U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel
800 Independence Ave., SW.
Washington, DC 20591

February 24, 2006

Mr. Neil Milburn
Armadillo Aerospace
18601 LBJ Freeway, Suite 460
Mesquite, TX 75150

Dear Mr. Milburn:

You inquired by letter dated February 10, 2006, whether Armadillo Aerospace (Armadillo) requires a license from the Federal Aviation Administration to operate a launch site. This requires an interpretation of 14 CFR § 401.5, which defines operation of a launch site. Your inquiry consists of two parts. You inquired whether Armadillo would require a license to operate a launch site if it launched from privately owned sites that had no facilities and was not permanent. You also inquired whether Armadillo would require such a license if it were to launch from a prospective licensed launch site. You asked that, in order to avoid delay, the FAA answer either of these questions as soon as an answer was available. The FAA can answer the first question now and will answer the second question in the near future. If Armadillo were to use a privately owned site intermittently, and build no infrastructure, it would be using a temporary site and thus not require a license to operate a launch site. If those facts change, the answer may change as well.

Armadillo Aerospace is developing a vertical take-off and vertical landing rocket. Initially, Armadillo plans to operate under an experimental permit issued by the FAA. Our understanding is that Armadillo is contemplating launching its vehicle at different sites in Oklahoma, Texas and New Mexico from time to time. Armadillo would go to a site as many as two times per month for two or three days. The sites would require no infrastructure to support an Armadillo launch. Armadillo would transport its vehicle, fuel, and all personnel and equipment to the proposed site the day of or the day prior to its launches. Armadillo would remove any equipment or material used for the launches immediately afterwards. Neither Armadillo nor the landowner will prepare the site or engage in any permanent or temporary construction. Armadillo plans no permanent presence, now or in the future. With the exception of Las Cruces International Airport in New Mexico, the launch sites would not be used by other launch operators. In short, Armadillo would arrive at each site, launch and leave.

49 U.S.C. Subtitle IX, chapter 701 does not define the operation of a launch site. However, it does define a launch site as "the location on Earth from which a launch takes place ... and necessary facilities at that location." 49 U.S.C. § 70102(7). To operate a launch site in the United States, a person must have a license. 49 U.S.C. § 70104(a). 14 C.F.R. § 401.5, of the FAA's space rules, defines "operation of a launch site" as "the conduct of approved safety operations at a permanent site to support the launching of vehicles and payloads." When

promulgating this definition of operation, the Department of Transportation observed that "the operation of a launch site involves continuing operations at a permanent location." Licensing Regulations, 64 Fed. Reg. 11004, 1007 (Apr. 4, 1988). If a person operates a launch site, he or she must obtain a license to do so under 14 CFR part 420.

The FAA understands that there will be no permanent facilities used to support launch activities at any of these locations. The launch site would not be used by any other launch operators. Any equipment Armadillo brings to the site, Armadillo will remove. Armadillo and the landowners will engage in no construction. We also understand that Armadillo will not conduct continuous operations at these facilities, but will leave after each two or three days of launch testing. Accordingly, because the proposed activities lack the necessary indicia of permanence, Armadillo Aerospace does not need to obtain a license for the site's operation.

This interpretation is consistent with previous FAA determinations. For example, Sea Launch, an FAA licensee, does not require a license to operate a launch site because Sea Launch's launch activities in the Pacific are not permanent. When the launch is over, the platform, personnel and ship leave. No facilities or personnel remain behind. Even though Sea Launch returns to its site again and again, year after year, the FAA does not treat the site as permanent and thus requiring of a license for its operation.

This interpretation does not apply to any of the owners of the launch sites. Any determination regarding their obligations must be made separately upon request by them. We will prepare an answer for your second question regarding prospective licensed launch site operations in the near future.

This interpretation was prepared by Laura Montgomery, Senior Attorney in the Regulations Division of the Office of the Chief Counsel and coordinated with the office of the Associate Administrator for Commercial Space Transportation. We encourage you to contact us if we can be of further assistance.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations