

Appendix 7-A (Mandatory)

Standard Yarding System Whistle Signals

High Lead Whistle Signals – Means longer spacing between signals

1 short	Stop all lines.
3 short - 3 short	Ahead easy on mainline.
3 short	Ahead on mainline.
2 short	Ahead on haulback.
2 short - 2 short	Ahead easy on haulback.
3 short - 1 short	Ahead on haywire.
3 short - 1 short - 3 short	Ahead easy on haywire.
4 short or more	Slack mainline.
2 short - 1 short	Slack haulback.
3 short - 1 short - 4 short	Slack haywire.
3 short - 2 short	Standing tight line.
2 short	Tightline while lines are running, or break tightline if lines are running tight.
3 short	When rigging is in: Haywire back on haulback
3 short - plus "X" number of shorts	When rigging is in: Indicates number of sections of haywire back on rigging.
3 short - 2 short	When rigging is in: Haywire back on rigging.
1 short	When rigging is in: Chaser inspect and repair rigging.
2 short	When rigging is in: No chokers back.
2 short -1 short - plus "X" number of shorts	When rigging is in: Number of chokers back.
2 short - 1 short	When rigging is in: Slack haulback, hold all lines until 2 short blown.
3 medium	Hooker.
3 medium - 4 short	Hooker and the crew.
5 long	Climber.
4 long	Foremen.
1 long - 1 short	Start or stop work.
7 long - 2 short	Person injured, call transportation and stretcher.
1 long - 1 short	Fire.
3 short - 1 short	Acknowledge by engineer to signify a hazardous turn.

Grabinski system

2 short - 1 long	Slack mainline and haulback together.
2 long	Take off or put on rider block.

Appendix 7-A (Mandatory)

Standard Yarding System Whistle Signals

Slackline Whistle Signals – Means longer spacing between signals

2 short - 2 short - 2 short 1 short	First cable up when road has been changed and tail hold made fast.
2 short - 2 short - 2 short	Drop Skyline.
1 short	Stop any moving line.
1 long	When logging, slack skyline.
2 short	Ahead on skyline.
1 long - 2 short	Ahead easy on skyline.
3 short	Ahead on skidding line.
3 short - 3 short	Ahead easy on skidding line with slack haulback.
4 short	Slack skidding line.
2 short - 2 short - 2 short -2 short	Ahead easy on haulback with slack skidding line.
2 short - 2 short	Ahead on haulback.
2 short - 1 short	Slack haulback
2 short - 3 short	Pick up skyline and skid.
2 short - 2 short - 2 short	Pick up skyline and skin.
3 short	When carriage in: Haywire back on haulback.
3 short - 1 short - 2 short	When carriage in: Haywire back on carriage.
3 short - 1 short	When haywire out: Ahead on haywire.
3 short - 2 short	Tight line.
3 short - 1 short - 4 short	Slack haywire.
3 short - 1 short - 3 short	Ahead easy on haywire.
2 long	Ahead on transfer.
2 long - 4 short	Slack transfer.
2 long - 2 short - 2 short	When carriage is in: Transfer back on carriage.
3 short - plus "X" number of short	When carriage is in: Number Section back on carriage.
2 short - plus "X" number of short	When carriage is in: Number of chokers.
1 short	When carriage is in: Inspect rigging, repair and send back.
2 short - 1 short	When carriage is in: Slack haulback and hold all lines until 2 short are blown-then send back.
3 short - 3 short	When carriage is in: Send back powder.
5 medium	Tail rigger.
5 medium - 4 short	Tail rigger and that crew.
3 medium	Head hooker.
3 medium - 4 short	Second hooker and that crew
5 long	Climber.
4 long	Foreman.
1 long - 1 short	Start or stop work.
7 long - 2 short	Person injured, call transportation and stretcher.
1 long - 1 short repeated	Fire.

Appendix 7-A (Mandatory)

Standard Yarding System Whistle Signals

Running Skyline Whistle Signals – Means longer spacing between signals

1 short	Stop all moving lines.
2 short	Skin carriage back.
2 short - 1 short	Slack haulback.
2 short - 2 short	Skin carriage easy.
2 short - 3 short	Standing tight line.
1 short - 2 short	Ahead on dropline.
4 short	Slack dropline.
1 short - 4 short	Slack both mainlines.
1 short - 1 short	Stop dropline going up and move carriage forward.
3 short	Move carriage forward.
3 short - 2 short - 3 short	Move carriage forward easy.
3 short - 1 short	When haywire is out: Ahead on haywire.
3 short - 1 short - 4 short	Slack haywire.
3 short	When carriage is in: Haywire.
3 short - plus "X" number of short	When carriage is in: Number of sections.
3 short - 1 short - 2 short	When carriage is in: Haywire back on carriage.
2 short - plus "X" number of short	When carriage is in: Number of chokers.
4 short	When carriage is in: Inspect rigging, repair and send back.
1 short	When carriage is in: Hold all lines until 2 shorts, then send back
3 medium	Hooker.
3 medium - 4 short	Hooker and crew.
5 long	Climber.
4 long	Foreman.
1 long - 1 short	Start or stop work.
7 long - 2 short	Person injured, call transportation and stretcher.
1 long - 1 short repeated	Fire.
3 short - 1 long	Acknowledged by engineer to signify hazardous turn.

Appendix 7-A (Mandatory)

Standard Yarding System Whistle Signals

Tension System Whistle Signals – Means longer spacing between signals

4 short	Release tension.
1 short	Stop carriage and start unspooling tong line.
1 short	Stop tong line.
1 short	Resume unspooling tong line.
1 short	Will stop any moving line or slack tong line when carriage is stopped.
2 short - 2 short	Go into interlock and go back.
2 short - 4 short	Slack haulback and let carriage down.
After turn is set - 2 short	Go ahead on tong line.
2 short - 3 short	Go ahead easy on tong line.
3 short	Go into interlock and take carriage to landing.
3 short - 3 short	Ahead easy on carriage.
1 short - 2 short	Increase tension on tong line when carriage is going in.
1 short - 1 short	Decrease tension on tong line when carriage is going in.
3 medium	Hooker.
3 medium - 4 short	Hooker and crew.
5 long	Climber.
4 long	Foreman.
1 long - 1 short	Start or stop work.
7 long - 2 short	Person injured, call transportation and stretcher.
1 long - 1 short repeated	Fire.

Appendix 7-A (Mandatory)

Standard Yarding System Whistle Signals

Skidder Whistle Signals – Means longer spacing between signals

1 short	Stops moving carriage - stops or goes ahead on slack-puller, as case may be, if carriage is stopped.
2 short	Go ahead on skidding line holding carriage.
1 short - 2 short	Pick up skidding line, easy.
2 short - 1 short	Shake up carriage to clear choker.
2 short - 2 short	Ahead on receding line.
3 short	Ahead on carriage, holding at present level, using interlock.
3 short - 3 short	Ahead easy on skidding line.
2 short - 2 short - 2 short	Slack skyline, cable down.
2 short - 2 short - 2 short - 1 short	Pick up skyline, cable up.
2 short - 2 short - 4 short	Slack receding line.
2 short - 4 short	Slack skidding line.
2 short - 2 short - 1 short	Tighten all lines.
1 short - 4 short	Slack off slack puller.
1 short - 2 short	Pick up slack puller when slack.
2 short - 2 short-plus "X" number of shots	When carriage is in: Number of chokers wanted.
2 short - 2 short - 1 long	Bull choker.
1 short	When carriage is in: Inspect butt rigging.
2 short - 4 short - 1 short	For each addition ten feet of tong line.
1 long - plus "X" number of short	Number of coils of haywire wanted.
5 medium	Tail or second rigger.
5 medium - 4 short	Tail or second rigger and that crew.
2 medium	Skidder head rigger.
3 medium	Hooker.
3 medium - 4 short	Hooker and that crew.
2 long	Ahead on transfer.
2 long - 4 short	Slack transfer.
1 short - 3 short	Ahead on carriage with slack puller line.
1 long	Ahead on haywire.
1 long - 4 short	Slack haywire.
1 long - 3 short	Ahead easy on haywire.
5 long	Climber.
4 long	Foreman.
1 long - 1 short	Start or stop work.
7 long - 2 short	Person injured, call transportation and stretcher.
1 long - 1 short repeated	Fire.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-B

