1. The types of airplane system, structure, and/or propulsion failure conditions that should be addressed.

2. The factors that impact the level of severity of the threat, airplane design features, and operation procedures that could be used to moderate the severity of the threat.

3. The recommendation of appropriation cabin pressure standards that would govern cabin air quality following certain failure conditions. These standard should ensure that exposure time to a reduced pressure and the lack of oxygen in the airplane does not reach a level that would:

a. Negatively impact the flight-deck crew's performance to the extent that the flight crew could not safely control the airplane during an emergency descent,

b. Disable any cabin crew member or passenger to the degree that resuscitation techniques would be needed to revive, or

c. Create long term health problems for the crew or passengers.

4. A definition of terms (e.g., ''appreciable rise in the pressure differential'', ''reasonably precludes'', ''rapidly equalized'', ''any delay that would significantly increase the hazards'', etc.) and appropriate pressurization system requirements and practices during all phases of operation.

5. Any relevant NASA, US Armed Forces, NIOSH, OSHA, FAA, academia and industry standards.

• Develop a report based on the review, and recommend any revisions to the rules (including cost estimates) and advisory materials needed to address the above issues.

• If as a result of the recommendations the FAA publishes a notice of proposed rulemaking and/or notice of availability of proposed advisory circular, ARAC may be further tasked to review all comments received and provide the FAA with a recommendation for disposition of those comments.

Schedule: This report is to be submitted no later than 24 months after the task is published by the FAA in the **Federal Register**.

ARAC Acceptance of Task

ARAC accepted the task and assigned the task to the Mechanical Systems Harmonization Working Group, Transport Airplane and Engine Issues. The working group serves as staff to ARAC and assists in the analysis of assigned task. ARAC must review and approve the working group's recommendations. If ARAC accepts the working group's recommendations, it will forward them to the FAA.

Working Group Activity

The Mechanical Systems Harmonization Working Group is expected to comply with the procedures adopted by ARAC. As part of the procedures, the working group is expected to:

1. Recommend a work plan for completion of the task, including the rationale supporting such a plan for consideration at the next meeting of the ARAC on Transport Airplane and Engine Issues held following publication of this notice.

2. Give a detailed conceptual presentation of the proposed recommendations prior to proceeding with the work stated in items 3 below.

3. Draft the appropriate documents and required analyses and/or any other related materials or documents.

4. Provide a status report at each meeting of the ARAC held to consider Transport Airplane and Engine Issues.

Participation in the Working Group

The Mechanical Systems Harmonization Working Group is composed of technical experts having an interest in the assigned task. A working group member need not be a representative or a member of the full committee.

An individual who has expertise in the subject matter and wishes to become a member of the working group should write to the person listed under the caption **FOR FURTHER INFORMATION CONTACT** expressing that desire, describing his or her interest in the task, and stating the expertise he or she would bring to the working group. All requests to participate must be received no later than August 24, 2001. The requests will be reviewed by the assistant chair, the assistant executive director, and the working group co-chairs. Individuals will be advised whether or not their request can be accommodated.

Individuals chosen for membership on the working group will be expected to represent their aviation community segment and actively participate in the working group (e.g., attend all meetings, provide written comments when requests to do so, etc.). They also will be expected to devote the resources necessary to support the working group in meeting any assigned deadlines. Members are expected to keep their management chain and those they may represent advised of working group activities and decisions to ensure that the proposed technical solutions do not conflict with their sponsoring organization's position when the subject being negotiated is presented to ARAC for approval.

Once the working group has begun deliberations, members will not be added or substituted without the approval of the assistant chair, the assistant executive director, and the working group co-chairs.

The Secretary of Transportation determined that the formation and use of the ARAC is necessary and in the public interest in connection with the performance of duties imposed on the FAA by law.

Meetings of the ARAC will be open to the public. Meetings of the Mechanical Systems Harmonization Working Group will not be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. The FAA will make no public announcement of working group meetings.

Issued in Washington, DC, on July 23, 2001.

Anthony F. Fazio,

Executive Director, Aviation Rulemaking Advisory Committee.

[FR Doc. 01–18674 Filed 7–25–01; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Environmental Finding Document

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Environmental finding document: finding no significant impact; notice.

