

DEPARTMENT OF NATURAL RESOURCES

LAW ENFORCEMENT DIVISION

VESSELS CARRYING PASSENGERS FOR HIRE

(By authority conferred on the department of natural resources by sections 3 and 12 of Act No. 228 of the Public Acts of 1965, being SS281.803 and 281.812 of the Michigan Compiled Laws)

PART 1. GENERAL PROVISIONS

R 281.3101 Definitions.

Rule 101. As used in these rules:

(a) "Act" means Act No. 228 of the Public Acts of 1965, being S281.801 et seq. of the Michigan Compiled Laws, or any act successor thereto.

(b) "Auxiliary engine" means any other engine or motor carried or used onboard a vessel, other than the main propulsion engines.

(c) "Class A vessel" means a vessel, except for a sailboat carrying 6 or less passengers for hire, on navigable waters.

(d) "Class B vessel" means a vessel, except for a sailboat carrying 6 or less passengers for hire on inland waters.

(e) "Class C vessel" means a vessel, except for a sailboat carrying more than 6 passengers for hire on inland waters.

(f) "Class D vessel" means a vessel which is propelled primarily by sails and which carries 6 or less passengers for hire on navigable waters or carries passengers for hire on inland waters.

(g) "Daytime" means 1 hour before sunrise to 1 hour after sunset, where the actual times of sunrise and sunset are determined by the United States weather bureau. Times shall be local prevailing time.

(h) "Deck rails" means a guard structure at the outer edge of a vessel deck consisting of vertical solid or tubular posts and horizontal courses made of metal tubing, wood, cable, rope, or other suitable material.

(i) "Department" means the department of natural resources.

(j) "Dockside inspection" means an examination of a vessel when the vessel is moored alongside a dock and afloat in the water so that all of the exterior above the waterline and the interior of the vessel may be examined.

(k) "Drydock inspection" means an examination of a vessel when the vessel is out of the water and supported so that all of the exterior and interior of the vessel may be examined.

(l) "Flexible vibration hose" means nonrigid tubing which is noncombustible or self-extinguishing and which is not affected by the motion of the vessel or the machinery to which it is connected or attached.

(m) "General maintenance" means drydocking or hauling out of a vessel for painting or cleaning the hull and rudder, or the changing of a propeller, propeller shaft, and associated bearings.

(n) "Good marine practice and standards" means those methods and ways of maintaining, operating, equipping, repairing, and restructuring vessels as determined by the marine inspector. The marine inspector shall use commonly accepted standards, including 46 C.F.R. SS1.01 to 552.5, the standards of the American boat and yacht council, and the standards of the boating industry association as sources of reference in making such determinations.

(o) "Inland waters" means all waters of the state, except navigable waters.

(p) "Marine inspector" means a department marine safety officer, conservation officer, or other person employed by the department and trained in vessel inspection and operator testing procedures.

(q) "Navigable waters" means those waters of the state over which the state of Michigan and the United States coast guard exercise joint jurisdiction, including the Great Lakes and waters connected thereto, to the upstream limit of navigation as determined by the United States department of the army, corps of engineers.

(r) "Nighttime" means 1 hour after sunset to 1 hour before sunrise where actual times of sunrise and sunset are determined by the United States weather bureau. Time shall be local prevailing time.

(s) "Open boat" means a vessel, either with or without engines or motors, which has its engine, fuel tank compartments, and other spaces, except weather enclosures, open to the atmosphere and arranged to prevent or preclude the entrapment of explosive or flammable gases and vapors within the vessel.

(t) "Owner" means a person who claims lawful possession of a vessel by virtue of legal title or equitable interest therein which entitles him or her to possession. "Owner" also means a person acting on the behalf of the owner in all matters concerning the vessel.

(u) "Personal flotation device" means a United States coast guard-approved lifesaving device.

(v) "Ring life buoy" means a United States coast guard-approved round or horse collar type IV throwable personal flotation device.

(w) "Suitable" means that the marine inspector has determined that an item is in keeping with good marine practice and standards.

(x) "Weather deck" means those portions of the foredeck and afterdeck which are open and exposed to the weather.

History: 1982 AACCS.

R 281.3102 Applicability.

Rule 102. (1) These rules do not apply to vessels required to be inspected by the United States coast guard, under 46 C.F.R. SS175.01 to 187.30, for the purposes of carrying passengers for hire.

(2) These rules shall apply to all other vessels, as defined in the act, carrying passengers for hire on waters of the state.

History: 1982 AACCS.

R 281.3103 Drydock inspection.

Rule 103. (1) All vessels carrying passengers for hire shall pass an initial drydock inspection conducted by a marine inspector. Thereafter, a vessel shall pass a drydock inspection when the department has reasonable cause to believe it necessary or at intervals not to exceed 60 months.

(2) Before an inspection, the owner of a vessel shall remove or effectively store all associated equipment, including fishing gear, coolers, and personal belongings onboard the vessel, which will impede the inspection process.

(3) The owner of a vessel shall open or remove all hatches and inspection ports before or during an inspection and shall have the vessel in a reasonably clean and orderly condition.

(4) To determine that a vessel is seaworthy and in good and serviceable condition, the owner of a vessel shall permit the marine inspector to inspect the entire interior and exterior of the vessel, including all of the following:

(a) The hull and appendages.

(b) Propellers.

(c) Shafting.

(d) Stern bearings.

(e) Rudders.

(f) Through-hull fittings.

(g) Sea valves.

(h) Strainers.

(i) Outdrive units.

(j) Outboard lower units.

(5) When the marine inspector has reasonable cause to believe that the seaworthiness or the sound structure of the vessel may be impaired, the owner of the vessel may be required to remove sections or portions of the lining, decking, ceiling, or other obstructions that may obscure any part of the vessel so that the seaworthiness or sound structure may be determined.

(6) When through-hull fittings are present below the waterline they shall be fitted with a readily accessible shutoff valve. The shutoff valve shall be located as close to the through-hull fitting as possible

and be in good and serviceable condition. This subrule shall not be construed to conflict with Act No. 167 of the Public Acts of 1970, as amended, being S323.331 et seq. of the Michigan Compiled Laws, and known as the watercraft pollution control act of 1970.

History: 1982 AACCS.

R 281.3104 Main engines.

