric scale for bird migration. This undeveloped conservation complex is used by millions of birds in their annual migration along the Atlantic Flyway between North and South America. Hundreds of thousands of those migratory birds spend their winters along the shore, within wetlands and impoundments, and upland habitats of CUIS.

Endangered North Atlantic right whales – mostly calving females and some non-breeding whales – migrate each winter to the southern coast of Georgia, which is designated as critical habitat directly offshore from CUIS due to its ideal calving and nursing grounds. Right whales, the official marine mammal of Georgia, swim very close to shore and emit low frequency sounds that may be a form of communication. The ocean is a noisy place with acoustic smog from shipping, drilling, and sonar testing. Rocket launches would add to this smog and further endanger this diminishing population of roughly 400 individuals.

The EIS should address how important flyways and wildlife corridors, including aquatic corridors be protected for migratory species, including North Atlantic right whales.

Historical Resources. The National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.); the National Environmental Policy Act (42 U.S.C. 4321 et seq.); the National Park Service’s Director’s Order #28, Cultural Resource Management Guideline (1997); Management Policies (2006); and Director’s Order #12, Conservation Planning, Environmental Impact Analysis, and Decision making (2001) require the consideration of impacts on historic structures and buildings listed in or eligible for listing in the National Register of Historic Places. NPCA believes the project as proposed would likely have direct or indirect adverse effects on historical or cultural resources of the United States. CUIS includes two archaeological districts and four established historic districts that contain both historic structures and archaeological resources. All are listed on the National Register of Historic Places. The Settlement, First African Baptist Church, and High Point-Half Moon Bluff are due east of the proposed Camden Spaceport. Plum Orchard, Stafford, and Dungeness lie southeast of the proposed launch facility. The Stafford Historic District features one of the foremost archaeological resources on CUIS, and the most fragile, the Stafford Chimneys. The Chimneys are the remnants of a large slave community. Stabilization work has been performed on several chimneys, but the sonic impact of nearby rocket launches may destabilize or damage the resource.

Museum Collections. CUIS’s entire collection includes nearly 204,000 objects. While most of the collection resides at the Southeast Archeological Center in Tallahassee and the mainland museum facility in St. Marys, a portion of the collection still remains on the island, including the furnishings.
and displays at Plum Orchard, the Ice House Museum, and other locations. These collections could be adversely impacted, if not destroyed, in the case of accidental fire from released rocket fuel or debris.

**Water Quality and Quantity Issues.** NPS policies require protection of water quality consistent with the mandates of the Clean Water Act. Launch activities at Spaceport Camden would have a significant impact on surface water and groundwater resources at CUIS. Impacts to water quality and quantity in the Cumberland River, Satilla River, and Cumberland Sound must be considered. Water use for launches and wet dress rehearsals, and potentially contaminated runoff from the launch site could impact water quality in the marshes, river and sound, west of CUIS. A study by U.S. Geological Survey hydrologists found that groundwater pumping in eastern Camden County would reduce aquifer levels that extend to CUIS and could affect water levels in surficial and Brunswick aquifer systems that sustain CUIS freshwater wetland ecosystems, most of which are located in the wilderness area. Historically artesian wells supplied the water for Plum Orchard. Three artesian wells also exist at Dungeness.

**Water Quality and Aquatic Communities of Upland Wetlands, Cumberland Island National Seashore, Georgia, April 1999 to July 2000,** notes “Surface- and ground-water resources have played an important role in human habitation and resource development on Cumberland Island. The first known human use of the island and its water resources was by Native Americans around 600 B.C. (Milanich, 1970) and the Spanish and English in 1532 (Bense, 1994; Steve Moore, National Park Service, oral commun., 2001). In the late 1700's, several prominent families from the northeastern United States (U.S.) settled on Cumberland Island and established working plantations where sea-island cotton, cattle, and rice were raised, and timber was harvested for shipbuilding. The Thomas Carnegie family eventually purchased a substantial portion of the island, building five mansions and summer homes. In 1887, in order to obtain freshwater for domestic uses and decorative fountains, the Carnegie family constructed the first deep wells to tap what is now known as the Upper Floridian aquifer on Cumberland Island (McCallie, 1898).”

**Wetland and Floodplain Impacts.** Executive Order (EO) 11990, *Protection of Wetlands,* requires federal agencies to avoid, where possible, adversely impacting wetlands. CUIS includes approximately 2,500 acres of freshwater wetlands that have connectivity to, and as a result are influenced by, surface water and groundwater. The proposed launch site is contiguous to significant wetlands systems and would pose risks to these systems. NPCA is concerned that the tremendous volumes of water used to cool launch facilities during a launch, and wet dress rehearsals would have direct and indirect negative impacts on these wetlands. EO 11988, *Floodplain Management,* requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternatives exist. The Interagency Task Force on Floodplain Management clarified the EO with respect to development in floodplains, emphasizing the requirement for agencies to select alternative sites for projects outside the floodplains, if practicable, and to develop measures to mitigate unavoidable impacts.

**Recreational Enjoyment.** More than 60,000 visitors come to CUIS each year to enjoy its unspoiled beaches, hike through rare maritime hammock, fish along the shore, watch extraordinary numbers and species of birds, take photographs of outstanding vistas, watch endangered sea turtles lay their eggs on the beach, connect with our shared cultural heritage embodied in historic sites, experience wilderness, and do the usual activities enjoyed by visitors to all national parks. Based on information supplied, we are told that Spaceport Camden intends to launch at least 12 times each year. We know
that the EIS for Space X Texas imposed a five-mile security zone around the launch pad, and we anticipate that would be the case in Georgia.

What we do not know is how the security zone will impact visitors at CUIS, many of whom spend time calling up to six months in advance to secure a competitive reservation spot for camping and visiting CUIS. Will CUIS need to be evacuated during launches and landings? How will these areas be monitored and cleared? Will NPS be responsible for this security activity? Will visitors and concessioners be compensated for the interruption to CUIS on launch and landing dates? These questions must be resolved because closures would negatively impact the visitor experience and local businesses that are dependent on a thriving and accessible national park.

Visitors sometimes only have one day (one chance) to visit the Seashore on a vacation and the EIS needs to recognize that the impact on that family or individual could forever deprive them of the opportunity to visit. While the impact of a rocket launch may appear to be ephemeral (or direct, short-term” and not significant), it would not be to a family or person whose vacation plans and dollars are lost due to a park closure resulting from a launch, landing, or test at the Spaceport.

**Public Health and Safety.** By policy, NPS strives to identify hazards and prevent injuries from recognizable threats to the health and safety of visitors and employees, according to NPS *Management Policies* (2006) Section 8.2.5. The proposed action could affect public health and the safety of the public and NPS staff. Because rocket launches on an eastern flight path would go directly over CUIS, we have questions and concerns about the possibility of fire, falling debris and fuel, and the potential impact to visitor safety and natural and cultural resources. Infrastructure at CUIS does not include paved roads or access suitable for fire trucks or emergency vehicles. How are residents and visitors protected from possible wildfire danger?

**Wilderness.** Congress has designated approximately 9,886 acres at CUIS as wilderness and identified another 10,550 acres as potential wilderness. This protection guarantees that future uses within the wilderness boundary would maximize the land’s value for tranquility and quality habitat for wildlife. Wilderness areas provide isolation, solitude and the absence of the hand of humans. CUIS provides a unique wilderness experience on a barrier island on the Atlantic Coast, where most other places are heavily developed and populated. The impact of rocket launches over this designated wilderness will impact and degrade that experience, startle wildlife, and potentially create consequences from expulsion of rocket fuel and other chemicals, including unintended fire.

**Lightscape Management.** In accordance with NPS *Management Policies* (2006), NPS strives to preserve natural ambient landscapes that exist in the absence of human-caused light. A rocket launch and light pollution for the launch site approximately five miles from CUIS would adversely impact the natural landscape.

**Soundscape Management.** In accordance with NPS *Management Policies* (2006) and Director’s Order #47, *Sound Preservation and Noise Management*, an important part of NPS’ mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, and solid materials. The frequencies, magnitudes, and duration of human-caused sound considered acceptable varies among NPS sites, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas.
The sounds associated with the activities at the proposed Spaceport Camden would diminish the natural soundscapes at CUIS.

**Air Quality.** Section 118 of the Clean Air Act, as amended (33 U.S.C. 7401 et seq.) requires each park unit to meet all federal, state, and local air pollution standards. CUIS is designated as a Class II air quality area under the Clean Air Act. A Class II designation indicates the maximum allowable increase in concentrations of sulfur dioxide and particulate matter over baseline concentrations, as specified in Section 163 of the Clean Air Act. Further, the Act provides that the federal land manager has an affirmative obligation to protect air quality-related values – including visibility, plants, animals, soils, water quality, cultural resources, and visitor health – from adverse pollution impacts. At this point we are not sure what the impacts of rocket launches are to air quality. Additionally, we would caution on the impacts of disturbing the proposed site, which appears to be a contaminated brownfield, and those impacts on air quality.

**Climate Change:** Climate change refers to any significant changes in average climatic conditions (such as mean temperature, precipitation, or wind) or variability (such as seasonality and storm frequency) lasting for an extended period (decades or longer). Recent reports by the U.S. Climate Change Science Program, the National Academy of Sciences, and the United Nations Intergovernmental Panel on Climate Change provide evidence that climate change is occurring as a result of rising greenhouse gas (GHG) emissions and could accelerate in the coming decades. Launches at Spaceport Camden would certainly add to GHG emissions.

Additionally, sea level rise could impact the proposed launch site. It appears that the proposed site lies within a Coastal Barrier Resource Area. According to the Coastal Barrier Resource System website [http://www.fws.gov/ecological-services/habitat-conservation/coastal.html](http://www.fws.gov/ecological-services/habitat-conservation/coastal.html) “In the 1970s and 1980s, Congress recognized that certain actions and programs of the Federal Government have historically subsidized and encouraged development on coastal barriers, resulting in the loss of natural resources; threats to human life, health, and property; and the expenditure of millions of tax dollars each year.” To remove the federal incentive to develop these areas, the [Coastal Barrier Resources Act (CBRA)](http://www.fws.gov/ecological-services/habitat-conservation/coastal.html) of 1982 designated relatively undeveloped coastal barriers along the Atlantic and Gulf coasts as part of the [John H. Chafee Coastal Barrier Resources System (CBRS)](http://www.fws.gov/ecological-services/habitat-conservation/coastal.html), and made these areas ineligible for most new federal expenditures and financial assistance. CBRA encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting federal expenditures that encourage development, such as federal flood insurance. Areas within the CBRS can be developed provided that private developers or other non-federal parties bear the full cost. Camden County is a public developer, not a private developer, and receives federal funding.

For these many reasons outlined above, NPCA has grave concerns about the direct, indirect, and cumulative impacts of the proposed Spaceport Camden upon CUIS. As stated above, the purpose of NPS is "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

We do not foresee any scenario where the operations of a commercial launch complex that is located adjacent to a national park and launches rockets directly over a national park would not impair the park’s resources and enjoyment.

NPCA offers the following specific comments and recommendations concerning the proposed EIS and proposed Launch Site Operator License for Spaceport Camden:
• As part of the EIS, the FAA should be required to consider alternatives to the proposed location of Spaceport Camden.

• Spaceport Camden should be required to address each of the issues and recommendations identified in the Technical Assistance Letter of the USFWS.

• Spaceport Camden would have direct, indirect, and cumulative adverse impacts on recreational use, public use, and the natural, historical, and cultural resources located within CUIS.

• Spaceport Camden would have direct, indirect, and cumulative adverse impacts on threatened and endangered species as listed pursuant to the Endangered Species Act, plus other wildlife protected by the Bald and Golden Eagle Protection Act, and other imperiled species protected by the Migratory Bird Treaty Act. Spaceport Camden should be required as part of the EIS to study each of these species and the possible effects of launch activities on each species and their specific habitat together with potential effects on management of listed species habitat within CUIS.

• Spaceport Camden may have direct, indirect, and cumulative adverse impacts on water quality and quantity at CUIS, Cumberland River, Satilla River, and Cumberland Sound, as well as groundwater resources. Spaceport Camden should be required as part of the EIS to study all of the possible effects of launch activities on water quality and quantity of the surrounding waterways.

• Spaceport Camden would have direct, indirect, and cumulative adverse impacts on important wetlands. Spaceport Camden should be required as part of the EIS to study all possible effects of launch activities on the wetlands on the site and wetlands in the immediate vicinity that may be affected by launch activities. Additionally disturbances to the proposed site in preparation of building a launch pad should be studied as the proposed site appears to contain contaminated waste.

• The proposed Spaceport Camden could directly and adversely impact valuable and irreplaceable historic resources of national significance within the four established historic districts at CUIS, including the Stafford Historic District and Rayfield Archaeological District.

• As part of the EIS, the FAA should commission third party professionals to develop studies on the impacts of rocket blasts, vibration, and noise from planned medium lift orbital and suborbital rockets on natural resources, listed imperiled species, and historical resources and the buffers required to make such impacts di minimis.

• As part of the EIS, the FAA should make an early determination of the security area that would be required for all launch activities in order to make a prudent judgment on the adverse impacts to the wide range of public and recreational activities within CUIS.

• Early in the EIS process, the FAA should insist that Camden County Commission provide the location of the specific flight paths planned for the Spaceport Camden.
Thank you for the opportunity to provide scoping comments for the EIS. We remain very concerned with the proposal because of what we see as negative impacts to CUIS and its visitors, which are beyond mitigation. National parks represent the best of America's natural resources, wildlife viewing opportunities, immeasurable recreational opportunities, and locations of the best of our historic landmarks. They are our legacy for future generations to enjoy. We take very seriously threats to our national parks, and we will follow this process with continued interest.

Sincerely,

Emily Jones, Senior Program Manager
Southeast Region, National Parks Conservation Association
706 Walnut Street, Suite 200
Knoxville, TN 37902
Dear Sir/Madam,

Attached please find NPS comments on ER-15/0617, the Spaceport Camden Launch Site Project.

If you have questions, please contact Steven Wright at Steven_M_Wright@nps.gov.
Mr. Daniel Murray  
U.S. Department of Transportation  
Federal Aviation Administration  
Office of the Associate Administrator  
for Commercial Space Transportation  
800 Independence Ave., SW.  
Washington, DC 20591

Dear Mr. Murray:

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

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

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

Specific Comments

Development of launch facilities adjacent to CUIS with launch trajectories and first stage recoveries over CUIS could have several primary affects, including temporary or permanent closures which would restrict visitor access, impacts to CUIS’ significant natural, scenic, and cultural resources; and potential threats to visitor safety. The NPS offers the following questions and comments, specifically:
1. Unit of the National Park Service

   a. As such CUIS is committed to the legislated purpose of the National Park Service, which is "...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The proposed launch facility and its associated activities could potentially have an impact on the NPS responsibility and ability to achieve that purpose.

2. Visitor access restrictions

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

3. The island contains 9,886 acres of Designated Wilderness and 10,500 acres of Potential Wilderness (16 U.S.C. §§ 1131-1136). What will the impacts be to Wilderness during flight operations for both launch and recovery? What will the impacts be from daily facility operations?

   a. The Cumberland Island Wilderness was established in 1982 under Public Law 97-250. Wilderness laws, regulations, and policies restrict conditions and activities that can occur in association with these protected areas. NPS Director's Order 41 delegates to the parks the responsibility for stewardship for all categories of eligible, proposed, recommended, and designated wilderness areas.

   b. The Wilderness Act of 1964 defines Wilderness as "...areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

   c. The Cumberland Island Wilderness area covers the northern half of the island. Activities associated with the proposed launch facility have the potential to impact
Wilderness character and values and may conflict with established laws, regulations, and policies.

