

<b>Policy Title</b>	Model Rockets and Engine Powered, Remote-Controlled, Battery-Operated Miniature Models and Toys
<b>Purpose</b>	Pursuant to Chapter 743.10 of the Cleveland Metroparks Regulations, this policy is being implemented to provide further direction for use of model rockets and engine powered, remote-controlled, or battery-operated miniature models and toys used in the Park District.
<b>Department/Divisions</b>	All Departments
<b>Approval Date</b>	March 21, 2022
<b>Review Date</b>	March 2027

**I. MODEL ROCKETRY**

Use of Model Rockets on or above Cleveland Metroparks' property must comply with all local, state, and federal laws and regulations. Recreational operators may fly Class 1 and 2 Model Rockets in Designated Areas if the following conditions are met:

**A. Definitions:**

1. Class 1 - Model Rocket means an amateur rocket that:
  - a) Uses no more than 125 grams (4.4 ounces) of propellant;
  - b) Uses a slow-burning propellant;
  - c) Is made of paper, wood, or breakable plastic;
  - d) Contains no substantial metal parts; and
  - e) Weighs no more than 1,500 grams (53 ounces), including the propellant.
2. Class 2 - High-Power Rocket means an amateur rocket other than a model rocket that is propelled by a motor or motors having a combined total impulse of 40,960 Newton-seconds (9,208 pound-seconds) or less.
3. Class 3 - Advanced High-Power Rocket means an amateur rocket other than a model rocket or high-power rocket. Class 3 Advanced High-Power Rockets are prohibited on or above Cleveland Metroparks property.

**B. General operating limitations.**

1. You must operate an amateur rocket in such a manner that it:
  - a) Is launched on a suborbital trajectory;
  - b) When launched, must not cross into the territory of a foreign country unless an agreement is in place between the United States and the country of concern;
  - c) Is unmanned; and
  - d) Does not create a hazard to persons, property and natural resources, other aircraft, or wildlife;
  - e) The Federal Aviation Administration (FAA) may specify additional operating limitations necessary to ensure that air traffic is not adversely affected, and public safety is not jeopardized.

**C. Operating limitations for Class 2-High Power Rockets.**

1. When operating *Class 2-High Power Rockets*, you must comply with the General Operating Limitations of Section B above. In addition, you must not operate *Class 2-High Power Rockets* –
  - a) At any altitude where clouds or obscuring phenomena of more than five-tenths coverage prevails;
  - b) At any altitude where the horizontal visibility is less than five miles;
  - c) Into any cloud;
  - d) Between sunset and sunrise without prior authorization from the FAA;
  - e) Within 9.26 kilometers (5 nautical miles) of any airport boundary without prior authorization from the FAA;
  - f) In controlled airspace without prior authorization from the FAA;
  - g) Unless you observe the greater of the following separation distances from any person or property that is not associated with the operations:
    - (1) Not less than one-quarter the maximum expected altitude;
    - (2) 457 meters (1,500 ft.);
  - h) Unless a person at least eighteen years old is present, is charged with ensuring the safety of the operation, and has final approval authority for initiating high-power rocket flight; and
  - i) Unless reasonable precautions are provided to report and control a fire caused by rocket activities.

**D. Air Traffic Control notification for all launches.**

1. No person may operate an unmanned rocket other than a Class 1 - Model Rocket unless that person gives the following information to the FAA Air Traffic Control (ATC) facility nearest to the place of intended operation no less than 24 hours before and no more than three days before beginning the operation:
  - a) The name and address of the operator; except when there are multiple participants at a single event, the name and address of the person so designated as the event launch coordinator, whose duties include coordination of the required launch data estimates and coordinating the launch event;
  - b) Date and time the activity will begin;
  - c) Radius of the affected area on the ground in nautical miles;
  - d) Location of the center of the affected area in latitude and longitude coordinates;
  - e) Highest affected altitude;
  - f) Duration of the activity;
  - g) Any other pertinent information requested by the ATC facility.

**E. Information requirements.**

1. **Class 2 - High-Power Rockets.** When a Class 2 - High-Power Rocket requires a certificate of waiver or authorization, the person planning the operation must provide the information below on each type of rocket to the FAA at least 45 days before the proposed operation. The FAA may request additional information if necessary to ensure the proposed operations can be safely conducted. The information shall include for each type of Class 2 rocket expected to be flown:
  - a) Estimated number of rockets,
  - b) Type of propulsion (liquid or solid), fuel(s) and oxidizer(s),
  - c) Description of the launcher(s) planned to be used, including any airborne platform(s),
  - d) Description of recovery system,
  - e) Highest altitude, above ground level, expected to be reached,
  - f) Launch site latitude, longitude, and elevation, and
  - g) Any additional safety procedures that will be followed.