Rule 104. (1) Each vessel designed for inboard or inboard/outboard (stern drive) main engines shall be fitted with the appropriate number of engines.

(2) All main engines shall be of the appropriate type and design for the propulsion requirements of the hull in which they are installed, shall be capable of operating at a constant marine load without exceeding their design limitations, and shall be in good and serviceable condition.

(3) The head, block, and exhaust manifold of any main engine shall be waterjacketed and cooled by water from a pump which operates when the engine operates, except for drystack exhaust systems.

(4) When a main engine is fitted with an updraft or sidedraft carburetor, the carburetors shall have integral or properly connected drip collectors of adequate capacity which will return all drip and overflow to the engine intake manifold.

(5) The exhaust pipe system of the main engines shall comply with all of the following provisions:

(a) Be gastight to the hull interior.

(b) Be designed and installed to prevent cooling water or seawater from returning to the engines.

(c) Be so accessible that it can be inspected and repaired throughout its length.

(d) Be supported so as to prevent undue stress which may cause fractures. Hangers, brackets, and other supporting components shall be made of fireproof materials and shall be installed so as to prevent the transmission of heat to adjacent combustible materials.

(e) Where personnel or combustibles might come in contact with hot surfaces, effective protection shall be provided by water jacketing, lagging, shielding, or suitable guards.

(6) Outboard engines on vessels designed for utilizing outboard engines as main engines shall be in good and serviceable condition.

(7) Vessels utilizing unique or unusual machinery as main engines shall be given separate consideration and shall be subject to requirements as determined by the marine inspector after consultation with the state boating law administrator. The requirements shall be in keeping with good marine practice and standards. These unique or unusual types of machinery shall include those utilizing steam, electricity, gas turbines, air screws, and hydraulic jets.

(8) When auxiliary engines are installed on a vessel, they shall be installed in accordance with good marine practice and standards and shall be in good and serviceable condition.

History: 1982 AACCS.

R 281.3105 Gasoline engines; ventilation.

Rule 105. (1) Any enclosed compartment or space, including the lower portion and bilge, in which a gasoline engine or fuel tank is located shall be provided with a ventilation system capable of preventing, and effectively removing, an accumulation of flammable or explosive vapors. The ventilation system shall be constructed and installed as follows:

(a) Where a gasoline engine and fuel tank are in the same enclosed or interconnected compartment, not less than 2 supply ducts shall be located at one end or side of the compartment and shall extend halfway into the compartment so as to be lower than the level of the carburetor air intake. Not less than 2 exhaust ducts, one of which shall be power-assisted, shall be located at the opposite end or side of the compartment and extend to the lowest portion of the compartment.

(b) When a gasoline engine and fuel tank are not in the same enclosed or interconnected compartment, each compartment shall be ventilated in the manner described in subdivision (a) of this subrule. However, a separate fuel tank compartment may be foamed in with United States coast guard-approved-type foam instead of ventilating the compartment.

(c) The exterior termination of a ventilation duct shall be fitted with a cowl, scoop, or louver and shall be elevated, in a suitable manner, to prevent the return of displaced vapors to any enclosed space and to avoid the pickup of vapors from fuel-filling operations. Cowls, scoops, or louvers shall be trimmed for maximum effectiveness.

(2) A duct shall be constructed of noncombustible, not readily collapsible materials. It shall be reasonably gastight from end to end. It shall lead as directly as possible and be properly fastened and supported. A duct shall be installed so that low spots in the ducting will not collect water and the ordinary collection of water in the bilge will not block the duct.

(3) The internal cross-sectional area of each intake and exhaust ventilation duct in a compartment will be the same. The minimum total aggregate internal cross-sectional area of the intake ventilation ducts shall be not less than 1.5 square inches per foot of beam. Notwithstanding, each round-type duct shall have an inside diameter of not less than 3 inches, and each rectangular-type duct shall have inside dimensions equivalent to not less than 2 inches by 3 1/2 inches.

(4) All cowls, scoops, or louvers shall have an open mouth area of not less than twice the required duct area. When screened, the mouth area shall be increased to compensate for the area of the screen wire. A damper shall not be fitted in a duct.

(5) At least 1 exhaust duct of each compartment required to be ventilated shall be fitted with a power-operated exhaust blower with a pickup capacity of not less than 100 cubic feet per minute and shall be of a type approved for marine use. The exhaust blower shall be installed as high above the bilges as possible and shall be in good and serviceable condition.

(6) At each helm position, where ignition of the main engine can be accomplished, there shall be an exhaust blower switch which is independent from the ignition system or the blower switch shall have an automatic delay interlock with the ignition system. The blower switch shall be in good and serviceable condition.

(7) At each helm position, where ignition of the main engines can be accomplished, a label shall be posted which is in plain view of the operator, which is as close to the ignition switch as practicable, and which contains, at a minimum, the following statement: "Warning - Before starting engine(s) operate blower(s)."

History: 1982 AACS.

R 281.3106 Diesel engines; ventilation.

Rule 106. Any enclosed or interconnected compartments or spaces containing only diesel engines or diesel fuel tanks, or both, shall be provided with at least 1 air supply duct at one end or side of the compartment and at least 1 exhaust duct at the opposite end or side of the compartment. The air supply duct shall be of a suitable size to provide sufficient air for proper operation of the engines and ventilation of dangerous vapors from the compartment. The duct shall be installed, constructed, and fitted as described in R 281.3105. However, the exhaust duct shall not be required to be power-assisted and any enclosed compartment containing only a diesel fuel tank shall not be required to be ventilated, but shall be provided with at least a gooseneck vent of not less than 1 1/2 inches inside diameter.

History: 1982 AACS.

R 281.3107 Fixed fuel tank systems.

Rule 107. (1) A fixed fuel tank on a vessel shall be installed as follows:

- (a) To permit examination with minimum disturbance to the hull structure.
- (b) With adequate support and bracing to prevent movement. The supports and braces shall be insulated from contact with the tank surfaces with a nonabrasive and nonabsorbant material.
- (c) With openings for fill and vent pipes and for fuel level gauges, where used, on the topmost surfaces of the tank. The tank shall not have openings in the bottom, sides, or ends, except that an opening fitted with a threaded plug or cap may be used for cleaning the tank.
- (d) On fuel tanks for diesel fuel, the opening for the fuel supply piping is not restricted to the top of the tank.

