

## Some preliminary comments

The actual rules for ROC launches are our own published rules and procedures. The ROC rules have evolved over the past three decades or so to incorporate requires imposed by various federal, state, and local regulations, FAA COA, BLM permit, and the safety codes and policies of NAR and Tripoli. All these have been incorporated and added to the collective knowledge of the ROC board and experience gather in running launches at Lucerne Dry Lake since the late 1980s.

This document is my modification of a document shamelessly stolen from LUNAR, the Livermore Unit of NAR. This document is intended to help you pass the exam for Pyrotechnic Operator License—Rocketry Class 3. If you have questions or comments about actual launch practices, please discuss them with a ROC board member.

The CalPyro Rocketry Class 3 exam consists of questions taken from the Fireworks Handbook published by the Office of the State Fire Marshal.

The handbook is available in pdf form from the OSFM website, <https://osfm.fire.ca.gov/media/3072/laws-and-regulations-for-transportation-use-and-storage-of-fireworks-in-california.pdf>

The Fireworks Handbook is a collection of five documents covering the laws that govern fireworks in California, which includes rockets. Much of the material is not germane to rocketry or the CalPyro Rocketry C;ass 3 license test. The sections listed below should be the subject of your particular attention because of their relevance to rocketry. It is a good idea to read through the entire guidebook, but I will try to point tot he sections specifically related to the Rocketry Class 3 exam.

### **I. State Fireworks Law, California Health and Safety Code, Section 12500 - 12726**

Read the definitions in chapter 1 for "model rocket" and "model rocket engine" as they are referenced throughout the handbook. You may find yourself referring back to chapter 1 for other definitions.

Read through the entire document for background information. **Chapter 3 (Administration)** and **Chapter 5 (Licenses)** have the most pertinent information.

### **II. State Fireworks Regulations, Title 19, California Code of Regulations, Chapter 6**

This document contains most of the information relevant to the CalPyro Rocketry 3 exam.

Article 2, Definitions

Pay particular attention to the definitions for "Experimental High Power Rocket" and "Experimental High Power Rocket Motor"

### Article 3, Licenses

Pay particular attention to the section "License Scope"

### Article 5, Qualifications-Examination and Investigation

Pay attention to the section describing the testing and background qualifications for CalPyro licensees.

### Article 7, Seal of Registration and Labeling

Review the registration and seal labeling requirements for rocket motors.

### Article 16, Experimental Rockets/Unlimited

This is an interesting read, but it doesn't really apply to the CalPyro Rocketry Class 3 exam.

### Article 17, Model Rockets

Again, interesting reading, but doesn't really apply to the CalPyro Rocketry Class 3 exam.

### Article 18, Experimental High Power Rockets and Motors

This section covers the bulk of the material of the CalPyro Rocketry Class 3 exam and should be studied closely. In particular, pay attention to the tables of distances and launch site standards.

## **III. Storage, Title 27, Code of Federal Regulations part 55, Subpart K**

Note the differences in the types of storage. **Type IV storage is required for high power motors**. Otherwise, skim for background material

## **IV. Hazardous Materials Transportation, Title 13, California Code of Regulations, Selected Sections**

Skim for background material.

### **ANNEX A EXPLANATORY MATERIAL**

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

### **Annex B, Model Rocketry, National Fire Protection Association, Code 1122, 2012, Referenced Sections.**

Skim for background material. This is only for information only and will not be on the exam.

Note the revision that is incorporated by reference. Later revisions have not been incorporated by the state, so any differences will not be on the exam and do not have regulatory weight in California. Note also that NFPA 1127 for high power is NOT incorporated.

## **ANNEX C GLOSSARY**

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

ANNEX "D" for "D"oesn't exist

## **ANNEX E INFORMATIONAL REFERENCES**

Informational resources used by NFPA to develop 1122. Points to some interesting reading, but not part of the exam.