SUMMARY: Pursuant to Executive Order (E.O.) 12114, Environmental Effects Abroad of Major Federal Actions, the application of which is guided by the National Environmental Policy Act (NEPA) of 1969, the Federal Aviation Administration (FAA) prepared an Environmental Assessment (EA), evaluating a Sea Launch Limited Partnership (SLLP) proposal to evaluate the potential environmental effects of issuing a launch operator license (LOL) or launch-specific licenses to SLLP. THe LOL would allow SLLP to conduct up to eight commercial launches per year for five years without obtaining a separate license for each launch as long as there is not change in the launch parameters or in the anticipated environmental impacts. These launches would be equatorial and would use azimuths between 82.6° and 97.4°, inclusive, originating from the SLLP Launch Platform (LP) at 0° latitude and 154° West (W) longitude, which is 425 kilometers (km) (266 miles (mi)) from Kiritimati (Christmas Island) in the

Kiribati Island Group in the Pacific Ocean. The EA also evaluated the proposed issuance of a launch-specific license for the launch of a Galaxy IIIC payload as well as other launch-specific licenses for launches within the proposed azimuth range and other specified launch parameters should the LOL not be issued or be delayed.

After reviewing the EA which analyzed currently available data and information on existing conditions, potential project impacts, and measures to mitigate those impacts, the FAA Associate Administrator for Commercial Space Transportation (AST) finds that licensing the proposed launch activities including the LOL, Launch-specific license for the Galaxy IIIC and other launch-specific licenses within the proposed azimuth range, is not a major Federal action that would significantly affect the quality of the human environment outside the United States within the meaning of E.O. 12114. Therefore, the FAA has determined that the preparation of an Environmental Impact Statement (EIS) is not required, and AST is issuing an Environmental Finding Document Finding No Significant Impact.

The Environmental Assessment for a Launch Operator License (LOL) for Sea Launch Limited Partnership, dated May 15, 2001, incorporates by reference a prior EA prepared by the FAA dated and referred to as the February 11, 1999 EA. Both documents are incorporated by reference. THe LOL EA describes the purpose and need for the proposed project and describes the alternatives considered during the preparation of the document. The LOL EA also describes the environmental setting and analyzes the potential impacts to the applicable human environment as a consequence of the proposed project.

Any person desiring a copy of the ''Final Environmental Assessment for a Launch Operator License for Sea Launch Limited Partnership'' should contact: Ms. Michon Washington, Federal Aviation Administration, Office of the Associate Administrator for Commercial Space Transportation, Suite 331/AST–100, 800 Independence Ave., SW., Washington, DC 20591; phone (202) 267–9305, or refer to the following Internet address: *http://ast.faa.gov.*

Action

The proposed Federal action has three parts. First, the proposed Federal action is for the FAA to issue an LOL to SLLP authorizing SLLP to conduct launches from one launch site, within a range of launch parameters, of specific launch vehicles, transporting specified classes of payload. (See 14 CFR 415.3(b)). The proposed LOL would authorize SLLP to:

• Conduct up to eight launches per year over a five-year period, for a maximum of 40 launches;

• Use a launch site at 0° latitude and 154° W longitude;

• Launch along a range of azimuths from 82.6° to 97.4°, inclusi ve;

• Use a Zenit-3SL launch vehicle; and

• Transport specified classes of payloads.

Any change to these LOL parameters would require additional environmental and safety analyses.

Second, the proposed Federal action is for the FAA to issue a launch-specific license to SLLP for the launch of Galaxy IIIC. Third, the proposed Federal action includes issuance of other potential launch-specific licenses (not to exceed eight per year) as necessary should the proposed LOL not be issued or be delayed. The proposed Galaxy IIIC launch specific licenses, as well as the other launch-specific licenses would authorize the SLLP to conduct specific launches:

• From a launch site at 0° latitude and 154°W longitude;

• On a launch azimuth within a range from 82.6° to 97.4°, inclusive;

• Using a Zenit-3SL launch vehicle; and

• Transporting specified classes of payloads.