(2) Fixed fuel tank piping shall be installed as follows:

(a) Fuel supply lines to the engines shall be tubing of copper, nickel-copper, steel, or United States coast guard-approved type A flexible fuel line. Fuel supply lines shall run as direct as practicable, shall be accessible, and shall be supported in a suitable manner. They shall have a readily accessible, manually operated, in-line shutoff valve installed as close to the fuel tank as practicable. They shall be protected in a suitable manner from mechanical injury at all supports and where they pass through bulkheads and structural members.

(b) Metal fuel supply lines shall be fitted with flexible vibration hose as close to the engine as practicable.

(c) A filling pipe shall be fitted to the highest point of the fuel tank and shall have an inside diameter of not less than 1 1/4 inches.

(d) A fuel tank shall be fitted with a marine-type fuel gauge or a sounding pipe if sounding cannot be accomplished through the filling pipe.

(e) A filling or sounding pipe shall be arranged so that overflow of liquid or vapor cannot escape to the inside of the vessel.

(f) A fuel tank shall be fitted with a vent pipe connected at the highest point of the tank, shall have an inside diameter of not less than 7/16 of an inch, and shall terminate on the hull exterior as far as practicable from any hull openings and below deck spaces. The vent pipe shall be installed to prevent accidental contamination of the fuel by water and shall be fitted with a removable flame screen at its point of termination.

(g) Devices in fuel lines for drawing fuel below decks for any purpose are prohibited.

(h) All accessories installed in the fuel line shall be supported in a suitable manner.

(3) The owner or operator of a vessel shall maintain the entire fuel system and accessories in good and serviceable condition.

(4) The owner or operator of a vessel with a fixed fuel system shall not carry fuel onboard the vessel outside of the fixed fuel system, unless the fuel is carried in conjunction with an auxiliary outboard engine. When fuel is carried, it shall be in portable fuel tanks as provided by manufacturers of outboard engines and shall be safely secured outside of the engine or living compartment.

(5) During fueling operations, smoking aboard the vessel by any person is prohibited.

(6) The operator of a vessel shall not allow passengers onboard the vessel while taking on fuel.

History: 1982 AACS.

R 281.3108 Fixed fuel system grounding.

Rule 108. (1) A fixed fuel system shall be grounded by 1 or more of the following methods:

(a) By electrical connection to a common ground.

(b) By welding or bolting to a metal bulkhead of a metal hull vessel.

(c) By electrical connection to the rudder, struts, or metal grounding plate.

(2) Where flexible vibration hose is installed, metal grounding straps or wires shall be used to maintain ground continuity.

History: 1982 AACS.

R 281.3109 Portable fuel systems.

Rule 109. (1) The operator of a vessel with a portable fuel system shall carry fuel onboard in approved portable fuel tanks.

(2) Portable fuel tanks shall be secured in a suitable manner to prevent shifting while underway. Sufficient lengths of approved flexible fuel lines shall be provided so that the farthest fuel tank from the engine can be reached without removing the tank from its secured location.

History: 1982 AACS.

R 281.3110 Electrical systems.

Rule 110. (1) All electrical systems on a vessel shall be safe and fit for the service intended, shall be in proper operating condition, and shall have a suitable electrical grounding system.

(2) Electrical wiring shall be routed as high as possible above the bilges, shall be supported in a suitable manner with nonabrasive fasteners to structural members of the vessel, and shall be protected against chafing where passing through bulkheads or other structural members. Fasteners and protective devices shall not be capable of causing damage to the wiring.

(3) Any electrical storage battery or batteries shall be compatible with its attendant electrical system.

(4) A battery shall be located so that gas generated in charging is dissipated by natural or mechanical ventilation.

(5) A battery shall be accessibly located, provided with suitable supports, and secured against shifting with the motion of the vessel.

(6) A battery shall be located in a liquid-tight tray or box of adequate capacity to retain normal spillage or boilover of the electrolyte. The tray or box shall be constructed of, or lined with, suitable materials resistant to deterioration by the electrolyte.

(7) A nonconductive, perforated cover or other suitable means shall be provided to prevent accidental shorting of the battery terminals.

History: 1982 AACS.

R 281.3111 Electrical equipment.

Rule 111. (1) Permanently installed electrical appliances, equipment, and fixtures used on a vessel shall be designed so that the current-carrying parts of the device are effectively insulated from exposed metal parts by an electrical insulating material suitable for use in damp or wet locations.

(2) All permanently installed electrical appliances, equipment, and fixtures shall be properly connected to the vessel's electrical grounding system.

(3) All electrical appliances, equipment, and fixtures installed or used in machinery spaces or other areas where flammable vapors may be present shall be designed, enclosed, or protected to prevent ignition of flammable vapors.

(4) Switches, circuit breakers, and fuse boxes or blocks used on a vessel shall be approved by underwriters laboratories for marine use, where available, or shall be a type commonly manufactured for use on vessels. These devices shall have suitable protection to prevent accidental shorting.

History: 1982 AACS.

R 281.3112 Bilge pumps and bailing devices.

Rule 112. (1) A vessel constructed with bilges or enclosed spaces below decks shall be fitted with not less than 2 electrically operated bilge pumps located in a manner that will assure that all bilge areas can be pumped. The bilge pumps shall be in good and serviceable condition.

(2) Each bilge pump shall be equipped with either an indicator light which activates when the bilge pump is operating or with an alarm system that is automatically activated when an excessive amount of water accumulates in the bilges.

(3) Bilge pump indicator lights shall be located at the helm position used most often and as close to the bilge pump switch as practicable. Bilge pump indicator lights and bilge water alarm systems shall be in good and serviceable condition.

(4) All vessels shall be equipped with a manually operated bailing device.

History: 1982 AACS.

R 281.3113 Vessel passenger capacity; determination.

Rule 113. (1) On vessels that do not have or are not required to have a vessel capacity plate, the maximum passenger capacity shall be determined by applying any 1 of the following criteria which results in the allowance of the greatest number of passengers.

(a) One passenger per 30 inches of rail space available to passengers at the vessel's sides and across the transom.

(b) One passenger per 10 square feet of deck area available for passenger use. In computing the deck area, the areas occupied by concession stands, toilets and washrooms, companionways, and stairways shall be excluded.

