

University of Illinois at Urbana-Champaign

Class 1 Model Rocket Launching Application

Class 2 or 3 Rockets will NOT be considered by UIUC
(application to be completed by organizer; email completed form to fandscodfire@illinois.edu)

Sponsoring Department/Organization: _____

Department Contact Name: _____

Launch Contact (if different than above): _____

Name of Event: _____

Number of Attendees Expected: _____

Phone Number and Email: _____

Date and Time of Launch: _____

Launch Location: _____

Rocket Motor Type
 (or circle type in table below): _____

Number of Rockets/Size of Event: _____

Expected Altitude of Launch: _____

Checklist (to be completed by organizer):

- Provide a Site Plan indicating a diagram of the launch site including distance from buildings, streets, utilities, and combustible vegetation.
- The organizer acknowledges the following announcement shall be provided when advertising for the event:
“If you will need disability-related accommodations to participate in this program/event, please contact (name, host department) at (phone number, e-mail.) Early requests are strongly encouraged to allow sufficient time to meet your access needs.”
- The organizer acknowledges there shall be no smoking at the event.

Additional Questions (to be completed by organizer):

A) The rockets will be launched outdoors, in a clear area, free of trees, power lines, buildings, and combustible vegetation, at least as large as indicated in table 4.9 NFPA 1122 (National Fire Protection Association) below. _____

Installed Total Impulse (N-sec)	Equivalent Motor Type	Minimum Site Dimension*	
		m	ft
0-1.25	1/4 A and 1/2 A	15	50
1.26-2.50	A	30	100
2.51-5.00	B	61	200
5.01-10.00	C	122	400
10.01-20.00	D	152	500
20.01-40.00	E	305	1000
40.01-80.00	F	305	1000
80.01-160.00	2F (or 1G)	305	1000
160.01-320.00	4F (or 2G)	457	1500

B) The model rockets' structural parts, including the body, nose cone, and fins, shall be made of paper, wood, or plastic and shall contain no metal parts. A model rocket motor casing that is metallic, reloadable, and meets the specifications of NFPA 1122 shall be permitted. _____

C) The model rockets shall have a means for returning it to the ground (for example, a parachute) so that it can be flown again. All recovery wadding used in a model rocket shall be flame-resistant. _____

D) The model rockets shall weigh no more than 1500 g (53 oz) at lift-off, including rocket propellant. A model rocket shall use no more than 125 g (4.4 oz) of rocket propellant. _____

E) The model rockets' installed motor(s) shall produce a total impulse of no more than 320 N-sec (71.9 lb-sec). Type G motors with an installed total impulse of more than 80 N-sec (18 lb-sec), but not more than 160 N-sec (36 lb-sec), shall be permitted to be used by individuals 18 years of age and older. _____

F) The model rockets shall not carry a payload that is designed to be flammable, explosive, or harmful to persons or property. _____

G) The model rockets shall not be launched on a flight path aimed at a target. A model rocket shall not be launched in a wind of more than 20 mph. A model rocket shall not be launched at an angle greater than 30 degrees from vertical. A model rocket shall not be launched into a cloud or near an aircraft in flight. _____

H) All persons shall remain at least 15 feet from the model rocket during ignition of a model rocket motor with an installed total impulse of 30 N-sec (6.7 lb-sec) or less. All persons shall remain at least 30 feet from the model rocket during ignition of a model rocket motor with an installed total impulse of more than 30 N-sec (6.7 lb-sec). When more than 10 rockets are being launched simultaneously, the minimum spectator distance shall be set to 1.5 times the highest altitude expected to be reached by any of the rockets, and one or more spotters shall be positioned to monitor the potential landing area to restrict unauthorized entry and to identify and report hazards. _____

I) All people in the launch area shall be made aware of the pending model rocket launch. An audible 5-second countdown to launch shall take place. If a model rocket misfires, no person shall approach the launcher until 1 minute has elapsed and the safety interlock has been removed or the battery has been disconnected from the ignition system. No attempt shall be made to retrieve a model rocket from a power line or other life-threatening area. _____

J) The launcher shall have a blast deflector device to prevent the motor exhaust from hitting the ground directly. The area around a launch device shall be cleared of brown grass, dry weeds, or other easy-to-burn materials. _____

K) A fire extinguisher will be accessible on site. _____

Additional Organizer Comments:

Organizer Signature: _____ Date: _____

*Note: Code Compliance Approval does not indicate facility location approval.
Please work with the appropriate facility to grant space reservation approval.*

Approval (to be completed by Code Compliance and Fire Safety)

Building Official: _____ Date: _____