4. Five historic districts and two archeological districts listed on the National Register of Historic Places (NRHP) are located on Cumberland Island. What are the potential impacts to these resources?

a. The CUIS historic and archeological districts were deemed significant due to their association with people, events, architecture, and/or cultures from Native American inhabitance, European contact, the colonial period, the plantation era, the gilded age, and other periods of history.

b. The NRHP districts are:
   - Dungeness Historic District, located on the island’s south end
   - Greyfield Historic District, located on the south within privately held property
   - Stafford Plantation Historic District, located mid-island
   - Plum Orchard Historic District, located mid-island
   - High Point – Half Moon Bluff Historic District, located on the north end
   - Table Point Archeological District, located mid-island
   - Rayfield Archeological District, located mid-island

5. The island contains 91 historic structures on the NPS List of Classified Structures. There are also 64 known archeological sites. What are the potential impacts to these resources?

a. The 91 historic structures on the island date to the early 19th century and later. The majority are contributing features to one of the NRHP listed Historic Districts, with the remainder listed as a single resource in the NRHP.

b. The archeological sites are the remnants of over 4,000 years of human habitation on the island. Some of the sites are contributing features to the NRHP historic districts. The others are located throughout the island outside of a defined historic district.

6. What will the impacts be to native flora and fauna on the island, including multiple Federal and State protected species?

a. The island and/or its environs support 22 species of animals on Federal and/or State protected species lists, ranging from rare to endangered. Critical nesting habitat is involved for some species. There are also potentially six plant species that are State listed, ranging from rare to threatened. In addition, there are species that are protected under other Federal laws such as the 1918 Migratory Bird Treaty Act.

b. There are 22 identified biological communities on the island with approximately 30 species of mammals, 300 bird species, 55 species of reptiles and amphibians, 85 fish species, and 498 plant species.
7. Government and private inholdings within the CUIS. These properties vary in size, number of residential structures, and volume and period of occupancy. What are the potential impacts to these properties and their occupants?

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

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

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

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

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

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

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

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

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

12. How often will launch providers seek to launch vehicles outside the parameters of the operator license and what will the burden be to affected agencies?

   a. Additional launch specifications and requirements have the potential for further and possibly greater impacts to CUIS.

   b. The FAA has indicated that launches outside the defined parameters of the launch site permit would require additional environmental evaluation and compliance, which would create additional burdens to the NPS and CUIS.

13. What sort of discharge of fluids, chemicals, materials, and/or other substances from launched and returning vehicles occur during flight?

   a. When a rocket is launched and/or a stage returns to the launch site what materials and/or substances are released from the rocket and fall back to earth during the operation?

   b. Materials and/or substances falling onto Cumberland Island and its surrounding waters have the potential to cause short and long term impacts, particularly if they are hazardous materials. Aquatic systems, such as wetlands, could be particularly vulnerable as well as vegetation communities. Visitors, residents, staff, and wildlife encountering these items could also be harmed, even well after the launch has occurred.

14. What are the contents of payloads and what potential hazards might they contain? Are there any limits/restrictions on payloads?

   a. Will any potential payloads contain hazardous materials? In the event of a launch failure and a payload landing on the island or its environs, is there potential for the release of the materials? Health and safety and threats to the island's natural and cultural resources are a concern directly from the materials and indirectly from any recovery/containment operations.

15. In the event of a catastrophic failure, detonation, or abort what will the impacts be to Cumberland Island? Potential impacts whether the failure occurs over the island or offshore? Could guidance failure or other mishap cause a vehicle to travel beyond the trajectory cone and/or the proposed closure areas?

   a. Such a failure or mishap could have long term effects on the island, potential impairment to the island’s natural and cultural resources, and major consequences for enjoyment of the island by future generations.
16. What is the statistical probability of a catastrophic failure occurring over the island or outside park boundaries, but still having an impact to the island?

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

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

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

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

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

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

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

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

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

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

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

21. What will the impacts be to scenic views?

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

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

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

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

a. The NPS is concerned that routine or accidental emissions from the facility, either through a launch or other operations, may impact the air quality on the island and
24. What are the surface water and/or groundwater requirements for the operation? Where will they be drawn from and at what quantity? Potential effects to groundwater quantity and quality? Potential effects to surface water quality?

   a. The NPS is concerned that drawdowns from underground aquifers will have an impact on the island, including surficial aquifers on down to the major Floridan aquifer. Withdrawals from these aquifers could affect wells or surface water.

   b. The NPS is concerned that the discharge of waste water from the facility could have an impact to waters that surround the island and flow tidally into marshes and streams.

25. Other than space vehicles what type of other flight activity can be expected in association with the facility?

   a. Is the facility expected to have any fixed wing or rotary aircraft activity? Is an airstrip proposed? Will they have to apply for an additional license from the FAA for such operations? The NPS is concerned that such activities may have further impacts on CUIS.

26. Is additional transportation infrastructure and/or other support facilities or operations involved such as a port facility or dredging?

   a. The NPS is concerned that supplemental activities not specifically identified in the NOI or public meetings may have impacts on CUIS.

27. What are the operational, logistical, and fiscal burdens placed on Cumberland Island National Seashore to ensure policies, regulations, and other requirements are met in conjunction with proposed space port activities? What is the potential NEPA/NHPA burden placed on Cumberland Island National Seashore in light of actions that may be required on the island to support/address space port activities? What will the NPS have to do to ensure safety and protection of resources.

   a. CUIS has a limited staff.

   b. Will additional Law Enforcement Rangers and emergency responders for medical and fire be needed?

   c. Will the NPS have to erect gates to enforce closures, will we be responsible for evacuating residents, will we have to monitor specific natural or cultural resources to ensure they are not harmed, etc.
d. Will the NPS have to complete our own National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and/or Wilderness compliance to put any of these requirements in place?

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

28. Any seismic effects from launches, landings, firing tests, and wet dress rehearsals?

a. The NPS is concerned that any seismic effects could have an impact on island resources such as slope and bank erosion, historic structures (some with existing stability problems), or other structures.

29. Notice of Intent states “All vehicles would launch to the east over the Atlantic Ocean”, which fails to recognize that launches would also be over CUIS.

a. This misconception that rockets will be directly launched and landed over the ocean has been stated elsewhere in other materials and venues and can be misleading to those reviewing the proposed activities. The NPS is concerned that this oversight will leave many with the false impression that the facility and its activities will have little or no effect on CUIS.

30. The NOI describes possible landing of first stage in Atlantic Ocean on a barge or in the water.

a. More specific information is needed on these possible operations for the NPS to address any potential concerns.

31. What is a wet dress rehearsal?

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

Section 4(f) Comments

The NOI identified alternatives under consideration include the Proposed Action and the No Action Alternative. The Proposed Action has been identified as one specific site location within Camden County, Georgia. Section 4(f) of the Department of Transportation Act of 1966, resides in the United States Code at 49 USC § 303 and 23 USC § 138. Section 4(f) protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance and historic sites of national state, or local significance from use by transportation projects. These properties may only be used if there is no prudent or feasible alternative for their use and the program or project encompasses all possible planning to minimize harm resulting
from its use. Constructive use occurs when impacts of a project in proximity to an adjacent or near-by Section 4(f) property are so severe that the activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired.

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

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

Sincerely,

Stan Austin
Regional Director
Southeast Region
To whom it may concern,

I support the US space program, NASA, SpaceX and the innovation of the Camden county Spaceport plan. But I am in opposition to Spaceport Camden for one main reason.

Spacelaunchreport.com has information on every rocket launch since the beginning of the space program in the 1950s. On average, 1 out of 12 launches ends in failure. So multiple Camden launch failures would be inevitable at some point based on reported plan of 12 launches per year.

Since the proposed flight path is over Brunswick ship channel, Little Cumberland, and northern Cumberland a failure would send debris down with disruptive and possibly disastrous results.

Thank you for your consideration,
Dear Representatives Atwood and Jones,

As a full time Jekyll Island resident and owner of two island homes, we fully oppose House Bill HB734 (the “Georgia Space Flight Act”) as it raises significant concerns not only to local and neighboring coastal communities but also to surrounding industry, our $2 Billion tourism industry and our environment. This Bill is an injustice and disgrace to our Democracy, as it serves only to protect Corporate interests, and Campden County or State politicians which single mindedly are focused on the unsubstantiated economic benefits of the Campden Spaceport.

At present, facts regarding the implications of the Campden County Spaceport remain unknown for both routine operations, and the unfortunate but probable event of a failed operation. Implementing a law at this stage, solely to protect and attract Corporate investment, is irresponsible.

The longstanding natural setting of historical Jekyll Island State Park, our Cumberland Islands and quiescent coastal towns, has substantial value to tourists, State residents and the protected ecosystem. Removing a citizen’s right to seek for damages, solely to attract a commercial space company, is NOT of benefit to Coastal Georgia or its people. Further, this Bill removes future Corporation incentive to implement future technical advancements to further improve and reduce noise disruption.

We ask that you oppose Bill HB734 to ensure that all people’s interests can be fairly represented and to uphold GA citizen’s expectation for Corporate social and economic responsibility.

Sincerely,
Please bring Spaceport to Camden County.

Sincerely,
Friends, with the deadline for EIS comments to the FAA fast approaching, I will be writing several more letters to them based on the Fish and Wildlife technical assistance letter for the Shiloh Launch Complex of 2/12/14. I know others have written amazing documents, so there’s a great chance we’ll cover all the bases. I just want to make sure every technical angle is addressed (not that I’m an expert, but the Shiloh letter was written by experts), using the Fish and Wildlife letter as a guide. And I want proof that they were sent, and that both Stacey Zee and the Subcommittee saw them. There will be no room for excuses. That’s why I’m sending copies to you.

Here are the categories that are left: Noise Pollution and Space Infrastructure, Traffic and Right-of-Way Improvements and Space Infrastructure, Public Use and Visitor Services, Cultural Resources, Catastrophic Failure, Contaminants, Alternatives, and Additional Questions.

Please forgive me for sending a plethora of emails. I assure you that I would rather not have to do this. But there is an imperative that all of us feel to protect the people, the flora and fauna, and even the good name, of Camden County, that pushes me on to get every last question that could be asked, asked.

Thank you so much for your understanding, and for your valiant efforts!
Dear Ms. Zee,

Thank you for all you do. Though interesting, yours is a very exacting job, with many depending on you for decisions that will impact thousands of people for the foreseeable future.


Specific information relating to the identity of hazardous materials and liquid/solid propellants to be stored on the proposed spaceport site in Camden County should be quantified and evaluated during the Environmental Impact Statement (EIS) process to enable an evaluation of potential impacts to all fish and wildlife species. The EIS should address the potential for fish and wildlife exposure to contaminants (e.g., from energetic liquids, solid propellants, and other explosives and/or hazardous wastes) within or adjacent to the ground, air, and waterways around and contiguous to the proposed spaceport location and analyze the impacts of such potential contamination. The EIS should describe how storm water and nonpoint source discharges from the proposed spaceport site will be managed. The EIS should identify if the proposed spaceport site will require a National Pollution Discharge Elimination System (NPDES) permit. The EIS should describe how the proposed spaceport could impact Todd Creek, the Satilla River, and the Atlantic Ocean, among other waterways in that area, as they all connect and impact the shores and waterways of Cumberland Island, which is a National "Seashore containing over 9,000 acres (approximately fifteen square miles) of designated wilderness. The United Nations has...declared Cumberland Island an International Biosphere Reserve because it provides critical habitat for rare and endangered wildlife—including loggerhead sea turtles, brown pelicans, piping plovers, least terns, bald eagles, and peregrine falcons [http://wildcumberland.org/?page_id=10]."

The EIS should describe how the proposed spaceport could impact Little Cumberland Island, Jekyll Island, Sea Island, St. Simons Island, Little St. Simons, and St. Marys and Fernandina Beach. The EIS should describe and analyze the potential impacts of containment structures for hazardous and/or explosive materials storage on the proposed spaceport site. A Spill Prevention Control Plan and a Countermeasures Plan for the proposed spaceport site should be available for review during the EIS review.
The EIS should describe how any disturbing by any spaceport activities, including construction, of the active toxic waste dump that is less than two miles from the proposed spaceport site could affect the drinking water of anyone living in Camden County or Glynn County. If the vibrations from rocket launches were to cause the poisons in the toxic waste dump to migrate, then wells, therefore Camden County and Glynn County citizens, in the area could be adversely affected. Also, a thorough investigation into the possible affect on wells in the area of any spills of toxic chemicals from the construction and/or operation of the proposed spaceport must be carried out and divulged to the public.

With so many populated and treasured areas at risk, it is plain that this project should be abandoned immediately, and an investigation launched into how it has gotten as far as it has with so many glaring dangers to the citizens and environs of Camden and other counties!

Should Camden Co. Reject Spaceport? Facebook
I recently moved here from NJ and love the area. It is disheartening to think that the piece and quiet and rural settings of Camden county will be overpowered by the sound of rockets blasting into space. I for one, am against the spaceport.

Thank you,

Sent from my iPad
To: Ms. Stacey M. Zee
FAA Environmental Protection Specialist
Office of Commercial Space Transportation
800 Independence Avenue SW., Suite 325
Washington, DC 20591

The attached letter regarding the proposed Camden County Spaceport was sent to you today via US Mail.

Thank you.
Ms. Stacey M. Zee
FAA Environmental Protection Specialist
Office of Commercial Space Transportation
800 Independence Avenue SW., Suite 325
Washington, DC 20591

Re: Camden County Spaceport

Dear Ms. Zee,

I am writing to express my concern as an owner of property on Little Cumberland Island (“LCI”) in Camden County, Georgia, over the County’s proposal to develop a commercial rocket-launching facility to be located directly across the Cumberland River from the Cumberland Island National Seashore. I strongly question the County’s evident conclusion that the economic benefits of such a development would outweigh its detrimental impact on the coastal environment.

As one who cherishes the peace, serenity and beauty of Georgia’s barrier islands and coastal marshlands and recognizes their importance to the preservation of coastal wildlife, I urge you to insist upon answers to the following questions regarding the potential effects of this proposed development:

☐ What is the risk, both to humans and to wildlife, of an explosion from a failed launch? In particular, what would be the potential fallout (as it were) from a crash on or near the Kings Bay Naval Submarine Base, which, of course, handles nuclear weapons?

☐ How would operation of the proposed spaceport affect the integrity of the Satilla River Watershed? In this regard, how much water will be used at the site during and between launches, from what source or sources will the water be obtained, and what is the risk that withdrawal of groundwater will result in contamination of fresh water aquifers? Also, what will be done with the water after use? Will it need to be treated, and if so, how?

☐ What other negative effects on the coastal environment and its wildlife habitat might result from operation of the spaceport? For example, it is my understanding that the airspace over the Cumberland Island National Seashore is restricted to prevent wildlife disturbance. Would not operation of the proposed spaceport be inconsistent with such restrictions?

☐ How would property values on LCI be affected by operation of the spaceport,
including, but not necessarily limited to, the resultant noise and light pollution and likely restrictions on our ability to access our properties? Would property owners be compensated for the diminution of their property values resulting from operation of the proposed spaceport, and if so by whom?