(c) One passenger per 18 inches of width of fixed seating provided.

(2) On vessels that have or are required to have vessel capacity plates, the passenger capacity shall be determined by applying either of the following criteria which results in the allowance of the greatest number of persons without exceeding the capacity plate maximums:

(a) Weight capacity minus maximum motor and gear weight : 150 = number of passengers.

(b) Boat length times boat beam : 15 = number of passengers.

History: 1982 AACS.

R 281.3114 Vessel damage, repairs, and alterations; reports; repair and alteration standards; modification of corrections and repairs; determination of unsafe vessel; modification and inspection exception.

Rule 114. (1) When a vessel has an accident causing physical damage, has a grounding causing physical damage, or is to be hauled out and dry docked to carry out major repairs or alterations affecting the vessel's seaworthiness, the owner of the vessel shall immediately report to the marine inspector or the marine safety section of the department the nature of the damage repairs, or alterations. Physical damage does not include breakage of glass, lights, or decorative items.

(2) All repairs and alterations shall be done in accordance with good marine practice and standards and approved by the marine inspector before the work is started. Drawings, sketches, or written specifications may be required by the marine inspector depending on the nature and extent of the repairs or alterations.

(3) The owner of a vessel shall not allow the vessel to be returned to service or returned to the water until all repairs or alterations have been completed and the vessel has been reinspected and approved by the marine inspector. The marine inspector shall reinspect the vessel as soon as possible after notification by the owner that the repairs and alterations have been completed.

(4) When corrections or repairs to the vessel or associated equipment are required as a result of an inspection by the marine inspector, the owner of the vessel shall notify the marine inspector when the corrections or repairs have been made.

(5) When, during the course of an inspection, the marine inspector finds equipment or conditions which are not addressed in these rules and which are unsafe or jeopardize the safety of the passengers carried onboard, the marine inspector shall require that the condition be corrected or the equipment removed from the vessel.

(6) When it is determined by the marine inspector and the state boating law administrator that a vessel, because of its construction or design, or both, is not safe to carry passengers for hire, a certificate of inspection shall not be issued. The owner, if not satisfied with the decision of the department, may seek relief in accordance with Act No. 306 of the Public Acts of 1969, as amended, being S24.201 et seq. of the Michigan Compiled Laws, and known as the Michigan administrative procedures act.

(7) Notification and inspection shall not be required for general maintenance drydocking or hauling out.

History: 1982 AACS.

R 281.3115 Dockside inspection.

Rule 115. The owner of a vessel shall, at the dockside inspection, submit all required safety apparatus for inspection and shall operate or cause to be operated all machinery, steerage, and bilge pumps to the extent necessary to determine that their condition is satisfactory and fit for safe, constant operation.

History: 1982 AACS.

R 281.3116 Main engine gauges.

Rule 116. (1) On vessels designed for inboard or inboard/outboard (stern-drive) main engines, both of the following gauges shall be present:

(a) A gauge to indicate main engine cooling water temperature for each main engine. The gauge shall be readable, by the marine inspector, from each helm position.

(b) A gauge to indicate main engine lubrication oil pressure for each main engine. The gauge shall be readable, by the marine inspector, from each helm position.

(2) All gauges installed on a vessel shall be in good and serviceable condition.

History: 1982 AACCS.

R 281.3117 Personal flotation devices.

Rule 117. (1) When the marine inspector determines that any personal flotation device required to be carried onboard a vessel is not in good and serviceable condition, the owner of the vessel shall permit the marine inspector to note, in writing, on the personal flotation device, that the device is no longer serviceable. The owner of the vessel shall replace the non-serviceable devices immediately or the number of passengers allowed to be carried aboard the vessel shall be revised to equal the number of serviceable personal flotation devices carried. The certificate of inspection may be revised, at any time, for the number of these devices carried, upon request of the owner to the marine inspector.

(2) Personal flotation devices shall be carried in suitable places which are readily accessible to the passengers onboard. The places shall be designed to allow the devices to float free when practical.

(3) When personal flotation devices are carried so that they are readily accessible, but not readily visible to the passengers, the container shall be marked "LIFE PRESERVERS" and the number of devices contained therein shall be listed. The letters and numbers shall be at least 1 inch high and shall be a color contrasting to the color of the container. The container shall also indicate the size of the devices contained therein. Differing sizes shall not be mixed within a container.

(4) On documented vessels, all required personal flotation devices shall be marked with the vessel's name in characters at least 1 inch high and shall be a color contrasting to the color of the device.

(5) On undocumented vessels, all required personal flotation devices shall be marked with either the vessel's name or the vessel's registration number in characters at least 1 inch high and shall be a color contrasting to the color of the device. After May 31, 1982, all personal flotation devices acquired shall be marked with the vessel's registration number in characters at least 1 inch high and shall be a color contrasting to the color of the device.

History: 1982 AACCS.

R 281.3118 Fire fighting equipment.

Rule 118. (1) A vessel, except for an open boat, shall be equipped with a minimum number of coast guard-approved portable fire extinguishers which shall be located as shown in the following table:

Minimum Number Compartmented Vessels		
Class of Extinguishers and Locations		
Less than 26 feet	B1	2
Helmsman's position and cabin.		
26 feet to less than 40 feet	B1	3
Accessible to the engine compartment, helmsman's position, and galley.		
40 feet and over	B1	4
Accessible to the engine compartment, helmsman's position, crew quarters, and galley.		

(2) Where 3 or more B1 units are required, the extinguishing capacity may be made up of a smaller number of B2 units, if each location is protected with a readily accessible extinguisher.

(3) The owner of a vessel shall examine, at regular intervals, all fire extinguishers to make certain that they have not been tampered with and have not suffered corrosion or damage.

(4) A foam extinguisher shall be discharged, cleaned, inspected for mechanical defects or serious corrosion, and recharged annually.

(5) A dry chemical extinguisher shall be kept full with the specified weight of chemical at all times. The cartridge shall be reweighed annually. If the cartridge is found to weigh less than the minimum weight stamped thereon, it shall be replaced with a full cartridge or recharged. An extinguisher with a gauge shall be recharged when the pressure is below prescribed operating limits.

(6) A carbon dioxide extinguisher shall be reweighed annually, and a cylinder found lighter than the weight indicated on the nameplate shall be recharged.

