Chapter 296-829 WAC
HELICOPTERS USED AS LIFTING MACHINES

WAC
296-829-100 Scope. Chapter 296-829 WAC applies to helicopters when used to carry loads, suspended with a cargo sling, powered hoist, or other attaching methods.

Exemption: This chapter does not apply to the use of helicopters:
• In the logging industry.
• For rescue operations when a winch or hoist is used.

WAC 296-829-100-05 Follow Federal Aviation Administration (FAA) requirements.
You must:
• Make sure helicopter cranes and their use meet the applicable requirements of the Federal Aviation Administration (FAA).

WAC 296-829-20005 Follow Federal Aviation Administration (FAA) requirements.
You must:
• Make sure a competent person tests all hooks before each day's operation to make sure both the electrical and mechanical releases work properly.

WAC 296-829-20010 Install and test hooks on helicopters correctly.
You must:
• Make sure all hooks are:
  – Designed and installed to prevent accidental operation.
  – Equipped with an emergency mechanical control to release the load.

WAC 296-829-300 Keep landing and deposit areas safe.
You must:
(1) Make sure precautions are taken to prevent loose objects from being caught in the downwash and flying around.
  • Secure or remove all loose gear:
    – Within one hundred feet of lift and deposit areas.
    – In all other areas affected by rotor downwash.
(2) Make sure employees do not work under hovering craft, except where necessary to hook or unhook loads.
(3) Make sure safe access and exit, including an emergency escape route, is provided for employees who hook or unhook loads.
(4) Prohibit open fires in any area that could be affected by the rotor downwash.
(5) Make sure unauthorized people do not go within fifty feet of the helicopter when the rotor blades are turning.
(6) Make sure all employees:
  • Stay in full view of the pilot, in a crouched position, when approaching or leaving a helicopter with rotating blades.
  • Stay away from the area behind the cockpit or cabin unless the operator authorizes them to work there.
(7) Take precautions to eliminate reduced visibility.
(8) Make sure ground personnel take special care to stay clear of rotors when visibility is reduced by dust or other conditions.

WAC 296-829-30010 Follow safe refueling procedures.
You must:
• Make sure refueling areas are safe.
– Post "NO SMOKING" signs at all entrances to the refueling area.
– Provide at least one thirty-pound fire extinguisher, or a combination totaling thirty pounds, good for class A, B, and C fires, within one hundred feet on the upwind side of the refueling operation.

Reference: For additional requirements relating to portable fire extinguishers, see WAC 296-800-300 in the safety and health core rules.

You must:
• Make sure workers involved in refueling are trained in both:
  – The refueling operation;
  AND
  – The use of fire extinguishing equipment they may need.
• Make sure the following precautions are taken before and during refueling:
  – Keep unauthorized people at least fifty feet away from the refueling operation or equipment.
  – Prohibit smoking and open flames within fifty feet of the refueling area or fueling equipment.
  – Make sure helicopter engines are shut down before refueling, if using aviation gasoline or jet B type fuel.
  – Pump fuel, either by hand or power.
  – Use self-closing nozzles or deadman controls:
    • Do not allow these to be blocked open.
  – Make sure nozzles are not dragged along the ground.
  – Make sure the helicopter and the fueling equipment are grounded.
  – Electrically bond the fueling nozzle to the helicopter:
    • Do not use conductive hose for this bonding.
  – Make sure all grounding and bonding connections are:
    • Electrically and mechanically firm.
    • On clean unpainted metal parts.
• Stop fueling immediately if there is a spill:
  – Do not continue operation until the person in charge has determined it is safe.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 04-09-099, § 296-829-30010, filed 4/20/04, effective 9/1/04.]

WAC 296-829-40005  Hold daily briefings.
You must:
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HELICOPTER HAND SIGNALS

**MOVE RIGHT**
Left arm extended horizontally; right arm sweeps upward to position over.

**HOLD HOVER**
The signal "Hold" is executed by placing arms over head with clenched fists.

**MOVE LEFT**
Right arm extended horizontally; left sweeps upward to position over head.

**TAKEOFF**
Right hand behind back; left hand pointing up.

**MOVE FORWARD**
Combination of arm and hand movement in a collecting motion pulling toward head.

**LAND**
Arms crossed in front of body and pointing downward.

**MOVE REARWARD**
Hands above arm, palms out using a noticeable showing motion.

**MOVE UPWARD**
Arms extended, palms up; arms sweeping up.

**RELEASE SLING LOAD**
Left arm held down away from body. Right arm cuts across left arm in a slashing movement from above.

**MOVE DOWNWARD**
Arms extended, palms down; arms sweeping down.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 04-09-099, § 296-829-40020, filed 4/20/04, effective 9/1/04.]
WAC 296-829-500 Definitions.

Aviation gasoline
Gasoline fuel for reciprocating piston engine helicopters, also known as avgas.

Cargo hook
A device attached to a helicopter that is used to hold suspended loads.

Competent person
One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Deadman controls
A control, switch or device that will automatically shut off whenever the operator releases it.

Deposit area
An area that is designated for dropping off and picking up suspended loads.

Downwash
The wind created by the rotating blades of a helicopter.

Ground device
A device used to dissipate the static electricity charge that has built up on a suspended load.

Helicopter crane
A helicopter that carries cargo or equipment suspended underneath it.

Jet A type fuel
A kerosene grade fuel suitable for helicopters with turbine engines.

Jet B type fuel
A blend of gasoline and kerosene fuel.

Powered hoist
A powered device designed to lift and lower equipment and cargo.

Tag line
A line or rope used to control suspended loads that can swing freely.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 04-09-099, § 296-829-500, filed 4/20/04, effective 9/1/04.]