

WAC 204-68-110 Review of denials of public records requests. (1) Any person who objects to the denial of a request for a public record may petition for prompt review of such decision by tendering a written request for review. The written request shall specifically refer to the written statement by the public records officer or other staff member which constituted or accompanied the denial.

(2) Immediately after receiving a written request for review of a decision denying a public record, the public records officer or other staff member denying the request shall refer it to the chairman of the commission. The chairman shall immediately consider the matter and either affirm or reverse such denial or call a special meeting of the commission as soon as legally possible to review the denial. In any case, the request shall be returned with a final decision within two business days following the original denial.

(3) Administrative remedies shall not be considered exhausted until the commission has returned the petition with a decision or until the close of the second business day following the denial of inspection, whichever comes first. [Statutory Authority: RCW 46.37.005. 79-09-092 (Order 7201A), § 204-68-110, filed 8/31/79.]

WAC 204-68-120 Protection of public records. Requests for public records shall be made to the Washington state commission on equipment, General Administration Building AX-12, Olympia, Washington 98504. Public records and a facility for their inspection and/or copying will be provided by the public records officer of the commission. Such records or documents shall not be removed from the place designated for their inspection and all records will be reviewed under the supervision of the public records officer or his designee. [Statutory Authority: RCW 46.37.005. 79-09-092 (Order 7201A), § 204-68-120, filed 8/31/79.]

WAC 204-68-130 Request for information. All communication with the commission, including but not limited to the submission of materials pertaining to its operations and/or the administration or enforcement of chapter 42.17 RCW, and these rules, requests for copies of the commission's decisions, and other matters, shall be addressed as follows: Secretary, Commission on Equipment, General Administration Building AX-12, Olympia, Washington 98504. [Statutory Authority: RCW 46.37.005. 79-09-092 (Order 7201A), § 204-68-130, filed 8/31/79.]

WAC 204-68-140 Adoption of form. The commission hereby adopts for use by all persons requesting inspection and/or copying, or copies of its records, the following form entitled, "Request for Public Record":

REQUEST FOR PUBLIC RECORD

Date ----- Time -----  
Name -----  
Address -----

Nature or Description of Record:

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I certify that the information obtained through this request for public record will not be used for commercial purposes.

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Signature [Statutory Authority: RCW 46.37.005. 79-09-092 (Order 7201A), § 204-68-140, filed 8/31/79.]

Title 212 WAC  
STATE FIRE MARSHAL

- Chapter 212-02 Description of fire marshal's office--Organization, operations, obtaining information.
- 212-20 Model and experimental rocketry.

Chapter 212-02 WAC  
DESCRIPTION OF FIRE MARSHAL'S OFFICE--  
ORGANIZATION, OPERATIONS, OBTAINING  
INFORMATION

- WAC 212-02-020 Organization and operations.
- 212-02-030 Functions.

WAC 212-02-020 Organization and operations. (1) Administration. The administrative staff and technical specialists are situated on the capitol campus in Olympia. The majority of the staff is assigned to specific functions and is situated at various locations throughout the state, but under the direction of the administrative division.

(2) Health care inspection division. A supervisor, clerical help and a team of deputy fire marshals are assigned to work directly with department of social and health services in fulfilling the fire marshal's responsibilities in inspecting and approving all hospitals, nursing homes, boarding homes, maternity homes, and facilities treating mental illness or inebriacy prior to licensing by the state. This team operates from offices within the department of social and health services in Olympia, Seattle and Spokane. Their primary duty is the inspection, at least annually, of all the aforementioned licensed facilities and issuing approvals or disapprovals for future operation. Facilities not approved must make the necessary corrections or risk denial, revocation or suspension of their license to operate. Secondary duties of this team includes training facility staffs in fire prevention and fire

emergency procedures and the investigation of fires in the facilities to determine the effectiveness of fire-safety features, proficiency of the staff and evaluation of the fire prevention efforts of both the facility and the state.

Also assigned to work directly with the department of social and health services in their Olympia office is a plan review team, which reviews all plans for new construction or major remodeling of licensed facilities and makes field inspections at the construction site to insure compliance. This function is performed under a contract with the department of social and health services, rather than a statutory responsibility on the part of the fire marshal.

(3) **Residential inspection division.** A supervisor, clerical help and a team of deputy fire marshals operate out of offices in Olympia, Seattle and Spokane and work in close association with the department of social and health services in the inspection and approval for licensing of facilities encompassing several categories of full time and part time care of children, and transient accommodations. The primary duties of this team is the inspection or coordination of local inspections for the purpose of issuing approvals or disapprovals for licensing by the state. Secondary duties include fire prevention and fire investigation, in the same manner as the health care team.

(4) **Fire investigation division.** A team of deputy fire marshals operate from combination insurance commissioner/fire marshal offices in Olympia, Mount Vernon, Vancouver, Yakima, Richland and Spokane. Their primary function is the investigation of fires of criminal, suspected or undetermined origin, as reported by fire departments, police departments or insurance adjusters. Results of such investigations are referred to local prosecuting attorneys. Secondary duties include assisting in the enforcement of local fire codes, responding to complaints, answering inquiries and public education in fire-related matters. Seasonal duties also include inspections and enforcement of the fireworks law.