Camden County’s proposed spaceport has the potential to do irreparable damage to the Georgia coast by placing at risk the historic, cultural and natural resources that make this region so special. With all that is at stake, I urge you to insist on answers to these questions and to incorporate those answers into the EIS process far in advance of any decision to allow this proposed development.

Sincerely yours,
From:    
Sent:  Thursday, December 24, 2015 2:05 PM  
To:     FAACamdenSpaceportEIS  
Cc:     
Subject:  PROPOSED CUMBERLAND ISLAND SPACEPORT

DEAR SIR OR MADAM:
Please allow for careful and extensive public and governmental input regarding this NEW UNKNOWN in the seemingly endless manipulations of our tranquil but fragile coastline.  
Kindest Regards

Sent from my iPhone
Dear Ms. Zee and Colleagues-
I have attached comments regarding the proposed Camden Spaceport for your consideration. Thank you for the opportunity to comment.
Sincerely,
Leidos  
20201 Century Boulevard,  
Suite 105  
Germantown, MD 20874  
FAACamdenSpaceportEIS@Leidos.com

To the Attention: Ms. Stacey M. Zee  
Regarding: Spaceport Camden EIS

Dear Ms. Zee and colleagues,

As a resident of coastal Georgia since the mid 1980’s, I respectfully submit the following to question any known, unknown and unintended impacts as a result of considering locating a private rocket launch facility at Harriet’s Bluff on Floyd’s Creek in Camden County, GA.

In the past 60 years, considerable public and private investment of resource has occurred to conserve our extraordinary Georgia coastline and tidal estuarine habitats. We have come to know that Georgia’s coast holds over 30% of the remaining eastern coastal tidal saltmarsh habitat which is the nursery to a significant percentage of our commercial seafood harvested offshore. These saltmarshes are also known to produce the most biomass of any habitat in the world- resulting in coastal environs which sustain diverse and abundant lifeforms.

- What impact of preparing and launching rockets would affect the tidal estuary and water quality? How might that affect the productivity of these near shore and offshore waters – and all the species dependent upon them? What are the known impacts from noise and emissions- both in air and water quality as a result of launching of these rockets? How would that impact all the resident and migratory species that depend on these coastal ecosystems?

- Will visitors to Cumberland Island National Seashore be denied access when a private launch is scheduled? If so, how will economic impact be mitigated for the private businesses in St. Marys and surrounding communities who have grown to support the eco-tourism of the National Seashore?

- What impact will occur for residents of Cumberland, Little Cumberland and Jekyll when a launch is scheduled?

- What impact will occur with private and commercial air traffic (JAX, BQK, SAV, St Marys, KSSI) with scheduled private rocket launches?

- Would there be impact to commercial and recreational fisheries and private and commercial ship traffic (inshore and offshore)?

Thank you for your consideration of my concerns.

Sincerely,
While I have not yet decided on my position on this proposal, I must ask why is another spaceport needed when a facility exists just south of us - notably, Cape Canaveral/Kennedy Space Center. The facility has served us well historically and is terribly underutilized. It's obviously plausible, witness the recent success of the launch of 9 satellites into space and a return of the spacecraft. I would appreciate understanding why another site is under consideration.
December 15, 2015

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

Dear Ms. Zee,

I am writing to you again because many questions that should have been asked at the Scoping meeting were not. I apologize for the amount of questions but there are a lot of issues involved if the spaceport does come into existence.

Would you please address the following questions in the EIS?

1. What will need to be done to Harriett's Bluff Rd. to accommodate all Spaceport Traffic including heavy loads?

2. Should there be another exit and entrance besides Harriett's Bluff Rd. in case of necessary evacuation from fire or spaceport mishaps?

3. Was eminent domain used around other spaceports to accomplish necessities of the spaceports like road widening, removing homeowners from trajectory areas, etc? Will it have to occur here?

4. Did homeowners living within a 10 mile radius to other rocket launch facilities find their property values increasing or decreasing?

5. What is the magnitude of the vibration and noise from launches and testing at a 10 mile radius from the launch site?

6. How will evacuations from Cumberland, Little Cumberland, Jekyll and St. Simons Islands or even Harriett's Bluff be accomplished?

7. How will boat traffic on the Inter-Coastal Waterway, Satilla River and Crooked River, etc. be stopped during launches?

8. Will the County have to stop all traffic coming from the public and private boat ramps during evacuation time and if so, how will it be done?

9. How will the local crabbing, oyster and shrimping businesses be affected economically by these shut downs?
10. Economically, how much money will the launches cost Cumberland Island, Greyfield Inn and the Ferry that transports visitors to and from Cumberland?

11. How have evacuations been handled around other spaceport sites?

11. What has been the opinion of homeowners and businesses that do have to evacuate?

12. Have any evacuations at other spaceports lasted longer than 15 hours?

13. What will be the approximate total cost of all evacuations and restraints for one launch and is it economically feasible?

14. Will there be heavy metal fallout or toxic chemicals from the rocket fuel? If so, what will that do to the area and marine life and how far will it reach?

15. Will the existing improvements be removed from the Spaceport sight? If so, are there toxins involved such as asbestos that requires special handling?

16. What kind of fire protection will be necessary for the Spaceport?

17. Will an on-site Fire Department be required?

18. How much does fire protection cost at other spaceports?

19. What is the radius of damage that will occur from the heat of the launch, testing, etc.?

20. How are the animals and birds in the area affected by the heat of launches and testing? How many animals and birds die because of the launches at other spaceports?

21. Are there any endangered species located on the land or in the water in the area of the proposed Spaceport? During construction and launches could these species be disturbed or destroyed?

22. I know there is a big stand of old oak trees on the property. Will these be disturbed?

23. Will a waterway have to be dredged for the barges to bring back the first stage of the rocket? If so, which waterway?

24. What will be the effect on marine life in the dredged and adjacent areas if dredging is to occur?

22. Around other spaceports has business and income increased or decreased?

23. How will the Sub-base be affected by the Spaceport?

Could you add me to your list for future updates and please email the Draft Environmental Statement to [redacted]

This letter will be coming to you both by email and snail mail.

Sincerely,
Thank you for considering the attached.
Attn: Ms. Stacey M. Zee, FAA Environmental Specialist
Re: Comments regarding Spaceport Camden EIS

Dear Ms. Zee,

I know today is the deadline but hoping it is close of business today. This communication is related to the Little Cumberland Island (LCI) community. Briefly, I am addressing two items: one related to LCI community concerns and the other related to the toxic waste at the launch site. Thank you for your consideration.

Overview of the LCI community.

Overall, I am concerned about a precedent being set that could result in a catastrophic event over any community; however, the LCI community is the focus in this communication. LCI is a conservation community and cannot be defined in the exact same manner as a mainland community. Nor can it be defined as a second home as all other coastal communities are defined [GA’s Golden Isles, Hilton Head (GA), Tybee Island (GA), Amelia Island (FL), Spring Island (SC)]. As the Chair of the LCI Archive Committee chair, I have the privilege of knowing LCI’s unique history. Our archived records go back to the 1960’s with the original documents and communications regarding our agreement with the Department of Interior. Our lighthouse is on the historical register. The fact that a portion of our community members is now into the fourth generation emphasizes the stability, uniqueness and value of this Island. We have 44 houses on LCI that family members and guests frequent.

Questions / Comments:

- **Rapid Response. Emergency Action.**
  - Fire is always a real concern on LCI; however, rocket launching will increase the risk of a fire. How can the LCI community be assured of a rapid response should launch debris result in a fire?
  - A readiness plan should be developed for rapid response should there be a fire on LCI. Who will take the responsibility to develop a readiness plan and who would be responsible for implementing the plan during each launch? The goal is to have a “fire ready crew” on standby for each launch.
  - Same argument for medical response. Who will develop a readiness plan for immediate medical response should a catastrophic event involving LCI community members occur? Who will implement the plan during each launch? Again, the goal is to have a medical team on standby during launching.
  - Would it be possible for someone from the FAA and someone from Leidos to visit LCI? Being more familiar with the LCI community would provide factual information and allow a sense of place during the EIS process. Hosting can easily be arranged.

- **Chemical waste on proposed launch site. Potential contamination of water supply from toxic waste on proposed launch site.**
  - Because it is unprecedented to build and launch rockets on a known toxic waste site, how can our community and others be assured that our water supply does not become contaminated from the toxic waste leakage?
  - Will there be a comprehensive risk assessment done by professionals and scientists? Will EPA assume a role to ensure the health of a population is not jeopardized?
  - Will EPA be involved in scientific research to ensure that a short or long term contamination does not occur as in the current Michigan’s Flint River lead contamination event affecting water supply?

Most sincerely,

Contact information:
This is, without a doubt, the most exciting news that I have heard since I have lived in Georgia for the last 59 years. This is an opportunity that will resound loudly throughout the economic sector, the education sector and the spaceport should have a dynamic effect on short term and long term employment opportunities for our citizens. I trust our State and local leaders to be great stewards of the environment in and around the proposed spaceport and by operating it in keeping with all environmental laws and regulations there should be no adverse impact on the ecosystems of coastal Georgia. The construction and operation of the spaceport in Camden County will most surely put Georgia on equal footing with any other State in the U.S. as far as tourism, intellectual properties and resources, and educational benefits. 100% in favor of this great endeavor.

Columbus, Georgia
From: 
Sent: Wednesday, December 30, 2015 4:01 PM
To: 
Cc: 
Subject: Re: Important Facts

Dear [Redacted]

Can you define for us what you mean by a "stranded asset" in terms of your statement "The project is an ambitious and complex project concerning a “Stranded Asset” within the unincorporated area of Camden County, Georgia." Does this mean the Union Carbide / Dow Chemical holds land that is a stranded asset in terms of their making the land productive once more because of the problems from past industrial use? Does it mean something more from the comment in the article you provided below: making "underappreciated" be a stranded asset? Basically, the term seems to mean "There is something that is obsolete and useless, but an attempt is being made to profit from the stranded asset." How does this fit what Camden County hopes to achieve?

"Still, Steve Justice, the Georgia Center Innovation for Aerospace Director, laments that Georgia’s $51-billion aerospace industry is largely underappreciated. That’s despite aircraft, parts and engines being the state’s No. 1 export, the state having the world’s busiest airport by passenger traffic (Hartsfield-Jackson Atlanta International Airport), and Georgia Tech having the country’s second-ranked aerospace engineering school."

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Thank you.

--- Original Message ---

From: Ms. Stacey M. Zee

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"SUBMITTED EPA COMMENT"

"These comments are related to issues involving the HAZARDOUS LANDFILL ON THE PROPOSED SPACEPORT PROPERTY

"A 58.16 acre hazardous waste site is identified on the proposed spaceport site. The waste site is under a recorded Environmental Covenant ("Covenant") between Union Carbide and Georgia Environmental Protection Division.

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A. Sponsors of the site have previously stated that the landfill would be excluded from the site purchase agreement. GEPD expressly included all 4,011.54 acres of the site in the Covenant for the purpose of protecting the landfill from future development on any part of the site. To technically remove the site in a property transaction would not remove the site from its location and proximity to the launch danger zone.

B. Camden County does not have the financial resources to remediate the landfill.

C. Spaceport Camden plans include both launch pad and landing pads that are currently proposed respectively 1.6 and 1.0 miles from the landfill and could very well fall within a required launch and landing blast exclusion zone. The proximity of the landfill, irrespective of its ownership, must be considered a significant risk and is unique to this site.

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"Respectfully submitted, December 28, 2015."
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Should Camden Co. Reject Spaceport? Facebook
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I would really, really appreciate it if I was taken off of this email group forever. I have no interest in this topic. Please consider this an "opt out" request.

thanks

-----Original Message-----
From: [Hidden]
Sent: Wednesday, December 30, 2015 11:07 am
To: [Hidden] "Ms. Stacey M. Zee"
<FAACamdenSpaceportEIS@Leidos.com>
Cc:
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This email has been sent from a virus-free computer protected by Avast.
www.avast.com

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December 30, 2015

Re: Open Records Act Request

Dear [Name],

Under the Georgia Open Records Act § 50.18.70 et seq., I am requesting an opportunity to inspect or obtain copies of public records regarding the financial business planning for the Spaceport Camden project.

1) Please provide records of all meetings, communications, letters, documents, emails and records of telephone conversations between Camden County and any and all prospective providers of funding for the Spaceport Camden land acquisition and further development of the site, including government or private sources, and;

2) Please provide all records of meetings, communications, letters, documents, emails and records of telephone conversations related to other sources of funding, included, but not limited to: allocation of general revenue taxes, raising property taxes, SPLOST, tourism and hotel taxes, bonds and other borrowing, and;

3) Please provide the County expense records showing the amounts already spent in 2013, 2014 and 2015 related to the Spaceport Camden project, and;

4) Please provide the financial budgets and projected budgets the County has developed for the years 2016 through 2021 showing the expected expenses related to the Spaceport Camden project and their related sources of funding, and;

5) Please provide a copy of the executed Option Agreement between Camden County and Union Carbide (including attachments).

If there are any fees for searching or copying these records, please inform me if the cost will exceed $100. However, I would also like to request a waiver of all fees in that the disclosure of the requested information is in the public interest and will contribute significantly to the public's understanding of the financial impacts and risks of the public investment in Spaceport Camden. Certain information
gathered under this Request will be distributed to the public on a non-commercial, website, in meetings, or by other means.

The Georgia Open Records Act requires a response time within three business days. If access to the records I am requesting will take longer than three days, please contact me with information about when I might expect copies or the ability to inspect the requested records.

If you deny any or all of this request, please cite each specific exemption you feel justifies the refusal to release the information and notify me of the appeal procedures available to me under the law. Records with redacted information should have explanations attached as to why each section has not been made available to the public.

I will provide a mailing address when I have been informed that the records are ready, or the records can be sent as groups of digital files up to a total of 20mb in each email to [redacted].

Thank you for considering my request.

Sincerely,

[redacted]

"One thing that doesn't abide majority rule is a person's conscience"
Harper Lee, To Kill a Mockingbird
Thanks for your e-mail. The term I used is in the context of this being a stranded asset may be best stated as this commercial industrial park is now dormant. As you are aware this site employed hundreds of employees with a multi-million dollar payroll over several decades. The site has a history of over 50 years of employment activity. Concerning your other statement funding other priorities. The Board of County Commissioners formally adopted the CAMDEN COUNTY VISION 2030/ GUIDING PRINCIPLES & Strategic Plan 2015-2020-2030 with formal input from citizens county wide that covers many areas tied back within the strategic plan. The spaceport project is just one the projects found within the multi-year strategic plan. The strategic plan was formally adopted at a Board of County Commissioners official advertised public meeting.

The Board of County Commissioners have kept the citizens as informed as possible about the project. This has been communicated via newsletters, press releases, civic engagement presentations, annual reports, dedicated spaceport website, social media, citizen academy (s) and at formal Board of County Commissioner meetings. The Board of County Commissioners as an additional layer of transparency has also approved the formation of a spaceport steering committee and environmental sub-committee with appointments from local and regional stakeholder representation.