The launch site location, launch vehicles, and classes of payloads that would be authorized under the proposed launch-specific licenses would be identical to the launch site location, launch vehicles, and classes of payloads that would be authorized under the proposed LOL. In addition, the launch azimuths that would be authorized under the launch-specific licenses would fall within the launch azimuth range that would be authorized under the LOL. Finally, the number of launch-specific licenses that would be issued per year would not exceed the number of the launches that would be authorized annually under the LOL (i.e., eight per year). The conduct that would be authorized under the proposed LOL and launch-specific licenses is identical, only the license application process would differ. Therefore, discussions and analyses of potential environmental impacts of the LOL and the launch-specific licenses are addressed together. Throughout the document, when the proposed action is discussed, while emphasis is placed on the launch operator license, it should be understood that the launch-specific licenses are included in the proposed action.

To obtain a launch license (either launch-specific or a launch operator license), an applicant must obtain policy and safety approvals from the FAA. Requirements for obtaining these approvals are contained in 14 CFR 415 Subpart B (Policy Review and Approval), Subpart C (Safety Review and Approval for Launch From a Federal Launch Range, including the calculation of acceptable flight risk), and Subpart F (Safety Review and Approval for Launch From a Launch Site not Operated by a Federal Launch Range). Other requirements include payload determination (14 CFR 415 Subpart D), financial responsibility (14 CFR 415.83, Subpart E) and environmental review (14 CFR 415 Subpart G).

The purpose of the proposed action as defined in 49 U.S.C. Subtitle IX—Commercial Space Transportation, ch. 701, Commercial Space Launch Activities, 49 U.S.C. 70101–70121 is to:

• Promote economic growth and entrepreneurial activity through use of the space environment for peaceful purposes;

• Encourage the U.S. private sector to provide launch vehicles, reentry vehicles, and associated services by simplifying and expediting the issuance of licenses;

• Provide FAA oversight and coordination of licensed launches and to protect the public health and safety, safety of property, and national security and foreign policy interests of the U.S.; and

• Facilitate the strengthening and expansion of the U.S. space transportation infrastructure.

The need for the proposed action is to streamline the FAA's licensing process while still assuring public safety and proper environmental review. Such a streamlined process will promote the entrepreneurial activity of a licensed launch provider. The proposed LOL would cover multiple launches using the same infrastructure at the same launch location through a range of launch azimuths without the need to re-evaluate license applications for individual launches unless there are changes in the proposed action, environmental impacts or conditions of approval. The proposed LOL would allow SLLP to conduct up to eight launches per year for five years, for a maximum of 40 launches. The proposed LOL would allow SLLP to launch on exact equatorial azimuths (e.g., 90°), which are optimal for geosynchronous orbit (GSO) launches in terms of fuel efficiency, payload weight, and satellite life span.

Alternatives Including No Action and the Alternatives Evaluation Process

The FAA considered six alternatives in addition to the proposed action. These alternatives included issuing the proposed LOL with various changes in the launch parameters:

- *Alternative with Up to 12 Launches Per Year.* This alternative evaluates increasing the annual number of launches up to a maximum of 12 per year;
- *Alternative with a Range of Azimuths Between 70° and 110°.* This alternative considers a wider range of azimuths, those from 70° to 110°, inclusive, identified as feasible for GSO launches;
- *Alternative with Avoidance of National Parks and National Reserves.* This alternative would involve launching along a range of azimuths between 82.6° and 97.4° but would avoid specific azimuths within this range that would overfly any country's National Park or National Reserve;
- *Alternative with Avoidance of the Oceanic Islands.* This alternative would involve launching along a range of azimuths between 82.6° and 97.4° but would avoid any azimuth that would overfly any of the Oceanic Islands; and
- *Alternative with Avoidance of the Galapagos Islands.* This alternative would involve launching along a range of azimuths between 82.6° and 97.4° but would avoid any azimuths that overfly the Galapagos Islands Group; and
- No Action Alternative.

The council on Environmental Quality (CEQ) regulations require that the agency look at ''reasonable'' alternatives to a proposed action. With that standard in mind, the FAA did not evaluate in detail those alternatives that showed no possibility of meeting the purpose and need of the proposed action, as described previously. The following screening criteria were used to determine whether alternatives were reasonable to evaluate in detail in the EA:

- Promote economic growth and entrepreneurial activity through use of the space environment for peaceful purposes;
- Encourage U.S. private sector to provide launch vehicles, reentry vehicles, and associated services by simplifying and expediting the issuance of licenses;
- Provide FAA oversight and coordination of licensed launches and to protect the public health and safety, safety of property, and national security and foreign policy interests of the US; and
- Facilitate the strengthening and expansion of the U.S. space transportation infrastructure.

