DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Finding of No Significant Impact

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Finding of no significant impact.

SUMMARY: The Federal Aviation Administration (FAA), in cooperation with the United States Air Force (USAF), prepared an Environmental Assessment (EA) to evaluate the Oklahoma Space Industry Development Authority (OSIDA) proposal to operate a commercial launch facility at the Clinton-Sherman Industrial Airpark (CSIA) located adjacent to the town of Burns Flat, Oklahoma. The EA evaluated the potential environmental impacts of launches of three types of horizontally launched suborbital vehicles (Concept X, Concept Y, and Concept Z) proposed to be launched from the CSIA. The EA also evaluated the transfer of ownership of the CSIA from the City of Clinton to OSIDA. After reviewing and analyzing currently available data and information on existing conditions, project impacts, and measures to mitigate those impacts, the FAA, Office of Commercial Space Transportation (AST) has determined that issuing a launch site operator license to OSIDA for the CSIA would not significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA). The FAA also determined that the transfer of ownership of the CSIA from Clinton, Oklahoma to OSIDA would not significantly affect the quality of the human environment within the meaning of NEPA. Therefore the preparation of an Environmental Impact Statement (EIS) is not required and AST is issuing a Finding of No Significant Impact (FONSI). The FAA made this determination in accordance with all applicable environmental laws.

For a Copy of the Environmental Assessment: Visit one of the following Internet addresses: http://www.okspaceporteis.com or http://ast.faa.gov, or contact Mr. Doug Graham, FAA Environmental Specialist, 800 Independence Avenue, SW., Room 331, Washington, DC 20591. You may also send e-mail requests to doug.graham@faa.gov or via telephone (202) 267–8568.

DATES: The Draft EA was released for public comment on February 3, 2006. The FAA held a public hearing on the Draft EA on March 9, 2006 in Burns Flat, Oklahoma to collect comments from the public. All comments received before March 13, 2006 were considered in the preparation of the Final EA.

Proposed Action: Operation of a non-Federal launch site in the United States, such as OSIDA’s proposed operation of a launch site at the CSIA, near Burns Flat, Oklahoma must be licensed by the FAA pursuant to 49 United States Code (U.S.C.) 70101–70119, formerly the Commercial Space Launch Act. Licensing the operation of a launch site is a Federal action requiring environmental analysis by the FAA in accordance with NEPA, 1969, 42 U.S.C. 4321 et seq. Upon receipt of a complete license application, AST must determine whether to issue a license to OSIDA to operate a launch site at the CSIA. An environmental determination is required for the evaluation of license applications. Individual launch operators proposing to conduct launches at the CSIA will also need to obtain a license or permit, as appropriate, from the FAA.

The FAA is the lead Federal Agency for the NEPA process and the USAF is a cooperating agency on the proposed action. The CSIA is an auxiliary training location for Altus Air Force Base (AFB) and Vance AFB. The USAF is the primary user of the CSIA for aircrew training including landing and departures. In addition, the USAF’s current and future activities could be impacted by the use of the CSIA as a launch site. Therefore, the FAA requested and the USAF agreed to participate as a cooperating agency in the preparation of the EA.

The launch site would be located at the CSIA. No construction activities are proposed as part of this action. Existing infrastructure including hangars and runways would be used to support horizontal launch and landing operations at the proposed launch site. The OSIDA launch site operator license would be for the purpose of operating a facility to launch horizontally launched, suborbital reusable launch vehicles. Under the proposed action, the FAA would issue a launch site operator license to OSIDA for the CSIA for the purpose of operating a facility to launch horizontally launched, suborbital vehicles. Launch providers would be responsible for obtaining launch licenses from the FAA to conduct launches at the CSIA. The FAA may use the analyses in the Final EA as the basis for environmental determinations of the impacts of these launches to support licensing decisions for the launch of specific launch vehicles from the CSIA.

