

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

**Commercial Space Transportation;
Waiver of Public Notice Requirement for
Suborbital Rocket Launch**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of Waiver.

SUMMARY: The FAA has determined to waive the public notice requirement of 14 CFR part 431 for Reusable Launch Vehicle (RLV) missions to be conducted by Scaled Composites, LLC, under License No. LRLS 04-067, issued by the FAA on April 1, 2004. The FAA finds that waiving the public notice requirement is in the public interest and will not jeopardize public health and safety, safety of property, and national security and foreign policy interests of the United States.

FOR FURTHER INFORMATION CONTACT: George Nield, Deputy Associate Administrator for Commercial Space Transportation and Acting Manager, Licensing and Safety Division, Office of the Associate Administrator for Commercial Space Transportation, Federal Aviation Administration, U.S. Department of Transportation, 800 Independence Avenue SW., Washington, DC 20591, (202) 267-9222.

SUPPLEMENTARY INFORMATION:

Background

The Federal Aviation Administration (FAA) licenses the launch of a launch vehicle, reentry of a reentry vehicle and the operation of a launch or reentry site under authority granted to the Secretary of Transportation in the Commercial Space Launch Act of 1984, as amended (CSLA), codified in 49 USC Subtitle IX, chapter 701, and delegated to the FAA Administrator. Licensing authority under the CSLA is carried out by the Associate Administrator for Commercial Space Transportation.

The CSLA allows the FAA to waive a requirement for an individual license applicant if the Administrator decides that the waiver is in the public interest and will not jeopardize public health and safety, safety of property, and national security and foreign policy interests of the United States. 49 USC 70105(b)(3).

On April 1st, the FAA issued the first commercial Reusable Launch Vehicle (RLV) mission license authorizing Scaled Composites, LLC, to conduct manned suborbital RLV missions. The license, issued in accordance with licensing requirements under 14 CFR part 431, is valid for up to one year or until the authorized missions are completed, whichever occurs first.

Scaled Composites, LLC (Scaled Composites) plans to conduct piloted RLV missions using its SpaceShipOne vehicle, an RLV that is operated at all times under an Experimental Airworthiness Certificate (EAC). SpaceShipOne is an air-launched, winged, hybrid rocket-powered, horizontal landing vehicle that is a suborbital rocket as defined by the FAA. See Federal Register Notice, 68 FR 59977-59980, issued October 20, 2003, as corrected. It is carried aloft using a carrier aircraft, known as the White Knight. The White Knight is operated under an EAC. At the designated altitude, the SpaceShipOne is released from the White Knight, and after a brief glide for vehicle separation, the pilot ignites its rocket motor. Licensed activity commences upon rocket motor ignition.

Scaled Composites plans to conduct flight activities commencing upon take-off of the White Knight carrier aircraft from Mojave Airport, East Kern Airport District (EKAD). Licensed launch activity will commence, under the terms and conditions of the RLV mission license, in R-2515 airspace within the shared use areas of the R-2508 complex around and above Edwards Air Force Base, and will conclude, for nominal flight, upon landing at Mojave Airport.

As specified in the license, rocket-powered ballistic flight will occur over unpopulated area east of Mojave

Airport. Ballistic flight resembles a parabolic arc with steep ascent, followed by a coast period during which weightlessness occurs, and then atmospheric entry.

Following atmospheric entry, SpaceShipOne will circle down in a glide phase containment area, defined in the license, and must avoid identified population centers. In a nominal situation, the SpaceShipOne operates as a glider after its ballistic flight profile is concluded, having used up its fuel supply. It will fly back to Mojave Airport, where it will land on the designated Mojave Airport runway.

Under 14 CFR part 431, a licensee is required to maintain an emergency response plan that contains procedures for informing the affected public of a planned RLV mission. 14 CFR § 431.45(a). The FAA has determined to waive the public notice requirement for SpaceShipOne flights, relieving Scaled Composites of the requirement to issue local notice of planned launch events. While risk to public safety from SpaceShipOne launches is within allowable limits under 14 CFR part 431, and is expected to be highly remote, the FAA is concerned that public notice may have the unintended effect of drawing spectators to the launch area thereby increasing risk to public safety and the safety of property. Accordingly, the FAA has

determined that waiver of the public notice requirement is in the public interest.

Waiving the public notice requirement will not jeopardize public health and safety or the safety of property, and is consistent with U.S. national interests. Public notice is intended to alert the public in the vicinity of an RLV mission that a launch event will be occurring that includes ascent and descent flight. Without notice, the public may be alarmed at the sight of a launch vehicle and believe it to be unauthorized activity. Concerned persons may wish to seek shelter. However, for SpaceShipOne launches, the FAA has determined that because the most hazardous operations will occur in remote, unpopulated area, there should be little opportunity for the public to be alarmed at the sight of the vehicle. During glide flight, when the vehicle will briefly pass over populated area, the vehicle will be in a safe, non-explosive configuration and should not pose unusual risk to the local population. Moreover, Scaled Composites has conducted limited test flights using the SpaceShipOne vehicle, up to 15-second rocket motor burn-time, and has performed return glide flight to Mojave Airport. On all occasions, return glide flight of the SpaceShipOne vehicle to Mojave Airport has been uneventful from a public safety

perspective and has not been hazardous to public health and safety or the safety of property.

In accordance with RLV mission licensing requirements under 14 CFR part 431, proposed SpaceShipOne launch missions have undergone an interagency policy review. The review identified no concerns relating to national security or foreign policy considerations. The FAA has determined that waiving the public notice requirement will not jeopardize U.S. national security or foreign policy.

For the foregoing reasons, the FAA has waived the public notice requirement with respect to the conduct by Scaled Composites of RLV missions authorized by License No. LRLS 04-067.

Issued in Washington DC, on April 8, 2004

Patricia Grace Smith
Associate Administrator for
Commercial Space Transportation