(5) **Technical assistance.** Specialists in fire prevention, building design, pyrotechnics, codes and related matters are maintained in the administrative office in Olympia to provide assistance to the other deputies and local officials in technical fire-related matters. [Statutory Authority: Chapter 34.04 RCW, 78-04-076 (Order FM-78-1), § 212-02-020, filed 4/4/78; Order FM-77-1, § 212-02-020, filed 11/17/77; Order FMR-68-3, § 212-02-020, filed 8/23/68, effective 9/23/68.]

**WAC 212-02-030 Functions.** (1) The licensing function involves the adoption of recognized standards applicable to each category or licensed facility and the inspection prior to licensing to insure compliance. Where local officials are qualified and agreeable, they may make the inspections on behalf of the fire marshal. The specific requirements and manner of enforcement are covered in detail in other regulations.

(2) The fire investigation function involves all deputy fire marshals in varying degrees and for different specific purposes. Deputies assigned to inspection teams investigate fires in those specific facilities to evaluate the

effectiveness/ineffectiveness of the regulations and to prevent future similar occurrences.

The fire investigation division concentrates primarily on those fires which cannot be definitely determined to be accidental by the local investigator. Where criminality can be established, the deputy works directly with the local law enforcement agency in developing sufficient factual evidence for prosecution.

With the advent of recent legislation mandating the investigation of all fires by each city, town and county to determine the cause, origin and circumstances, the role of the fire marshal has become that of a technical specialist, assisting local investigators when requested, and monitoring the effectiveness of fire investigations in general. The fire marshal assigns all fires of criminal, suspected or undetermined origin reported or made known to him to the fire investigation division for follow-up. Assistance may or may not be provided, in accordance with local needs. Deputies follow these fires through the investigation and prosecution phases in order to establish state-wide statistics and ascertain other factors which will produce better results.

Another important function in fire investigation is that of establishing responsibility for noncriminal fires. Negligence, product liability and design deficiencies play a key role in fire cause and spread. The fire marshal attempts to document these factors with sufficient certainty to allow recovery by innocent victims and establish the need and justification for additional standards by industry or regulatory agencies.

The ultimate failure in any fire is where serious injury or death results. The fire marshal attempts to expend special effort in the investigation of these fires to accurately determine not only the cause of the fire but the reason the victims were unable to escape unharmed.

(3) The fireworks function involves the administration of the fireworks law, including the regulation of fireworks and the licensing of manufacturers, wholesalers, retailers, importers/exporters, public displays, and pyrotechnic operators. Included in this general function but the subject of separate rules, is the regulation of model and experimental rocketry.

(4) Local support, assistance. Recent legislation established building and fire codes in each city, town and county and mandated enforcement at the local level. This responsibility was new to many municipalities and an increasingly greater amount of the fire marshal's time and effort is being directed toward assisting the smaller towns and counties in fulfilling this responsibility through training, advice and assistance.

(5) Public education. The fire marshal is committed to the principle that more can be accomplished in the furtherance of fire prevention through education than by enforcement or regulation. An informed populace will voluntarily comply with the majority of fire safety standards, which are based on common sense and experience. The mandated responsibilities of the fire marshal must be accomplished first with the discretionary functions, such as public education, limited to the time and resources available. By a greater involvement of local officials in performing some of the duties required of the

fire marshal, more time and resources are available to, in turn, assist these same officials in public education efforts.

(6) Other functions. The fire marshal serves as a source of information and advice to all levels of government, business, industry and the general public. The headquarters and zone offices are staffed with full time clerical persons to receive telephone, mail and personal inquiries. The deputies and the technical specialists are qualified to answer questions on most all inquiries involving fire and life safety, regulations, etc. A substantial part of the fire marshal's time is involved in this activity. [Statutory Authority: Chapter 34.04 RCW. 78-04-076 (Order FM-78-1), § 212-02-030, filed 4/4/78; Order FM-77-1, § 212-02-030, filed 11/17/77; Order FMR-68-3, § 212-02-030, filed 8/23/68, effective 9/23/68.]

Chapter 212-20 WAC

MODEL AND EXPERIMENTAL ROCKETRY

WAC

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- 212-20-010 Definitions.
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- 212-20-020 Repealed.
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- 212-20-030 Repealed.
- 212-20-035 Application—Rocket launching.
- 212-20-040 Repealed.
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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 212-20-020 Licenses, permits, and fees. [Regulation IV, V, VI, and VIII, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-030 Supervision. [Regulations II, III, IX, and XI, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-040 Model rocket engines—Sale, consignment, and shipment. [Regulation VII, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-050 Launching site procedures. [Regulation X, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-060 Public view. [Regulation XII, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-070 Necessity of complying with rules of aeronautics commission. [Regulation XIII, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).
- 212-20-080 Penalties. [Regulation XIV, filed 8/6/63.] Repealed by 79-09-012 (Order FM-79-1), filed 8/8/79. Statutory Authority: RCW 70.77.250(3)(a).

**WAC 212-20-001 Declaration of intent.** The intent of this regulation is to provide permissive, instructional guidelines and standards for the design, construction, limitation of charge and power, and reliability of unmanned rocket engines manufactured for sale; for the design and construction of unmanned rockets propelled by these rocket engines; for the conduct of launchings, tests and other operations involving unmanned rockets; and to prohibit the making and launching of dangerous, homemade rocket devices or the experimentation with explosive rocket fuels. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-001, filed 8/8/79.]

**WAC 212-20-010 Definitions.** For the purposes of this regulation, the following terms shall be defined as follows:

- (1) "Aero model" shall mean a miniature, unmanned replica of a flying device and includes the category of model rocket, as defined elsewhere in this regulation.
- (2) "Cold propellant rocket motor" shall mean a rocket motor which produces force or thrust by change

of state of the substance contained, i.e., not by a process involving combustion.

(3) "Hybrid rocket motor" shall mean a rocket motor in which the fuel is in a different physical state (solid, liquid or gaseous) than the oxidizer and which derives its force or thrust from the combination thereof.

(4) "Liquid propellant rocket motor" shall mean a rocket motor which contains a fuel and an oxidizer in liquid form or in a combined monopropellant liquid form as a single chemical and which derives its force or thrust from the combustion thereof.

(5) "Model rocket" shall mean a rocket that is propelled by a model rocket motor, that contains a device for returning it to the ground in a condition to fly again, whose structural parts are made of paper, wood or breakable plastic and containing no substantial metal parts, except cold propellant rocket motors, and whose primary use is for purposes of education, recreation, and sporting competition.

(6) "Model rocket motor" shall mean a solid propellant, cold propellant, or pressurized liquid rocket motor that conforms to the standards for rocket motors as set forth in this regulation.

(7) "Pressurized liquid rocket motor" shall mean a rocket motor that derives its force or thrust from a liquid expelled from the rocket motor by pressurized gas and involving no combustion or change of state.

(8) "Rocket" shall mean a device which ascends into the air without use of aerodynamic lifting forces acting against gravity and which is propelled by a rocket motor.

(9) "Rocket engine" shall mean the same as rocket motor.

(10) "Rocket motor" shall mean a device, or combination of devices, that provides the necessary force or thrust to cause a rocket to move. The force or thrust shall be created by the discharge of gas generated by combustion, decomposition, change of state, or other operation of materials contained, carried, or stored solely within said rocket motor or rocket and not dependent upon the outside environment for reaction mass.

(11) "Rocket vehicle" shall mean the same as rocket.

(12) "Skyrocket or rockets with sticks" shall mean commercially manufactured fireworks rockets not intended for reuse and which have been classified as Class B or Class C fireworks in accordance with U.S. Department of Transportation regulations, Code of Federal Regulations, Title 49, Part 173.

(13) "Solid propellant rocket motor" shall mean a rocket motor containing a fuel and an oxidizer in solid form and which derives its force or thrust from the combustion thereof.

(14) "Steam rocket motor" shall mean a rocket motor which produces its force or thrust by means of steam carried or stored within the rocket motor or rocket vehicle or produced in the rocket motor or rocket vehicle by the heating of water therein.

(15) "Thrust augmenter" shall mean a device for increasing the force or motive power of a rocket motor by imparting a portion of the momentum of the rocket motor's exhaust jet to the surrounding environmental medium, and is considered to be a part of a rocket motor

when and where used. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-010, filed 8/8/79; Section I, filed 8/6/63.]

**WAC 212-20-015 Application--Rocket motors.**

This regulation shall apply to the design, construction, limitation of propellant mass and power, and reliability of all rocket motors, other than fireworks rockets, produced commercially for sale to and/or use by the public for purposes of education, recreation and sporting competition. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-015, filed 8/8/79.]

**WAC 212-20-020 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-025 Application--Rocket vehicles.**

This regulation shall also apply to the design and construction of rocket vehicles propelled by rocket motors. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-025, filed 8/8/79.]

**WAC 212-20-030 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-035 Application--Rocket launching.**

This regulation shall also apply to the conduct of launch operations of rocket vehicles. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-035, filed 8/8/79.]

**WAC 212-20-040 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-045 Application--Exempt activities.**

This regulation shall not apply to the design, construction, production, manufacture, fabrication, maintenance, launching, flight, test, operation, use, or other activity in connection with a rocket or rocket motor when carried out or engaged in by:

- (1) The government of the United States of America;
- (2) Any state or local government;
- (3) Any individual, firm, partnership, joint venture, corporation, or other business entity engaged, as a licensed business, in research, development, production, test, maintenance, or supply of rockets, rocket motors, rocket propellant chemicals, or rocket components or parts;

(4) Any college or university. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-045, filed 8/8/79.]

**WAC 212-20-050 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-055 Application--Exempt model aircraft.** This regulation shall not apply to the design, construction, fabrication, production, manufacture, maintenance, launching, flight, test, operation, or use of rocket-propelled model aircraft which sustain their mass

against the force of gravity by aerodynamic lifting surfaces that support the aircraft during the entire duration of their flight in the air or to the rocket motors which provide the propulsion for such model aircraft. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-055, filed 8/8/79.]

