



## Merritt Island Wildlife Association

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Website: [www.merrittislandwildlife.org](http://www.merrittislandwildlife.org)

*To promote conservation, awareness, appreciation, and use of the  
Merritt Island National Wildlife Refuge and to support its programs*

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February 17, 2014

Ms. Stacy M. Zee, Environmental Specialist  
Federal Aviation Administration  
Shiloh EIS  
c/o Cardno TEC Inc.  
2496 Old Ivy Road – Suite 300  
Charlottesville, VA 22903

Dear Ms. Zee:

The Merritt Island Wildlife Association (MIWA) is a 1,500 member non-profit community group which supports the Merritt Island National Wildlife Refuge (MINWR). Our membership and board are diverse, but united in our mission to promote and enhance the Refuge – and in opposition to construction of a launch complex in the Shiloh area.

We agree that recovery of a significant share of the worldwide commercial launch business is a commendable goal for the country, the state, and our local economy. But we believe that Shiloh is absolutely an inappropriate place to accomplish that, and that much better alternatives exist.

Our primary objective in commenting on this EIS is to urge the FAA and its consultants to give very close attention and considerable weight to the issues and concerns presented by the USFWS, and particularly those in their technical assistance letter of January 3, 2014.

We must expand on that, however, on a number of points of particular interest to our members. These are subjects we expect to be included in the scope of the EIS and questions we expect to be fully answered.

### **1. Precedent, Expansion, and Compatibility**

Construction of the proposed facility would set a dangerous precedent for conversion of National Wildlife Refuge System lands to incompatible commercial use, not just within MINWR but throughout the system. This is unacceptable to us and, we are sure, to the USFWS and the several hundred refuge friends organizations such as ours across the country.

Nor are we confident that the State's eventual taking of MINWR lands would be limited to this initial request for just 200 acres. Space Florida's business premise is that the commercial launch market will see substantial growth in the near future. If this proves true, as we hope it does, there would be immense pressure to expand the Shiloh facility. Furthermore, this transfer also would cede *de facto* control of thousands of acres of Refuge and National Park Service lands to Space Florida for extended periods throughout the year.

Since the establishment of MINWR in 1963, NASA has made only minor withdrawals from the Refuge for the purpose of facilitating land management. While we recognize that the agreement between NASA and DOI which established the Refuge authorizes NASA to do this, we believe it is not an unlimited option. Lands withdrawn from the Refuge must still be compatible with Refuge wildlife management responsibilities. Also, we see no authorization for NASA to withdraw land from the Refuge to be conveyed to another party for commercial operations.

## **2. NEPA Compliance**

One of the primary requirements of the National Environmental Policy Act is to verify the need for a proposed Federal action. We do not believe that Space Florida has yet identified or contracted any client committed to use the Shiloh complex. On that basis alone, this proposal fails to satisfy the Act.

"Build it and they will come" is not a valid basis for the massive expenditure of public funds or the severe consequences to MINWR associated with this proposal.

## **3. Adverse Impacts on MINWR**

Those consequences would be certain, extensive, and unlikely to be amenable to any satisfactory mitigation measures. The USFWS technical assistance letter describes and documents these issues quite thoroughly, as does the broad scope of commentary submitted by the many individuals and organizations which have aligned to oppose this plan.

To stress those of most importance to MIWA, there would be major adverse impacts on:

- **Habitat and Wildlife.** The area of the proposed site is unlike the vast majority of MINWR; it is unique and wonderful upland habitat, home to many species not found elsewhere on the Refuge. This subject alone is worthy of several pages of testimony, which the USFWS already has provided to your agency. Human settlements dating back to pre-Columbian times have been clustered here for good reason; the area differs greatly, and hospitably, from the marsh and wet prairie which is much more typical of MINWR.
- **Refuge Management.** Existence of an active launch complex in this area would greatly impede the Fish & Wildlife Service's ability to perform its statutory mandate to manage

MINWR for the preservation of the Florida Scrub-Jay and other threatened and endangered species, and would limit the staff's access to the northern portions of the Refuge. Here again, we ask you to please heed the views and concerns of the Service.