Proposed launch operations currently include launches of three types of launch vehicles that would take off from a standard aviation runway. The first type of launch vehicle, referred to in the EA as Concept X, would take off using turbojet engines, ignite rocket engines at a specified altitude, and make a powered landing using the turbojet engines. The second type of launch...
vehicle, referred to in the EA as Concept Y, would use rocket power to take off, and then the vehicle would make an unpowered landing. The third type of vehicle, referred to in the EA as Concept Z, would involve an air-drop design where two vehicles, an airplane and launch vehicle, are mated together. The airplane would carry the launch vehicle to a predetermined altitude where the launch vehicle is dropped and its rocket engines ignite. The airplane would make a powered landing at the CSIA after separating from the launch vehicle, and the launch vehicle would make an unpowered landing after traveling along its trajectory. The EA addresses the overall impacts to the environment of the proposed operations anticipated for a five-year launch site license term to include the launch and landing of Concept X, Y, and Z launch vehicles at the CSIA.

The FAA and USAF are involved in the proposed action. The FAA is the lead Federal agency for the NEPA process and is responsible for licensing and regulating OSIDA’s launch operations under 49 U.S.C. Subtitle IX-Commercial Space Transportation, ch. 701, Commercial Space Launch Activities.

The FAA is also responsible for approving the transfer of ownership of the CSIA. The USAF uses the CSIA primarily as an aircrew training facility for practicing airport landing approaches and departures, including tactical arrivals and departures. The CSIA is an auxiliary training location for Altus AFB and Vance AFB, both of which are located in Oklahoma. Altus AFB operates KC–135, C–5, and C–17 aircraft at the CSIA and Vance AFB operates T–37, T–6, T–38, and T–1 aircraft at the CSIA. The proposed action for the EA has the potential to impact current and future USAF operations at the CSIA. Therefore, the FAA requested and the USAF agreed to participate as a cooperating agency in the preparation of the EA.

The USAF prepared an Environmental Assessment (“Altus EA”) for the C–17 Program Changes at Altus AFB and the 97th Airlift Wing Commander signed a Finding of No Significant Impact (“Altus FONSI”) on August 19, 2004. The Altus EA considered several possible actions, including the possible construction of an Assault Landing Zone at the CSIA. The Altus FONSI indicated that the USAF would pursue the proposed action (which it was to accommodate the expanded C–17 training program without building a new Assault Landing Zone). Due to the lack of funding and authority to buy or lease land and build the Assault Landing Zone and the urgent need to produce more trained aircrews, the Commander opted for the proposed action. While the USAF has stated that the need still exists for a new Assault Landing Zone and the USAF continues to consider potential sites, including the CSIA, there is no reasonably foreseeable plan to locate such a facility at the CSIA. Accordingly, the cumulative impact from the construction and use of an Assault Landing Zone is not considered in the EA for the OSIDA commercial launch facility at the CSIA.

**Purpose and Need:** The purpose of the FAA action in connection with OSIDA’s request for licensure is to ensure compliance with international obligations of the United States (U.S.) and to protect the public health and safety, safety of property, and national security and foreign policy interest of the U.S. during commercial launch or reentry activities; to encourage, facilitate, and promote commercial space launches and reentries by the private sector; and to facilitate the strengthening and expansion of the U.S. space transportation infrastructure, in accordance with the requirements of the CSLAA, the Commercial Space Transportation Competitiveness Act, Executive Order 12465, 14 CFR parts 400–450, the National Space Transportation Policy, and the National Space Policy. The purpose of the FAA action in connection with the proposed transfer of property from the City of Clinton to OSIDA is to ensure that the transfer of the CSIA property is conducted in accordance with Federal laws and regulations, including, without limitation, applicable provisions of 49 U.S.C. Ch. 471 (§§ 47101–47153) and 14 CFR parts 152 and 155.