The Board of County Commissioners will continue to use multiple communication formats to inform citizens. Your comment concerning Steve Justice indicates to me that Georgia has a great opportunity for growth in the $300+ billion dollar global space economy that continues with growth each year. Georgia hosts business units from several large aerospace corporations with ties to the space industry. According to Georgia with its strong aerospace industry, Georgia is a natural place for space related companies to seek educational, manufacturing and research partnerships as well as hire skilled workers across space sectors which includes defense, intelligence, civil/commercial activities and users. Have a Happy New Year!
Subject: Re: Important Facts

Dear [Name]

Can you define for us what you mean by a "stranded asset" in terms of your statement "The project is an ambitious and complex project concerning a “Stranded Asset” within the unincorporated area of Camden County, Georgia." Does this mean the Union Carbide / Dow Chemical holds land that is a stranded asset in terms of their making the land productive once more because of the problems from past industrial use? Does it mean something more from the comment in the article you provided below: making "underappreciated" be a stranded asset? Basically, the term seems to mean "There is something that is obsolete and useless, but an attempt is being made to profit from the stranded asset." How does this fit what Camden County hopes to achieve?

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"Respectfully submitted, December 28, 2015. (Steve Weinkle)"

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Dear Sir, Madame, I can not attend the meeting physically.

I am a EMI, Lightning suppression engineer and fully support the construction of Georgia Spaceport in Camden County. This project will generate jobs in GA where we have SEVERE lack of high tech jobs.

I did a small FAA bldgs. lightning & ESD & EMI hardening project and pursuing a "Lightning Threat zones & mitigation techniques for FAA next gen. IT equipment" white paper FAA project.

Lastly, I worked many years in CA for HP and Cisco. I saw first hand how CA LOST jobs due to some "environmentalist trying to protect some bird species, CAL OSHA rulings etc.

How can a state, US JOBS compete against China, India where there is NO environmentalist, CAL OSHA?

Please look into FULLY supporting Georgia Spaceport in Camden County = MAKING GA JOBS.

Outsourced Jobs from China, India are NOT coming back, please look out for our own people and making local jobs.

Respectfully submitted

On Thu, 11/12/15, FAACamdenSpaceportEIS <FAACamdenSpaceportEIS@leidos.com> wrote:

Subject: Notice of Intent to Prepare an Environmental Impact Statement and Upcoming Spaceport Camden Public Scoping Meeting
To:
Date: Thursday, November 12, 2015, 3:29 PM
Dear Interested Party:

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

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

The EIS will consider the potential environmental impacts of the Proposed Action and the No Action Alternative. Based on comments received during the scoping period, the FAA may analyze additional alternatives.

The Proposed Action is for the FAA to issue a Launch Site Operator License to the Camden County Board of Commissioners that would allow the County to offer the commercial space launch site to commercial launch providers to conduct launches of liquid-fueled, medium-lift-class, orbital and suborbital vertical launch vehicles.

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

Monday, December 7, 2015

5:00 PM to 8:00 PM

Camden County Public Service Authority Recreation Center

Community Room

1050 Wildcat Drive
Kingsland, Georgia 31548

The meeting format
will include an open-house workshop from 5:00 PM to 6:00 PM, followed by a formal comment session. During the open house, there will be a table with comment forms for writing your comments, or you may speak to a stenographer who will record your comments. After the open house, the formal session will begin. The FAA will provide an overview of the environmental process from 6:00 PM to 6:15 PM, followed by a public comment period from 6:15 PM to 8:00 PM. During the public comment period, members of the public may provide up to a 2-minute statement. A stenographer will transcribe oral comments.

Comments, statements, or questions concerning scoping issues or the EIS process should be mailed to: Ms. Stacey M. Zee, FAA Environmental Specialist, Spaceport Camden County EIS, c/o Leidos, 20201 Century Boulevard, Suite 105, Germantown, MD 20874. Comments may also be sent by email to FAACamdenSpaceportEIS@Leidos.com.

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

More information on the proposed project and the NEPA process, and the Notice of Intent, are available on the project website at:

http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/camden_spaceport/

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

I live in Grover View Subdivision close to the proposed spaceport. I object to this project on the grounds that the rocket’s flight would be over homes of citizens who live on Little Cumberland or Cumberland Island. It is my understanding that the launches will require an evacuation zone at least five miles wide. My other objection is the proposed reentry landing pad is only four miles from Grover View Subdivision. Many attempts to vertical land spacecraft have failed, resulting in an explosions and fireballs. The surrounding area has dense forests which are highly flammable.

Thank you,

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Media inquiries, please contact Hank Price at 202-267-3447.
RE: Environmental Impact Study, Camden Spaceport

I am submitting my comment to the FAA Environmental Impact Study regarding the proposed construction and operation of Camden Spaceport in Camden County Georgia. I live close to the proposed site and will see a significant change in this area.

The proposed site is at the end of the road I live on. It has historically been used as an industrial area, hosting a variety of uses. At one time the site was considered by NASA as the primary location for its launch facilities. When an alternative site was chosen, Morton Thiocol used the area as a rocket test facility. It is a matter of historical fact that the largest solid fuel rocket was test fired at this site in 1964. The proposed site of Camden Spaceport has thus already been considered as an appropriate location for space based activities. I would be pleased to see this history honored in using this site as a launch facility, uniting the past with the future.

The development of Camden Spaceport will significantly affect the local infrastructure. It will require the upgrading of surface roads. Local surface roads are in dire need of upgrading. Bringing the local surface roads up to modern standards will improve the health and safety of the residents of Camden County in general and Harriets Bluff Road in particular. As a resident of Camden County Georgia living on Harriets Bluff Road I have witnessed and suffered the effects of having to deal with surface roads that need improvement. There will also be necessary improvements to I95 in the area. This will also help the current traffic situation. These improvements will bring the current surface and Interstate roads to the latest standards that are human and
Another effect of bringing Camden Spaceport to fruition will be the need for housing for new families who will want to live close to work. At present there are several Planned Unit Developments in Camden County Georgia that have been set aside and permitted for single family homes. These developments are not being utilized to their full potential. The sites are in place to build these homes, and Camden Spaceport will provide the boost to fill the places that are already waiting for the homes to be built. There is one such site on Old Still Road, which is a side road linking Harriets Bluff Road with Colerain Road. Every time I pass by this site I feel sad that these homes were never built. Camden Spaceport will provide the means to fill the housing sites that are waiting for families to live there.

Establishing Camden Spaceport will require the need for supportive industries. On Harriets Bluff Road between I95 and US 17 is a site designated for commercial/industrial use. This large tract of land is available for those industries that Camden Spaceport will bring to the area. This site is not currently being utilized to its full potential; Camden Spaceport will attract the supportive industries to fill the empty spaces. These supportive industries will not only create technical jobs; they will also boost the local service industries. As a citizen of Camden County Georgia who works in the service sector I will be happy to see other service workers able to work here closer to home instead of having to travel many miles to do the same job I was lucky enough to get locally. It is humanly and environmentally more friendly to have people work closer to where they live.

Supportive industries and Camden Spaceport itself will need people to work there. Camden County Georgia has a superior school system providing excellent postsecondary students that are college and work ready. A site has been designated on Harriets Bluff Road to build a Technical College for postsecondary students. Our children who have gone to college elsewhere will have the incentive to return home and work here where they were born. I daily witness the loss of the flowers of our youth who graduate and have to go somewhere else to live and work.

Camden Spaceport will have a large tract of land to act as a buffer zone. I have been to Merritt Island several times and it is beautiful. I would be happy to see the buffer zone required by Camden Spaceport as a permanent refuge for the local threatened and endangered species (and all the other animals) that already live there. There will be plenty of room for the local wildlife as well as the migratory birds seeking a resting place along the "East Coast Flyway". Camden County is the site of the Kings Bay Submarine Base that has existed without major incident with the local environment. The fishing is very good. Camden Spaceport will extend the protected area, and the fishing will be excellent. As a resident of Camden County Georgia living on Harriets Bluff Road I am not especially concerned about light or noise issues resulting from activities at Camden Spaceport. My immediate neighbors make more noise when they indulge in their hobbies (hot rod cars; ATV riding; hunting dog kennel).

I am not concerned about air, land or water restrictions during the operation of planned launches or tests at Camden Spaceport. As a resident of Camden County Georgia I proudly live with similar restrictions during conduction of Naval Operations relating to Kings Bay Submarine Base.

In summation, bringing Camden Spaceport to fruition will result in immediate changes to the local economy and environment. In the long run these changes will result in a better quality of life for the humans and animals who live here.

Thank You for your time in reading this extensive email.
Sincerely
Ms. Zee,

Please consider this my notice of opposition to the proposed Spaceport project in Camden County. I think this is a dangerous idea for this very fragile area for all of the reasons stated so succinctly below. I have been reading quite a bit of material related to other spaceports operated by SpaceX and their successes and failures. I don't see enough success to show me that this would be a low impact/low pollution industry in our area. Our tourism industry is highly dependent on a quiet and peaceful natural surrounding inhabited by a large array of wild species. I don't believe for a minute that a Spaceport will not negatively impact the tranquil beauty of this fragile coastline and it marshes and estuary environments which are the nurseries of so many of our ocean bound fish and sealife.

I see much room for error in the trajectory over both populated and ecologically sensitive areas of our coast and do not believe that any amount of positive economic impact would be worth the danger posed to our communities. In addition, I believe that any real evidence of a positive economic impact is lacking in the other Spaceport areas which have already been built. I think that SpaceX should continue to develop the areas they have already been approved for and have built until they can prove that they are able to maintain and prosper in what they have for at least ten years to show that they can help and not hinder the economic goals of the communities in which they are already located. Once they have shown that they can positively impact a local community (with plenty of community feedback over the course of this period), perhaps expansion and more permitting could be seen as a win for locals in other areas.

I have read that they are actually underutilizing the ports they have now, which makes me think they are spending their money (and the taxpayers money) on a land grab of any viable site now in order to ensure a monopoly in the future to prevent further development of areas that might be viable. Supporting this kind of giant industry blindly is a bad idea without a real working plan (and not a secret one within a private industry that isn't shown to us).

One can only hope that, as a representative of a government who is only here to serve the People and ensure our safety, that you will look for real proof that this company has acted in the best interest of the communities it is already operating in at this time in other parts of the country before approving permits here. Polls say that the views by citizens of this country towards their elected officials are at an all time low. We all know they work for the highest bidder. Is your firm working for the FAA? Who is paying Leidos?

I would like to see two additional pieces of information that I don't see anywhere yet. The first is a restricted flight map around the launch area. Here is the one I found for Canaveral. That is approximately 100 miles in diameter. I want this clearly shown to our own aviation community for any possible launch area and trajectory.
The second is a map showing any possible restrictions of watercraft or water-based activities and the size and scope of that. Here is one from Canaveral. We need for the locals to be able to have a clear idea of what water-based and land-based areas will be either permanently off limits and/or temporarily off limits in and around all possible launch times. Governor Perry in Texas simply passed a bill to close a prominent public beach during launch times for this private company. I want a map of our local area for this purpose drawn up and available to the public prior to any public meetings and/or comment period.

The public comment period allowed for this proposed permit was set up over the holiday period. Why? Everyone is far too busy at this time of year to take the time to do any research. I think the period needs to be extended as we (the public) still have so very little information about this proposal. We need more time to work with our local business to ascertain risk and/or reward of the idea. This feels like it being railroaded through with no public input because so little real information is being given like what is above.

Are there specific launch limits that are allowed (x per year, etc) with a permitted spaceport? How easily can those numbers be changed once a permit is in place? What kind of liability does SpaceX or the Federal government have in the event of a tragedy and loss of life and or property? How will the Spaceport affect our property owners' insurance?
Since the spaceport will impact a greater area than Camden, I believe that there should be public meetings in Glynn County as well, an area that is far more populated and stands to risk a huge tourism industry with negative impacts of a space station so close. I want more detail about the possibility of heavy water usage/water quality issues along with noise pollution. I want specific numbers of jobs by type and salary from the other SpaceX ports in this country for a multi year period.

I do firmly believe that putting a Spaceport in this area is a terrible idea. At the very least, a vote should be put forward to everyone who has a chance of being affected across the entire multi-county region. More information needs to be shown with real data brought in from other Spaceport locations to show economic impact and community support in those areas.

Thanks,

On Mon, Jan 4, 2016 at 9:24 AM, [Name] wrote:

Dear Ms. Zee,

As you have seen, the viability of having a spaceport at Floyd's Neck in Camden County is zero. Now is the time to call it quits and look at alternatives, rather than waste the money of the Camden County taxpayers any further.

As we have investigated the proposal for a spaceport in Woodbine, Georgia, we have found that the potential unavoidable effects of the proposed project would be very difficult to mitigate. We recommend that the FAA consider and evaluate in the EIS alternative sites, sites, to quote an esteemed colleague, that:

- don't have a VL spaceport launching directly over a National Seashore and a designated Wilderness Area
- aren't next door to a nuclear submarine base
- don't have a trajectory across "the only breeding area for the endangered northern right whale"
- don't have a trajectory across occupied private property
- aren't located less than two miles from "an unstable 58 acre toxic waste landfill"
On Jan 7, 2016, at 8:45 AM, FAACamdenSpaceportEIS <FAACamdenSpaceportEIS@leidos.com> wrote:

Thank you for your Scoping comment for the Spaceport Camden EIS. PLEASE NOTE, A LOT OF PEOPLE FORGET WE PAY THE RUSSIAN GOV. THREE HUNDRED MIL.PE SHOT.
Please disregard my early memo unintentionally shared regarding House Bill HB734. Consistent with your request for public comments regarding FAA efforts to evaluate the Campden Spaceport, please find enclosed comments for consideration.

Sincerely,
Attn: Ms. Stacey M. Zee, FAA Environmental Specialist

Re: Additional comments regarding Spaceport Camden EIS

Dear Ms. Zee,

Thank you for the opportunity to provide comments on issues that must be addressed in the environmental impact statement for the proposed commercial rocket launch site (“Spaceport Camden”) in Camden County, Georgia.

**Environmental**
To ensure all aspects of human and natural environment are assessed consideration of the following is critical:

- **The EIS must consider both routine facility operations and catastrophic events**, even if low probability. This would include, defining required efforts to address contamination of the site and adjacent marsh that may result from vehicle and payload preparation (e.g. fuel storage and transfer). This would also include contamination resulting from a vehicle explosion on the launchpad or over nearby lands and waters.
- Both test fire, and returning landing activities should be assessed and included.
- In assessing impacts or impact mitigation measures, the marsh must not be described as or considered to be “buffer”. The coastal marsh is one of the most sensitive resources that may be affected by spaceport operations.

**Socioeconomics**
What is the predicted economic impact to businesses utilizing public airspace and waterways from temporary disruptions by maritime and aviation exclusion zones? Potentially impacted parties include:

- McKinnon Airport on St. Simons Island
- Jekyll Island Light Marine
- Port of Brunswick
- Jekyll Island dolphin tours
- Commercial fishermen utilizing inshore and offshore waters around Cumberland Island
- Charter fishing captains
- Area marinas
- Cumberland Island ferry, including both ferry operations AND congressionally-mandated tours to the north end of Cumberland Island
- Field Inn
- Businesses in Camden County catering to Cumberland Island visitors

What is the predicted impact to taxpayers in Camden County from land acquisition, construction, maintenance, and operation of a spaceport. Impacts could include, but are not limited to:

- Increased property taxes
- Decreased availability of funds for other county services
- Increased fees for county services
• Reduced borrowing ability of the county to support other projects
• Increased homeowner insurance premiums
• Long term financial liability of the county for catastrophic events including firefighting and contaminant cleanup.

What is the anticipated revenue from tenants, including launch fees? How does this estimate compare to actual revenues realized by other commercial spaceports?

**Public Safety and Kings Bay Submarine Base**

Public safety is one of the most significant impacts to the human environment, so a comprehensive risk analysis must be included in the EIS. In particular, the risk of launch misfires to nuclear warhead-armed submarines Kings Bay must be addressed.

**Private Property**

All launch trajectories from the proposed location will overfly occupied private property, including dozens of properties on Cumberland Island, one hundred properties on Little Cumberland Island, and dozens of private residences on the south end of Jekyll Island.

• How will the FAA protect lives and property downrange of the proposed launch site?
• It cannot be assumed that residents will evacuate properties to accommodate launches by a private company. There is no precedent for launches over occupied private property within a short distance downrange of the launch site. G
• Additionally, the FAA must recognize that properties that are unoccupied require G protection. G
• What is the predicted impact on property values downrange of the launch site or in the

**Sound/Vibration/Acoustic Energy**

How will the FAA insure that the extreme acoustic energy released during rocket launches and catastrophic explosions will not adversely affect resources? Particularly sensitive resources include:

• Historic structures on Jekyll Island, Cumberland Island, particularly those that are already unstable, such as the Chimneys and Dungeness.
• The Little Cumberland Island Lighthouse, which was recently restored by members of the Little Cumberland Island Homes Association for a cost of $500,000. The lighthouse sits at the north end of the island on eroding sand dunes. Shock waves and vibrations from launches could accelerate erosion, leading to the collapse of the lighthouse.
• Homes on Jekyll Island, Cumberland Island and Little Cumberland Island will be directly under the path of rockets launched to the east.
• Contamination at the spaceport site. The spaceport is immediately adjacent to a capped RCRA landfill. Additionally, there are at least 3 areas in the spaceport property that are contaminated with munitions waste, pesticides, and other known and unknown contaminants. Other, currently unknown contaminated areas may be present. The extent of soil and ground water contamination is not fully characterized. Vibrations could influence the vertical and horizontal migration of contaminants.

**Contamination**

As mentioned above, the site is contaminated with munitions, pesticides, and other known and unknown chemicals.

• What contaminants have been introduced to soil and groundwater by operations at other commercial and non-commercial rocket launching sites?
• How will the AA insure that routine operations will not contribute to the existing contamination?
• How will the AA prevent catastrophic events from spreading contamination from fuel, rocket debris, payloads, etc. throughout the site, the marsh, coastal waters, Cumberland Island National Seashore, and nearby private properties.
• Research by Reichard at eorgia Southern indicates the presence of vertical basement faults propagated into the overlying Coastal Plain sediments in several places in coastal eorgia, including nearby lynn County. How will the AA insure that rocket launches do not activate vertical conduits in the underlying sediments, allowing contaminants to migrate into the Brunswick or Floridan Aquifers.

Light and other visual impacts
The dark sky environment of Camden County is an exceptional resource. How will the AA insure that exterior lighting does not disrupt sensitive resources, including, but not limited to:
  • The wilderness character of Cumberland Island
  • Nesting and hatching sea turtles on the beaches of Jekyll Island Little Cumberland that face the spaceport site G
  • Other wildlife use of adjacent uplands and marsh G
  • Residences and visitors who enjoy the existing dark sky environment G
At a minimum, exterior lighting and nighttime operations at the site must conform to outdoor lighting guidelines of the International Dark-Sky Association and restrictions on outdoor lighting imposed by Jekyll Island State Park to protect sea turtles.

Wilderness
President Reagan signed into law a bill protecting much of Cumberland Island as wilderness because of its exceptional natural and cultural resources and public recreational opportunities. In his signing statement, the President specifically stated the importance of protecting wild lands in the eastern United States. How can rocket overflights of Cumberland Island National Seashore be consistent with maintaining the wilderness character of Cumberland Island?

In addition, Jekyll Island Historic State Park, has been maintained to serve and protect the natural environment and habitat. What are the implications of to protecting Jekyll Island’s natural Park and public recreation opportunity?

Sincerely,
Dear Ms. Lee:

I learned about the extension from the St. Marys Earth Keepers on facebook and appreciate this direct notice. I attended the public scoping meeting and found it exactly as I expected and so professionally run. Thanks to you and your consultants for a job well done.

I believe my husband’s and my questions have probably been raised by so many others, but just in case, here are our thoughts and questions.

Our perspectives:

As owners of multiple small businesses and active Chamber members, we generally we support economic development, especially in this small community where the economy and jobs are so depressed. When we moved our chemical manufacturing / R & D business from upstate NY into the downtown business development district of St. Marys 4+ years ago, we were pleased that the county and city officials asked appropriate questions and assured that our practices wouldn’t harm residents or the environment. We are happy to see a similar level of care going into Spaceport planning.

As life and legacy members of The Nature Conservancy and the GA Sea Turtle Center of the Jekyll Island Foundation, we highly value environmental and wildlife preservation. We chose this location for our home and businesses because we can live close to nature in a small community that cares about people and the environment. Living directly across the Crooked River from the launch site (9 houses down from the state park boat ramp), we want to understand the impacts this venture would place on our lives and surroundings. We’re neighbors and friends of Commissioners’ President Jimmy Starline and he explained to us that we are approximately 7 miles away.

We have a good understanding of the proposed Spaceport site and understand that it is already compromised environmentally. The information about the proposals provides a good amount of information, but is not complete.

Our questions – some of which might not be strictly within your environmental scope:

About our own circumstances:
1. Under normal operating conditions and extreme situations, how far away from the Spaceport will there be noticeable chemical (or other) fumes / odors, noise above 90 dbL, and particles / debris / clouds?
2. Is there an evacuation zone for people during launches and reentry? If so, what are the particulars of those – frequency, duration, etc.?
3. Are there environmental impacts of any kind that would reasonably be expected to impact humans and/or domestic animals?
About the Spaceport and regional (including the Cumberland Island National Seashore) environment, considering normal operations and potential emergencies:

4. What degree of impacts are probably and possible to the physical environment, birds, sea creatures/fish and animals, especially breeding and endangered species?

5. What concerns are there about Spaceport operations contaminating / further contaminating surrounding aquifers, waterways, etc.?

6. What impacts are expected based on the increased traffic and population during construction and operation phases to environmental factors?

7. What possible preventive and remediation actions can be taken to eliminate or mediate these impacts?

8. What entity would be financially responsible (Camden taxpayers or private operators) for the remediation and/or liability settlements in the worst-case scenarios?
We look forward to receiving your comment by January 18, 2016. After the close of the public comment scoping period, we will prepare a scoping report and post it to the project website.

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

Thank you,

Stacey Zee, FAA Environmental Specialist
Office of Commercial Space Transportation
Leidos

20201 Century Boulevard, Suite 105

Germantown, MD 20874

FAACamdenSpaceportEIS@Leidos.com

Attn:  Ms. Stacey M. Zee, FAA Environmental Specialist

Re:  Comments regarding Spaceport Camden EIS

Dear Ms. Zee,

I appreciate having the opportunity to comment on the environmental impacts of a proposed commercial rocket launch and recovery site (“Spaceport Camden”) in Camden County, Georgia. Hopefully my comments will contribute to encouraging the thorough preparation of an EIS. This introductory page is copied also to the body of the attached Word document (see below).

My wife and I are homeowners and are part of the association that has collectively managed Little Cumberland Island (LCI) for over 50 years, under an agreement with the Department of the Interior and the National Park Service (Cumberland Island National Seashore) to maintain the island in as natural a state as possible. Our nearby island would be to some degree downrange from the rocket launching facility if it were approved and I will have serious concerns about my safety, the safety of my family, the safety of my property, the safety of the National Seashore, and adjacent coastal areas. It is my understanding that it would be unprecedented for vertical launches to launch over nearby private properties. I would not plan to voluntarily evacuate my private property or surrender private property rights to accommodate the commercial interests of private aerospace investors.
Both my wife and I have been involved in supporting the environmental conservation mission of LCI. My wife is Corporate Secretary for the association. I am currently the Chairperson of the Science, Research, and Conservation Committee that advises the LCI Board of Directors. I serve as the Director of the LCI Sea Turtle Project (the longest running sea turtle project in the world). I serve as the President of the Caretta Foundation (not affiliated with LCI), a non-profit organization whose goal is to facilitate research and conservation activities on the Georgia coast. I work with university graduate students and GA DNR technicians on island research projects. I have been invited by Camden County to participate in the county’s “environmental subcommittee” that will advise the county on environmental issues related to the proposed commercial rocket launch facility, however, the comments below are my own. My wife and I have strong personal connections with the area and are dedicated to continuing to protect preserve the Georgia coast.

My comments are grouped in four overlapping, categories that I hope will facilitate incorporation into EIS review (please see below).

Most sincerely,
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Most sincerely,
I. **Environmental and cultural**

II. **Safety, Access, and Risk to Property**

III. **Socioeconomic concerns: the project and the community**

IV. **Boca Chica EIS; relevance to the proposed Camden County project EIS**

**I. Environmental and cultural**

**A. Vibration and pressure waves during launch, re-entry, and from possible explosions**

Rocket engines cause significant vibration during the launch process; down-range inhabited areas would be directly underneath the flight paths of an ascending (and descending) rockets. Cumberland Island is the largest of Georgia’s barrier islands with four historic districts and 87 structures listed on the National Register of Historic Places. It is also part of the Gullah/Geechee Cultural Heritage Corridor. The historic homes and ruins on Cumberland, such as “Chimneys,” the “First African Baptist Church” on the north end of the island, Plum Orchard, and Stafford would be particularly vulnerable to vibrations caused by the launching of rockets. It is imperative that historical conservationists and structural engineers assess all 87 of these historic structures and the historic lighthouse on Little Cumberland Island so that the possible impacts of repeated rocket launches, test fires, and landings can be determined and mitigated to preserve these cultural resources, if a license for a spaceport were approved. Similar fragile cultural resources exist on the mainland (e.g., historic houses and cemeteries), as well as private residences on both the mainland and barrier islands.

The EIS should investigate the potential for rocket engine-induced vibration and/or significant pressure waves to destabilize steep sand dune faces, for example, in the proximity of the LCI lighthouse or around private residences causing them to collapse beyond their current ‘angle of repose’. Vibration could contribute to erosion of sand dunes on the north end of LCI that might lead to erosion of the foundations of the lighthouse, or from under private residences and, for example, the LCI Operations Manager’s house.

Vibration can cause collapse of mainland gopher tortoise (a species of special interest) burrows which are also habitat for threatened eastern indigo snakes. Sudden blasts of noise or pressure potentially can startle nesting bald eaglets from their nearby nests, for example on Pompey Island, LCI, and Cumberland Island. If the EIS process decides vibration and pressure waves would be unavoidable, and that these would likely have
adverse impacts on historic structures, collapsing sand dunes, and native wildlife, would sorts of mediation would be meaningful and realistic?

B. Marsh and Creek Dredging

Floyd Creek is narrow and only between 11-21 feet deep (depending on the maps I have seen) at the site suggested for a rocket facility deep-water port (as presented in the Spaceport Camden Conceptual Plan). This area experiences a regular tidal flux of 7-9 feet. As it exists today, the Bayer Crop Science dock location could hardly seriously be considered a “deep-water” port, especially at low tide. Dredging and other construction presumably would be required. Would dredging be permitted? If so, how much material would be dredged and where would it be placed? What would be the changes in sedimentation profiles that might result in large scale dredging of Floyd Creek, for example further downstream closer to Kings Bay Naval Base, or around Jekyll, LCI, and Cumberland Island, and St. Andrews Sound? Could dredging and related (perhaps unanticipated) bank erosion contribute to leaching of contaminated soil on the property into the Floyd Creek or nearby Todd Creek?

The saltwater marshes on the Georgia coast are among the most highly biologically productive landscapes on Earth. The importance of this ecosystem is recognized by, and carefully monitored and regulated by, the Georgia Department of Natural Resources and the Army Corps of Engineers. The Proposed Action Alternative description states “…marshland, would be used as buffer.” It is inappropriate for such a resource to be considered a buffer for possible failed commercial rockets…quite the opposite, we need to do what we can to buffer the marsh from possible harm.

C. Wildlife disturbance, air space, Wilderness designation

Cumberland Island has over 9,000 acres of designated Wilderness and UNESCO has declared that Cumberland is part of the Carolinian-South Atlantic Biosphere Reserve because of the incredible biological diversity including, beaches, sand dunes, salt marsh, maritime forest, tidal creeks, and fresh and brackish water ponds. It provides important nesting, wintering, and migratory habitat for rare and endangered wildlife including loggerhead sea turtles, brown pelicans, piping plovers, least terns, bald eagles, Wilson’s plover, red knots and peregrine falcons. Loss or damage to the Cumberland Island barrier island environment would be devastating.

Risk assessment for each guild or group of migratory and nesting species of birds, as well as reptiles, amphibians, and mammals should be performed as part of the EIS. Surveys using accepted protocols should be performed in all habitats to identify species, diversity, abundance, resource needs and potential effects with the proposed footprint and with an ‘area of potential impact’ for various wildlife species. Colonial bird nesting and rookery areas should be identified. The use of ‘best available information’ will not be adequate as limited avian data is available for the proposed aerospace project and adjacent areas. Surveys lasting only a few days would not be adequate to identify species potentially impacted by the proposal or to perform a meaningful risk assessment. If surveys are conducted for less than a one or two year period, and are not sufficient to adequately evaluate the population status of local and migrant species, these data would not be considered adequate to properly analyze project-related impacts.
Potential impact to birds should be assessed both upon the footprint of the proposed project as well as within the areas of potential impact. Criteria should include possible direct mortality of birds and/or the destruction of nestlings or eggs (which could constitute violations of the Migratory Bird Treaty Act); indirect effects that may result in nest failure or reduce nesting potential, such as noise, vibration, pressure waves, possible contamination of the environment associated with fuel spills; activities that alter behavior; and habitat loss. Bird nesting mortality associated with night launch activities would be expected to be higher than day launches since parent birds that may be startled from the nest may not be able to return to both protect and incubate/insulate their young. The NOI does not indicate specifics for day or night rocket launch activities and this should be clarified in the EIS. In addition to nesting activities, the marshes and barrier islands of Georgia are significant overwintering and migratory stopover and staging areas for migratory species; these areas are considered critical components to successful life cycles for many species and should be addressed in the EIS.

Although the precise footprint of the proposed Camden County rocket launching and landing facilities are not particularly large, the impact to adjacent land areas, marshes, islands, and beaches could be significant. The Migratory Bird Treaty Act does not permit “take” of bird species associated with activities adjacent to project areas. Therefore, potentially sensitive bird populations must be identified, and avoidance measures taken, to avoid violations of the Migratory Bird Treaty Act.

Bald eagles and their nests are protected under the Bald and Golden Eagle Protection Act. Multiple bald eagle nests exist in areas adjacent to the proposed Camden County rocket facility and these nests are used on a yearly basis from approximately November to June. Nestling, but flightless, eaglets spend months hanging out on the edges of their nests. Sudden noises (e.g., rocket engine blasts, sonic booms, explosions associated with rocket failure) could potentially startle flightless eaglets (and other young birds, such as wood storks) from nests and must be avoided.

Light pollution in the form of a skyline glow mimics the starlight that emerging sea turtles use to orient to the open sea and hence can severely disorient young turtles during and after their attempt to reach the ocean. Currently, there are essentially no artificial lights visible on the beaches of either sides of Little Cumberland Island (by community agreement) or Cumberland Island. The absence of sources of artificial lights and other human disturbance is thought to contribute to the success of the these islands being responsible for the largest number of endangered loggerhead sea turtles nests along the Georgia coast. The EIS must acknowledge and reject the possibility of sources of bright nighttime artificial lights to the west of the barrier islands and the marsh.