Double Tree Intermediate Support System

RECOMMENDED RIGGING GUIDELINES FOR A DOUBLE TREE INTERMEDIATE SUPPORT SYSTEM

Dragging Load Size (pounds)	Intermed. Support Line Size in Inches (or greater)	Rigging Height in Inches In Tree (diameters at 4.5 ft. above ground)	
		Less than 30 ft.	Between 30 & 40 ft.
0- 5000	7/16	11.0	13.0
5000- 6000	1/2	12.0	14.0
6000- 8000	9/16	12.5	14.5
8000-10000	5/8	13.0	15.0
10000-14000	3/4	14.0	16.0
14000-19000	7/8	14.5	17.0
19000-25000	1	15.5	18.5
25000-32000	1 1/8	16.0	19.5
32000-40000	1 1/4	17.0	20.5
40000-48000	1 3/8	17.5	21.5

NOTE: Line sizes are based on IWRC extra-improved plow steel (Cable Logging Systems, p. 25). Smaller rope of equivalent breaking strength is acceptable. Tree diameters are for firmly rooted, sound, straight Douglas Fir trees. Other coniferous trees may be used provided the loads are reduced 25 percent. For example, a 13-inch Western Hemlock support tree rigged at 30 feet can carry a maximum 7500-pound load.

RECOMMENDED MINIMUM DIAMETERS FOR WEST COAST DOUGLAS FIR TAIL TREES

(Recommended diameter in inches measured at 4.5 feet)

Skyline Size, Inch	Rigging Height, Feet					
	30	40	50	60	70	80
5/8	13.5	16.0	18.5	20.5	22.5	24.5
3/4	14.5	17.0	19.5	22.0	24.5	26.5
7/8	15.0	18.0	20.5	23.0	25.5	28.0
1	16.0	19.0	21.5	24.5	27.0	29.0
1 1/8	16.5	20.0	22.5	25.5	28.0	30.5
1 1/4	17.5	21.0	23.5	26.5	29.0	31.5
1 3/8	18.0	21.5	24.5	27.5	30.0	32.5
1 1/2	18.5	22.5	25.0	28.5	31.0	33.5
1 5/8	19.5	23.0	26.0	29.0	31.5	34.5
1 3/4	20.0	23.5	26.5	30.0	32.5	35.5
1 7/8	20.5	24.5	27.5	30.5	33.5	36.5
2	21.0	25.0	28.5	31.5	34.5	37.5

NOTE: Table is for sound, straight Douglas Fir. Add 2 inches to above diameters when using other coniferous species.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

**OAR 437 Division 7, Forest Activities
Appendix 7-C (Mandatory Curriculum)**

BASIC WILDLAND FIRE SAFETY TRAINING

BLOCK 1: FIRE PROTECTION STATUTES AND RULES

1. Fire Protection System in Oregon
2. Need for This Training Course
3. Summary

BLOCK 2: BASIC FIRE BEHAVIOR

1. How a Fire Burns
2. How a Fire Spreads
3. The Fire Environment
4. Summary

BLOCK 3: BASIC FIRE CONTROL

1. Pre-planning for an Operation Fire
2. Size-up
3. Initial Attack
4. Control
5. Mop-up

BLOCK 4: BASIC FIRELINE SAFETY

1. The 18 Watch Out Situations
2. The Ten Standard Fire Fighting Orders
3. LCES – A System for Operational Safety
4. Lessons learned from prior experiences
5. Hazards associated with aerial retardant drops

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

OR-OSHA Admin. Order 2-2005, f. 5/27/05, ef. 6/1/05.