**Alternatives Considered:** Alternatives analyzed in the EA included (1) the proposed action, issuing a launch site operator license to OSIDA for the operation of a launch site at the CSIA for Concept X, Y, and Z launch vehicles, (2) issuing a launch site operator license to OSIDA for the CSIA for Concept X and Y launch vehicles only, (3) issuing a launch site operator license to OSIDA for the CSIA for Concept X and Z launch vehicles only, and (4) the no action alternative. Under the no action alternative, the FAA would not issue a launch site operator license to OSIDA for launches of Concept X, Y, and Z launch vehicles from the CSIA. No launches of Concept X, Y, or Z launch vehicles from the CSIA. The CSIA would continue to operate as a general aviation airport and potential environmental impacts from the proposed action would not occur.

**Environmental Impacts**

**Safety and Health**

A hazard analysis is a necessary part of the Mission and Safety Review for the FAA licensing determination to assess the possible hazards associated with proposed ground, flight, and landing operations. Launches of Concept X, Y, and Z vehicles from the CSIA would require launch specific licenses from the FAA, and each launch applicant would be required to conduct risk analyses based on the proposed mission profiles. The Mission and Safety Review will consider these analyses, and, therefore, they were not discussed in detail in the EA. However, analysis of the safety and health implications of launch related operations and activities that have the potential for environmental impact were considered in the EA.

Ground operations involved in servicing and preparing launch vehicles typically involve industrial activities, which were evaluated for potential impact on the environment. There are various hazards associated with these activities including:

- Spill/fire/explosion of propellant/fuel storage, transport, handling, and loading; Traffic accidents due to increased activity on- and off-site; and Occupational mechanical accidents.

There would be some vapors of various propellants released from propellant storage/transfer operations through evaporative losses. However, such vapors would be vented outside and at a height that would provide adequate protection for personnel, buildings, and the environment. Also, the total quantity of emissions would not occur as a large acute (short-term) exposure but would occur as a slow vapor release over a long period of time. There is also the concern of spills of propellants during handling and loading operations and subsequent fires or explosions. However, the CSIA has established practices and procedures to handle the spills and releases of propellants.

Increased road traffic that would result from conducting the proposed launch operations at the CSIA would add a few cars/trucks above existing traffic loads. The increase in the number of shipments of hazardous materials should not significantly increase the number of traffic accidents on the roadways around the CSIA.

On-site work associated with the conduct of launch operations would be similar to that associated with industrial chemical operations, and the servicing
and routine maintenance of aircraft. Exposure to mechanical accidents should not differ significantly from current levels for the CSIA because the number of operations associated with the conduct of launch operations would be relatively small given the number of operations airport wide.

In a catastrophic accident, it would be likely that the crew would be seriously injured or killed. At the CSIA, the on-site fire department would respond and secure the site but would stay clear of the immediate area until the danger of explosions diminishes. It is expected that any fires resulting from a failure could be fought by the fire department. Additional off-site emergency response capability could also be used if necessary.

Air Quality

Air emissions may be generated during launch/landing operations, pre- and post-launch ground operations, and accidents. The proposed action does not include any changes to the physical structure of the CSIA (e.g., runway) or any construction activities; therefore there are no construction vehicles or associated emissions and no construction-related dust or airborne particles. The air quality at the CSIA in Washita County is in attainment for all criteria pollutants, as designated by the United States Environmental Protection Agency (EPA). Furthermore, the calculated emissions that would result from the proposed action are less than both the Federal de minimis levels and the level of emission considered significant for Oklahoma stationary sources per the Oklahoma air pollution control rule (Title 252). Based on these data, there is no need for a Federal conformity analysis and no significant impacts to air quality are anticipated.

The regional haze rule requires states to develop State Implementation Plans (SIPs) to address visibility at designated mandatory Class I areas. The only Class I area in Oklahoma is approximately 80 to 97 kilometers (50 to 60 miles) southeast of the CSIA. The Oklahoma regional haze SIP is not available yet, but the minimal emissions of the haze-related pollutants associated with the proposed action are expected to have a negligible impact on the visibility at the designated Class I area.

