§ 431.39 Mission rules, procedures, contingency plans, and checklists.

(a) An applicant shall submit mission rules, procedures, checklists, emergency plans, and contingency abort plans, if any, that ensure safe conduct of mission operations during nominal and non-nominal flight conditions.

(b) Mission rules, procedures, checklists, emergency plans, and contingency abort plans must be contained in a safety directive, notebook, or other compilation that is approved by the safety official designated under § 431.33(c) and concurred in by the launch site operator and reentry site operator, if any.

(c) Vehicle safety operations personnel must have current and consistent mission checklists.

§ 431.41 Communications plan.

(a) An applicant shall submit a plan providing vehicle safety operations personnel communications procedures during the mission. Procedures for effective issuance and communication of critical safety information during the mission shall include hold/resume, go/no go, contingency abort, if any, and emergency abort commands by vehicle safety operations personnel. The communications plan shall describe the authority of vehicle safety operations personnel, by individual or position title, to issue these commands. The communications plan shall ensure that—

1. Communication networks are assigned so that personnel identified under this section have direct access to real-time, safety-critical information required for making decisions and issuing commands;

2. Personnel identified under this section monitor a common intercom channel for safety-critical communications during launch and reentry;

3. A protocol is established for utilizing defined radio communications terminology; and

4. Communications affecting the safety of the mission are recorded in a manner that accurately reflects communications made on individual channels, synchronized time coding, and sequence of communications.

(b) An applicant shall submit procedures to ensure that licensee and reentry site personnel, if any, receive a copy of the communications plan required by this section and that the reentry site operator, if any, concurs with the communications plan.

§ 431.43 Reusable launch vehicle mission operational requirements and restrictions.

(a) An applicant for RLV mission safety approval shall submit procedures—

1. That ensure RLV mission risks do not exceed the criteria set forth in § 431.35 for nominal and non-nominal operations;

2. That ensure conformance with the system safety process and associated hazard identification and risk assessment required under § 431.33(c);

3. That ensure conformance with operational restrictions listed in paragraphs (c) through (e) of this section;

4. To monitor and verify the status of RLV safety-critical systems sufficiently before enabling both launch and reentry flight to ensure public safety.