Based on the evaluation of alternatives using the above screening criteria and the requirements of the National Environmental Policy Act (NEPA), the following alternatives were evaluated in detail in the EA:

- Proposed Action,
- Alternative with Avoidance of the Oceanic Islands,
- Alternative with Avoidance of the Galapagos Islands, and
- No Action Alternative.

Environmental Impacts of Successful Flight

Geology, Oceanography, and Atmospheric Processes

The launch will originate from a launch site at 0° latitude and 154°W longitude. As the flight proceeds over open ocean, State I and the fairing will be deposited. The Stage I and fairing impact zones overlap slightly, and jointly form a rectangle of approximately 480 km (north to south) by 600 km (east to west) (300 by 375 mi). These impact zones are located in water 2,000 to 4,000 meters (m) (1.2 to 2.5 mi) deep. Later in the flight, Stage II will also be deposited in the open ocean. The Stage II impact zone is approximately 1,270 km (790 mi) by 1,320 km (820 miles). The water depth in this area is approximately 3,900 m (2.4 mi). The deposition of spent stages and the fairing in these areas would be inconsequential relative to natural geologic processes in the region.

The open ocean environment within the proposed range of azimuths is largely uniform in terms of oceanic and atmospheric processes, with biological characteristics (e.g., plankton biomass) primarily varying with nutrient and mineral levels (Barber, et al., 1996). The spend stages and fairing pieces from any launch within the proposed range of azimuths would fall into undifferentiated deep, open waters of the tropical equatorial Pacific Ocean, far away from any Oceanic Islands or continental landmass.

Given the expanse of the open ocean area within each impact zone, the environmental effect of stage and fairing deposition is minimal. For any individual launch, only 0.00003 percent, 0.000003 percent, and 0.000001 percent of the impact zone area would be affected by the Stage I, fairing, and Stage II depositions, respectively.

Residual propellants would be released as spent integrated launch vehicle (ILV) components fall into the ocean. Residual LOX would dissipate immediately upon release. Residual kerosene would be dispersed into a mist during descent, and all but the largest droplets would evaporate within a few minutes. The environment would recover from the effects of the residual propellants and return to its natural condition within a few days.

Biological Communities and Commercial Activities

Potential effects of successful launches on biological communities and commercial activities are limited to the unlikely possibility that the spent stages and fairings could fall on a marine organism, ship, fishing vessel, or aircraft and noise effects associated with the launch.

There is a remote possibility that spent stages or the fairing may fall on a marine organism, ship or fishing vessel, or aircraft. As a mitigation measure, SLLP gives advance notice for each launch to the FAA (Central Altitude Reservation Function), the U.S. Coast Guard (USCG; 14th District), the National Imagery and Mapping Agency (NIMA), and the U.S. Space Command (USSC). To coordinate air, marine, and space traffic, these organizations issue necessary information, including notices, through well-established channels. For vessels without receiving equipment (expected to be limited to those operating out of Kiribati ports), standard notices are delivered by fax to Kiribati government authorities and regional fishing fleet and tour operators for distribution and posting.

Noise

Steady noise from pre- and post-launch operations (*e.g.,* from ship engines) may reach approximately 70 dB. Research indicates that this level of noise would not have a detrimental affect on any animal that would linger in the area (Shulhof, 1994; Richardson, et al., 1997). Wind speeds of approximately 60 km/hr (37 mi/hr), which occur in the eastern portion of the Pacific Ocean, generate similar levels of noise (*i.e.,* approximately 70 dB) on the open ocean (NIMA, 1998; Cato, 1994).

No significant noise impacts would be expected from the launch because of the relatively short duration of launch noise and the unlikely presence of the higher trophic level organisms near the launch site. Noise from a single launch is estimated to be 150 dB at 378 m (1240 ft), with the equivalent sound intensity in the water at this distance being 75 dB. This reflects the fact that noise generated above the ocean is significantly attenuated by the air-water interface, which protects fish and marine mammals from most above-water noise impacts (Bowles, 1995).