*How would the Refuge staff reach and suppress a brush fire without delay or hindrance within areas closed for complex activities?*

*Under what conditions, and how often, would controlled burns for habitat management be precluded by launch complex operations, or merely by its existence?*

- **Recreation and Access.** The probable duration of closures of State Road 3 (Kennedy Parkway) and public access to the northern Indian River Lagoon, Mosquito Lagoon, and Canaveral National Seashore is greatly understated in Space Florida's proposal. Clearance of those areas and the near shore Atlantic Ocean waters prior to launch or test operations would require far longer times than have been suggested.

Consider the problem of well-concealed hunters, hikers, photographers, or birders. Even if all could be located, a very difficult task in itself, they would have to be given time to return to their vehicles and leave the area. Fishermen, kayakers, canoeists, and the like along the many miles of irregular Indian River and Mosquito Lagoon shorelines would perhaps be more easily detected but would need even more time to withdraw to safety.

Space Florida would have no choice but to invoke and widely publicize closure far in advance of a test or launch, then meticulously survey the hazard area in the hours preceding the event, and allow time for those who "didn't get the word" to depart. That would be a very slow and cumbersome process fraught with surveillance, communication, and enforcement difficulties. And without question some launches would be delayed by failure of a vehicle component or subsystem after the area is closed, extending the closure for hours or days.

Visitor surveys confirm that MINWR is a highly popular "destination" attraction. Many people come from far away and plan their travel months ahead. This would further complicate the notification and clearance procedures, and unanticipated closures would inevitably lead to harsh criticism of Space Florida, FAA and, by association, USFWS.

In reality, it seems obvious that the northern portions of MINWR and much of Canaveral National Seashore would be lost to public use for long, frequently recurring, and often unpredictable and indefinite periods. These areas receive a significant percentage of the million-plus annual visitors to the Refuge and Seashore. Many would simply go elsewhere, taking their money – and local jobs and business – with them.

*What would be the specific extent of the area to be closed to public access? Would it be fixed for all events, or vary by type of activity or launch inclination?*

*How would clearance of the area actually be accomplished and maintained, and what is a realistic estimate of the closure duration for each type of event?*

*What agency or agencies would have the police power and responsibility to enforce orders to leave the affected lands, waters, and airspace? Would failure to leave promptly be a criminal offense?*

- **The Historical Record.** A number of historically and culturally important archeological treasures within and near the proposed Shiloh complex have been identified but not yet fully studied. We know of the Elliot Plantation of the British period, traces of the King's Highway, vestiges of even older Timucuan villages, and remnants of more recent early 20<sup>th</sup> century communities. There may well be other sites to be discovered.

*Even if the launch complex could be configured to preserve these features, what assurance is given that USFWS, National Park Service, and other research teams – and our members – would continue to have open and timely access to them?*

*The EIS evaluation should consider that 18<sup>th</sup> century masonry construction did not envision the palpable seismic-type vibrations that result from heavy lift launches. How long would those old foundations survive 24 launches a year?*

- **Appearance and Infrastructure.** Space Florida has displayed a rendering of the view of the proposed launch site from an open two-lane State Road 3 showing the rockets barely visible above a screen of trees. We find this naïve at best, and misleading. For very good reasons, no other launch site on the Cape has significant standing vegetation so close to the pad. This facility undoubtedly would be highly visible from the road and enclosed by a high security fence or wall. And security, work site, and roadway lighting would markedly detract from one of the few remaining dark sky areas in the County.

It is also certain that State Road 3 would require major reconstruction to support heavy vehicle loads plus the addition of deceleration and turn lanes, traffic signals, closure barriers, and guard stations. Additional security and closure measures would be required at access points away from the highway such as the dike roads and boat ramps.