(7) Maintenance required in subrules (3), (4), and (5) of this rule shall be performed by a qualified fire-fighting equipment repair service.

History: 1982 AACS.

R 281.3119 First aid kit and emergency procedures list.

Rule 119. (1) The owner of a vessel shall provide, and have onboard the vessel, at least 1 standard 16unit first aid kit.

(2) The owner of a vessel shall post an emergency procedures list aboard the vessel in a conspicuous location. The list shall set forth, at a minimum, all of the following information items:

(a) Radiotelephone distress:

(i) Switch to channel 16 - coast guard.

(ii) Give distress signal "MAYDAY" 3 times.

(iii) Give boat name, type, and color.

(iv) Give position.

(v) Describe emergency.

(b) Man overboard:

(i) Post a lookout.

(ii) Throw over a flotation device or the water light.

(iii) Don't jump into the water unless the person overboard is a small child, elderly, or a handicapped person.

(iv) Maneuver to return for pickup.

(v) Use additional markers.

(vi) Get victim aboard.

(vii) Call for help if necessary.

(c) Explosion:

(i) Be ready to go overboard with personal flotation device (life jacket).

(ii) When clear of danger, account for all passengers and assist.

(iii) Stay together.

(d) Fires:

(i) If possible, use fire extinguisher.

(ii) If practical, jettison burning materials.

(iii) Reduce the air supply.

(iv) Assemble at opposite end of boat.

(v) Make preparation to abandon ship:

(A) Put on life jacket.

(B) Signal for help by radio or any means available.

(e) Leaks or damage control:

Leaks or damage control:

(i) Put on life jackets.

(ii) Check bilge pump operation.

(iii) Pull up all decks and floor boards in search of leaks.

(iv) Slow or stop boat as needed. You may need to stay on plane to keep hole above water.

- (v) Stop engine, close sea cock for engine cooling, disconnect hose and place end in bilge. Start engine to act as bilge pump.
- (vi) Cover large hole from outside of boat with mattress, or similar device.
- (vii) Use radio to call for help. Channel 16 - coast guard.

History: 1982 AACS.

R 281.3120 Cooking and heating appliances.

Rule 120. (1) Galley stoves aboard a vessel shall be operated only by the owner, the operator, or a crew member while carrying passengers. The owner, the operator, or the crew member shall be present in the galley at all times while the galley stove is being operated.

(2) Heating appliances, when present on a vessel, shall be of a type commonly manufactured for use aboard vessels.

(3) Heating appliances, when present on a vessel, shall be installed in adequately ventilated areas and shall be securely fastened to the vessel.

(4) Woodwork and other combustible material immediately surrounding heating appliances installed on a vessel shall be effectively insulated with noncombustible material.

(5) All fuel tanks for heating appliances installed on a vessel shall have an in-line shutoff valve as close to the fuel tank as practical. The fuel line shall have as few other fittings as practicable between the shutoff valve and the heating appliance.

All remotely installed fuel tanks shall be securely fastened to the vessel in an accessible location.

(6) Heating appliances, when present on a vessel, using liquefied petroleum gas, liquefied natural gas, or compressed natural gas shall be installed in accordance with good marine practice and standards, except for class A and class D vessels on which these type appliances are prohibited by federal law.

(7) A person shall not ignite or start a gasoline, liquefied petroleum gas, compressed natural gas, or liquefied natural gas heating or cooking appliance onboard a vessel while passengers are onboard the vessel.

History: 1982 AACS.

R 281.3121 Visual distress signals.

Rule 121. (1) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall have aboard the vessel at least 1 option, from the following list, of coast guard-approved visual distress signals:

	Number Options Required	Type Accepted
(a)	3	Hand-held red flare with manufacture date of October 1, 1980, or later.
(b)	3	Hand-held, rocket-propelled parachute flare.
(c)	1	Orange flag distress signal for boats
	1	and electric distress light for boats.
(d)	3	Floating or hand-held orange smoke and
	1	electric distress light for boats
(e)	3	Floating or hand-held orange smoke and option (a) or option (b).
(f)	1	Orange distress flag for boats and Option (a) or option (b)

(2) Non-approved hand-held pyrotechnic aerial red flares and pyrotechnic hand-held or floating orange smoke is acceptable for meeting the requirements of this rule until July 1, 1982, if the devices remain in good and serviceable condition.

(3) A person shall not display a visual distress signal on the waters of the state, except in an emergency.

(4) A person shall not possess any pistol-type visual distress signal launching device commonly known as a flare gun.

(5) Any coast guard-approved electric distress light for boats that activates automatically upon contact with the water and flashes S.O.S. is acceptable for meeting the nighttime requirements of this rule and the requirements of R 281.3202(4), R 281.3302(3), R 281.3404(3), and R 281.3503(4).

(6) The owner of a vessel shall have aboard the vessel at least 1 portable battery-operated light (flashlight), powered by D-cells or larger-size batteries, which is in good and serviceable condition.

History: 1982 AACCS.

R 281.3122 State pilot's license; requirements.

Rule 122. (1) An applicant for a state pilot's license shall be not less than 18 years of age.

(2) When an applicant for a state pilot's license has been convicted by a court of record for a felony violation of the laws of the United States or the state of Michigan within 5 years of the date of application, the marine inspector shall investigate the circumstances of the conviction. When the investigation shows continued illegal or questionable activity on the part of the applicant, the application shall be denied by the state boating law administrator.

(3) When an applicant for a state pilot's license has been convicted by a court of record for a serious violation of the marine laws of the United States or the state of Michigan within 3 years of the date of application, the marine inspector shall investigate the circumstances of the conviction. When the investigation shows continued illegal or questionable activity on the part of the applicant, the application shall be denied by the state boating law administrator. A serious violation includes all of the following:

(a) Careless operation.

(b) Reckless operation.

(c) Operation under the influence of alcoholic beverage or controlled substance.

(d) Negligent operation.

(e) Operation causing death or injury.

(4) An applicant for a state pilot's license shall have not less than 90 days' experience, within the preceding 24 months, operating a noncommercial vessel of a type similar to the vessel for which the pilot's license is sought or 90 days' experience, within the preceding 24 months, as a full-time crew member on a commercial vessel of a type similar to the vessel for which the pilot's license is sought and shall have received instruction from a licensed pilot in the operation of the vessel.

