DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY STANDARDS

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 16 and 21 of 1974 PA 154, MCL 408.1016 and 408.1021, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

PART 59. HELICOPTERS

R 408.15901 Scope.

Rule 5901. This part provides for the safe use and maintenance of helicopters in general industry, such as in aerial photography, aerial survey, fire fighting, rescue operations, transportation of personnel to elevated job sites, and delivery of injured persons and emergency supplies.

History: 1979 AC.

R 408.15903 MIOSHA referenced standard.

Rule 5903. The Michigan occupational safety and health (MIOSHA) standard General Industry Safety Standard Part 33 “Personal Protective Equipment,” R 408.13301 to R 408.13398, is referenced in these rules. Up to 5 copies of this standard may be obtained at no charge from the Michigan Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, 7150 Harris Drive, Lansing, Michigan, 48909-8143 or via the internet at website: www.michigan.gov/mioshastandards. For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.

History: 2015 AACS.

R 408.15911 Rescinded.

History: 1979 AC; 2015 AACS.

R 408.15914 Briefings; visibility; fires; energized lines or equipment.

Rule 5914. (1) Briefing shall be conducted prior to each day's operation and shall set forth the plan of operation for the pilot in command and ground employees.

(2) The employer shall insure that, when visibility is reduced by dust or other conditions, ground employees are instructed to exercise special caution to keep clear of

the main and stabilizing rotors. The employer shall also eliminate, as far as practical, the dust or other conditions reducing the visibility.

(3) Open fires shall not be permitted in areas where they may be spread by the rotor downwash.

(4) A helicopter, or any part of a helicopter, shall maintain the clearances prescribed in table 1 from any energized line or equipment, unless the owner or operator of the line assures that the line is deenergized and visibly grounded.

TABLE 1

Voltage	Clearance
50 kilovolts or less	15 feet
More than 50 kilovolts	15 feet plus .4 inch per each kilovolt over 50 kilovolts

History: 1954 ACS 88, Eff. July 16, 1976; 1979 AC.

R 408.15915 Personal protective equipment; loose clothing.

Rule 5915. (1) Except during an emergency operation, eye protection, as prescribed in General Industry Safety Standard Part 33 “Personal Protective Equipment,” as referenced in R 408.15903, shall be provided and used by a ground crew employee while working on an operation covered by these rules when there is exposure to rotor wash.

(2) Except during an emergency operation, head protection shall be provided and used as prescribed in General Industry Safety Standard Part 33 “Personal Protective Equipment,” as referenced in R 408.15903, and shall be secured by a chin strap by a ground crew employee working on an operation covered by this part when lifting or landing a load.

(3) Loose fitting clothing likely to flap in rotor downwash, and thus be snagged on the hoist line, shall not be worn.

History: 1979 AC; 1983 AACS; 2015 AACS.

R 408.15916 Housekeeping; loose gear.

Rule 5916. (1) Good housekeeping shall be maintained in the helicopter loading and unloading area. The area shall be kept free of recognized hazards.

(2) The employer shall take all necessary precautions to protect employees from flying objects in the rotor downwash. All loose gear within 100 feet of the place of lifting or depositing the load, or within an area susceptible to rotor downwash, shall be secured or removed.

History: 1979 AC.

R 408.15921 Approaching craft by employees.

Rule 5921. (1) An employee shall not be permitted to approach within 50 feet of the helicopter when the rotor blades are turning, unless the work duties of the employee require the presence of the employee within that area.

(2) The employer shall instruct employees and shall ensure that, whenever approaching or leaving a helicopter which has its blades rotating, all employees shall remain in full view of the pilot and keep in a crouched position. An employee shall not be permitted to work in the area from the cockpit or cabin rearward while blades are rotating, unless authorized by the helicopter operator.

(3) An employee shall not be permitted to perform work under hovering craft except when necessary to hook or unhook a load. A safe means of access shall be provided for an employee to reach the hoist line hook and engage or disengage a cargo sling while under the hovering craft.

History: 1979 AC.

R 408.15922 Providing and training ground employees; checking size, weight, and connection of load; tag line, pressed sleeve, hoist wire, or other gear; static charge; rated capacity of load line.