Data suggest that fish and marine mammals will move to avoid chronic high level noise and noise that may increase slowly in magnitude (Office of Naval Research, 2000; ENS, 2000). Fish and marine mammals, however, are not likely to be able to move quickly enough to avoid sudden acute high level noise. The velocity of sound in seawater is approximately 1,500 m/s (4,950 ft/s), or about 4.5 times faster than in air (Taley, 1990).

A sonic boom would occur when the ILV reaches supersonic velocity during Stage I flight. A sonic boom is caused when an object moving faster than sound (i.e., 1,200 km/hr (750 mi/hr) at sea level) compresses the air in its path. The sound heard at the Earth's surface as a ''sonic boom'' is the sudden onset and release of pressure after the buildup by the shock wave or ''peak overpressure.'' The change in pressure caused by a sonic boom is only a few kilograms per square meter (pounds per square foot).

The maximum pressures experienced from a sonic boom would be directly under the launch vehicle flight path, and is primarily a function of velocity and altitude. The sonic boom would occur over the open ocean far from any of the Oceanic Islands. The distance between the sonic boom footprint and the closest landmass (i.e., Kiritimati Island) is 420 km (260 mi). Below water effects of the sonic boom would be rapidly attenuated by the air-water interface (Bowles, 1995). Thus, it would not have any significant adverse effects on marine organisms that happen to be in the area other than a startle reaction. A startle reaction may cause an adverse effect in a threatened and endangered species; however, little information on the physiological impacts of the startle effect is available for marine organisms in the open ocean. No physical harm to animals or ships at sea level would occur because of the altitude of the launch vehicle and its vertical acceleration (USAF, 1996).

Environmental Impacts of Failed Missions

The EP considered and analyzed potential impacts of a possible mission failure at the LP, during Stage I or Stage II flight, or during Upper Stage flight. In most cases, a failure would result from a detected deviation between the programmed flight path parameter (e.g., pitch, yaw, roll) and the actual flight parameters as monitored by ILV sensors. If flight deviations exceed established limits, the thrust termination system would terminate the flight. Failure of the onboard computer systems could also result in thrust termination and loss of the mission. SLLP has projected launch reliabilities of 0.982 for Stage I flight, 0.956 for Stage II flight, and 0.974 for Upper Stage flight (SLLP, 2001). For the purposes of conducting debris risk analyses the FAA specifies that for launch vehicles ''with fewer than 15 flights, a launch operator shall use an overall launch vehicle failure probability of 0.31.'' 14 CFR 417.227(b)(6)(i) For launch vehicles ''with at least 15 flights, but fewer than 30 flights, a launch operator shall use an overall launch vehicle failure probability of 0.10 or the empirical failure probability, whichever is greater.'' 14 CFR 417.227(b)(6)(ii) For launch vehicles ''with 30 or more flights, a launch operator shall use the empirical failure probability determined from the actual flight history.'' 14 CFR 417.227(b)(6)(iii)

Possible Failure at the Launch Platform

A possible failure at the LP would likely result in a cascading explosion of all ILV propellants. The explosions would scatter pieces of the ILV, and perhaps pieces of the LP, as far as three kilometers (two miles) away (the LP is designed to survive an explosion of the fully fueled launch vehicle). A smoke plume would rise and drift downwind some distance before dissipating. In the course of about one minute, the entire matter and energy of the ILV would be dispersed in the environment in a relatively concentrated area of the ocean. Environmental effects would include intense heat generated at the ocean surface; debris and noise released during the explosion; emissions released to the atmosphere; and the subsequent cleanup needed on the LP. Despite this intense, short-term, and localized disruption, there would be no discernible long-term impact to the environment. The fuels not consumed in the explosion would evaporate or become entrained in the water column and would eventually be degraded by microbial activity and oxidation (Doerffer, 1992; National Research Council, 1985; Rubin, 1989; ITOPH, 2001; and EPA, 1999). The areas of plankton lost due to heat or toxic effect would be re-colonized as currents redistribute the surface waters (Grigg and Hey, 1992).