(5) An applicant for an original state pilot's license shall pass a physical examination given by a licensed physician of this state and shall present a certificate signed by the physician attesting to the applicant's general physical condition. Epilepsy, insanity, senility, acute general disease or neurosyphilis, badly impaired hearing, or other defect that would render the applicant incompetent to perform the ordinary duties of a licensed operator may be cause for denial of the application.

(6) The department, when it has reason to doubt the operator's physical or visual abilities, may require him or her, at any time, to obtain a new physical examination. Notwithstanding, a physical examination shall be required once every 36 months.

(7) An applicant for a state pilot's license shall not be color-blind and, in the opinion of a qualified physician, shall have adequate vision, in at least 1 eye, to safely operate a vessel.

(8) A qualified applicant for a state pilot's license shall successfully complete examinations, both written and practical, administered by a marine inspector.

History: 1982 AACCS.

R 281.3123 Certification.

Rule 123. (1) Upon satisfactory completion of the required drydock and annual dockside inspections, the department shall issue a certificate of inspection which shall expire on May 31 of the following year, except that the department may extend the expiration date for a period not to exceed 30 days when extreme weather conditions exist.

(2) The certificate of inspection shall indicate that the vessel may operate during both the daytime and nighttime hours, unless otherwise requested by the owner of the vessel.

(3) A certificate of inspection shall be framed under transparent material and posted in a conspicuous place on the vessel. Where posting is impractical, the certificate shall be kept onboard to be shown on demand.

(4) There shall be a sticker issued with each certificate, and such stickers, when issued, shall be affixed to the port and starboard sides of the vessel in a conspicuous manner.

History: 1982 AACS.

R 281.3124 Suspension and revocation of certificates.

Rule 124. (1) If, at any time subsequent to an inspection of a vessel and the issuance of a certificate, changes to the hull or any portion of the vessel, including equipment required to be carried onboard, are found to have occurred so that the vessel no longer meets the minimum standards prescribed, the certificate shall be revoked by the department and immediately surrendered to a marine inspector.

(2) Violation of the act or any other act or falsification of information on an application for inspection may also be cause for suspension or revocation of the certificate.

History: 1982 AACS.

R 281.3125 Pilot's license; display.

Rule 125. A licensed operator, when operating a vessel for hire, shall place his or her pilot's license, framed under transparent material, in a conspicuous place on the vessel where it can be seen by passengers and other persons at all times. Where such display is impracticable, the pilot's license shall be carried onboard and shown on demand.

History: 1982 AACS.

R 281.3126 Pilot's license; duration; renewal.

Rule 126. (1) A state pilot's license is valid for 3 years from the date of issue.

(2) A state pilot's license shall be renewed by application to the department.

History: 1982 AACS.

R 281.3127 Pilot's license; suspension or revocation.

Rule 127. The following conduct is cause for suspension or revocation of the state pilot's license:

(a) The negligent or improper operation of a vessel.

(b) Physical impairment of the operator.

(c) Falsification of information given on a license application.

History: 1982 AACS.

R 281.3128 Pilot's license; ownership; surrender.

Rule 128. An issued state pilot's license shall remain the property of the department and shall be surrendered to a marine inspector upon revocation.

History: 1982 AACS.

R 281.3129 Public liability insurance required.

Rule 129. The owner of a vessel shall carry marine liability insurance for bodily injury. The insurance coverage shall be for 1 year and shall be renewed annually. The amount of the coverage, per accident, shall be not less than \$50,000.00 multiplied by the number of passengers authorized to be carried by the

certificate of inspection. However, each vessels carrying more than 10 passengers shall carry not less than \$1,000,000.00 coverage per accident.

History: 1982 AACCS.

R 281.3130 Rescission.

Rule 130. R 281.2001 to R 281.2130 of the Michigan Administrative Code, appearing on pages 1005 to 1022 of the 1979 Michigan Administrative Code, are rescinded.

History: 1982 AACCS.

PART 2. CLASS A VESSELS

R 281.3201 Deck rails.

Rule 201. (1) A vessel, except for an open boat which operates exclusively on rivers, shall have deck rails or equivalent protection at the periphery of all weather decks, including the cockpit, which are accessible to the passengers and crew. The top rail course of the deck rails shall be not less than 26 inches above the deck.

(2) Deck rails shall consist of evenly spaced horizontal courses and the spacing between courses shall not be greater than 13 inches. However, rail courses are not required where the space between the top rail course and the deck is fitted with a bulwark, chain link fencing, wire mesh, or equivalent.

(3) A vessel with a flying bridge shall have suitable deck rails or equivalent protection at the periphery of the flying bridge deck.

(4) An open boat which operates exclusively on rivers shall have suitable deck rails or equivalent protection.

(5) All deck rails or equivalent protection shall be in good and serviceable condition.

History: 1982 AACCS.

R 281.3202 Personal flotation devices and water light.

Rule 202. (1) The owner of a vessel shall provide 1 coast guard-approved, type I personal flotation device, of a proper size, for each person, including the crew, to be carried onboard. Each device shall be inspected at the dockside inspection.

(2) The owner of a vessel shall affix, in a suitable manner, to all type I personal flotation devices carried aboard the vessel, 200 square centimeters (31.5 sq. in.) of coast guard-approved retroreflective material to the outside of each device and 200 square centimeters (31.5 sq. in.) to the inside of each device.

(3) The owner of a vessel shall have aboard the vessel a ring life buoy not less 20 inches in diameter. The ring life buoy shall comply with all of the following requirements:

(a) Be readily accessible in a suitable location.

(b) Have attached, in a suitable manner, not less than 50 feet of line.

(c) Be marked as required by R 281.3117.

(4) The owner of a vessel shall provide a water light which is self-activating upon contact with the water and which is approved by the marine inspector. The light shall be stored in a readily accessible location near the ring life buoy and shall be in good and serviceable condition. When, at the owner's discretion, the light is attached to the ring life buoy, it shall be attached by a line at least 1 foot in length.

History: 1982 AACCS.

R 281.3203 Marine radio and compass.

Rule 203. (1) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall have aboard the vessel a marine radio-telephone which is in good working condition and a current federal communication commission operator's license.

(2) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall have aboard the vessel a suitable marine-type compass which is in good and serviceable condition.

History: 1982 AACS.