**WAC 212-20-060 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-065 Application--Exempt toy rockets.** This regulation shall not apply to model or toy rockets propelled by pressurized liquid rocket motors containing less than 250 milliliters (8.45 liquid ounces) of water. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-065, filed 8/8/79.]

**WAC 212-20-070 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-075 Application--Exempt fireworks.** This regulation shall not apply to skyrockets, rockets with sticks, and other fireworks rockets as defined elsewhere in this regulation. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-075, filed 8/8/79.]

**WAC 212-20-080 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 212-20-085 Purpose--Availability.** The purpose of this regulation is to insure the wide and easy availability of commercial model rocket motors that meet standards of safety and reliability, thereby insuring that the creative and experimental urges of the public regarding rocket devices has reasonably safe outlets. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-085, filed 8/8/79.]

**WAC 212-20-090 Purpose--Prohibited rockets.** The purpose of this code shall also be to prohibit the making and launching of homemade rockets and other rocketlike vehicles propelled or intended to be propelled by homemade rocket propulsion devices. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-090, filed 8/8/79.]

**WAC 212-20-095 Purpose--Prohibited propellants.** The purpose of this regulation shall also be to prohibit experiments with explosive or highly energetic rocket propellants, construction of homemade rocket propulsion motors, and attempted launchings or operations of these homemade rocket devices, thereby minimizing tragic deaths and injuries. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-095, filed 8/8/79.]

**WAC 212-20-100 Rocket construction and operation.** A rocket shall at all times comply with the requirements of construction and operation as set forth in

Section 307, 72 Statute 749, 49 U.S. Code 1348, "Air-space Control and Facilities"; Federal Aviation Act of 1958 covering Federal Aviation Regulations, Part 101, Subpart A, pp. 101.1, (a)(3)(ii)(a) through (d), or later revisions or amendments thereto. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-100, filed 8/8/79.]

**WAC 212-20-200 Solid propellant rocket motors--General.** A solid propellant rocket motor shall be a device produced by a commercial manufacturer and shall have all of the propellant preloaded into the motor casing in such a manner that they cannot be removed without destroying the motor. Delay trains and ejection charges may be included as an integral part of the motor or may be preloaded and packaged separately if (1) the auxiliary package is a single preassembled unit containing all of the remaining combustible material, and (2) the auxiliary package is so designed that an individual would have no difficulty handling and using it safely. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-200, filed 8/8/79.]

**WAC 212-20-205 Solid propellant rocket motors--Casing material.** A solid propellant rocket motor casing shall be made of nonmetallic material of low thermal conductivity such that the temperature of the external surface of the motor casing cannot exceed 150 degrees C. (302 degrees F.) during or after operation. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-205, filed 8/8/79.]

**WAC 212-20-210 Solid propellant rocket motors--Casing design.** A solid propellant motor casing shall be so designed and constructed that it will not fragment if it should rupture. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-210, filed 8/8/79.]

**WAC 212-20-215 Solid propellant rocket motors--Incapable of spontaneous ignition.** A solid propellant rocket motor shall be so designed and constructed as to be incapable of spontaneous ignition in air, in water, as a result of physical shocks, jarring, impacts, or motion under conditions that would reasonably be expected to occur during shipment, storage, and use, or when subjected to a temperature of 80 degrees C. (176 degrees F.) or less. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-215, filed 8/8/79.]

**WAC 212-20-220 Solid propellant rocket motors--Propellant.** A solid propellant rocket motor shall contain not more than 62.5 grams (2.2 ounces) of propellant materials and shall produce less than 80 Newton-seconds (17.92 pound-seconds) of total impulse with a thrust duration of not less than 50 milliseconds (0.050 seconds). [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-220, filed 8/8/79.]

**WAC 212-20-225 Solid propellant rocket motors—Manufacturer sampling.** A manufacturer of solid propellant rocket motors shall subject a random sample of one percent of each motor production lot to a static test which shall measure and record the rocket motor thrust, duration, thrust-time profile, delay time, and action of the ejection charge if included. Solid propellant rocket motor lots shall be corrected or destroyed by the manufacturer under any of the following conditions:

(1) The total impulse of any test item departs more than twenty percent from the established mean total impulse value of the rocket motor type;

(2) The time delay of any test item departs more than twenty percent from the established mean time delay value of the rocket motor type, but in no case shall this variation exceed three seconds;

(3) The ejection charge, if any, of any test item does not function properly;

(4) If any test item malfunctions in any other manner that effects the safety of its shipment, storage, handling, or use. Static tests shall be conducted with the test items at ambient temperature. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-225, filed 8/8/79.]

**WAC 212-20-230 Solid propellant rocket motors—Manufacturer dating.** A solid propellant rocket motor type whose performance deviates from the sample test criteria and performance limits detailed above within one year from the date of manufacture shall be withdrawn from commercial sale and redesigned to provide reliable operation when ignited within a period of one year from the date of manufacture. All solid propellant rocket motors shall have imprinted upon the exterior surface of their motor casing the date of manufacture or equivalent coding. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-230, filed 8/8/79.]