**II. ENGINE POWERED, REMOTE-CONTROLLED, BATTERY-OPERATED MINIATURE MODELS AND TOYS, INCLUDING MODEL CARS AND BOATS**

Use of engine powered, remote-controlled, battery-operated miniature models and toys ("Miniature Model Toys") on Cleveland Metroparks' property must comply with all local, state, and federal laws and regulations. Engine powered, remote-controlled, battery-operated ride-on cars are not covered by this policy. Recreational operators may use Miniature Model Toys in Designated Areas if the following conditions are met:

**A. Definitions:**

1. Miniature Model Toys means the following:
  - a) Any toys, cars, planes, helicopters, boats and/or other vehicles or vessels powered by battery, electricity or other power source and operated remotely and/or by hand-held controllers for recreational purposes.
  - b) Drones are not Miniature Model Toys. Consult Cleveland Metroparks Drone Policy for regulations related to drones. <https://www.clevelandmetroparks.com/getmedia/ad66bd95-5c89-4acb-819d-4bb6df52b729/UAS-or-Drone-Policy-6-10-2020.pdf.ashx>

**B. General operating limitations.**

1. You must operate Miniature Model Toys in such a manner that:
  - a) Does not create a hazard to persons, property and natural resources, other Miniature Model Toys, or wildlife;
  - b) All persons using or operating Miniature Model Toys in the parks, any body of water located within the parks, or on park property must use or operate such vehicle or vessel in the area or facility specifically designated for such use by Chief Executive Officer or his/her designee.
  - c) Miniature Model Toys shall not be operated on Cleveland Metroparks' trails, including but not limited to bridle trails.

**III. DESIGNATED LOCATIONS**

**A. Pursuant to Cleveland Metroparks Regulation 743.10:**

1. Designated areas within the Park District for Model Rockets are open fields, and not open fields, in the following locations except during those dates and times of scheduled events:
  - a) The Polo Fields located in South Chagrin;
  - b) The Top O' Ledges in the Hinckley Reservation;
  - c) Main Street Diamond located in Mill Stream Run Reservation;

- d) The fairways of all Cleveland Metroparks golf courses, except Sleepy Hollow or Manakiki, from November 1<sup>st</sup> through March 15<sup>th</sup> when the golf course is not open for golf. Big Met, Little Met, and Mastick Woods golf courses are less than 5 miles from an airport boundary and require prior authorization from the FAA to operate Class 2 rockets.
  - e) The operator shall not be permitted on the greens or tees at any time.
  - f) The operator shall not interfere with any non-golf activity that may be occurring on the golf course (e.g., snowshoeing, cross country skiing, etc.)
2. Miniature Model Toys, excluding boats, may be operated on any empty paved parking lot in the Park District from November 1<sup>st</sup> through March 15<sup>th</sup> during the offseason.
    - a) The operator shall not be permitted to operate Miniature Model Toys if the parking lot is being used by vehicles.
  3. Designated areas within the Park District for Miniature Model boats, are any bodies of water in the Park District outside of swimming areas provided that the Miniature Model boats shall not interfere with persons recreating in the park (e.g., fishing, kayaking, boating, swimming, etc.)
- B. Even in designated areas, all operators, must learn and comply with all FAA regulations. It is not Cleveland Metroparks' responsibility to inform, train, or educate the public about the FAA regulations.

References:

Title 14 Code of Federal Regulations

Part 101, Subpart A, §§ 101.1 through 101.7

Part 101, Subpart C, §§ 101.21 through 101.29

[Doc. No. 1580, 28 FR 6721, June 29, 1963, as amended by Amdt. 101-1, 29 FR 46, Jan. 3, 1964; Amdt. 101-3, 35 FR 8213, May 26, 1970; Amdt. 101-8, 73 FR 73781, Dec. 4, 2008; 74 FR 38092, July 31, 2009; Amdt. 101-9, 81 FR 42208, June 28, 2016; Amdt. Nos. 101-10, 85 FR 79826, Dec. 11, 2020] [Doc. No. FAA-2007-27390, 73 FR 73781, Dec. 4, 2008, as amended at Doc. No. FAA-2007-27390, 74 FR 31843, July 6, 2009]

Chapter 743 of the Cleveland Metroparks Regulations



Chief Executive Officer

3.21.22

Approval Date

