

California Model Rocketry Regulations 4-22-04

Chapter 4. Division of Industrial Safety, Subchapter 7. General Industry Safety Orders
Group 18. Explosive Materials, Article 113 Explosive Materials, Section 5237.

Definitions

“Propellant (Solid).” Explosives compositions used for propelling projectiles and rockets and to generate gases for powering auxiliary devices.

“Propellant-Actuated Power Devices.” Any tool or special mechanical device or gas generator system which is actuated by a propellant, or which releases and directs work through propellant charge.

“Pyrotechnic Devices.” Any combination of materials, including pyrotechnic compositions, which, by the agency of fire, produce an audible, visual, mechanical or thermal effect designed and intended to be useful for industrial, agricultural, personal safety, or educational purposes. The term “pyrotechnic device” includes, but is not limited to, agricultural and wildlife fireworks, **model rockets**, exempt fireworks, emergency signaling devices, and special effects.

Title 19. Public Safety, Division 1. State Fire Marshal, Chapter 1. General Fire and Panic Safety Standards, Subchapter 1, Administration, Article 1. Basic Operational Requirements, Section 1.00 Title

These regulations shall be known as the “Regulations of the State Fire Marshal” and shall constitute the Basic Building Design and Construction Standards of the State Fire Marshal. They may be cited as such, and will be referred to herein as “these regulations.”

§1.02. Purpose

These regulations have been prepared and adopted for the purpose of establishing minimum standards for the prevention of fire and for the protection of life and property against fire, explosion and panic.

Chapter 6. Fireworks, Article 1. Jurisdiction, Section 975. Title
Article 2. Definitions, Section 980 Definitions

(a) “A” Definitions

(2) ASTM. The American Society of Testing and Materials, a national organization publishing standards for all types of materials and products.

(d) “D” Definitions

(3) D.O.T. means U.S. Department of Transportation.

(e) “E” Definitions.

(3) Experimental High Power Rocket. Non-professional rockets which are propelled by commercially manufactured high-power solid propellant rocket motors.

(4) Experimental High Power Rocket Motor. A State Fire Marshal approved, commercially manufactured rocket propulsion device containing a solid propellant charge wherein all the ingredients are pre-mixed and which produces more than 160 Newton-seconds (36 lb.-seconds) but shall not exceed 10,240 Newton-seconds (2302.2 lb.-seconds) of total impulse.

(i) "I" Definitions.

(1) Ignitor. An electric, chemical or mechanical device used to initiate burning or pyrotechnic or propellant materials

(l) "L" Definitions.

(2) License. "License" means any nontransferable authorization granted by the State Fire Marshal to engage in any activity regulated by this part.

(3) Licensee. "Licensee" means any person 21 years of age or older holding a fireworks license issued pursuant to Chapter 5 (commencing with Section 12570), of the Health and Safety Code.

(m) "M" Definitions.

(6) Model Rocket Motor. The same as a model rocket engine, as defined in Health and Safety Code Section 12520. Model rocket motors shall not produce more than 160 Newton-seconds of total impulse power.

(n) "N" Definitions

(1) N.F.P.A. The National Fire Protection Association.

(r) "R" Definitions.

(1) Report. A detailed written account of all events involving pyrotechnic materials, devices, and operations in which a fire, injury, or death occurs, or in which any violation of the laws or regulations takes place.

(2) Retailer. Any person who, at a fixed place of business, sells, transfers, or gives fireworks to a consumer or user.

(t) "T" Definitions.

(1) Travel. To move from point of ignition either vertically or horizontally.

(w) "W" Definitions.

(2) Within This State. “Within this state” means all territory within the boundaries of this state.

Article 3. Licenses, Section 981. General

(a) No person shall engage in any type of fireworks activities without having submitted an application for and having obtained a license from the State Fire Marshal in accordance with the provisions of this chapter. Licenses shall be processed in accordance with Title 19, California Code of Regulations, Section 3.33.

Exceptions:

(1) Licensed Pyrotechnic Operators Basic Commercial, Restricted Commercial and Rockets, First Class may employ unlicensed assistants.

Unlicensed assistants shall perform only when under the direct, immediate and constant supervision of the licensee when handling fireworks and pyrotechnic compositions.

(2) Licensed special effects and theatrical pyrotechnicians may employ unlicensed assistants. Unlicensed assistants shall perform only when under the direct, immediate and constant supervision of the licensee when handling fireworks and pyrotechnic compositions.

(3) A license shall not be required for the use or discharge of safe and sane fireworks.

§981.1. Cause for Denial.

The use of any false or misleading statement or misrepresentation offered or used to secure any fireworks license, permit, classification, registration, or any other official fireworks document is a violation of these regulations, and shall be cause for denial of the license, permit, classification, registration or other official fireworks document.

§981.2. Misuse or Alteration of License.

All fireworks licensees as set forth in this chapter shall be prohibited from giving or permitting any other person to use such license for any purpose whatsoever.