Launch Abort Scenarios

There is also the potential for a launch abort at the LP (i.e., when a countdown is interrupted or no launch occurs, which is technically not a failure). In general, a launch would be aborted if equipment malfunctions or unresolved deviations of ILV parameters occur just before launch. Due to the inherent complexity of the ILV, a deviation in any number of factors could trigger an abort, and the extent to which propellants need to be safeguarded would vary based on the time prior to launch that the abort occurs. In all cases, however, the resulting contingency measures initiated by SLLP would follow established routines to stabilize the ILV on the LP. A worst-case abort, which would occur three seconds prior to launch, involves the largest quantities of propellant and the most detailed contingency measures. An abort scenario would involve draining small quantities of propellant into the flame bucket where it would evaporate due to wind effects. In addition, the pyrophoric fluid that initiates kerosene ignition would be burned according to SLLP's operating procedures. The ILV would be returned to a horizontal position in the LP hanger, and the propellant reservoirs from the State I engine would be drained into containers for later disposal at the Home Port as a hazardous waste.

An ILV failure moments after the ILV leaves the deck of the LP could also be considered a worst-case scenario since the propellant quantities involved would still be near a maximum at the onset of flight, and the failure would occur over the ocean rather than on the LP. A possible failure at this stage of flight would put all unexpended propellants, other hazardous materials, and ILV hardware into the environment in a more concentrated area than would occur during a successful flight. The quantity of hazardous material and debris reaching the ocean surface would depend on when in the flight the failure occurred (i.e., the longer the flight before failure, the less propellant would be onboard the ILV and available to potentially reach the ocean surface).

Explosive Versus Thrust Termination Failures

Potential explosive failures (marked by the sudden destruction of propellants and the ILV during flight) would result in the scattering of ILV parts and the immediate consumption by burning of most if not all of the hazardous materials incorporated by or contained in those parts. In contrast, possible thrust termination failures (i.e., one in which a deviation in flight triggers engine cutoff) would result in the ILV losing upward and forward momentum and falling toward Earth. In this case, an ILV early in Stage I flight would likely fall intact and rupture on the ocean surface, while later in Stage I flight and during all of Stage II flight, the ILV would begin to tumble within seconds and break up due to stresses on the structure. Explosions may also occur during thrust termination if, as the ILV breaks up, flammable materials become exposed to hot engine parts and ignite. If an explosion does not occur, the extent to which ILV materials would reach the Earth's surface would depend on the altitude and speed of the ILV at the time of thrust termination.

Possible Failure Near the Launch Platform

The worst-case scenario during initial ILV flight would be a thrust termination failure within 20 seconds of the ILV leaving the LP and the ILV falling intact and rupturing on the ocean surface. Regardless of when within the first 20 seconds the failure occurs, the ILV flight would continue until the twentieth second at which time the thrust termination system would automatically end the flight. This delayed termination has been automated to ensure that this type of failure does not damage the LP and to ensure that the ILV falls safely away from the ACS, which is positioned approximately five km (three mi) from the LP. At this point in flight, most of the propellant is unburned and virtually all of the ILV mass of propellants, other hazardous material, and components would be released into the environment in a concentrated area.

A possible failure near the launch platform would be worse than either an explosive failure or a thrust termination failure in which the ILV explodes later in the flight. In the case of a failure involving an explosion, most of the ILV would be consumed, destroyed, and scattered in a series of cascading explosions, and the propellants and other flammable materials would be burned before reaching the ocean surface. A thrust termination or explosive failure later in the launch may have less environmental impact (depending on the impact location). During such a failure later in flight more of the debris and virtually all of the propellants would be incinerated or evaporated and not reach the ocean surface, while those debris or propellants that would reach the ocean surface would be more dispersed. In general, larger and more concentrated amounts of ILV material and debris released during a failure would have a proportionately greater impact and take more time to dissipate and break down in the environment.