The coastal waters immediately offshore of Cumberland Island are designated “critical” habitat for endangered Northern Right Whales. There are only an estimated 450 Northern Right Whales left in the world and the waters off Cumberland Island are their only known calving grounds in the entire world. The whales migrate to these waters every December through March to give birth before returning to the North Atlantic for the summer. A narrow band of the critical whale habitat does extend to just beyond Cape Canaveral Florida, however, this is the southern extremity of whale habitat, and
whales are rarely present that far south. In contrast, waters off of Cumberland Island are the very heart of the right whale calving grounds. Almost all right whale mother-calf pairs are spotted in these waters each year. Cetaceans are acoustically sensitive. Any negative impact to the whales or the habitat upon which they depend would be inappropriate and also tragic. The EIS should investigate possible impact of low frequency noise, such as from rocket engines and sonic booms, on mother-calf whale behavior, as well as potential impact of unplanned releases of rocket fuels and other contaminants associated with rocket failures on normal whale function, including the impact of toxic materials on the health of right whales and their ability to breath and feed normally.

Diamond terrapins, gopher tortoises, and federally threatened eastern indigo snakes are all found on the mainland and near marshes and are especially susceptible to increased vehicular traffic mortality, habitat fragmentation, and construction disturbance. The EIS should describe the impact of increased vehicle traffic, construction, maintenance, and rocket procedures on these reptile species and suggest mechanisms for effective mitigation of adverse impacts.

Air space over CINS, including areas designated as Wilderness, is currently restricted to prevent wildlife disturbance. How would this restrict over-flights by rockets as well as associated surveillance aircraft and drones?

D. Coastal vulnerability to flooding

According to the Camden County Hazard Mitigation Plan, “Severe flooding has inflicted significant damage in Camden County in the past due to heavy rainfall and river rising events”, “Camden County is located in a known floodplain”, and “coastal flooding has the potential to cause severe flooding that not only dampens but destroys exposed structures”. The proposed rocket-launching site is only a few feet above mean high tide level, with saltwater marsh on two sides and adjacent to the Satilla River. Traditional flood mitigation measures, such as “retention ponds” and “storm water drainage”, are meaningless when a site is flooded at sea level. The county’s hazard mitigation plan recommends to “Determine the elevation of critical facilities in known flood areas and seek funding to relocate if necessary” and further advocates using such flood prone land for open space. The EIS should note that the priorities of the county’s hazard mitigation plan appear to be inconsistent with the placement of a “critical” facility on the proposed site.

E. Clean up of Existing Toxic Waste and Unexploded ordnance

What progress would be made, prior to developing the site, to identify and clean up the existing toxic wastes and unexploded ordnance left by former industries at the site, including Bayer Crop Science, Union Carbide, and Thiokol Chemical, who manufactured explosive and incendiary chemicals, as well as pesticides such as aldicarb (Temik) at the site? Would a Phase 2 Environmental Site Assessment of the Bayer Crop Science tract be completed in time for the FAA to consider its consequences for the spaceport licensing process? The EIS should seriously evaluate if the existing pollution of the site and adjoining, sequestered properties is too great to safely operate a
publicly owned spaceport? Are all the types of chemical dangers and their locations known on the property, including on the Bayer Crop Science property? If not, what effort would be made to find them, clean, isolate, or otherwise manage them and notify the public? The EIS should require that on-site environmental remediation should be complete before construction of Spaceport Camden is considered; if not, why not?

F. Contamination or Release into nearby Waters, Air and Soil

How would the possible migration of contamination or release into nearby waters, air and soil be monitored and publically reported, especially for toxins on the Bayer Crop Science tract (since the Union Carbide site is already under the requirements of a RCRA permit)? Would a seismic (vibration) test be done to detect damage to the legacy toxic landfill now being managed on Union Carbide Company property (including damage to the cap, acceleration of the movement of polluted groundwater toward Todd Creek, or acceleration of nearby bank erosion on Todd Creek)? Besides the hazardous landfill under RCRA permit, would vibration cause the movement of other existing toxic wastes and unexploded ordnance on the Bayer Crop Science or Union Carbide tracts, or interfere with their management, remediation, or containment?

G. Catastrophic Event Smoke Plumes

In a catastrophic launch or landing failure at or near the proposed rocket site, what is the chance that a toxic smoke plume could form and drift over spectators, or inhabited areas (e.g., similar to the massive smoke cloud that developed and drifted north-easterly following the 2014, Antares disaster at Wallops Island)?

H. Volatilization of Hazardous Waste: Clean Air Act

Would spaceport construction, launch and landing operations, or general operations volatilize existing hazardous wastes causing their release into air in dangerous quantities, or resulting in a Clean Air Act violation? Has adjacent offsite testing of air been done to establish whether or not there has been a Clean Air Act violation? Is perchlorate contamination already on the site in dangerous quantities, owing to the use of solid rocket fuel by Thiokol in the 1960s? If so, what measures would be taken to remove, or prevent mobilization of perchlorate during construction of a spaceport and the vibration caused by rocket launches and landings?

I. Withdrawal of Deep Groundwater (aquifers)

If deep groundwater is withdrawn from the site, such as from the Floridian Aquifer, what tests would be done to insure that vibration does not cause contamination from shallow groundwater to enter the water so withdrawn, or contaminate drinking water off site? Has adjacent offsite testing of groundwater seepage, interstitial water in sediments, or surface water runoff been tested for possible contaminants originating from the proposed spaceport property to establish whether or not there has been a Clean Water Act violation?

Would the additional, large-scale use of fresh water from aquifers contribute to local, perhaps sporadic but permanent, saltwater intrusion into the existing cones of depression
in the fresh water aquifers? Has this been thoroughly evaluated by the GA Environmental Protection Division and USGS in light of the well-documented saltwater intrusion nearby in the Brunswick area?

Some shallow groundwater at the site is contaminated, and groundwater withdrawal is currently restricted at least on some of the site. If deeper water withdrawal is allowed, what steps would be taken to insure that any shallow groundwater would not be drawn down into the deeper water or the Floridian Aquifer either via cracks in well seals or fractures in the natural barrier between shallow and deep water, especially given the expected amount of seismic vibration during launches and landings?

What would be done with large amounts of water (e.g., 100,000+ gallons) used during each launch? Would it need to be monitored and treated? Would it be reused? If water is reused or discharged off site, to what level or standards would it be treated? Would treatment be to drinking water standards, colorless, clear, and of ambient temperature and pH? Who would be responsible for the infrastructure, operation, and expense to supply and treat water used at the site? Would water withdrawals or discharges impact the quality or quantity of water used by people, wildlife, or ecosystems, including wetlands? Would National Pollution Discharge Elimination System (NPDES) permits be sought in order to discharge treated water off site? If so, where would the discharge be placed? What monitoring of water pollution would be done to ensure compliance with all standards of public safety and environmental health?

J. Possible Future Actions

In what condition would the site be left in the event that the spaceport failed or otherwise ceased operations temporarily or permanently? How would deactivation be controlled, monitored, funded, and managed?

K. Factoring future demand for recreation

The population of Camden County and the south coast of Georgia is expected to continue to increase. As populations in the SE increase, demand for nature-based recreation will continue to grow. Due to the positive economic impact visitors to Cumberland Island National Seashore, Crooked River State Park, and Jekyll Island State Park have on adjacent communities, the EIS should analyze the impact of maritime and other launch closures on current and future revenue over the short and long terms.

L. Clarification of thresholds for concern

The Spaceport Camden EIS should clarify what level of ecologic and cultural concerns are considered sufficiently significant to trigger recommendations for ‘no action’, or alternatively to require mediation to minimize impact. The EIS should include site-specific studies, done over a meaningful span of time prior to licensure (e.g., for a full season or more for nesting species) and not rely on studies that would only commence after granting a site license and after potential damage may have begun. Studies should provide meaningful data on potential impact of a facility on the coastal environment, barrier islands, and human communities prior to licensure. The EIS should include bench marks for successful environmental mediation and recommendations for
independent monitoring of benchmarks by responsible parties, if a launch facility is permitted and constructed.

II. Safety, Access, and Risk to Property

A. Vertical Rocket Launches over Populated Areas

Launching over nearby inhabited areas of Little Cumberland Island, Cumberland Island, or Jekyll Island would set a new precedent for the FAA. If it were to be deemed acceptable to launch over inhabited, environmentally unique barrier islands, the EIS should articulate why it would likewise not be equally or more acceptable to consider launching over other inhabited but less environmentally unique, inland areas?

_The Camden County spaceport EIS must articulate what specific FAA legal directives apply to risks for persons and property when launching and landing commercial rockets over nearby inhabited areas. Do rockets, which are used for private economic gain, assigned the same risk allowances as those tax-payer funded rockets used for the ‘public good’? Are the rights of private citizens and property owners equal to or greater than the financial interests of an out-of-state investor in a commercial rocket? These important details must be explained with regard to how they concur with the FAA’s mandate to protect the public from potential harm._

B. Trajectories

Specific projected launch trajectories that might originate from the Camden County facility are unspecified, other than they presumably would be in an easterly direction. Working launch trajectories would be agreed upon as part of the secondary licensing process to launch rockets (separate from the site license procedure). It is impractical to consider permitting a site for a commercial rocket-launching facility when the full range of launch and reentry trajectories is not being recognized and analyzed and when various trajectories constitute various environmental impacts. The EIS must evaluate several possible trajectory ‘windows’, for example to include Jekyll Island and the Kings Bay Naval Base, as well as Little Cumberland and Cumberland Islands. This wider spectrum launch and reentry analysis should include public safety considerations and recommendations for each window. _In the absence specific launch trajectories it is impossible to meaningfully plan for the future, or to fully understand possible environmental impacts of the project._ The ‘one trajectory example model’ for commercial rocket site licensure (such as has been prepared as part of the Spaceport Camden concept model) is next to meaningless when possible alternative trajectories (e.g., passing over or near other barrier islands) would have significantly different environmental impacts. If only one trajectory is considered in the current EIS, addition of possible alternative future trajectories presumably would trigger multiple, new EIS processes.

The EIS must be clarified whether or not 1st stage rocket parts would attempt to use essentially the same reverse trajectory/launch exclusion zone(s) as used during liftoff and if novel risks might be involved in this process.
In the absence of a significant amount of industry experience with successful attempts to recover rocket parts from spacecraft launched towards orbit, the EIS should investigate how would risk be evaluated, to persons, property, and environmental and cultural features, over which such parts would pass?

C. Evacuations and access

Closures of the Intracoastal Waterway and possible island evacuations would impact residents and visitors to the various nearby islands potentially including Jekyll, Little Cumberland, and Cumberland Islands. Parameters of closures and other measures must be clarified for inhabited areas prior to launches, rehearsals, static firings, and first-stage recoveries. The EIS should clearly describe all possible trajectories, the clearing, closing, and reopening process and clarify who would be responsible.

Little Cumberland Island is accessible only by water transportation during high tide, so time away for evacuation would likely be a minimum of three days, if the launch goes as scheduled and there are no changes to the launch schedule. If occupants and employees of such remote areas were evacuated, how would they be compensated for travel, their own time away from home, and employee non-productive time? Who would be responsible for this compensation? If an evacuation is not necessary but waterways are temporarily closed to limit traffic in the area, how would medical or emergency evacuations be handled from such remote places?

Infrastructure on Little Cumberland Island and Cumberland Island does not include roads or access suitable for emergency management vehicles. What plans would be in place to manage fires, fallout of possibly toxic debris, or recovery of possible rocket components? If only part of an island requires evacuation, how are residents in other parts of the island protected from possible wild fire danger associated with a potential catastrophic launch failure?

D. Liability and Property Values

In case of the need for liability claims from injury or damage caused by spaceport operations, could a responsible party acknowledge legal responsibility in advance (prior experience on the same industrial site reminds us that government and private industry has been reluctant to acknowledge responsibility for catastrophic accidents)? The cost of insurance coverage to Camden County should be acknowledged as part of the EIS as a factor of socioeconomic impact on citizens who will pay for this. Would the County, or aerospace launch company, provide injury/damage/fire insurance to inhabitants in the launch hazard zone and under the launch exclusion zone?

The EIS should articulate, if property values were to decrease as a result of a nearby spaceport, how would owners be compensated for their loss and if so, by whom?

The EIS should articulate, if property insurance costs were to increase as a result of a nearby spaceport, who would bear the burden?

E. Catastrophic rocket failure
The prospect of catastrophic rocket failure is clearly not hypothetical. Failures can include uncontrolled burning fuel, disintegrating parts, and potentially toxic substances, some of which rains down on whatever is underneath or nearby. The shock wave from the explosion of the 1997 Delta II rocket blew out windows 10 miles away, started a fire on the ground, and destroyed property in the area. A similar scenario would be far more catastrophic were it to occur over an island with little or no infrastructure for fire suppression or hazardous material management, or proximal to a Navy base with sensitive equipment and other significant assets.

Little Cumberland Island (LCI) has a 50+ year legacy of being carefully maintained as one of the most ‘untouched’ and least developed, of East-coast barrier islands, even before the island was incorporated within the boundaries of the larger Cumberland Island National Seashore (CINS) in the 1970’s. LCI is the home of the world’s longest continuously running sea turtle monitoring project (52+ years). CINS is considered one of the jewels of the National Park Service and a unique resource for the study of the ecology of barrier islands. Jekyll Island is largely owned by the State of Georgia as a state park. CINS, LCI, and Jekyll Island all have legacies of preserving fragments Georgia barrier islands in varying degrees of naturalness.

If all other concerns were omitted from EIS consideration, even the remote risk to these rare examples of barrier island ecology, or the remote risk of damage to the Kings Bay Naval Station, would outweigh possible financial benefit to any corporate aerospace company. Other safer, currently unused potential launch sites exist. A primary mandate of the FAA is to protect the safety and interests of the public.

III. Socioeconomic concerns: the project and the community

A. Spaceport Demand

Is there sufficient demand to keep a Camden County spaceport in full operation for its maximum 12 launches per year over the site’s projected design life in years? How many launches per year must occur for Camden County taxpayers to ‘break even’ on the spaceport investment? Has the ‘break even’ number of launches been consistently achieved at other established commercial rocket launching facilities (e.g., Spaceport America in New Mexico; Mid-Atlantic Regional Spaceport, Wallops Island, VA; Cecil Field, Jacksonville, FL)?

How do economic expectations for the Camden County commercial rocket-launching facility significantly differ for other existing commercial facilities (e.g., Boca Chica, TX, Spaceport America, NM, Wallops Island, VA) that have not realized expected community-wide economic prosperity as a result of the presence similar facilities?

B. Commercial Impact

Would business activity at the Port of Brunswick, Georgia be delayed during launches or landings, or business at US Navy Submarine Base Kings Bay, or at ports in Fernandina Beach, Florida or Jacksonville, Florida? Aerial launch exclusion zones would
presumably interrupt airplane traffic along the Atlantic corridor from Florida north, including air traffic bound for Miami and Jacksonville International Airport as well as local air traffic to Brunswick, St. Simons, Jekyll, and St. Mary’s airports; what would be the cost to the community of such possible closures/delays/rerouting?

Ecotourism is recognized as an important part of St. Marys’ and Kingsland’s existing economies. The cities are described as “the gateway to Cumberland Island National Seashore” and nearby Crooked River State Park. What impact would the intermittent interrupting of access to CINS have on St. Marys’ economic wellbeing?

