

**GI Part 59. Helicopters
Compared with
29 C.F.R. 1910.183 Helicopters**

As of May 2015

Summary: The significant differences between GI Part 59. Helicopters and 29 C.F.R. 1910.183 Helicopters are in:

- Scope
- Briefings; visibility; fires; energized lines or equipment
- Personal protective equipment; loose clothing
- Housekeeping; loose gear
- Approaching craft by employees
- Providing and training ground employees; weight limitation; checking size, weight, and connection of load; tag line, pressed sleeve, hoist wire

The comparisons show only those provisions where MIOSHA rules are different than OSHA or where MIOSHA rules are not included in 29 C.F.R.

MIOSHA	OSHA
<p>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, firefighting, rescue operations, transportation of personnel to elevated job sites, and delivery of injured persons and emergency supplies.</p>	<p>No comparable OSHA provision.</p>
<p>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 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 de-energized and visibly grounded.</p>	<p>1910.183(b) Briefing. Prior to each day's operation a briefing shall be conducted. This briefing shall set forth the plan of operation for the pilot and ground personnel.</p> <p>1910.183(m) Visibility. Ground personnel shall be instructed and the employer shall ensure that when visibility is reduced by dust or other conditions, they shall exercise special caution to keep clear of main and stabilizing rotors. Precautions shall also be taken by the employer to eliminate, as far as practical, the dust or other conditions reducing the visibility.</p> <p>1910.183(s) Fires. Open fires shall not be permitted in areas where they could be spread by the rotor downwash.</p>

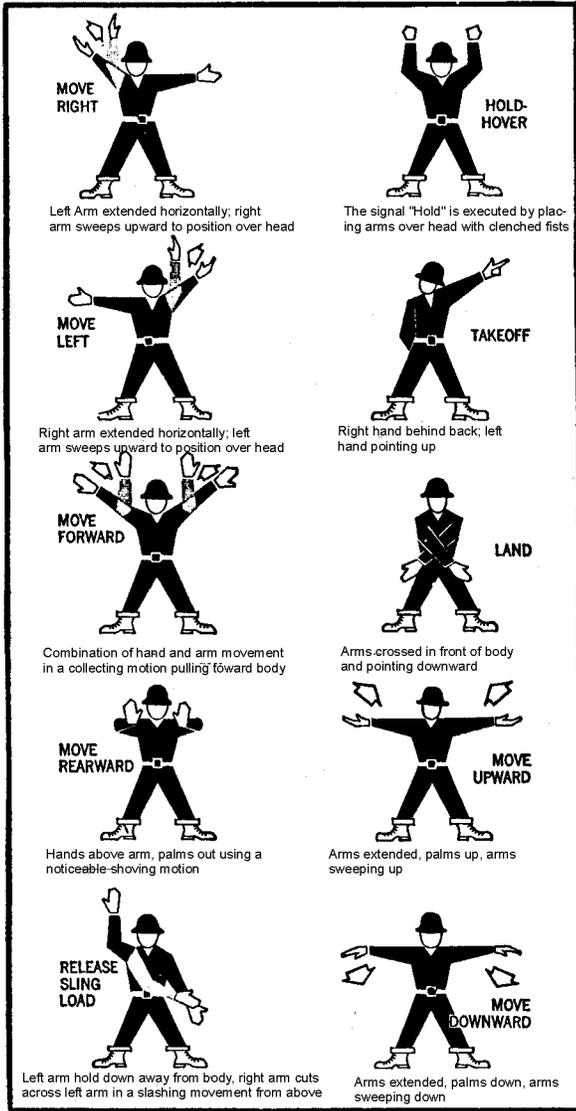
MIOSHA	OSHA								
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2" data-bbox="94 184 747 279">TABLE 1</th> </tr> <tr> <th data-bbox="94 279 316 373">Voltage</th> <th data-bbox="316 279 747 373">Clearance</th> </tr> </thead> <tbody> <tr> <td data-bbox="94 373 316 468">50 Kilovolts or less</td> <td data-bbox="316 373 747 468">15 feet</td> </tr> <tr> <td data-bbox="94 468 316 562">More than 50 Kilovolts</td> <td data-bbox="316 468 747 562">15 feet plus .4 inch per each Kilovolt over 50 Kilovolts</td> </tr> </tbody> </table>	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	
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								
<p>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.</p> <p>(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.</p> <p>(3) Loose fitting clothing likely to flap in rotor downwash, and thus be snagged on the hoist line, shall not be worn.</p>	<p>1910.183(e) Personal protective equipment. 1910.183(e)(1) Personal protective equipment shall be provided and the employer shall ensure its use by employees receiving the load. Personal protective equipment shall consist of complete eye protection and hardhats secured by chinstraps.</p> <p>1910.183(e)(2) Loose-fitting clothing likely to flap in rotor downwash, and thus be snagged on the hoist line, may not be worn.</p> <p>1910.183(f) Loose gear and objects. 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 the load or depositing the load, or within all other areas susceptible to rotor downwash, shall be secured or removed.</p>								
<p>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.</p> <p>(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.</p>	<p>1910.183(g) Housekeeping. Good housekeeping shall be maintained in all helicopter loading and unloading areas.</p>								