Any license issued under this chapter found to be altered shall be confiscated by the authority examining the license. The authority confiscating the license shall notify the State Fire Marshal immediately, and shall cooperate with the State Fire Marshal in all matters relating to an investigation of the incident.

(a) Every license fee required in accordance with this section shall be paid by check or money order made payable to the “CDF/State Fire Marshal.”

(b) Every required fee shall be paid at or mailed to the office location designated by the State Fire Marshal.

(c) The original and annual renewal fee for a license shall be for the fiscal year or portion thereof beginning July 1 and ending June 30 of the following year, except that the fee for a Retail License shall be for the period of noon on the 28th of June through noon on the 6th of July, of the same calendar year.

(d) The original and annual renewal fees shall be as follows:

- (1) Manufacturer \$1500.00
 - (2) Wholesaler \$3000.00
 - (3) Importer & Exporter \$4500.00
 - (4) Retailer \$50.00
 - (5) Public Display (special) \$350.00
 - (6) Public Display (limited) \$200.00
 - (7) Public Display (general) \$1500.00
 - (8) Pyrotechnic Operator:
 - Rockets, 1st Class \$50.00
 - Rockets, 2nd Class \$50.00,
 - Rockets, 3rd Class \$50.00
 - (9) Manufacture, import, export, or wholesale, or any combination thereof; agricultural and wildlife fireworks \$500.00
 - (10) Manufacture, import, export, or wholesale, or any combination thereof; model rocket motors \$500.00
 - (11) Registration or classification fee for each model of emergency signaling device \$50.00
 - (12) Party Popper/Snap Cap Distributor Permit \$750.00
 - (13) Manufacture, import, export, wholesale, or any combination thereof high power or experimental high power rockets and motors \$1500.00
 - (14) Retailer (high power rocket) \$500.00
- (e) The original registration and classification fees shall be as follows:
- (1) Original registration and classification fee for each model of model rocket motor, high power rocket or motor, safe and sane, party popper, snap caps/snappers, agricultural/wildlife or exempt fireworks 50.00
- (f) Required fees shall be submitted jointly with the appropriate application. Such Fees are non-refundable once the license has been issued.

§981.4. Duplicate License.

In the event a valid license is lost or destroyed, a duplicate license will be issued upon written notice from the licensee to the State Fire Marshal and the submission of a \$25.00 fee.

§981.5. License Scope.

(a) Model Rocket A Model Rocket License authorizes the manufacture, import, export or wholesale or any combination thereof.

(b) Pyrotechnic Operator. A Pyrotechnic Operator's License authorizes and places the responsibility for the handling, supervision and discharge of any fireworks item or pyrotechnic device and establishes that the operator is responsible for the training of his or her assistants in the safe handling, supervision, and discharge of these items and devices, in accordance with the following:

(1) Pyrotechnic Operator--Unrestricted may conduct and take charge of all fireworks activities in connection with every kind of public fireworks display, whether commercial entertainment, experimental and other types of rockets, special effects in motion picture, theatrical and television production.

(2) Pyrotechnic Operator--Basic Commercial may conduct and is restricted to all fireworks activities in connection with a commercial fireworks public display, including the determination that all mortars, set pieces, rocket launchers and rockets are properly installed and that the proper safety precautions have been taken to insure the safety of persons and property. Such operator shall have charge of all activities directly related to handling, preparing and firing all fireworks at the public display, including the fixing of lifting charges and quick match as needed for aerial shells.

(4) Pyrotechnic Operator--Rockets First Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading and launching of all types of experimental rockets. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under subsection (b) are also required to obtain a local permit from the authority having jurisdiction prior to all launches.

(5) Pyrotechnic Operator--Rockets Second Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading and launching of all types of solid fuel experimental rockets only. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under subsection (b) are also required to obtain a local permit from the authority having jurisdiction prior to all launches.

(6) Pyrotechnic Operator--Rockets Third Class may purchase, transport, store, and launch high power rockets. Experimental high power rocket motors may only be imported, exported, and wholesaled by individuals or companies holding valid import, export, or wholesale licenses. Pyrotechnic Operators--Third Class may only purchase high powered rocket motors from licensed wholesalers. Operators licensed under subsection (b) are

also required to obtain a local permit from the authority having jurisdiction prior to all launches.

(c) **Separate License Not Required.** A separate license shall not be required of licensed manufacturers, wholesalers, or importer-exporter to manufacture, wholesale, import or export agricultural and wildlife fireworks or model rocket engines.

(d) **Explosive Materials Not Included in Scope of License.** The license scope as defined in this section is restricted to the use of materials defined as “fireworks” (as defined in Health and Safety Code Section 12511) and in no way confers authority for the use or discharge of explosive materials defined in Health and Safety Code Sections 12000, et seq.

§981.6. Penalty.

§981.7. Expired License.

§981.8. Duplicate License.