The EA assessed the impacts of launch emissions for each atmospheric level. The composition of exhaust emissions varies depending in the type of propellant and propulsion system used (i.e., jet engine and/or rocket motors). The emissions of concern include: Particulate Matter (PM), Nitrogen Oxides (NO\textsubscript{x}), Sulfur Oxides (SO\textsubscript{x}), Carbon Monoxide (CO), Carbon Dioxide (CO\textsubscript{2}), Water (H\textsubscript{2}O), and Volatile Organic Compounds (VOCs).

The USAF estimated current aircraft emissions at the CSIA based on fiscal year 2002 planned aircraft operations. At the maximum launch rate under the proposed action, an additional 54 missions per year would occur from the CSIA. This is a 0.1 percent increase in operations. Total emissions associated with the proposed action and alternatives were estimated by completing the following steps:

- Estimate the emissions per launch into each layer of the atmosphere for each type of vehicle,
- Estimate the total annual launches for each type of vehicle, and
- Multiply the number of launches by the appropriate emissions per launch.

The jet engine emissions and rocket launch emissions were calculated for each launch for each vehicle concept. The analysis calculated the total emission loads per launch or reentry for 2006–2010 by vehicle concept type and each criteria pollutant. Emission loads were calculated for the mesosphere (Concept X only), stratosphere, the troposphere, and below 914 meters (3,000 feet), which is the EPA’s threshold altitude for considering ground-level air quality effects.

Airspace

The CSIA has the capacity to accommodate the additional operations without substantially impacting airspace. During the years with the highest number of launches there would be a maximum of 54 launches. Currently there are approximately 47,200 aircraft operations per year at the CSIA. An additional 54 launches would be an increase of 0.1 percent in operations at the CSIA. Class A, Class E, and Special Use Airspace would not be substantially impacted due to the infrequency of launch operations and the availability of alternate routes to reroute commercial traffic activities. Because of the relative infrequency of launch operations, and the availability of alternate routes for commercial traffic activities, proposed launches would not be expected to result in the degradation of the FAA’s ability to control air traffic and provide necessary safety for flight operations in airspace. As part of the licensing process, the FAA and OSIDA would prepare an agreement, known as a Letter of Agreement (LOA), related to airspace use. The LOA would address the responsibilities of all involved entities and would serve the purpose of mitigating potential impacts to airspace use.

Biological Resources

The noise associated with launches and landing would be less than that associated with military aircraft. The emissions associated with launches and landing would not impact biological resources. Threatened and endangered species would not be impacted by the proposed action because no federally protected species occur in the region of the CSIA. However, previous studies indicate that the endangered whooping crane may be found in or near the wetlands at the CSIA during its spring and fall migration. Should the whooping crane be identified in or near the wetlands at the CSIA, OSIDA would consult with the U.S. Fish and Wildlife Service and implement mitigation measures. Examples include monitoring the whooping crane during launches and landings to document effects or scheduling launches and landings when the whooping crane is not present.

The sonic booms generated by Concept X and Z vehicles would have relatively small overpressures that would have minimal impacts on wildlife and domestic animals. Studies have found that most domestic animals and wildlife tend to become accustomed to sonic booms fairly quickly. Because of the small number of annual launches, the relatively small overpressure, and the fact that wildlife and domestic animals tend to become accustomed to sonic booms, the impacts on wildlife and domestic animals would be small.

Cultural Resources

Launches and landings would not impact cultural resources. No new infrastructure would be constructed and the nearest historic site listed on the National Register of Historic Places is located approximately 13 kilometers (8 miles) northwest of the CSIA. Launches and landings would not impact any known cultural resources or traditions of the Cheyenne-Arapaho Tribe, the Chickasaw Nation, the Comanche Tribe, the Kiowa Tribe, or the Wichita Tribe.