**WAC 212-20-235 Solid propellant rocket motors—Safe shipment.** A solid propellant rocket motor shall be shipped and stored with no ignition element installed that can be activated by an open flame at a temperature of less than 150 degrees C. (302 degrees F.), or by incident radio frequency radiation normally encountered in shipping, storage, handling, or use. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-235, filed 8/8/79.]

**WAC 212-20-240 Solid propellant rocket motors—Flame ignition prohibited.** No manufacturer, distributor, or other person shall sell, expose for sale, or otherwise make available to the public any type of rocket motor ignition device that is intended to be initiated by a hand-held flame. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-240, filed 8/8/79.]

**WAC 212-20-245 Solid propellant rocket motors—Instructions.** A solid propellant rocket motor shall be

shipped and sold with complete instructions for its storage, handling, and use. These instructions shall contain a warning to read and follow all instructions carefully and to use the rocket motor only in accordance with instructions. In addition, the instructions shall contain the following information:

(1) How to safely ignite the rocket motor by electrical means;

(2) Performance data on the rocket motor type to include propellant weight, total impulse, average thrust, time delay, and representative thrust-time curve;

(3) Any special first aid data or action to be taken in the event of burns or oral ingestion of the propellant;

(4) Proper and safe disposal of the rocket motor if it has become too old, been subjected to conditions that may impair its performance or, in the opinion of the user, may have become unsafe;

(5) Any special action that must be taken to fight any fire in which stored rocket motors may be involved. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-245, filed 8/8/79.]

**WAC 212-20-250 Solid propellant rocket motors—Sealing.** A solid propellant rocket motor containing more than 25 grams (0.88 ounces) of propellant material shall be sealed at the factory with a nonflammable, nonmetallic seal over the nozzle end and over the forward end. The seals shall be readily removable by the user unless the motor is designed to function with the seals in place. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-250, filed 8/8/79.]

**WAC 212-20-305 Cold propellant rocket motors—Sold assembled.** A cold propellant rocket motor shall be sold as a completely prefabricated assembled device ready for attachment to a rocket vehicle and ready for the user to fill with cold propellant material. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-305, filed 8/8/79.]

**WAC 212-20-310 Cold propellant rocket motors—Propellant.** A cold propellant rocket motor shall use dichlorodifluoromethane (Fluorocarbon - 12) as a propellant. This cold propellant material shall be shipped, stored, sold and made available separately from the rocket motor and shall be transferred to the rocket motor only after the rocket motor and rocket vehicle to be propelled by the motor is on a launching device and/or otherwise ready for operation. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-310, filed 8/8/79.]

**WAC 212-20-315 Cold propellant rocket motors—Working pressures.** A cold propellant rocket motor shall be designed for a working internal pressure not greater than 7 atmospheres gauge (103 psig or 7.231 kilograms per square centimeter) and shall be equipped with a nonadjustable, nonremovable safety valve or pressure release means that will operate when the internal pressure exceeds 10 atmospheres gauge (147 psig or 10.33 kilograms per square centimeter). The cold propellant



rocket motor casing shall be so designed and constructed that it possesses a minimum burst pressure of 20 atmospheres gauge (294 psig or 20.66 kilograms per square centimeter). [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-315, filed 8/8/79.]

**WAC 212-20-320 Cold propellant rocket motors--Construction materials.** Materials used in the construction of a cold propellant rocket motor shall not be adversely effected by the cold propellant material; aluminum alloy may be used for major structural components of a cold propellant rocket motor in order to satisfy this requirement. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-320, filed 8/8/79.]

**WAC 212-20-405 Pressurized liquid rocket motors--Sold assembled.** A pressurized liquid rocket motor shall be sold as a completely prefabricated, assembled device ready for the user to fill, pressurize, and use. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-405, filed 8/8/79.]

**WAC 212-20-410 Pressurized liquid rocket motors--Nontoxic propellant.** A pressurized liquid rocket motor shall use water in the liquid state or other nontoxic liquid as a propellant or reaction mass. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-410, filed 8/8/79.]

**WAC 212-20-415 Pressurized liquid rocket motors--Working pressures.** A pressurized liquid rocket motor shall be designed for an internal working pressure not greater than 7 atmospheres gauge (103 psig or 7.231 kilograms per square centimeter) and shall be equipped with a nonadjustable, nonremovable safety valve or pressure release means that will operate when the internal pressure exceeds 10 atmospheres gauge (147 psig or 10.33 kilograms per square centimeter). The pressurized liquid rocket motor casing shall be designed and constructed to possess a minimum burst pressure of 20 atmospheres gauge (294 psig or 20.66 kilograms per square centimeter). [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-415, filed 8/8/79.]

**WAC 212-20-420 Pressurized liquid rocket motors--Shipped empty.** A pressurized liquid rocket motor shall be shipped and stored with no propellant material inside it and vented to atmospheric pressure. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-420, filed 8/8/79.]