How would the companies that use the proposed Camden County commercial rocket facility be taxed and how much would Camden County taxpayers expect the companies using the Spaceport to pay in taxes per year?

C. Camden County Liability

What contribution would Camden County taxpayers make towards liability for damage to persons, or private and public property caused by launches, landings, testing, and accidents, and catastrophic failures, including fire, collision with debris, exposure to toxic materials, noise and vibration damage, or dispersal of ionizing radiation?

D. Implications of County ownership

Camden County would own “Spaceport Camden”. Currently, Camden County derives private property taxes from the same land. What would be the impact of a decrease in property taxes paid to Camden County, if the county owns the title to the land?

Would Camden County purchase the property before having a contract in place with a private launch partner(s)? Would Camden County taxpayers pay initial construction costs and how much of expenditures would the county expect to recoup from private users/tenants? Would the county seek a private partner to fund construction and not proceed unless/until they find one? Would taxpayers be responsible for subsequent launch site operation and maintenance of the facility, including during possible hiatuses in between aerospace clients?

E. “Space Tourism” Implications

Spaceport Camden promoters have frequently cited “space tourism” as a key financial driver for justification for additional commercial spaceports. However, the medium sized vertical launch rockets, such as those referenced in the FAA’s Spaceport Camden Notice of Intent, are not considered large enough to carry significant human payloads. What kind of tourism is being considered under this site license? The EIS should investigate and reconcile the expectation for space tourism and the need to launch larger rockets. Are there plans that have been discussed with the FAA, but not yet been made public, re the use of much larger rockets?
F. Status and meaning of a Site Licenses

It is important for Camden County residents to know what is the anticipated ‘half-life’ for a commercial rocket launching site license? What meaning does a site license have to local residents with regard to a reasonable understanding of expectations for the future? What changes to the Camden County site license could Camden County residents reasonably expect; e.g., more than 12 launches per year, larger rockets, how many more launch platforms? For the benefit of the environment and the community, the EIS should explore the potential that the primary site license is a ‘foot in the door’ for more impactful development.

G. Alternatives

Many alternative potential commercial rocket-launching sites already exist in locations that do not require launching or landing over nearby inhabited property or environmentally unique areas, e.g., SpaceX and Blue Origin both have already leased government sites at Cape Canaveral and elsewhere. The EIS needs to clearly articulate whether there is truly a need for additional launch sites that would operate with increased risk to the public and the environment. Alternatively, is there a commercial imperative for new cheaper launch sites that increase profit margins for commercial aerospace companies? If the answer is ‘cheaper’, the EIS should articulate what elements related to safety and quality control at a commercially operated site would be different from existing sites that fall under federal government oversight.

As a tax-paying, proud ex-public servant and citizen, I consider contributions from for-profit companies to reimburse our federal government, in return for the option to utilize existing facilities, as a legitimate and proper source of public income and not something to be undercut. The EIS needs to consider existing sites, with equal or lower inherent risks, as viable and appropriate alternatives, irrespective of potential profit margins for aerospace investors.

If it is decided that there is little or no risk to persons or property under the immediate flight path of ascending commercial rockets, the EIS should articulate why ships in existing maritime exclusion zones are regulated.

If there is little or no risk to persons or property under the immediate flight path of an ascending commercial rocket, the EIS must consider alternative launch site properties, further inland, which could serve to launch commercial rockets over inhabited areas but which don’t include nearby unique environmental and cultural features, such as exist on coastal landscapes and barrier islands.

Since the prospective clients for Spaceport Camden would be private companies (rather than a U.S. government agency), what assurance do citizens of Camden County have that these clients would not exercise their own option to ‘alternatives’ and move operations to facilities that offer greater profit margins (e.g., abroad) when doing so becomes economically attractive?

It would be useful if the EIS could explore why there are currently so many unused launch platforms (e.g., in Florida and New Mexico) and then investigate why, in
contrast, a single launch platform in Camden County would reasonably be expected to be competitive with, or have a longer working life than, other, currently unused, facilities?

In direct reference to another possible aerospace facility in Camden County, Stephen Fleming, Georgia Tech University vice president for Economic Development and Technology Ventures and Aerospace, is quoted by the Atlanta Business Chronicle (2015/06/12) as saying “We need more launches. We don’t need more launch pads”

The various aspects of the socioeconomic impact on the community must be considered as a critical aspect of the EIS. Without an economic risk-benefit analysis, there is no way residents of Camden County (or anyone else) can have a realistic understanding of various possible socioeconomic scenarios.

IV. Boca Chica EIS; relevance to the proposed Camden County project EIS

A. Inherent differences between Boca Chica and the proposed Spaceport Camden

Because of the single owner-operator status of the Boca Chica facility, the EIS document prepared for that site is able to specifically reference rocket types, specifications, and trajectories and even look forward in a realistic manner to launching other larger rocket formats. The Camden County EIS cannot refer to specifics of rocket types or expected trajectories (since the identity of the potential Camden County partner aerospace launch companies are not known or under contract). This is a significant difference between the two sites and EIS processes.

Due to the location, uniquely sensitive public assets, and larger local population, the Camden County EIS process will very likely attract more public attention and be more closely scrutinized by concerned citizens and partners than was the Boca Chica EIS process.

B. Boca Chica EIS document as an example for Camden County: Wildlife

The Boca Chica EIS document appears to do a good job recognizing possible adverse impacts of rocket launching activities on native wildlife, including threatened species (e.g., piping plovers, migrating red knots, various species of nesting sea turtles, ocelots). However, after acknowledging such concerns, a recurrent theme of the Boca Chica EIS document is encapsulated in the last sentence of the EIS: “These [adverse] changes would affect Boca Chica Village residents, the surrounding parks, cultural resources, and National Wildlife Refuges. However, as discussed in Chapter 6.0, Mitigation and Special Conservation Measures, measures would be implemented to reduce the impacts”. Typically, the responsibility for implementing the “measures” are ascribed to the launch site owner who clearly has a strong commercial interest in launching rockets but no obvious incentive to protect wildlife or the environment. There is little attempt in the EIS to quantify how much mitigation measures might reduce negative environmental impacts and what benchmarks for mitigation would be considered as
successful. Some of the mitigation measures lack biologically relevant specificity or meaning. For example, the misguided requirement that occasional beach trash pick-up and “pre-launch security patrols, security vehicles or other necessary equipment on the beach will be driven above the "wet line" to minimize disturbance of birds and protect feeding and roosting areas”; most Southern coastal resource managers would agree this “measure” constitutes a potential disaster for both nesting shorebirds and turtles which nest above the wet line between the months of April-November (at least in Georgia).

The Boca Chica “special conservation measures” chapter 6.8.2 includes the optimistic note: “With the above-mentioned Special Conservation Measures, impacts to biological resources would be avoided or minimized; therefore, no addition [sic] mitigation measures are needed.” How could the authors of the Boca Chica EIS have come to such a blanket conclusion without having done or required 1) the meaningful, proactive environmental baseline studies, 2) projections of spaceport impact on the local environment informed by baseline studies, and 3) without establishing bench marks for mitigation success and/or a requirement for impartial monitoring or follow-up studies?? [As a brief aside, the existing polluted-toxic status of the Camden County site is a testimonial to corporate America’s occasional willingness to ignore the interests of the environment over which corporations have control.] As a concerned biologist-citizen (albeit with little experience in evaluating EIS documents) it is hard to understand how the Boca Chica EIS document could have been considered a meaningful and true “environmental impact statement” other than in a limited bureaucratic sense. Hopefully, the model of the Boca Chica EIS can serve as a basic level starting point for a much more insightful, informative, proactive, and meaningful Camden County spaceport Environmental Impact Statement.

C. Boca Chica launch safety issues

In a few brief references to launch safety in the Boca Chica EIS document it is written that private homeowners of Boca Chica Village, within the gated launch hazard zone (within 2-3 miles of the launch pad), can remain within the launch hazard zone during rocket launches: e.g., “Restrict access to all but property owners and authorized personnel at T-6 hours”.

The proposed Camden County commercial rocket launching facility would launch and recover rockets over nearby inhabited property; EIS clarification is imperative regarding the requirements or expectations to evacuate from under the projected exclusion zones (see also II C above). The Spaceport Camden EIS should clearly articulate what is FAA policy and what directives inform policy.
Safeguard the environment!
Dec 1, 2015

Ms. Stacey M. Zee

Spaceport Camden County EIS, c/o Leidos, 20201 Century Boulevard, Suite 105
Germantown, MD 20874

Dear Ms. Zee,

As the Federal Aviation Administration (FAA) evaluates the potential environmental impacts of Spaceport Camden, please consider the following concerns about how this proposed commercial space launch site and supporting industrial complex could impact Cumberland Island National Seashore, which is located approximately five miles away from the proposed launch site.

Following are some issues and concerns:

1. Annual visitors – 60,000
2. Total area of park – 9,800 acres
3. Park will probably have to close and evacuate visitors during launches.
4. All visitors will be impacted while visiting or hoping to visit the natural barrier island.
5. Personal vacations will be impacted and a number will change vacation locations.
6. Rocket launches in other places around the country require the temporary restriction of air space, closure of navigable waterways, and evacuation of residential areas.
7. Loud noise and visual impairments associated with rocket launches can impair the visitor experience and endanger wildlife.
8. Launches so close to a national park also raise major safety concerns for park visitors and wildlife from rocket launch failures, unintended discharge of rocket fuel, and other debris contaminants into sensitive wetlands.
9. Additionally, the endangerment of the Northern Atlantic right whales and loggerhead sea turtles as well as other wildlife impact during construction of the spaceport, and all rocket launches, demands that the associated development must be fully understood before proceeding with this project.

The Georgia Coast is known for its scenic vistas of vast marshland and remoteness. Public and private spaceports have transformed communities across the country by bringing significant changes in land use, population density, and growth accompanied by increased commercial, industrial, and residential traffic due to new construction. I urge the FAA to carefully weigh these concerns before proceeding with a development that could have irreversible consequences to this area.

Thank you for considering my comments and urge caution in locating the location of this spaceport.

Sincerely,
Dec 1, 2015

Ms. Stacey M. Zee

Spaceport Camden County EIS, c/o Leidos, 20201 Century Boulevard, Suite 105
Germantown, MD 20874

Dear Ms. Zee,

As the Federal Aviation Administration (FAA) evaluates the potential of locating a commercial spaceport near Cumberland Island and its federally designated wilderness launches so close to a national park, the risk to wildlife, marine resources and the pristine environment should not have to take this risk. I have spent many days at Little Egg Island, Little St. Simmons and the Cumberland Island area. This area is unique and priceless. The wildlife is irreplaceable. The proposal should be DOA.

Sincerely,
Jan 8, 2016

Ms. Stacey M. Zee

Spaceport Camden County EIS, c/o Leidos, 20201 Century Boulevard, Suite 105
Germantown, MD 20874

Dear Ms. Zee,

I usually am not publicly vocal about the things I feel strongly about, but I need to share something with you. In recent months, plans have been developed to build a commercial spaceport in Camden County, GA. This spaceport would lie adjacent to Cumberland Island National Seashore, and it's construction would drastically alter access to it.

For those who aren't aware, Cumberland is an 18 mile barrier island off the southern Georgia coast. It has been preserved since 1972 as a National Seashore, and affords forty thousand visitors every year the chance to witness the splendor and purity of nature - to witness the silence of its ancient maritime forest, the ebb and flow of its tidal creeks, the environmental harmony in which its wild horses, bald eagles, and sea turtles exist. The Island is a physical manifestation of the unity we're all seeking as individuals and as a species in ourselves; as a planet. It is an undeniable expression of coexistence.

If you've been there then you know exactly what I'm saying. Its the closest thing to magic that I've ever experienced.

In short, it is fertile soil. And to us - to me - it is a representation of the cosmic soil from which we all sprang, and continue to spring. It is a breeding ground for the mind and for the heart.

It must be stated that I understand the implicit importance of space travel. It will become a necessity in the coming years. We are a species prone to expansion. I also understand that experimentation is essential to the formation of efficient and value-creating infrastructure. But we must ask ourselves the terrestrial cost at which we expand outwards. We are not a bacteria, we are not driven by propagatory impulse alone. We are driven by desire, and within desire there lies the equalizing force of will. We decide our fate, we posses the faculty of choice. Thus we must appraise the relationship between the richness of space and the richness of what we have here. It's only then that we can make that choice - to decide with any certainty the appropriate time to travel outwards together into our beautiful and unexplored universe.

My message is that this appraisal has not taken place. We live in a world where human beings rape and kill each-other in the name of increasingly obsolete ideas. But I see this dissolving. I see this nebulous cloud of circumstance and ideology that we call our existence taking form. When we look at a nebula through a telescope, it appears to us as something amorphous - a thing without shape. But the closer we look, the more we realize that even nebulae are rooted in atomic symmetry. Gravity is beckoning the cloud towards uniformity; coexistence with structure and equilibrium. This is Evolution. This is Cumberland Island.
So I'm asking you to make that appraisal. I'm asking you to take stock of the implicit value in the accessibility to pure natural experience. What we are talking about here is the difference between a handful of low-paying jobs for Camden County and 40,000 magical, pure, and life-changing experiences every year. If what I'm saying seems outlandish or rife with new-age jargon, then go there for a weekend and report back to me. Just make sure you do it soon.

I wrote this because I feel helpless. I see purity in peril, I'm afraid of losing a part of myself. I see the futility of a single person's will and passion to stand against this, and it terrifies me.

Sincerely,

[Signature]

Sincerely,
Dear Ms. Zee,

Good morning! I hope this email finds you well. The year is certainly off to a busy start!

I got help writing this from referring to the Fish and Wildlife Service's technical assistance letter for the proposed Shiloh Launch Complex: http://www.fws.gov/uploadedFiles/ShilohScopingComments.pdf.

The gopher tortoise, a candidate for federal listing, and the federally threatened eastern indigo snake are the most susceptible species to road mortality, habitat fragmentation issues, and construction disturbance. The proposed project would be anticipated to increase vehicle traffic in the proposed project area and likely result in increased mortality for these two species. The Environmental Impact Survey (EIS) should describe construction, maintenance, and operation impacts of the proposal to gopher tortoises and eastern indigo snakes, and any other animals or birds that reside in the proposed spaceport's target construction area and the vicinity. Right-of-way improvements that have not yet been identified, but would likely be required to support the proposed project would likely include line of sight clearing and above ground and underground transmission lines and pipes. These additional impacts would increase the project footprint area, impact area, and fragmentation effects. The EIS should describe, identify, and map any and all infrastructure and rights-of-way improvements necessary to support the proposal and the EIS should analyze the impacts of construction, maintenance, and operation of these infrastructure elements and rights-of-way.

The EIS should document the existing traffic conditions and analyze the impacts of traffic, roadway, and right-of-way construction, maintenance, and operation activities of the proposal. This documentation should include both the immediate vicinity and sensitive wildlife crossing areas in all areas that might be impacted by the proposed spaceport project.

Thank you very much for your assistance.

Should Camden Co. Reject Spaceport? Facebook
Dear Ms. Zee,

I hope this missive finds you well. I am basing this email on a document from the United States Department of the Interior Fish and Wildlife Service, that was delivered to you on 02/12/14, that reviews areas of concern for a spaceport proposal such as we have for Camden County.

Cumberland Island has many, many fewer lights than you’d find on the mainland. Wildlife impacts from the lights/lighting elicited by rockets flying overhead, also by explosions and raining flaming debris bombarding the shore, could cause sea turtle disorientation.