§986. Classification.

(a) Fireworks or pyrotechnic devices that are to be used or sold for use in this state and found by the State Fire Marshal to come within the definition of “party poppers”, “snap caps”, “safe and sane”, “agricultural and wildlife”, “model rocket motors”, “high power rocket motors”, “emergency signaling device” or “exempt” fireworks shall be classified as such by the State Fire Marshal.

Exception: Special Effects items developed and compounded on location for single time usage.

(b) The classification of an item shall not be construed as conferring classification to any similar item without the approval of the State Fire Marshal. The trade name of an item shall not be changed without notifying the State Fire Marshal 30 days prior to such change.

§986.2. Test Samples.

(b) Undischarged samples of each item, which is to be examined, classified, and labeled as “agricultural wildlife”, “emergency signaling devices”, “model rocket engine”, and “high-power rocket engine” shall be submitted to the State Fire Marshal for testing. The number of undischarged samples necessary for each test shall be determined by the State Fire Marshal and in no case shall be less than three (3).

Article 7. Seal of Registration and Labeling

§987. Seal of Registration, Description.

(a) The State Fire Marshal's Seal of Registration required by this chapter shall conform to the provisions of this article. The Seal of Registration shall be applied to all classified fireworks and pyrotechnic devices by a licensed manufacturer, importer, exporter or wholesaler, and shall indicate the classification assigned by the State Fire Marshal or any State Fire Marshal approved laboratory.

(b) The licensee registration number shall appear in the boxes below the seal as illustrated in this article.

§987.1. Unlawful Use.

No person or concern shall produce, reproduce or use the Seal of Registration in any manner or for any purpose except as provided in this chapter.

Article 16. Experimental Rockets/Unlimited

§1010. General.

This article applies to all rockets except approved model rockets as defined in Article 14 and experimental high power rockets and experimental high power rocket motors as defined in Article 2.

Article 17. Model Rockets

§1020. General.

Nothing in this article is intended to regulate the sale or the construction of model rockets, provided that such model rockets are not equipped with a model rocket motor.

§1021. Classification and Labeling.

All types of model rocket motors shall be submitted to the State Fire Marshal by a licensed model rocket motor manufacturer, importer/exporter, or wholesaler for classification. A copy of a certificate of classification indicating the item has been classified as a model rocket motor by a laboratory approved by the Department of Transportation shall accompany the request for classification by the State Fire Marshal. Three samples of each motor type shall be submitted to the State Fire Marshal for classification. Standards for the classification of model rocket motors shall conform to the National Fire Protection Association (N.F.P.A.) 1122 (1987), Code for Unmanned Rockets, Sections 3-1.1, 3-1.2, 3-1.3, 3-1.4, 3-1.5, 3-1.6, 3-1.7, 3-1.8, 3-1.9, 3-1.10.

(b) Individual engines shall bear the California State Fire Marshal seal and the registration number of the licensee.

§1022. Model Rocket Standards and Use.

(a) Model rocket standards and use shall comply with: N.F.P.A. 1122, the Code for Unmanned Rockets, Chapter 3, Sections 3-1.1 through 3-1.10, Chapter 4, Chapter 5, Chapter 6, and Appendix A-2-(1987), which is incorporated by reference herein except for Appendices A-2.3 and A-2.4.

§1023. Storage and Sale.

No model rocket motors shall be stored, sold or offered for sale at retail unless such model rocket motors have been classified by the California State Fire Marshal.

§1024. Restrictions.

§1025. Authorization.

(a) No model rocket user shall launch any model rocket motor from any site without first securing authorization from the authority having jurisdiction. The authority having jurisdiction may require notification each time that model rockets are to be launched.

(b) It shall be the responsibility of the model rocket user to secure permission of the owner of private lands when such land is intended to be used to launch model rockets.

§1026. Revocation of Permits and Authorized Use of Launching Area.

The authority having jurisdiction may immediately revoke a permit to sell model rocket motors at retail if it is found that those persons granted a permit have violated these regulations. The authority having jurisdiction may immediately revoke its authorization to use a firing area if it is found that an undue hazard exists, including, but not limited to, fire safety hazards or life safety hazards.

§1027. Minimum Age.

(a) No model rocket motors shall be sold, given, or delivered to any person under 18 years of age.

Exceptions: (1) Model rocket motors bearing the standardized coding 1/4A, 1/2A, A, B, C, and D may be sold, given, or delivered to any person 14 years of age or older.

(2) Persons who are 12 years of age or older and who are taking part in a model rocket education program may receive model rocket motors and launch approved model rockets when under the direct supervision and control of a person 18 years of age or older. Model rocket motors must be obtained only from the adult in charge of the launching. Approved model rocket motors for this exception shall bear the motor coding 1/4A, 1/2A, A, B, C, or D.

§1028. Supervision. The permittee shall be responsible for the safety of all spectators and other persons connected with the launching of model rockets.

§1029. Use.