Rule 5922. (1) Ground employees shall be provided, and they shall be properly trained to ensure that helicopter loading and unloading operations can be performed safely.

(2) The size and weight of loads, and the manner in which loads are connected to the helicopter, shall be checked by the pilot in command. A lift shall not be made if the helicopter pilot in command determines that the lift cannot be made safely.

(3) A load shall be properly slung. A tag line shall be of a length that does not permit it being drawn up into the rotors. A pressed sleeve, swedged eye, or equivalent means shall be used for a freely suspended load to prevent a hand splice from spinning open or a cable clamp from loosening.

(4) A hoist wire or other gear, except for a pulling line or conductor that is allowed to "pay out" from a container or roll off a reel, shall not be attached to any fixed ground structure or allowed to foul on any fixed structure.

(5) The static charge on the suspended load shall be dissipated with a grounding device before ground personnel touch the suspended load, unless protective rubber gloves are being worn when touching the load.

(6) A load line shall have a working load rating of not less than the rated capacity of the helicopter.

History: 1979 AC; 2015 AACS.

R 408.15923 Cargo hooks.

Rule 5923. (1) An electrically operated cargo hook shall have the electrical activating device so designed and installed as to prevent inadvertent operation.

(2) A cargo hook shall be equipped with an emergency mechanical control for releasing the load.

(3) The employer shall ensure that a hook is tested prior to operation each day by a competent person to determine that the electrical and mechanical releases function properly.

History: 1979 AC; 2015 AACS.

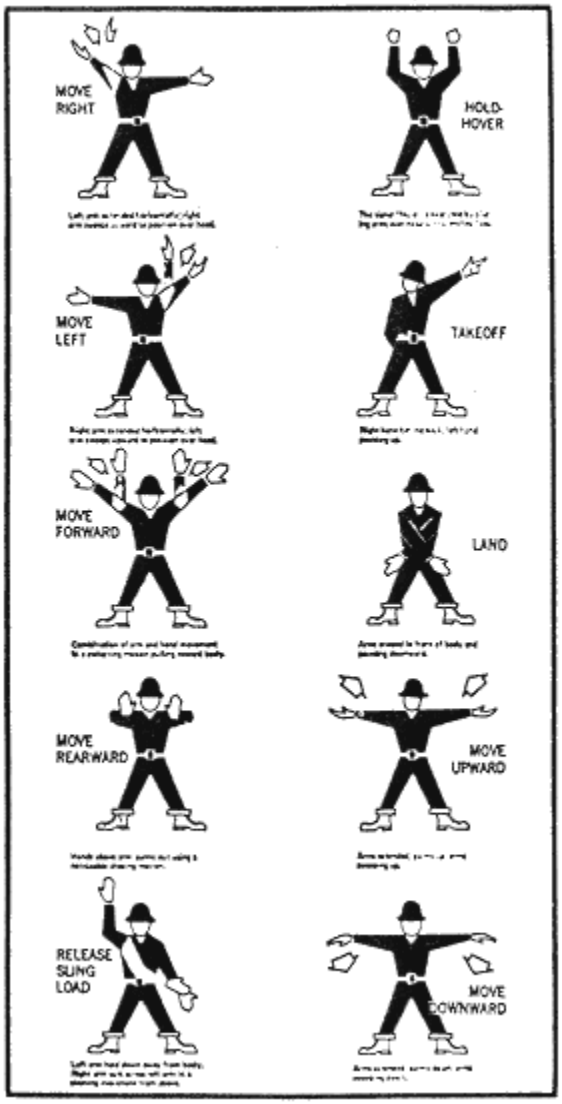
R 408.15931 Communication between pilot and signalman; signal systems.

Rule 5931. (1) There shall be constant, reliable communication between the pilot and a designated employee of the ground crew who acts as a signalman during the period of loading and unloading. The signalman shall be clearly distinguishable from other ground employees.

(2) The employer shall instruct the aircrew and ground employees on the signal systems to be used, and shall review the system with the employees in advance of hoisting the load. This applies to both radio and hand signal systems. Hand signals, where used, shall be as shown in figure 1.

Figure for 408.15931

FIGURE 1
Helicopter Hand Signals



History: 1979 AC.