**WAC 212-20-425 Pressurized liquid rocket motors--Pressurizing.** The pressure used by a pressurized liquid rocket motor shall be either generated or produced by a pressure source such as a pump outside the rocket motor or generated by the noncombustible chemical reaction of chemicals within the rocket motor or rocket vehicle. [Statutory Authority: RCW

70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-425, filed 8/8/79.]

**WAC 212-20-430 Pressurized liquid rocket motors--Construction materials.** Materials used in the construction or fabrication of a pressurized liquid rocket motor shall be nonmetallic. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-430, filed 8/8/79.]

**WAC 212-20-500 Nationally recognized testing labs, associations.** Model rocket motor types offered for sale, sold, used, or made available to the public shall be examined and tested by a nationally recognized testing laboratory or an organization such as the National Association of Rocketry or its successor organization affiliated with the National Aeronautic Association (the national aeronautical club of the United States of America having jurisdiction over the sporting and competitive aspects of model rocketry as the United States representative to the Federation Aeronautique Internationale). Only those rocket motor types tested and certified by the testing laboratory or association as meeting the requirements of this regulation shall be sold, offered for sale, exposed for sale, or otherwise made available to the public. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-500, filed 8/8/79.]

**WAC 212-20-600 Use of rocket motors for spectacular display.** The use of rocket motors for the primary purpose of producing a spectacular display of color, light, sound or any combination thereof is prohibited. This shall not prohibit the public demonstration of model rockets done in accordance with the provisions of this regulation, the launch site dimensions and provisions of the National Fire Protection Association's Code 1122L, and the Model Rocket Safety Code of the National Association of Rocketry-Hobby Industry Association of America. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-600, filed 8/8/79.]

**WAC 212-20-605 Use of rocket or rocket motor as a weapon.** The use of a rocket or rocket motor as a weapon against a target is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-605, filed 8/8/79.]

**WAC 212-20-610 Use of rocket motor contrary to federal aviation agency regulations.** The use of a rocket motor contrary to the instructions for its use and contrary to the provisions of Federal Air Regulations Part 101.1(a)(3)(ii) is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-610, filed 8/8/79.]

**WAC 212-20-615 Tampering with rocket motor.** Tampering with any rocket motor in any manner or degree which is contrary to the purpose for which said rocket motor is designed and intended to be used is prohibited. [Statutory Authority: RCW 70.77.250(3)(a).

79-09-012 (Order FM-79-1), § 212-20-615, filed 8/8/79.]

**WAC 212-20-620 Sale of noncomplying rocket motors.** The sale, offering for sale, exposing for sale or otherwise making available to the public any rocket motor that does not comply with the requirements of this regulation and has not been tested and so certified is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-620, filed 8/8/79.]

**WAC 212-20-625 Operation of rockets contrary to federal aviation agency regulations.** The operation, discharge or activation of a rocket contrary to the provisions of federal air regulations is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-625, filed 8/8/79.]

**WAC 212-20-630 Use of noncomplying rockets.** The manufacture, production, fabrication, making, operation, maintenance, launch, flight, test, activation, discharge or other experimentation with rockets or rocket motors, including but not limited to hybrid rocket motors, liquid propellant rocket motors, steam rocket motors, rocket propellant chemicals for solid, liquid, and hybrid rocket motors including monopropellants, not in compliance with this regulation, is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-630, filed 8/8/79.]

**WAC 212-20-635 Sale or use of hand-held igniters.** The sale, offering for sale, exposing for sale, making, or using of fuse, wick, or other ignition devices intended to be activated by a hand-held flame for the purpose of starting or igniting a rocket motor is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-635, filed 8/8/79.]

**WAC 212-20-640 False certification.** Affixing to a rocket motor a statement of compliance with this regulation or a statement of certification by a nationally-recognized testing laboratory or association, or writing in advertising or on the package that certification has been obtained, when such certification has not been obtained, has been withdrawn, or has been denied, is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-640, filed 8/8/79.]

**WAC 212-20-645 Reloading solid propellant rocket motor.** Reloading any solid propellant rocket motor with any material, once said motor has been operated, is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-645, filed 8/8/79.]

**WAC 212-20-650 Refilling cold propellant rocket motor.** Reloading or refilling any cold propellant rocket motor with any material not specifically recommended or made available by the manufacturer is prohibited.

[Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-650, filed 8/8/79.]

**WAC 212-20-655 Refilling pressurized liquid rocket motor.** Reloading, refilling or pressurizing any pressurized liquid rocket motor with any material or by any means not specifically provided or recommended by the manufacturer is prohibited. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-655, filed 8/8/79.]

**WAC 212-20-660 Permits.** The storage of more than 100 kilograms (220 pounds) of solid propellant model rocket motors and/or the launching of any rocket shall be subject to the permit requirements, if any, of the local authority having jurisdiction. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-660, filed 8/8/79.]

**WAC 212-20-665 Penalty.** Violation of any provision of this regulation shall be deemed a misdemeanor, and upon conviction, shall be punishable as such. [Statutory Authority: RCW 70.77.250(3)(a). 79-09-012 (Order FM-79-1), § 212-20-665, filed 8/8/79.]

**WAC 212-20-990 Appendix--Supplementary information.** (This appendix is not a part of the regulation but is included for information purposes only.)