Geology and Soils

Launching and landing vehicles from the CSIA would not affect the subsurface geology or expose people or structures to seismic activity. However, surface soils could be impacted from the deposition of exhaust emissions from vehicle launches, residual propellant during a vehicle crash, leaks in storage tanks or tanker trucks, or from propellant or jet fuel spills during fueling. Concept X, Y, and Z vehicle launches would all use fuels and propellants that would not have any substantial impacts on geology and
soils. Concept X and Z vehicles would use jet engines for takeoff and would not produce any emissions that would adversely impact surface soils. Concept Z vehicles would use liquid propellant rocket engines for launch, which would create a ground cloud with few impacts to soils. Potential soil chemistry-altering emissions from launches would be disturbed over a large area and would not pose substantial impacts. The landing of Concept Y and Z launch vehicles would have no impact on soils because they would land unpowered and thus would not emit any materials that would alter the surface soils. Concept X launch vehicles and the Concept Z carrier vehicle would land under the power of jet engines and thus some pollutants could be deposited onto surface soils. However, the impacts would be limited due to the low total number of vehicle launches and the limited potential impacts of emissions released from jet engines onto surface soils.

Impacts to soils from crash debris would not be substantial due to the low probability of a crash and the legal requirement to clean up any residual hazardous materials. The breakup of any of the concept vehicles during a crash and subsequent recovery activities could directly impact soils. The force associated with falling debris could create impact craters, which might impact soils depending on the force of the impact. Any residual propellant in the damaged launch vehicle could be absorbed by soils at the impact site. Because the probability of a crash is low and cleanup is required under CERCLA, debris or residual propellant would not be expected to result in substantial contamination, erosion, or loss of topsoil.

Spills or leaks could occur during storage, transportation, or fueling, but all activities at the CSIA would comply with applicable Federal and State regulations, which would reduce the likelihood of soil contamination occurring. The limited number of launches and the procedures in place to prevent spills would limit the likelihood of soil contamination, erosion, or soil loss.

Hazardous Materials and Hazardous Waste Management

No substantial impacts regarding hazardous materials and hazardous waste management are anticipated because all propellants and other hazardous materials would be handled, stored, and used in compliance with all applicable regulations. Procedures are in place to minimize potential impacts from spills of propellants.

The proposed action involves the use of a location with historic soil and ground water contamination. Major remediation actions have already been completed by the U.S. Army Corps of Engineers. Due to the remediation activities that have occurred at the site, there would be no substantial hazardous materials and waste impacts to the environment resulting from historic contamination.

The primary hazardous materials used in support of launch activities at the CSIA would be propellants. Concept X and Y rocket fuels include kerosene and/or alcohol, which have hazardous characteristics similar to the jet fuels currently used and stored without adverse impact at the CSIA. The main oxidizer used for Concept X and Y vehicles is liquid oxygen (LOX), a nontoxic cryogenic liquid. The fuel and oxidizer for Concept Z launch vehicles are solid hydroxyl-terminated polybutadiene (HTPB) and liquid nitrous oxide (N\textsubscript{2}O\textsubscript{4}), respectively, which are relatively inert. Concept X vehicles would make powered landings at the CSIA using turbojet engines, which is a routine occurrence at the CSIA. The unpowered landings of the Concept Y and Z vehicles would not require use of propellants or other hazardous materials and would not result in substantial impacts.

The CSIA has standard operating procedures in place to minimize the hazard associated with transporting and storing jet fuel and propellants. All propellant shipments would be escorted from the point of entry into the CSIA to the designated staging or storage area. Emergency response personnel would be on standby during these shipments. All liquid fuel and propellants would be shipped to the CSIA in bulk tanker trucks, which would also serve as temporary storage containers. The HTPB solid propellant would be manufactured and loaded into Concept Z rocket motors off-site and shipped to the CSIA. The solid propellant is stable and non-reactive until combined with its oxidizer and ignited. No propellants would be stored for extended periods of time; propellant shipments would be brought in to support launches as needed.

Fueling operations would occur at existing on-site fuel staging areas. Temporary dikes would be provided for containment should a spill occur, which would minimize impacts to the environment. The launch operator would be responsible for any necessary cleanup and remediation actions following a spill. In addition to propellants, it is anticipated that minor amounts of other hazardous materials, such as paint, oils, lubricants, and solvents, would be used. No adverse impacts would be anticipated from these additional hazardous materials.

