MODEL ROCKETS

Act 333 of 1965

AN ACT to regulate the use of model rockets.

History: 1965, Act 333, Imd. Eff. July 23, 1965

The People of the State of Michigan enact:

259.781 Model rockets; definitions.

Sec. 1.

As used in this act:

(a) "Model rocket" means an aero-model that ascends into the air without use of aerodynamic lifting forces against gravity and is propelled by means of a model rocket engine.

(b) "Model rocket engine" or "engine" means a device or combination of devices which provide the necessary force or motive power to cause the model rocket to move through the air.

History: 1965, Act 333, Imd. Eff. July 23, 1965

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259.782 Inapplicability of act to certain activities.

Sec. 2.

This act does not apply to the design, construction, production, maintenance, launch, flight, test, operation or use of, or any other activity in connection with a model rocket or model rocket engine, when carried on or engaged in by (a) the United States or this state, (b) a college, university or other institution of higher education, or (c) an individual or an entity engaged in research, development or production of rockets, rocket engines or propellants, or components thereof, as a business.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.783 Model rockets; requirements prior to launch, operation and flight.

Sec. 3.

A model rocket shall comply with the following requirements prior to its launch, operation and flight:

(a) Gross weight, including the model rocket engine, shall not exceed 16 ounces.

(b) No more than 4 ounces of propellant materials shall be contained in a model rocket engine at the moment of launch.

(c) It shall be so constructed as to be capable of repeated flights and shall contain means for retarding descent to the ground so that the structure shall not be substantially damaged and no hazard shall be created to persons and property on the ground.

(d) Construction shall be of wood, plastic, paper, rubber or similar materials and without substantial metal parts.

(e) Design and construction shall include attached surfaces which will provide aerodynamic stabilizing and restoring forces necessary to maintain a substantially true and predictable flight path.

(f) It shall not contain any type of explosive or pyrotechnic warhead.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.784 Model rocket engines; standards.

Sec. 4.

A model rocket engine which supplies the propulsive force for a model rocket shall conform to the following standards:

(a) It shall be a commercially manufactured device or combination of devices wherein all chemical ingredients of a combustible nature are pre-mixed and ready for use.

(b) The force or motive power shall be created by a rearward discharge of gas generated by the combustion or other operation of materials contained solely within the device or combination of devices.

(c) The device or combination of devices shall have been tested by the federal bureau of explosives and shall qualify as a "toy propellant device" under title 18, section 11 of the United States code.

(d) An engine constructed wholly or partly of metal shall be equipped with an adequate blowout disc or other safety release, as an integral part of the engine, for the purpose of preventing rupture of the engine casing in the event of internal over-pressure.

(e) It shall be so designed and constructed as to be incapable of spontaneous ignition or combustion in air, water, under pneumatic or hydraulic pressure, as a result of motion or jarring, when subjected to a temperature of 170 degrees Fahrenheit or less, or in glycerine.

History: 1965, Act 333, Imd. Eff. July 23, 1965

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259.785 Model rockets; location of launch site, standards.

Sec. 5.

A model rocket may be launched, operated and flown only in a location, not otherwise restricted by law, which shall comply with the following minimum standards:

(a) A ground area shall be used containing at least 5,000 square yards and having a general rectangular shape with no side less than 50 yards in length.

(b) Flight areas shall be located in places that will not create a hazard to persons and property in the vicinity of the area.

(c) Flight areas shall not contain or be located adjacent to a high voltage power line, major highway, multi-story building or other obstacle.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.786 Model rockets; launching, conditions.

Sec. 6.

A model rocket may be launched upon compliance with the following conditions:

(a) A device or mechanism shall be used which shall restrict the horizontal motion of the model rocket until sufficient flight velocity shall have been attained for reasonably safe, predictable flight.

(b) Launching or ignition shall be conducted by remote electrical means fully under the control of the person launching the model.

(c) A launching angle of more than 60 degrees from the horizontal shall be used.

(d) At least 1 adult person shall inspect each model rocket before flight and shall supervise the launching of each model rocket.

(e) All persons in the vicinity of the launching shall be advised that a launching is imminent before a model rocket is ignited and launched.

(f) Winds shall be less than 20 miles per hour and visibility shall be greater than 2,000 feet.

(g) A model rocket in flight shall not create a hazard to aircraft.

(h) A model rocket shall not be used as a weapon against ground or air targets.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.787 Model rocket engines; ground testing, conditions.

Sec. 7.

A model rocket engine may be tested on the ground for the purpose of determining performance or may be used as the motive power of an experiment conducted on the ground under the following minimum conditions:

(a) The engine shall be affixed to a testing device or to an immovable structure in such manner that the engine may not become free during the conduct of the test or experiment.

(b) The engine shall be ignited only by remotely operated electrical means fully under the control of the person conducting the test or experiment.

(c) When a test or experiment is conducted indoors, the exhaust from the engine so tested shall be directed into a nonflammable hood or vent which shall lead directly to the outside of the building.

(d) The exhaust path shall be cleared of all inflammable objects prior to the igniting of such engine.

(e) A person who conducts, participates in or observes static or ground testing of a model rocket engine shall stand a safe distance away from the engine, and particularly its exhaust path, at all times during the conduct of the test.

(f) At least 1 adult person shall inspect each engine to be tested and the testing device to be used before the test is conducted.

(g) The conduct of the test or experiment shall be supervised by at least 1 adult person.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.788 Model rockets; activities prohibited.

Sec. 8.

The following activities are prohibited:

(a) The use of a model rocket engine for pyrotechnic purposes or for the primary purpose of producing a spectacular display of color, sound, light or any combination thereof, or in any way contrary to the provisions of this act.

(b) Tampering with or using an engine in any manner or degree contrary to the purpose for which the engine is designed and intended to be used, or contrary to the provisions of this act.

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(c) The ignition of an engine with such instantaneous and violent expansion of gas or relinquishment of energy as to cause rupture of the casing.

(d) The launching, operating, discharging, flying or otherwise activating of a model rocket without first having fully complied with the foregoing provisions of this act.

History: 1965, Act 333, Imd. Eff. July 23, 1965

259.789 Scope of act.

Sec. 9.

Chapter 39 of Act No. 328 of the Public Acts of 1931, as amended, being section 750.243 of the Compiled Laws of 1948, and all other acts and parts of acts inconsistent with the provisions of this act do not apply to the use of model rockets in conformity with the provisions of this act.

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