R 281.3204 Toilet and sanitary facilities.

Rule 204. A vessel, except for an open boat and a vessel where suitable privacy enclosures are not practical, shall be equipped with 1 toilet which complies with Act No. 167 of the Public Acts of 1970, as amended, being S323.331 et seq. of the Michigan Compiled Laws, and which shall be maintained in a serviceable and sanitary condition by the owner of the vessel.

History: 1982 AACS.

R 281.3205 Anchor and anchor line.

Rule 205. (1) A vessel shall be equipped with 1 anchor of a suitable size and type.

(2) A vessel operating on the Great Lakes and Lake St. Clair shall be equipped with 1 sea anchor.

(3) A vessel operating on the Great Lakes and Lake St. Clair shall be equipped with not less than 150 feet of suitable anchor line which is readily available onboard the vessel.

(4) A vessel operating exclusively on rivers shall be equipped with not less 30 feet of suitable anchor line which is readily available onboard the vessel.

(5) Any line, when attached to the required anchor, shall be attached by eyesplice, thimble, and shackle.

History: 1982 AACS.

PART 3. CLASS B VESSELS

R 281.3301 Deck rails.

Rule 301. (1) A vessel, except for an open boat which operates exclusively on rivers, shall have deck rails or equivalent protection at the periphery of all weather decks, including the cockpit, which are accessible to the passengers and crew. The top rail course of the deck rails shall be not less than 26 inches above the deck.

(2) Deck rails shall consist of evenly spaced courses and the spacing between courses shall not be greater than 13 inches. However, rail courses are not required where the space between the top rail course and the deck is fitted with a bulwark, chain link fence, wire mesh, or equivalent.

(3) A vessel with a flying bridge shall have suitable deck rails or equivalent protection at the periphery of the flying bridge deck.

(4) An open boat which operates exclusively on rivers shall have suitable deck rails or equivalent protection.

(5) All deck rails or equivalent protection shall be in good and serviceable condition.

History: 1982 AACS.

R 281.3302 Personal flotation devices and water light.

Rule 302. (1) The owner of a vessel, except for an open boat, shall provide 1 coast guard-approved type I personal flotation device of a proper size, for each person, including the crew, to be carried onboard. Each device shall be inspected at the dockside inspection.

(2) The owner of a vessel, except for an open boat, which operates on inland lakes shall have aboard the vessel a ring life buoy not less than 20 inches in diameter. The ring life buoy shall comply with all of the following requirements:

- (a) Be readily accessible in a suitable location.
- (b) Have attached, in a suitable manner, not less than 50 feet of line.
- (c) Be marked as required by R 281.3117.

(3) The owner of a vessel, except for an open boat, shall provide a water light which is self-activating upon contact with the water and which is approved by the marine inspector. The light shall be stored in a readily accessible location near the ring life buoy and shall be in good and serviceable condition. When, at the owner's discretion, the light is attached to the ring life buoy, it shall be attached by a line at least 1 foot in length.

(4) The owner of an open boat shall provide 1 coast guard-approved type I, type II, or type III personal flotation device, of a proper size, for each person to be carried onboard, including the crew. In addition, 1 unicellular plastic foam coast guard-approved type IV throwable device shall also be carried. Each device shall be inspected at the dockside inspection.

(5) The owner of a vessel shall affix, in a suitable manner, to all personal flotation devices carried aboard the vessel, 200 square centimeters (31.5 sq. in.) of coast guard-approved retroreflective material to the outside of each device and 200 square centimeters (31.5 sq. in.) to the inside of each device that is reversible.

History: 1982 AACS.

R 281.3303 Anchor and anchor line.

Rule 303. (1) A vessel shall be equipped with 1 anchor of a suitable size and type.

(2) A vessel operating on inland lakes shall be equipped with not less than 75 feet of suitable anchor line which is readily available onboard the vessel.

(3) A vessel operating exclusively on rivers shall be equipped with not less than 30 feet of suitable anchor line which is readily available onboard the vessel.

(4) Any line attached to the required anchor shall be attached by eyesplice, thimble, and shackle.

History: 1982 AACS.

PART 4. CLASS C VESSELS

R 281.3401 Deck rails.

Rule 401. On a passenger deck of a vessel, the deck rails shall be not less than 36 inches high. The space between the top rail course and the deck shall be fitted with bulwarks, chain link fencing, wire mesh, or equivalent.

History: 1982 AACS.

R 281.3402 Fixed seats.

Rule 402. Fixed seats, when used, shall be installed as follows:

(a) Aisles not more than 15 feet long shall be not less than 124 inches wide.

(b) Aisles more than 15 feet long shall be not less than 30 inches wide.

(c) Where seats are in rows, the distance from seat front to seat front shall be not less than 30 inches.

(d) Seat spacing shall provide for ready escape in case of fire or other emergency. Portable or temporary seats shall be arranged as required for fixed seating.

History: 1982 AACS.

R 281.3403 Vessels carrying vehicles.

Rule 403. A vessel carrying vehicles shall have suitable chains, cable, or other barriers installed at the end of the vehicle runways. Suitable gates, rails, or other devices shall also be installed as a continuation of the regularly required rails.

History: 1982 AACCS.

R 281.3404 Personal flotation devices and water light.

Rule 404. (1) The owner of a vessel shall provide 1 coast guard-approved type I, type II, or type III personal flotation device, of a proper size, for each person, including the crew, to be carried onboard. Each device shall be inspected at the dockside inspection.

(2) The owner of a vessel shall have aboard the vessel a ring life buoy not less than 20 inches in diameter. The ring life buoy shall comply with all of the following requirements:

- (a) Be readily accessible in a suitable location.
- (b) Have attached, in a suitable manner, not less than 50 feet of line.
- (c) Be marked as required by R 281.3117.

(3) The owner of a vessel, except those vessels operating exclusively on rivers, shall provide a water light which is self-activating upon contact with the water and which is approved by the marine inspector. The light shall be stored in a readily accessible location near the ring life buoy and shall be in good and serviceable condition. When, at the owner's discretion, the light is attached to the ring life buoy, it shall be attached by a line at least 1 foot in length.

(4) Beginning January 1, 1982, any personal flotation device acquired as a replacement for an existing required device shall have affixed, in a suitable manner, 200 square centimeters (31.5 sq. in.) of coast guard-approved retroreflective material to the outside of each device and 200 square centimeters (31.5 sq. in.) to the inside of each device that is reversible.