The road corridor would also have to accommodate electric power service to the complex. And sewer or water lines would be necessary if the site is found unsuitable for onsite waste disposal or development of potable and fire suppression water supplies.

These types of infrastructure improvements and the land clearing necessary to install them would have to extend several miles beyond the complex site.

The EIS must assess the visual impact of the complex, probable noise levels, the offsite security and transportation improvements which would be required, and the suitability of the site for adequate water supply and disposal of domestic and industrial wastes.

#### **4. Public Safety and Environmental Protection**

Much has been said about the restrictive NASA and USAF launch safety regulations. Over several decades of launch activity, however, those rules have served our community quite well. There have been no offsite injuries or significant property damage caused by a failed launch in over fifty years of operations.

We acknowledge that FAA has experience in space launch operations at facilities where DOD is not involved, such as those at Wallops Island and the Kodiak complex; and that your safety regulations are modeled on those of the Eastern Test Range, and are even stronger in some respects. However, we know of no other launch facility placed immediately next to a public road and which launches over lands and waters as heavily and constantly used by the public as those east of Shiloh.

We seek assurance that all safety concerns have been or would be identified and resolved. These should include:

*How would Space Florida and users of the complex secure their facilities and equipment from vandalism which might affect flight readiness or launch success?*

*How far would the blast from a catastrophic explosion of three quarters of a million pounds of liquid propellant threaten injuries to individuals, damage to public and private property, and devastation of the surrounding habitat?*

*What would be the initial and long-term environmental effects of rocket fuels and other crash debris in the event a launch failure drops a rocket and its payload into the Mosquito Lagoon, National Seashore, or Atlantic Ocean?*

*Who would be responsible for triggering destruction of an errant rocket, and in whose employ would that person be?*

Assuredly these are rare events, but they do happen and in all likelihood the human and environmental damage from a single such occurrence would be disastrous and long-lasting. The EIS should include a thorough risk-of-failure analysis for complex operations.

Ms. Stacy M. Zee

We presume environmental regulations would require appropriate wetlands protection and stormwater management for all proposed construction, and a spill control and countermeasure plan for the hazardous materials to be used within the complex.

*Would Space Florida or its contractor also be required to be equipped and prepared for immediate and effective response to pollutant releases or accidents outside the launch complex, and to assume full liability for damages, cleanup, and restoration?*

#### **5. A Practicable Alternative**

The MIWA board of directors includes several members with significant space program management and operations experience. Indeed, many of our founders were NASA personnel. We recognize that institutional obstacles exist and must be overcome to place and operate a new commercial launch facility within the KSC security zone. But doing so offers a means to both accomplish the State's objectives and prevent degradation of MINWR. We believe this is a feasible and highly preferable alternative to the Shiloh proposal and is consistent with NASA's current master planning.

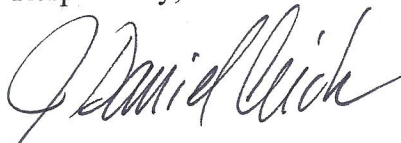
The purpose of an EIS is to examine alternatives. We ask FAA to give full consideration to additional commercial launches at KSC as part of this EIS. In fact, the FAA or any other Federal agency is prohibited from issuing a permit for a project which would adversely impact a national park, wildlife refuge, or historical site unless there is no practicable alternative. We firmly believe that KSC provides a realistic and viable alternative.

**We urge you to identify, evaluate, and select a suitable site south of State Road 402.**

Americans view our National Wildlife Refuges as great national assets, places we go for the enjoyment of things not built by man and for reconnection with our natural heritage. Each one has fundamentally important functions, devoted staff, and ardent supporters. But none provides the marriage of nature and technology, biology and history, and ecological and public value, which characterize Merritt Island. Let us not lessen or deface it.

Thank you for this opportunity to express our concerns about this proposal.

Respectfully,



J. Daniel Click  
President