Effects of a Possible Failure During Stage I or II Flight

For the proposed action, the scenario of possible Stage I or II failure, and especially the worst-case scenario of possible thrust termination failure during the first 20 seconds of flight, would occur over the east-central Pacific Ocean, well away from the Oceanic Islands and South America. Even if a failure caused a deviation from the intended flight plan, the deviation prior to thrust termination would not be so great as to have any environmental effects significantly closer to the Oceanic Islands than the normal debris deposition areas of a successful flight. Therefore, the debris from the ILV would fall into the deep waters of the open ocean far from any Oceanic Islands. The debris, which includes metal and composite components that incorporate small amounts of rubber, plastics, and ceramics, is largely inert and would settle to the ocean bottom and become an inert part of the seafloor ecology (Chou, 1991).

A possible failure during Stage I or II flight would result in the release of propellants and other hazardous materials. In addition to the main propellants, kerosene (or Boktan) and LOX, small quantities of the propellants MMH (or UDMH) and N_2O_4 would be released, as would even smaller amounts of explosive compounds and metals present in release mechanisms and batteries.

There are three primary effects of a failure during Stage I or II flight:

- Release of emissions to the atmosphere;
- Release of propellants and other hazardous material to the ocean; and
- Unlikely possibility of Stage I or II debris falling on marine organisms, marine vessels, or aircraft.

Possible failure during flight of the Upper Stage could conceivably occur at any point as the Upper Stage progressively transits over the open ocean, the Oceanic Islands, and the northern part of South America. Given the speed and altitude of the Upper Stage during this period, a failure during any point in Upper Stage flight would result in most of the material components and all of the propellants being heated in the atmosphere and vaporized or burned from frictional effects before reaching the Earth's surface. The actual amount of debris that survives depends on the time of failure during the flight (i.e., more debris would survive a failure that occurs earlier during the flight).

As is the case for possible Stage I and II failures discussed above, a possible Upper Stage failure could occur as an explosion (where propellants in the Upper Stage suddenly combust) or a thrust termination (where acceleration ceases and the remaining ILV components begin to fall). In both types of failure scenarios, the hazardous materials associated with the Upper Stage, the satellite payload, and their connecting components would be rapidly consumed (in an explosion) or released and dispersed (as the ILV components tumble and break up in the fall to Earth).

Cumulative Impacts

In general, all of the potential environmental impacts of the proposed action would occur on a regional scale. No larger global impacts are expected to occur, mainly because of the small amounts of debris, hazardous material, and atmospheric emissions produced by the ILV relative to other anthropogenic activities (e.g., power generation and the scale of natural processes in the Pacific Ocean).

Other Environmental Concerns

Environmental Justice and Social and Economic Considerations

Although Executive Order 12114 requires consideration of Federal actions abroad with the potential for impacts to the environment, the Executive Order specifically defines environment as "the natural and physical environment and excludes social, economic and other environments * * *." Therefore, potential impacts to environments other than the natural and physical are not analyzed in this document. Nevertheless, given the limited amount of time that the LP and the ACS will be present at the launch location, social and economic considerations are assumed to be negligible.

Exclusive Economic Zones

Under successful flight conditions, any potential environmental impact from the stages and fairing would occur outside the Exclusive Economic Zones—defined as 200 nautical miles (370 km or 230 statute miles) of all countries bordering the affected environment. Only in the event of a mission failure during Upper Stage flight would be deposition of debris potentially occur within an EEZ. As with all missions failures, an intensive investigation as to the cause of the failure would be completed. A return to flight for the SLLP project would be re-instated only after corrective actions are undertaken to the satisfaction of the FAA and SLLP.

Other Alternatives to the Proposed Action

Avoidance of the Oceanic Islands

Under this alternative, only azimuths between 82.6° to 83.28°, 84.50° to 85.07°, 86.36° to 88.80° and 92.89° to 97.40° would be used. The environmental impacts would be the same as for the proposed action except for the impacts to Oceanic Islands and the corresponding portions of South America which would not be overflown in this alternative action.

Upper Stage and payload flight would progressively transit over open ocean waters and the northern part of South America. Upper Stage flight during a successful mission would have no effect on the ocean or land environments or the lower atmosphere because its operation occurs at very high altitudes. The impacts of failure during Upper Stage flight for this alternative would be the same as those for the proposed action with the exception that no Stage I or II impact would occur on or near the Oceanic Islands.

Avoidance of the Galapagos Islands

Under this alternative, only azimuths between 83.60° to 86.8 0° and 92.89° to 97.40° would be used. The environmental impacts would be the same as for the proposed action except for the impacts to the Galapagos Islands and the corresponding portions of South America which would not be overflown in this alternative action.