If rockets would be flying over Cumberland Island - and they should not be, since it includes occupied private property from the north end of the island to the south - disorientation surveys for federally listed sea turtles should be conducted along Cumberland Island beaches.

The Environmental Impact Survey should document the existing lighting conditions and analyze the rocket lighting and flaming debris and explosion lighting that would or could result from operation activities of the proposal.

Thank you for looking into the advisability of having a spaceport in Camden County. We think you will find, once you review the various emails and letters, that this project should be cut short immediately, as we know the United States government wouldn't want to waste taxpayer money when it's obvious there is no future in having a spaceport here, due to several factors. I would imagine it's your responsibility to advise them as such.

Should Camden Co. Reject Spaceport? Facebook
Please see my attached letter. The original will be sent by regular mail.

Thank you.
Dear Ms. Zee,

I am writing about the recently proposed commercial Spaceport in Camden County, Georgia. As a Camden county property owner and someone who cherishes our coast, I have concerns about the project's potential impacts. I would appreciate having the following questions addressed in advance and incorporated into the decision making process. I understand the time is now to consider whether Spaceport Camden is a good idea for our unique coastline.

I have several concerns, including how the project will affect the lives of the many endangered and threatened species depending upon the continued viability of the marshes, the coast and the ocean.

Information from Camden County indicates that rockets may launch eastward from the site as many as 12 times per year (once a month). Specifically, how will this affect the quality of life and the integrity of special places on our coast like Cumberland Island National Seashore?
The proposed Spaceport may pose a safety risk to humans and our natural resources. What is the risk of an explosion over a populated area? What are the dangers of a spaceport near the Kings Bay Naval Submarine Base, a base which handles nuclear weapons?

The Spaceport Threatens the Satilla River Watershed. How much water will be used at the site both during and between launches? Will this taking of water detrimentally affect the Floridian Aquifer? From what source will the water be obtained? What will be done with water after use? Will it need to be treated?

The Spaceport's noise and light pollution along with significant changes in land use patterns and growth will transform our coastal community and negatively affect the quality of life. What is the noise intensity and duration of the various kinds of launches to be allowed at the site? What will happen to property values within earshot of the spaceport, or along launch paths? Will property values decrease? Will this light pollution detrimentally affect nesting Loggerhead sea turtles? Will this noise pollution and vibrations detrimentally affect the federally protected bald eagles and their chicks, endangered gopher tortoises (a keystone species), and protected migrating species such as Red Knots, Wilsons plovers, Piping plovers and the American Oystercatcher as well as the endangered Southern Right Whales that calve in our waters?

Dredging and other construction activities presents a multitude of potential harms including sedimentation, contamination releases of toxic wastes known to exist on the property, groundwater contamination, etc. Should the EIS include a study of the viability of a more intensive use of existing facilities (such as Cape Canaveral) rather than irreparably damaging a fragile and unique coastal ecosystem and the human community that co-exists with it? Do we need more launch pads or simply more launches from existing launch facilities?
The proposed Camden spaceport benefits private investors and not the general public, which the FAA is charged with protecting. The number one priority of a private corporation (SpaceX) is to return a profit to its investors. Will a thorough and unbiased economic analysis be performed that will weigh the costs and benefits to Camden county, its taxpayers and residents? Is there a compelling national interest in having this facility built?

Spaceport Camden will forever change Georgia’s coast as we know it today. These impacts risk the historic, cultural and natural resources that all make the region special. With all that is at stake, our coast deserves all of our thoughtful consideration.

I urge you to incorporate all my questions thoroughly into the EIS process and answer them far in advance of any decision that could change our coastline forever.

Sincerely
Please see my attached letter. The original will be sent by regular mail.

Thank you.
December 29, 2015

Ms. Stacey M. Zee
FAA Environmental Protection Specialist
Office of Commercial Space Transportation
800 Independence Avenue SW., Suite 325
Washington, DC 20591
FAACamdenSpaceportEIS@Leidos.com

Dear Ms. Zee,

I am writing about the recently proposed commercial Spaceport in Camden County, Georgia. As a spouse of a Camden county property owner and someone who cherishes our coast, I have concerns about the project's potential impacts. I would appreciate having the following questions addressed in advance and incorporated into the decision making process. I understand the time is now to consider whether Spaceport Camden is a good idea for our unique coastline.

I have several concerns, including how the project will affect my quality of life and the lives of the many endangered and threatened species depending upon the continued viability of the marshes, the coast and the ocean.

Information from Camden County indicates that rockets may launch eastward from the site as many as 12 times per year (once a month). Specifically, how will this affect the access to my own private property and how will this affect the integrity of special places on our coast like Cumberland Island National Seashore?

The proposed Spaceport may pose a safety risk to humans and our natural resources. What is the risk of an explosion over a populated area? What are the dangers of a spaceport near the Kings Bay Naval Submarine Base, a base which handles nuclear weapons?

The Spaceport Threatens the Satilla River Watershed. How much water will be used at the site both during and between launches? Will this taking of water detrimentally affect the Floridian Aquifer? From what source will the water be obtained? What will be done with water after use? Will it need to be treated?
The Spaceport’s noise and light pollution along with significant changes in land use patterns and growth will transform our coastal community and negatively affect my quality of life. What is the noise intensity and duration of the various kinds of launches to be allowed at the site? What will happen to my property value within earshot of the spaceport, or along launch paths? Will my property value decrease? Will this light pollution detrimentally affect nesting sea turtles? Will this noise pollution and vibrations detrimentally affect the federally protected bald eagles and their chicks, endangered gopher tortoises (a keystone species), and protected migrating species such as red knots, Wilson’s plovers and Piping plovers as well as the endangered right whales that calve in our waters?

Dredging and other construction activities presents a multitude of potential harms including sedimentation, contamination releases of toxic wastes known to exist on the property, groundwater contamination, etc. Should the EIS include a study of the viability of a more intensive use of existing facilities (such as Cape Canaveral) rather than irreparably damaging a fragile and unique coastal ecosystem and the human community that co-exists with it? Do we need more launch pads or simply more launches from existing launch facilities?

The proposed Camden spaceport benefits private investors and not the general public, which the FAA is charged with protecting. The number one priority of a private corporation (SpaceX) is to return a profit to its investors. Will a thorough and unbiased economic analysis be performed that will weigh the costs and benefits to Camden county, its taxpayers and residents? Is there a compelling national interest in having this facility built?

Spaceport Camden has the potential to forever change Georgia’s coast as we know it today. These impacts risk the historic, cultural and natural resources that all make the region special. With all that is at stake, our coast deserves our thoughtful consideration.

I urge you to incorporate all my questions thoroughly into the EIS process and answer them far in advance of any decision that could change our coastline forever.

Sincerely,
Yes, let's get spaceport!
Sent from my iPad
Yes to the Spaceport in Camden County GA

Sent from my iPhone
Dear Sir or Madam:
Please say "NO" to a commercial spaceport across from beautiful, mystical Cumberland Island. I find it hard to believe that this idea has gotten this far! Right whales breed there on the coast of GA. The sound and light pollution would affect them and all wildlife. Please be the voice of the animals! Listen to your higher Angels. Do the right thing. Looking back on this pivotal moment in earth's time.... 1000 or 10,000 years in the future.... I hope that you feel good about your decision. It seems like we are on the brink of ecological disaster on this planet. This assault can be stopped. Please step up, be brave, and do the right thing! Big business will have lots of lobbyists and attorneys, but who will speak for Gaia? Thank you for the opportunity to comment.
Environmental issues:

Heavy industry on marsh: Steve Howard has said that Rocket factories along side mission control would be brought in. Where would these be located and what effect would they have on the marsh and surrounding areas?

Traffic pollution: At present there is a 2 lane road from I-90 to the proposed site. What is to be done about increased traffic and noise and wear and tear on the road? It is also the only route out of the area for evacuations if they become necessary.

Water quality: About 1 million gallons per launch, Where would that come from? How would it affect our drinking water? Many of us have wells that provide our drinking water. Union Carbide has requested pollutants be added to their permit as more pollutants have been detected at the site of the proposed launch and those detected would have negative effects on human health according to the EPA and World Health Organization. How would these pollutants be mitigated?

Noise pollution: What noise decibels should be expected and how far from the space port would launches be heard? How will wildlife and sea animals be affected?

Right whale calving: How would noise and water quality effect this area?

How might this affect Cumberland Island and the approximately 60,000 visitors per year

Effects of rocket launch failures on marsh, wildlife, surrounding property, and water quality

We would appreciate it if these issues could be addressed at the Dec 7 meeting, as we live in fairly close proximity to the proposed launch site. Thank you for your time.

Grover View Subdivision
Dear Stacy Zee,

I am a property owner in Camden County Georgia, and I am very much in favor of the spaceport plans intended for the area. I hope that all progresses as planned as I feel it would be a boon to the community.
Stacey M. Zee, FAA Environmental Specialist

I look forward to the economic value that Camden County will receive once the Spaceport is completed. There is great value in re-purposing the proposed site.  
I strongly support the spaceport.
Stacey M. Zee, FAA Environmental Specialist

I support Spaceport Camden because it brings a host of great opportunities for our county and surrounding counties to take advantage of a highly unique site and have very little impact on the environment and the site's neighbors. In addition, Spaceport Camden would bring skill employment rather than the typical minimum wage employment to our county. This program would be able to utilize the skilled workforce already in place and allow those workers to stay in Camden rather than commute or move away. There are so many positives to consider I believe they outweight the negative. Let's bring Spaceport to Camden and bring together the talent with the workforce that will be needed to operate this facility.
Stacey M. Zee, FAA Environmental Specialist

Camden County desperately needs jobs, especially good jobs such as the Spaceport would provide. I began to visit Camden County in the late 1950's and throughout the 1960s. I fell in love with the hunting, the fishing, the water and the people. I wanted to live here with my Aunt and Uncle and go to high school but my parents had other ideas. I worked here at the bag plant for a while in 1971 between college semesters and moved here after finally finishing college in 1977 to start a business. Now it is my home where I raised my family and where I still have a business and where I intend to finish my life. We need good job opportunities to keep our families in Camden County.

You may hear some opposition to Spaceport Camden but these folks are mostly anti-progress, anti-development non-resident wackos who could not care less about the Camden County economy and our standard of living or status quo retirees who moved here to die in the wonderful place God has given us and have little regard for the future of this county beyond their own demise. I care deeply for Camden County, love and respect our history and heritage and want only the best for our future. I have watched a tight-knit sleepy little mill-town with a brilliant colonial history as a sea-port and fishing village become transformed into a military boom town, then watched the once thriving private industry die out as the military and base related opportunities are scaled back. I believe the Spaceport could make Camden's future as rich and promising as her past has proven to be. I am convinced Camden County is uniquely positioned to provide location and resources that are unmatched and that we the people of Camden County as a whole are prepared to receive, accommodate and embrace all the challenges and opportunities Spaceport Camden will bring.
Stacey M. Zee, FAA Environmental Specialist

I am originally from the east coast of Florida and have seen what Cape Kennedy has done economically for the surrounding area. Furthermore, the Cape has been able to coexist with its surrounding natural habitats. I have no reason to doubt that Spaceport Camden would not meet with equal success.
Stacey M. Zee, FAA Environmental Specialist

Local job opportunities.
Stacey M. Zee, FAA Environmental Specialist

I believe this would be great for jobs and for growth in Glynn county as well as Camden.
Stacey M. Zee, FAA Environmental Specialist

Very excited with both the concept and having it local!
Stacey M. Zee, FAA Environmental Specialist

It will expand space exploration by private enterprises. It will provide high-quality jobs for the whole area.
Stacey M. Zee, FAA Environmental Specialist

It will be great for Georgia and its citizens. In the future I see every state having there own launch pad. Lets do it.
Stacey M. Zee, FAA Environmental Specialist

Economical growth for our surrounding counties. Educational growth for our youth.
Stacey M. Zee, FAA Environmental Specialist

I think it would be a positive improvement to our area
Cumberland Island is one of the few untouched wild life preserves left in this country and is an awesome asset to the state of Georgia! The building of the site so close to the island would put many animals at risk and may keep the 600+ sea turtles that nest there yearly. This is another example of how regular citizens of this country are losing our own natural resources.

A regular visitor to Cumberland Island,

Sent from Yahoo Mail on Android
As a resident of Camden I’m excited about Space Port not only for the tax base for the county but jobs for the future. This will give us a good shot in our arm so we can grow. The really only concern is the road on Harriett's Bluff. On a day to day basis I don’t think it will be much different due to the fact there was other companies in the past but as we grow the street needs to be widen and repair? A lot more homes have been built and school buses stop and start. Will their be another road way be built?
To: Ms. Stacey M. Zee  
FAA Environmental Protection Specialist  
Office of Commercial Space Transportation  
800 Independence Ave. SW.  
Suite 325  
Washington, DC 20591  

December 19, 2015  

Re: Space Port Camden Co. GA  

Commercial Space Transportation is important but why should a space port be placed in such a way as to directly put families and private property in harm's way? Why introduce a project that can endanger local populations, add noise, light and pollution into a sensitive area that encourages ecotourism and has a National Park? Beyond the actual building and installation of the site, how many jobs would be available to locals? Is the trauma for a community and environment worth a few additional jobs?

Why would the FAA approve a project with so many negatives for the environment and residents?
Dear FAA,

I am very excited about the possibility of Camden becoming a Space-Port. I am very much in support of Spaceport Camden. I also pastor a church of about 400 regular attendees weekly, and all the comments that I’m hearing are very positive.

Thanks, and Be Blessed!
I purchased my first property (a lot in the Cumberland Harbour Subdivision) in Camden County in 2003. I have lived in Downtown St Marys since April, 2006 and am a local business owner here since 2007.

I believe that having the Space Port located in Camden County would be a tremendous benefit for the growth of the commercial space industry, a growing industry in Georgia. We have the best location nationwide and this would promote so much positive growth in the surrounding areas.

I plan to attend the meeting in Camden County on December 2007 to continue supporting the effort to bring the Space Port here for a nearly unrestricted launch range and to promote the economic development of Camden County and the surrounding areas!
To Whom it may concern:

I am writing to express my concern of the possibility of a space port in Camden county Georgia. I am a home owner on the private island and National Wildlife Refuge of Little Cumberland Island. I have several concerns about the potential destruction of wildlife and property should a space port be built in the area. It is more than an inconvenience to be evacuated from our home every time a launch is scheduled, it is more about the fall out and desecration of mother nature. The animals on the land and in the water below are sure to suffer. Wild fires are likely to start from debris falling from the sky. There is also a nuclear submarine base in the area. It seems like common sense that launching rockets over a nuclear submarine base is dangerous and flat out stupid. The question of who is going to be liable and take responsibility when something goes wrong (because something will), is almost laughable, because the damage will be so catastrophic - to the water, to the animals, to the air, to the property, etc., that there is no repairing.

I know that there are several other arguments against the space port, but I will leave those topics to those that know more about toxic waste, aquifers, the ecology, and the economy. Please take Camden county off the list of viable sites for a space port and look elsewhere in an un-populated, barren area. Or better yet, use the facilities that already exist.

Thank you for listening,
I do not support construction of spaceport due to environmental degradation it will cause, including harm to right whales. I also do not support because of huge amount of noise and electromagnetic frequencies it will generate.

Thank you.
I am very much in support of the spaceport in Camden County, Georgia.

Sincerely,