



# Clovis Fire Department

## Standard # 5.5

### RULES & REGULATIONS FOR MODEL ROCKETS

**Rules and Regulations:** The following are provided to ensure that adequate safety precautions are utilized when firing model rockets.

1. Gross weight, including the model rocket engine and propellant, shall not exceed 1500 grams (53 oz).
2. No more than 125 grams (4.4 ounces) of propellant materials shall be contained in a single model rocket at the time of launch.
3. Model rockets shall be constructed to be capable of repeated flights and contain a means for retarding descent to the ground so it will not be substantially damaged, and no hazard is created to persons or property on the ground.
4. Construction shall be of wood, plastic, paper, rubber, or similar materials and without any metal as structural parts. Exception, a model rocket casing constructed per 2018 NPA 1122 section 4.2.1
5. Design and construction shall include attached aerodynamics surfaces or other suitable means that will provide stabilizing and restoring forces necessary to maintain a substantially true and predictable flight path.
6. A model rocket shall not contain a payload that is designed to be flammable, explosive, or harmful to persons or property.

#### **Authorized Locations for Operation:**

1. The launch site diameter shall be established as no less than one-half ( $\frac{1}{2}$ ) the maximum altitude as stated by the manufacturer for the model rocket and motor(s) combination being flown, or as approved by the authority having jurisdiction based on flight demonstration or data required to substantiate the anticipated altitude.
2. A model rocket shall be launched outdoors in a cleared area, free of tall trees, power lines, buildings, and dry brush and grass.
3. The launching locations shall be no closer than twenty-five feet (25') to the boundaries of the flight area.
4. The authority having jurisdiction in the area shall approve the flight locations.

**Launching:** Model rockets may be launched upon compliance with the following conditions:

1. A device or mechanism shall be used which provides a suitable deflector to prevent the exhaust jet from impinging directly on the ground or launch surface and shall restrict the horizontal motion of the model until sufficient flight stability has been attained for a reasonable safe, predictable flight.
2. The system used to launch a model rocket shall be remotely controlled and electrically operated. It shall have a launching switch that will return to the "off" position when released. The system shall be equipped with a removable safety interlock in series with the launch switch.
3. The launch device shall be pointed within thirty degrees (30°) of vertical.
4. At least one adult person, competent to supervise the safe operation of model rockets, shall inspect each model rocket before flight and supervise the launching of each model rocket.
5. All people in the launch area shall be made aware of the pending model rocket launch. An audible five-second (5) countdown shall take place.
6. Surface winds at the launch site shall be less than twenty (20) miles per hour and visibility shall be greater than two thousand feet (2,000').
7. Model rockets may only be launched during daylight hours.
8. All materials, such as recovery system wadding or igniter holding devices, that are subject to high temperatures and ejected from the rocket during the launch and recovery sequence shall be of a flame-resistant nature to prevent any ignition upon landing.
9. All personnel conducting, assisting, or observing the launching shall remain at least fifteen (15') feet from models containing less than thirty (30) Newton-seconds total impulse and at least thirty feet (30') from models exceeding these limits during the countdown and launching.

Reference: NFPA 1122, 2018 Edition

If you have any question, contact the Clovis Fire Department at (559) 324-2200.