(1) Excerpt from Section 307, 72 Statute 749, 49 United States Code 1348, "Airspace Control and Facilities," Federal Aviation Act of 1958 covering Federal Air Regulations, Part 101, Subpart A, Part 101.1 (a)(3)(iii):  
"The Part prescribes rules governing the operation in the United States of the following: . . .

- (3) Any unmanned rocket except . . .
- (ii) Model rockets
  - (a) Using not more than four ounces of propellant;
  - (b) Using a slow-burning propellant;
  - (c) Made of paper, wood or breakable plastic, containing no substantial metal parts, and weighing not more than sixteen ounces, including the propellant; and
  - (d) Operated in a manner that does not create a hazard to persons, property or other aircraft."

NOTE: By waiver letter dated December 27, 1968, the Federal Aviation Agency exempted cold propellant model rockets from the nonmetallic provisions of FAR 101(a)(3)(ii)(c) above.

(2) Model Rocketry Safety Code of the National Association of Rocketry-Hobby Industry Association of America.

#### Solid Propellant.

1. Construction - My model rockets will be made of lightweight materials such as paper, wood, plastic, and rubber without any metal as structural parts.

2. Engines - I will use only preloaded factory-made model rocket engines in the manner recommended by the manufacturer.

3. Recovery - I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.



4. **Weight Limits** – My model rockets will weigh no more than 453 grams (16 ounces) at lift-off, and the engines will contain no more than 113 grams (4 ounces) of propellant.

5. **Stability** – I will check the stability of my model rockets before their first flight, except when launching models of already proven stability.

6. **Launching System** – The system I use to launch my model rockets must be remotely controlled and electrically operated, and will contain a switch that will return to "off" when released. I will remain at least 15 feet away from any rocket that is being launched.

7. **Launch Safety** – I will not let anyone approach a model rocket on a launcher until I have made sure either the safety interlock key has been removed or the battery has been disconnected from my launcher.

8. **Flying Conditions** – I will not launch my model rockets in high winds, near buildings, power lines, tall trees, low-flying aircraft, or under any conditions that might be dangerous to people or property.

9. **Launch Area** – My model rockets will always be launched from a cleared area, free of any easy-to-burn materials, and I will use only nonflammable recovery wadding in my rockets.

10. **Jet Deflector** – My launcher will have a jet deflector device to prevent the engine exhaust from hitting the ground directly.

11. **Launch Rod** – To prevent accidental eye injury, I will always place the launcher so the end of the rod is above eye level, or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use, I will always store it so that the launch rod is not in an upright position.

12. **Power Lines** – I will never attempt to recover my model rocket from a power line or other dangerous place.

13. **Launch Targets and Angle** – I will not launch rockets so their flight path will carry them against targets on the ground, and will never use any explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

14. **Prelaunch Test** – When conducting research activities with unproven designs or methods, I will, when possible, determine their reliability through prelaunch tests. I will conduct launchings of unproven designs in complete isolation.

**Cold Propellant.**

1. **Engines** – I will use only factory-made model rocket engines in the manner recommended by the manufacturer. I will reload rocket engines only with the propellant recommended by the manufacturer.

2. **Recovery** – I will always use a recovery system in my model rockets that will safely return them so they may be used again. I will conduct preflight tests to assure the recovery system functions properly before launching the rocket.

3. **Weight Limits** – My model rockets will weight no more than 453 grams (16 ounces) at lift-off.

4. **Stability** – I will check the stability of my model rockets before their first flight except when launching models of proven design.

5. **Flying Conditions** – I will not launch my model rockets in high winds, near buildings, power lines, tall trees, low-flying aircraft, or under any conditions that might be dangerous to people or property. I will never attempt to recover a model rocket from a power line or other dangerous place.

6. **Launch Rod** – To prevent accidental eye injury, I will always place the launcher so the end of the rod is above eye level, or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use, I will always store it so that the launch rod is not in an upright position.

7. **Launch Targets and Angle** – I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

8. **Loaded Rockets** – I will never store or leave a loaded rocket untended. I will always keep a loaded rocket on a launcher or firmly restrained. I will never point a loaded rocket or its rocket nozzle at anyone, nor allow anyone to be in the flight path of a rocket during flight preparations.

9. **Construction** – I will never use metal nose cones or metal fins.

**NOTE:** This NAR-HIAA Model Rocket Safety Code is included as an Appendix to provide the local authority having jurisdiction with guidelines as to nationally accepted safety practices so that the public may be advised concerning them if desired. Copies of this NAR-HIAA Safety Code are voluntarily included in every model rocket kit by the model rocket manufacturer members of the HIAA.

**(3) Suggested Launch Site Dimensions and Provisions.**

**NOTE:** These launching site dimensions and provisions are included as an Appendix to provide the local authority having jurisdiction and the interested public with a guideline concerning recommended, but not required, conditions for flying model rockets of the type permitted by this regulation.

