

TABLE E-7—DISTANCES WHEN EXPLOSIVE EQUIVALENTS APPLY—Continued

TNT equivalent weight of pro-pellants	Distance in feet	
	To public area	Intraline unbarricaded
Not over		
900 .....	1250	180
1,000 .....	1250	190
1,500 .....	1250	210
2,000 .....	1250	230
3,000 .....	1250	260
4,000 .....	1250	280
5,000 .....	1250	300
6,000 .....	1250	320
7,000 .....	1250	340
8,000 .....	1250	360
9,000 .....	1250	380
10,000 .....	1250	400
15,000 .....	1250	450
20,000 .....	1250	490
25,000 .....	1,250	530
30,000 .....	1,250	560
35,000 .....	1,310	590
40,000 .....	1,370	620
45,000 .....	1,425	640
50,000 .....	1,475	660
55,000 .....	1,520	680
60,000 .....	1,565	700
65,000 .....	1,610	720
70,000 .....	1,650	740
75,000 .....	1,685	770
80,000 .....	1,725	780
85,000 .....	1,760	790
90,000 .....	1,795	800
95,000 .....	1,825	820
100,000 .....	1,855	830
125,000 .....	2,115	900
150,000 .....	2,350	950
175,000 .....	2,565	1,000
200,000 .....	2,770	1,050

**PARTS 421-430 [RESERVED]**

**PART 431—LAUNCH AND REENTRY OF A REUSABLE LAUNCH VEHICLE (RLV)**

**Subpart A—General**

- Sec.
- 431.1 Scope.
- 431.3 Types of reusable launch vehicle mission licenses.
- 431.5 Policy and safety approvals.
- 431.7 Payload and payload reentry determinations.
- 431.8 Human space flight.
- 431.9 Issuance of a reusable launch vehicle mission license.
- 431.11 Additional license terms and conditions.
- 431.13 Transfer of a reusable launch vehicle mission license.
- 431.15 Rights not conferred by a reusable launch vehicle mission license.

431.16-431.20 [Reserved]

**Subpart B—Policy Review and Approval for Launch and Reentry of a Reusable Launch Vehicle**

- 431.21 General.
- 431.23 Policy review.
- 431.25 Application requirements for policy review.
- 431.27 Denial of policy approval.
- 431.28-431.30 [Reserved]

**Subpart C—Safety Review and Approval for Launch and Reentry of a Reusable Launch Vehicle**

- 431.31 General.
- 431.33 Safety organization.
- 431.35 Acceptable reusable launch vehicle mission risk.
- 431.37 Mission readiness.
- 431.39 Mission rules, procedures, contingency plans, and checklists.
- 431.41 Communications plan.
- 431.43 Reusable launch vehicle mission operational requirements and restrictions.
- 431.45 Mishap investigation plan and emergency response plan.
- 431.47 Denial of safety approval.
- 431.48-431.50 [Reserved]

**Subpart D—Payload Reentry Review and Determination**

- 431.51 General.
- 431.53 Classes of payloads.
- 431.55 Payload reentry review.
- 431.57 Information requirements for payload reentry review.
- 431.59 Issuance of payload reentry determination.
- 431.61 Incorporation of payload reentry determination in license application.
- 431.62-431.70 [Reserved]

**Subpart E—Post-Licensing Requirements—Reusable Launch Vehicle Mission License Terms and Conditions**

- 431.71 Public safety responsibility.
- 431.73 Continuing accuracy of license application; application for modification of license.
- 431.75 Agreements.
- 431.77 Records.
- 431.79 Reusable launch vehicle mission reporting requirements.
- 431.81 Financial responsibility requirements.
- 431.83 Compliance monitoring.
- 431.85 Registration of space objects.
- 431.86-431.90 [Reserved]

**Subpart F—Environmental Review**

- 431.91 General.

## § 431.1

431.93 Environmental information.

AUTHORITY: 49 U.S.C. 70101-70121.

SOURCE: Docket No. FAA-1999-5535, 65 FR 56658, Sept. 19, 2000, unless otherwise noted.

### Subpart A—General

#### § 431.1 Scope.

This part prescribes requirements for obtaining a reusable launch vehicle (RLV) mission license and post-licensing requirements with which a licensee must comply to remain licensed. Requirements for preparing a license application are contained in part 413 of this subchapter.

#### § 431.3 Types of reusable launch vehicle mission licenses.

(a) *Mission-specific license.* A mission-specific license authorizing an RLV mission authorizes a licensee to launch and reenter, or otherwise land, one model or type of RLV from a launch site approved for the mission to a reentry site or other location approved for the mission. A mission-specific license authorizing an RLV mission may authorize more than one RLV mission and identifies each flight of an RLV authorized under the license. A licensee's authorization to conduct RLV missions terminates upon completion of all activities authorized by the license or the expiration date stated in the reentry license, whichever occurs first.

(b) *Operator license.* An operator license for RLV missions authorizes a licensee to launch and reenter, or otherwise land, any of a designated family of RLVs within authorized parameters, including launch sites and trajectories, transporting specified classes of payloads to any reentry site or other location designated in the license. An operator license for RLV missions is valid for a two-year renewable term.

#### § 431.5 Policy and safety approvals.

To obtain either type of RLV mission license, an applicant must obtain policy and safety approvals from the FAA. Requirements for obtaining these approvals are contained in subparts B and C of this part. Only the license applicant may apply for the approvals, and may apply for either approval separately and in advance of submitting a

## 14 CFR Ch. III (1-1-07 Edition)

complete license application, using the application procedures contained in part 413 of this subchapter.

#### § 431.7 Payload and payload reentry determinations.

(a) A payload determination is required to launch a payload unless the proposed payload is exempt from payload review under § 415.53 of this chapter. Requirements for obtaining a payload determination are set forth in part 415, subpart D of this chapter.

(b) A payload reentry determination is required to reenter a payload to Earth on an RLV unless the proposed payload is exempt from payload reentry review.

(c) A payload reentry determination made under a previous license application under this subchapter may satisfy the requirements of paragraph (b) of this section.

(d) The FAA conducts a review, as described in subpart D of this part, to make a payload reentry determination. Either an RLV mission license applicant or a payload owner or operator may request a review of the proposed payload using the application procedures contained in part 413 of this subchapter. Upon receipt of an application, the FAA may conduct a payload reentry review independently of an RLV mission license application.

#### § 431.8 Human space flight.

To obtain a license, an applicant proposing to conduct a reusable launch vehicle mission with flight crew or a space flight participant on board must demonstrate compliance with §§ 460.5, 460.7, 460.11, 460.13, 460.15, 460.17, 460.51 and 460.53 of this subchapter.

[Doc. No. FAA-2005-23449, 71 FR 75632, Dec. 15, 2006]

EFFECTIVE DATE NOTE: By Doc. No. FAA-2005-23449, 71 FR 75632, Dec. 15, 2006, § 431.8 was added, effective Feb. 13, 2007.

#### § 431.9 Issuance of a reusable launch vehicle mission license.

(a) The FAA issues either a mission-specific or operator license authorizing RLV missions to an applicant who has obtained all approvals and determinations required under this chapter for the license.