History: 1982 AACCS.

R 281.3405 Toilet and sanitary facilities.

Rule 405. (1) The owner of a vessel shall provide toilets which comply with Act No. 167 of the Public Acts of 1970, as amended, being S323.331 et seq. of the Michigan Compiled Laws, and washbasins in accordance with the following table, except that a vessel operating on short runs of approximately 30 minutes or less need not be fitted with toilets or washbasins.

Number of Passengers	Toilets	Washbasins
49 and less	1	0
Over 49	1	1

(2) Toilet and washbasin facilities shall be maintained in a serviceable and sanitary condition.

History: 1982 AACCS.

R 281.3406 Fire fighting equipment.

Rule 406. (1) In addition to the number of portable fire extinguishers required by R 281.3118, a power-driven fire pump system shall be carried on a mechanically propelled vessel which is permitted to carry more than 49 passengers. The power-driven fire pump system shall be self-priming and of such size as to discharge an effective stream from a hose connected to the highest outlet of the pump. The power fire pump system may be driven by a propulsion engine or other source of power. The pump may also be connected to the bilge system so that it can serve as either a fire pump or a bilge pump.

(2) The power-driven fire pump system shall be of a type that allows any part of the vessel to be reached with an effective stream of water from 1 length of fire hose.

(3) At least 1 length of fire hose shall be attached to each power-driven fire pump or hydrant in the system at all times. Fire hose may be commercial fire hose or equivalent which is not more than 1-1/2 inches in diameter or garden hose which is not less than 5/8 inch nominal inside diameter. The fire hose shall be in 1 piece which is not less than 25, nor more than 50, feet in length. Garden hose, when used, shall be of a good commercial grade constructed of an inner tube, plies of braided cotton reinforcement, and an outer rubber cover or equivalent material and shall be fitted with a commercial garden hose nozzle of good grade bronze or equivalent metal.

History: 1982 AACS.

R 281.3407 Anchors and anchor line.

Rule 407. (1) A vessel shall be equipped with 1 anchor of a suitable size and type.

(2) A vessel operating on inland lakes shall be equipped with not less than 75 feet of suitable anchor line which is readily available onboard the vessel.

(3) A vessel operating exclusively on rivers shall be equipped with not less than 30 feet of suitable anchor line which is readily available onboard the vessel.

(4) Any line attached to the required anchor shall be attached by eyesplice, thimble, and shackle.

History: 1982 AACS.

PART 5. CLASS D VESSELS

R 281.3501 Sailing apparatus; inspection.

Rule 501. The owner of a vessel shall permit the marine inspector to examine all masts, spars, standing rigging, running rigging, blocks, fittings, sails, lines, and other sailing apparatus to determine if they are fit for safe constant operation.

History: 1982 AACS.

R 281.3502 Deck rails.

Rule 502. (1) A vessel shall have deck rails or equivalent protection at the periphery of all weather decks, including the cockpit, which are accessible to the passengers and crew. The top course of the deck rails shall be located as follows:

(a) Not less than 24 inches above the deck where accompanied by handgrabs.

(b) Not less than 26 inches above the deck where not accompanied by handgrabs.

(2) Passengers shall not be allowed forward of the cabin unless the deck rails are 26 inches high.

(3) Deck rails shall consist of evenly spaced courses and the spaces between courses shall not be greater than 12 inches on 24-inch-high deck rails or 13 inches on 26-inch-high deck rails. However, rail courses are not required where the space between the top rail course and the deck is fitted with a bulwark, chain link fencing, wire mesh, or equivalent.

(4) All deck rails shall be in good and serviceable condition.

History: 1982 AACS.

R 281.3503 Personal flotation devices and water light.

Rule 503. (1) The owner of a vessel shall provide 1 coast guard-approved type I personal flotation device, of a proper size, for each person, including the crew, to be carried onboard. Each device shall be inspected at the dockside inspection.

(2) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall affix, in a suitable manner, to all type I personal flotation devices carried aboard the vessel, 200 square centimeters (31.5 sq. in.) of coast guard-approved retroreflective material to the outside of each device and 200 square centimeters (31.5 sq. in.) to the inside of each device.

(3) The owner of a vessel shall have a ring life buoy not less than 20 inches in diameter aboard the vessel. The ring life buoy shall comply with all of the following requirements:

- (a) Be readily accessible in a suitable location.
- (b) Have attached, in a suitable manner, not less than 50 feet of line.
- (c) Be marked as required by R 281.3117.

(4) The owner of a vessel shall provide a water light which is self-activating upon contact with the water and which is approved by the marine inspector. The light shall be stored in a readily accessible location near the ring life buoy and shall be in good and serviceable condition. When, at the owner's discretion, the light is attached to the ring life buoy, it shall be attached by a line at least 1 foot in length.

History: 1982 AACS.

R 281.3504 Marine radio and compass.

Rule 504. (1) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall have aboard the vessel a marine radio-telephone which is in good working condition and a current federal communication commission radio-telephone operator's license.

(2) The owner of a vessel which operates on the Great Lakes and Lake St. Clair shall have aboard the vessel a suitable marine-type compass which is in good and serviceable condition.

History: 1982 AACS.

R 281.3505 Toilet facilities.

Rule 505. A vessel, except for an open boat and a vessel where suitable privacy enclosures are not practical, shall be equipped with 1 toilet which complies with Act No. 167 of the Public Acts of 1970, as amended, being S323.331 et seq. of the Michigan Compiled Laws, and shall be maintained in a serviceable and sanitary condition by the owner.

History: 1982 AACS.

R 281.3506 Anchors and anchor line.

Rule 506. (1) A vessel shall be equipped with 1 anchor of a suitable size and type.

(2) A vessel operating on the Great Lakes and Lake St. Clair shall be equipped with 1 sea anchor.

(3) A vessel operating on the Great Lakes and Lake St. Clair shall be equipped with not less than 150 feet of suitable anchor line which is readily available onboard the vessel.

(4) A vessel operating on inland lakes shall be equipped with not less than 75 feet of suitable anchor line which is readily available onboard the vessel.

(5) Any line, when attached to the required anchor, shall be attached by eyesplice, thimble, and shackle.

History: 1982 AACS.