Land Use

No substantial impacts are anticipated because major land use changes would not occur under the proposed action, and OSIDA does not currently have plans to alter the existing land use for the Spaceport Territory. Land use, including individual isolated, residential structures. Where those surrounding the CSIA, may be considered compatible within the Day/Night Level 65 decibel noise contour where the primary use of land is agricultural and adequate noise attenuation is provided.

Although OSIDA has been granted municipal authority over the Territory, an Advisory Council would also be involved in future decision-making regarding land use. The Advisory Council, consisting of elected officials of towns within the Spaceport Territory, would make recommendations to OSIDA regarding land use and development, municipal annexation, zoning, construction, safety regulations, and other matters that may be relevant to land use and development. This input from elected officials would ensure that future land use would be amenable to those living within the ROI.

The proposed action does not require any physical or constructive use that would impair any Section 4(f) properties. The nearest known potential Section 4(f) property is the Washita National Wildlife Refuge, located on Foss Lake 19 kilometers (12 miles) to the north of the CSIA. Any impacts to the refuge would be minor and should not substantially impair the resource.

Noise

No substantial noise impacts would be expected from jet engine powered operations associated with Concept X and Z vehicles. Rocket engine powered operating noise associated with Concept X and Z vehicles may range from 60 to 70 A-weighted decibels at ground level; this is roughly equivalent to the C–141A aircraft, and would not result in a change in noise exposure in excess of the applicable threshold of significance. Rocket engine launch noise from Concept Y vehicles would range from 76 to 86 A-weighted decibels; this noise level is similar to existing jet engine noise at the CSIA and would not be expected to result in a change in noise exposure in excess of applicable thresholds of significance.

Concept X vehicles would produce sonic booms that range from 1.1 to 1.9
pounds per square foot. Concept Y vehicles would not reach supersonic speeds and therefore would not produce sonic booms. Concept Z vehicles would produce sonic booms that range from 0.5 to 0.7 pounds per square foot. Assuming up to 52 launches per year of these vehicles, the C-weighted day/night average noise level would be less than the 61 C-weighted day/night average noise level standard.

Concept X vehicles could land under jet power. Concept Y and Z vehicles would glide in for landing. Landing noise would therefore consist of Concept X jet noise, Concept Z carrier jet noise, and sonic booms (discussed in the previous section) during vehicle descent. Noise impacts due to vehicles landing would be lower than those associated with takeoff. Sonic booms during vehicle descent would occur at higher altitudes than booms occurring during ascent, and jet engine noise is much lower during landing than during takeoff, because the engines are throttled back.

Socioeconomic Impacts and Environmental Justice

No substantial impacts are anticipated because the proposed action does not result in any of the following: extensive relocation of residents where sufficient housing is not available; relocation of community businesses that would create severe economic hardship for the affected communities; disruption of local traffic patterns that substantially reduce the levels of service of the roads serving the airport and its surrounding communities; or a substantial loss in the community tax base.

OSIDA has projected that approximately 50 on-site personnel would be required to staff launch and landing operations. These 50 personnel would be in addition to the 10 current employees required for normal CSIA flight operations. Any impacts related to the new employees would likely be beneficial, with an increased tax base and a small boost in sales and other services offered by local area businesses.

Any temporary increase in population due to spectators would impact the surrounding businesses and community. Because the level of impact depends upon the exact number of spectators, it is impossible to know the level of impacts to the surrounding businesses and communities. However, it is unlikely that the impact would be negative. Although the area has low population density, which usually means fewer services and less ability to accommodate an influx of visitors, the region is located along a major east-west U.S. thoroughfare, and has sufficient infrastructure and services to accommodate periodic increases in transient populations. Therefore, the region could accommodate a fairly large increase in population for a short time.

Minority populations, low-income communities, and children’s health would not experience disproportionate adverse impacts from the proposed action. Based on Census data, there is no evidence of an environmental justice population of concern living within the region of influence. Furthermore, health and environmental impacts from the proposed action and alternatives are not expected to exceed applicable thresholds of significance for any impact category. Although Burns Flat has a slightly higher percentage of children under the age of 18 as compared to the U.S., Oklahoma, and the SWODA region, the types of effects from the proposed action should not be disproportionate to the health and safety of children as compared to adults.

Transportation

The limited number of launches would not result in a substantial increase in vehicle volume due to propellant, fuel, or raw material shipments. Road and rail systems in and around the CSIA would not experience unacceptable increases in the ratio of volume-to-capacity. Additional traffic management controls would minimize impacts from tourist activity during peak years.

Within the CSIA, shipments would travel on designated roads to the customer’s location. Vehicle operations requiring crossing the main runway have been eliminated from current planning. Entry to the CSIA would be limited to four controlled-access gates designated for specific purposes. This traffic flow was suggested to minimize impacts to transportation to, from, and within CSIA.

The proposed action would result in the addition of 50 personnel commuting to and from the site on a daily basis. This amount of additional traffic should be accommodated by state highway OK-44; however, additional traffic controls may be required at the intersection of OK-44 and Sooner Drive, where personnel would enter the site. If the addition of launch day personnel and tourist activity significantly increases the number of people traveling to the CSIA, an additional entrance to the CSIA could be opened to employees or employees and the general public.

Depending on the exact number of spectators and how rapidly this number declines after launch, there could be substantial temporary traffic congestion on routes to the CSIA for launches occurring early in the operating period. However, given the limited number of launches, and the existing capacity of the existing roads in the area, no major or lasting impacts would be expected. Onsite transportation could increase during landings due to recovering and transporting the launch vehicle from the runway after landing. However, the maximum number of launches (54) per year would not be expected to create substantial impacts to transportation on-site.

Visual Resources

No substantial impacts to visual resources are anticipated because the CSIA is a low visual sensitivity area and the activities under the proposed action would not be visually dominant in the viewed area around the CSIA.

The visual impact of most horizontal launches would be “visually co-dominant.” There were approximately 47,000 aircraft operations at the CSIA in 2003, and the general public in the area of the CSIA is accustomed to seeing various military aircraft performing training maneuvers at the CSIA.

Therefore, the visual presence of horizontal launches would not be new to the area. The majority of current aircraft operations at CSIA involve jet powered aircraft.

While Concept X and Z vehicles would be launched by jet powered carrier vehicles, Concept Y vehicles would be launched under rocket power. Rocket-powered launches would be a new sight in the area of the CSIA and might attract and dominate the attention of a viewer in this area. In these few cases the launch itself might be “visually dominant;” however, the limited number of Concept Y launches (a maximum of two per year) would mitigate any resulting impacts.

Horizontal landing activities would result in a “visually subordinate” classification because of the large number of existing touch and go operations performed by various sizes of military aircraft on a daily basis. Both powered and unpowered landings should appear similar to current landing activities as CSIA.

Water Resources

Wetlands and floodplains would not be impacted and no new discharges would be released into the wetlands. The fueling and assembly of launch vehicles may result in inadvertent spills or releases of fuel or materials that may impact surface water and ground water. OSIDA or the launch operator would clean up any spills and excavate and remove any contaminated soil.
Cumulative Impacts

Cumulative impacts are “the incremental impact of the actions when added to other past, present, and reasonably foreseeable future action regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” (40 CFR 1508.7) The cumulative impacts analysis focused on those past, present, and reasonably foreseeable future actions that have the potential to contribute to cumulative impacts. These actions include the cumulative effect of the proposed action/preferred alternative as it would occur over the five-year term of the launch site operator license, the continued use of the CSIA as a training facility for military and general aviation aircraft, and the proposed future use of the CSIA as a location for testing rocket engines. The proposed action has been evaluated for cumulative impacts on the resourcursorsized below.

Air Quality—Cumulative air quality impacts associated with the proposed action are not anticipated, given that the CSIA is currently in attainment for all criteria pollutants; the emissions associated with the proposed action were estimated using worst-case assumptions; and the increase in emissions associated with the proposed action is relatively small. Furthermore, none of the alternatives to the proposed action would result in higher emissions than the proposed action and thus no cumulative air quality impacts are expected under any of these alternatives. Potential short-term impacts of emissions from rocket engine testing would be mitigated through proper choice of weather conditions and/or burn times.

Airspace—Cumulative airspace impacts associated with the proposed action are not anticipated given that coordination and scheduling procedures would be developed with the Air Route Traffic Control Center and military users of the CSIA.

Biological Resources—The cumulative increase in noise and emissions would result in an adverse impact on biological resources. The cumulative noise and emissions would result from ongoing commercial, military, and private aviation activities, future rocket engine testing, as well as the proposed action. The biological resources affected would be those that have been able to tolerate the existing noise and emissions associated with an active airfield; therefore, the cumulative impacts on biological resources are expected to be minor.

Hazardous Materials and Hazardous Wastes—Cumulative impacts from hazardous materials and hazardous waste management could occur on the portions of the CSIA with historic soil and ground water contamination. However, substantial cumulative impacts associated with the proposed action are not anticipated due to the extensive remediation activities that have been completed at the site.

Health and Safety—Cumulative health and safety impacts associated with the proposed action are not anticipated given that the risk to human health and safety from rocket engine testing would be small and would be limited by safety precautions in place.

Noise—Background noise at the CSIA would increase with the increased level of activity resulting from the addition of launches and landings. Because of the relative infrequency of launches, landings, engine tests, and aircraft operations, the cumulative noise impacts would be relatively small. Sonic booms from supersonic vehicles at high altitudes would create no substantial impacts because of their relatively low magnitude, infrequent occurrence, and occurrence over unpopulated areas.

Socioeconomics—Cumulative socioeconomic impacts associated with the proposed action are not anticipated given the proposed action’s small relative size to the workforce in the surrounding counties and the minimal impacts from a population and residential living standpoint. The beneficial cumulative socioeconomic impact could be greater than the direct impact of the proposed action.

Transportation—Over OSIDA’s five-year operating period, cumulative transportation impacts could occur because the number of launches (and thus, the number of shipments of propellants and other materials) would rise from 16 in 2006 to 54 in 2010. Cumulative transportation impacts associated with engine testing are not anticipated given the limited number of engine tests and infrequent shipments.

Visual resources—Cumulative visual resource impacts associated with the proposed action are not anticipated given the less than one percent increase in flight operations out of the CSIA. The rocket-powered launches of Concept Y vehicles would be limited to a maximum of two per year to prevent substantial cumulative impacts on visual resources.

Water Resources—Cumulative impacts on water resources may result from incidental spills and releases associated with aircraft preparation, rocket engine test preparation, and launch vehicle preparation. Such spills or releases may impact surface water and ground water. As presented in Section 4.14, Impacts on Water Resources, OSIDA or the proponent of the activity would clean up any spills or releases and excavate and remove any contaminated soil associated with an incidental spill or release resulting in a small cumulative impact.

No Action Alternative

Under the no action alternative, the FAA would not issue a launch site operator license to OSIDA and there would be no commercial launches from the CSIA. In addition, the FAA would not issue launch licenses or permits to any operators for launches from the CSIA. The CSIA would continue to be available for existing aviation and training related activities. The predicted environmental effects of the Proposed Action would not occur.

Consistency With Community Planning

This proposed action is consistent with community planning activities for both State and local governments. Both State and local governments have incorporated the proposed launch site operations into their planning processes.

Determination

An analysis of the proposed action has concluded that there are no significant short-term or long-term effects to the environment or surrounding populations. After careful and thorough consideration of the facts herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives set forth in Section 101(a) of the National Environmental Policy Act of 1969 and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(c) of NEPA. Therefore, an EIS for the proposed action is not required.

Issued in Washington, DC on April 27, 2006.

Patricia Grace Smith,
Associate Administrator for Commercial Space Transportation.

[FR Doc. E6–6872 Filed 5–4–06; 8:45 am]