MIOSHA	OSHA
<p>R 408.15921. Approaching craft by employees.</p> <p>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.</p> <p>(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.</p> <p>(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.</p>	<p>1910.183(o) Approach distance.</p> <p>No employee shall be permitted to approach within 50 feet of the helicopter when the rotor blades are turning, unless his work duties require his presence in that area.</p> <p>1910.183(p) Approaching helicopter.</p> <p>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. No employee shall be permitted to work in the area from the cockpit or cabin rearward while blades are rotating, unless authorized by the helicopter operator to work there.</p>
<p>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.</p> <p>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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(6) A load line shall have a working load rating of not less than the rated capacity of the helicopter.</p>	<p>1910.183(q) Personnel.</p> <p>Sufficient ground personnel shall be provided to ensure that helicopter loading and unloading operations can be performed safely.</p>

MIOSHA	OSHA
<p>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.</p>	<p>1910.183(d) Cargo hooks. All electrically operated cargo hooks shall have the electrical activating device so designed and installed as to prevent inadvertent operation. In addition, these cargo hooks shall be equipped with an emergency mechanical control for releasing the load. The employer shall ensure that the hooks are tested prior to each day's operation by a competent person to determine that the release functions properly, both electrically and mechanically.</p>
<p>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</p>	<p>1910.183(n) Signal systems. The employer shall instruct the aircrew and ground personnel 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 N-1.</p> <p>1910.183(r) Communications. 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 personnel.</p>
<p style="text-align: center;">PART 59. HELICOPTERS</p> <p style="text-align: center;">APPENDIX</p> <p>14 CFR, Part 27-1974, referenced in rule 5911(3) prescribes rules for "airworthiness" for rotorcraft, such as but not limited to, flight, performance, ground and water handling characteristics, strength requirements, loads, design and construction, power plants, equipment, and operating limitations.</p> <p>14 CFR, Parts 60 to 199, referenced in rule 5911(3) prescribes rules for certification of pilots and flight instructors, airspace and airports, operating and flight rules, external load operations, schools and repair stations.</p>	<p>No comparable OSHA provisions</p>

MIOSHA

**Figure 1.
Helicopter Hand Signals**



OSHA

**Figure 1
Helicopter Hand Signals**

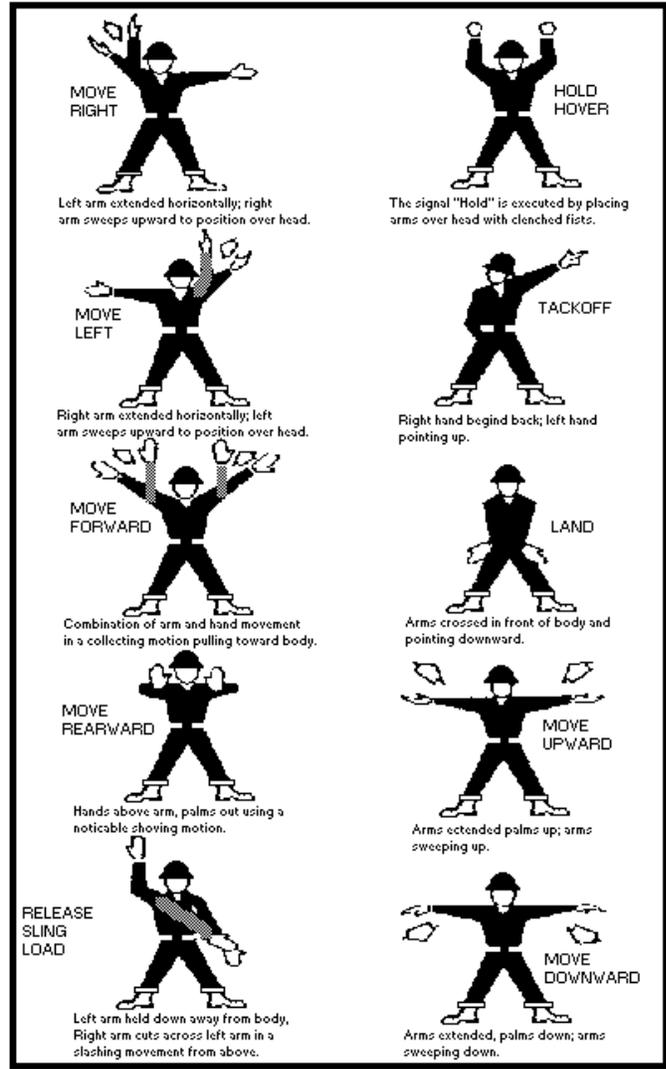


FIGURE N-1 HELICOPTER HAND SIGNAL

Disclaimer:

Documents available from this server were prepared as a courtesy for informal guidance and assistance. This information is not intended to replace or supercede the actual MIOSHA standard or rule requirement. Please reference the specific MIOSHA standard or rule for the actual rule requirement language.

All information published online by MIOSHA is subject to change without notice. Every effort is made to ensure that the information provided at this site is accurate and up-to-date, but no legal responsibility is accepted for any errors, omissions, or misleading statement.