Upper Stage and payload flight would progressively transit over open ocean waters, the Oceanic Islands (excluding the Galapagos Islands), and the northern part of South America. Upper Stage flight during a successful mission would have no effect on the ocean or land environments of the lower atmosphere because its operation occurs at very high altitudes. The impacts of failure during Upper Stage flight for this alternative would be the same as those for the proposed action with the exception that no impact would occur on or near the Galapagos Islands.

No Action

Under the No Action alternative FAA would not issue an LOL or launch-specific license for Galaxy IIIC to SLLP. SLLP would continue to prepare and submit launch-specific applications for individual licenses to launch up to six satellites per year within the launch parameters addressed in the February 11, 1999 EA. Home Port operations would continue at their present level. If a customer requires a different launch azimuth, SLLP would prepare individual environmental analyses and documentation to support launch-specific applications and submit the documentation to the FAA for review.

Environmental Monitoring and Protection Plan

The Environmental Monitoring and Protection Plan is an evolving document of mitigation measures, incorporating improvements identified by the FAA, SLLP, or suggested by the public. The plan consists of four elements:

- Visual observation for species of concern.
- Remote detection of atmospheric effects during launch.
- Collection of surface water samples to detect possible launch effects.
- Notification to mariners and air traffic.

Public Participation

During the planning phase of the Sea Launch environmental review process, the FAA concluded that public participation was required. It was further decided that the Environmental Assessment document would be made available for public review for a 30-day period. Consequently a list of pertinent entities was compiled to ensure that wide distribution of the documents would be possible. The list included cognizant Federal and State agencies, scientific institutes, trade and environmental organizations and foreign embassies of countries in the area of the proposed action. The documents were also made available to any organization or member of the public who requested a copy and could also be found in the FAA/AST web site. The public review period commenced on May 17, 2001 via publication of a Notice in the **Federal Register**. Preceding this announcement, FAA mailed copies of the documents to all entities on the list. Additional copies were mailed via regular or next-day mail, as requested. The public review and comment period was scheduled from May 17, 2001 until June 18, 2001.

During the public review period the U.S. Air Force and the Aerospace Corporation expressed interest in the project and submitted formal comments to the FAA. The South Pacific Regional Environmental Programme (SPREP) indicated the need for additional time for internal coordination and consultation. The FAA extended the closing date for comments for SPREP until June 30, 2001. However, no comments were received from SPREP.

As part of the public participation program, FAA/AST personnel held face-to-face information exchanges with representatives of Ecuador in Washington, DC. In addition, SLLP personnel traveled to the Western Pacific and held similar meetings with representatives from SPREP.

The Final Sea Launch LOL Environmental Assessment and Environmental Finding Document are public information available upon request pursuant to FAA procedures. Copies of the final Sea Launch LOL Environmental Assessment and finding document will be sent to persons on the list of pertinent entities.

Notification of the Environmental Finding Document is provided to all interested parties through publication of this Notice in the **Federal Register.**

Prepared by:

Michon Washington.
Dated: July 19, 2001.

Recommended by:

Herbert Bachner.
Dated: July 19, 2001.

Finding

After careful and thorough consideration of the SLLP LOL Final EA and the facts contained herein, the undersigned finds that the proposed Federal action is consistent with the purpose of national environmental policies and objectives as set forth in Executive Order 12114 the application of which is guided by the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment outside the United States within the meaning of Executive Order (E.O.) 12114, or otherwise include any condition requiring consultation. Therefore, the FAA has determined that an Environmental Impact Statement for the proposed action is not required (See E.O. 12114, Section 2–5).

Issued in Washington, DC, on: July 19, 2001.

Patricia G. Smith,

Associate Administrator for Commercial Space Transportation.

[FR Doc. 01–18673 Filed 7–25–01; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Petition for Waivers of Compliance

In accordance with 49 CFR 211.9 and 211.41, notice is hereby given that the Federal Railroad Administration (FRA) has received a request for a waiver of compliance with certain requirements of the Federal safety laws and regulations. The petition is described below, including the party seeking relief, the regulatory provisions involved, the nature of the relief being requested, and