**Launch Site Dimensions**

Type Motor	Total Impulse (N-sec)	Max. Recommended Model Weight (ounces)	Max. Recommended Time Delay (seconds)*	Minimum Site Dimensions (feet)
1/4A & 1/2A	0-1.25	3	2	50
A	1.26-2.50	4	3	100
B	2.56-5.00	6	2	200
C	5.01-10	6	3	400
D	10.01-20	13	3	500

**Launch Site Dimensions**

Type Motor	Total Impulse (N-sec)	Max. Recommended Model Weight (ounces)	Max. Recommended Time Delay (seconds)*	Minimum Site Dimensions (feet)
E	20.01-40	16	4	1000
F	40.01-80	16	4	1000

\*Maximum time delay for maximum model weight shown. Add one second of time delay for each ounce less than the maximum recommended model weight shown.

**Launch Times:** Models should be launched only during hours of daylight.

**Recovery Wadding:** The recovery device protective material (wadding) ejected from the model during the flight sequence when the recovery device is deployed, should be of a flame-resistant material.

**Launch Site Conditions:** The area for a radius of five feet around the launching device should be clear of dry grass or other flammable substances. It is recommended that the launch device be set atop a flame-resistant tarpaulin or canvas sheet if the launch area is grass covered. The launch site should not be located in a grain field or forested land. [Statutory Authority: RCW 70.77.250(3)(a), 79-09-012 (Order FM-79-1), § 212-20-990, filed 8/8/79.]

**Title 220 WAC  
FISHERIES, DEPARTMENT OF**

**Chapters**

- 220-16 Definitions.
- 220-20 General provisions.
- 220-22 Management and catch reporting areas.
- 220-24 Pacific Ocean waters.
- 220-36 Grays Harbor.
- 220-40 Willapa Harbor.
- 220-44 Coastal waters.
- 220-47 Puget Sound--Salmon.
- 220-48 Puget Sound--Fish other than salmon.
- 220-49 Puget Sound commercial bait fish.
- 220-52 Shellfish.
- 220-55 Personal-use licenses.
- 220-56 Personal use fishery.
- 220-57 Fresh water angling--Open areas and seasons.
- 220-57A Fresh water lakes.
- 220-69 Fish receiving tickets--Weight delivery sheets.
- 220-74 Surplus salmon eggs.
- 220-85 Commercial salmon license moratorium advisory review board regulations.
- 220-95 Commercial fishing gear reduction program.
- 220-100 State Environmental Policy Act rules.
- 220-105 Salmon angling license regulations.

**Chapter 220-16 WAC**

**DEFINITIONS**

**WAC**

- 220-16-025 Definitions--Brush weir.
- 220-16-028 Definitions--Dip bag net.
- 220-16-050 Repealed.
- 220-16-051 Definitions--Hand line jig.
- 220-16-060 Repealed.
- 220-16-070 Definitions--Otter trawl.
- 220-16-340 General definitions--Bottomfish.

**DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER**

- 220-16-050 Definitions--Hand line. [Order 810, § 220-16-050, filed 4/17/69. Formerly WAC 220-16-010 (part).] Repealed by 79-03-014 (Order 79-11), filed 2/15/79. Statutory Authority: RCW 75.08.080.
- 220-16-060 Definitions--Jigger. [Order 810, § 220-16-060, filed 4/17/69. Formerly WAC 220-16-010 (part).] Repealed by 79-03-014 (Order 79-11), filed 2/15/79. Statutory Authority: RCW 75.08.080.

**WAC 220-16-025 Definitions--Brush weir.** "Brush weir" shall be defined as a stationary impounding net constructed on piling, with one lead and not to exceed two hearts, and constructed according to specifications of the director. [Statutory Authority: RCW 75.08.080, 79-03-014 (Order 79-11), § 220-16-025, filed 2/15/79; Order 810, § 220-16-025, filed 4/17/69. Formerly WAC 220-16-010 (part).]

**WAC 220-16-028 Definitions--Dip bag net.** "Dip Bag net" shall be defined as a section of netting distended by a rigid frame operated by a process commonly recognized as dipping. [Statutory Authority: RCW 75.08.080, 79-03-014 (Order 79-11), § 220-16-028, filed 2/15/79; Order 1105, § 220-16-028, filed 12/28/73; Order 810, § 220-16-028, filed 4/17/69. Formerly WAC 220-16-010 (part).]

**WAC 220-16-050 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 220-16-051 Definitions--Hand line jig.** Hand line jig shall be defined, when relating to its use for commercial purposes, as a line or lines to which may be attached not more than three hooks per line. [Statutory Authority: RCW 75.08.080, 79-03-014 (Order 79-11), § 220-16-051, filed 2/15/79.]

**WAC 220-16-060 Repealed.** See Disposition Table at beginning of this chapter.

**WAC 220-16-070 Definitions--Otter trawl.** "Otter trawl" gear shall be defined as a tapered, funnel-shaped net consisting of a forward, intermediate and codend section with floats along the upper edge of the mouth (headrope) and a weighted line (footrope) forming the lower edge thereof. Otter doors or boards are used to spread the mouth of the net horizontally as it is towed. Roller and bobbin gear on a rope attached to the footrope are used as aids to fishing rocky grounds. Telemetry gear consists of a precision net-depth indicating device attached to the door or footrope of the net giving