Appendix 7-D (Mandatory)

Hoisting Personnel Up Metal Spars

(1) When it is necessary to hoist personnel up a raised metal spar:

(a) A meeting attended by the qualified machine operator, signal person, person to be hoisted, and the person responsible for the task to be performed must be held to review the requirements of this section and the procedures to be followed.

(b) The machine operator must determine that all systems, controls and safety devices are activated and functioning properly before hoisting personnel.

(c) The machine operator must remain at the controls at all times when hoisting personnel.

(d) The hoisting drum must have a system or device on the power train, other than the brake, which regulates the lowering rate of speed (controlled load lowering). Free falling is prohibited.

(e) Drums used for hoisting personnel must have sufficient flange depth to prevent the hoisting line from running off the drum.

(f) A person must attend the drum used for hoisting personnel to make certain the hoisting line spools evenly.

(g) When used, hoisting line fair-leads must be kept in alignment and free from fouling at all times.

(h) When personnel are hoisted in a pass chain, work seat, or other device, they must wear a full body harness that is attached to the hoisting line with a lanyard no longer than 6 feet in length.

(i) All rigging used for hoisting personnel must be inspected by a competent person before use. Any defect found must be corrected before hoisting personnel.

(j) Hoisting of personnel must be performed in a slow, controlled, cautious manner with no sudden movements.

(k) The movement of a vehicle, machine, or equipment must not be used to raise or lower the person being hoisted.

(l) The person being hoisted must be in continuous sight of, and in direct communication with, the operator or signal person.

(m) Machines, equipment, or tools, such as power saws, loaders, etc., must not be operated if the noise could interfere with the communication between the person being hoisted and the signal person or operator.

(n) The hoisting drum brakes and locking devices must be engaged when the person being hoisted is in a stationary working position.

Appendix 7-D (Mandatory)

Hoisting Personnel Up Metal Spars

(o) Hoisting of personnel must be promptly discontinued upon indication of any dangerous weather conditions or other impending danger.

(p) Personnel must not be allowed to stand or work below the person being hoisted, or in any area where they could be struck by falling objects.

(2) When a passline is used while hoisting personnel, it must:

(a) Not be less than 5/16-inch nor larger than 1/2-inch diameter.

(b) Not be subjected to sawing on other lines or rigging and kept clear of moving lines and rigging.

(c) Be of one continuous length and in good condition with no splices, knots, mollies or eye-to-eye splices between the ends.

(d) Be long enough to provide three wraps on the drum before the climber leaves the ground.

(e) Have three tuck eyes only.

(f) Be attach to a powered drum with shackles or equivalent means.

(g) Be fitted with links or rings to prevent employees from being pulled into the passline block or hoisting line sheave.

(3) When a line other than a passline is used while hoisting personnel, it must:

(a) Not be less than 5/16-inch in diameter.

(b) Meet the requirements of (2)(b) through (g).

(4) When the hoisting line is larger than 1/2-inch diameter, precautions must be taken to ensure that the weight of line from the drum to the hoisting sheave will never be greater than the weight on the other side of the hoisting sheave, excluding personnel or materials being hoisted.

(5) When a passline chain is used while hoisting personnel, it must:

(a) Not be less than 5/16-inch alloy or 3/8-inch high test chain and must not contain cold shuts or wire strands.

(b) Be attached to the end of the passline with a screw-pin shackle, a slip-pin shackle with a nut and molly, or a ring large enough to prevent going through the pass block.

Appendix 7-D (Mandatory)

Hoisting Personnel Up Metal Spars

(6) When a pass block is used while hoisting personnel, it must:

- (a)** Be inspected before placing in each spar and the necessary replacement or repairs made before they are hung.
- (b)** Have bearings that are kept well lubricated.
- (c)** Not be used for heavier strains or lines than those for which it is constructed.
- (d)** Be fitted with line guards and used in a manner that prevents fouling.
- (e)** Have the shells bolted under the sheaves.
- (f)** Have the bearing pin securely locked and nuts keyed or be a type of block that positively secures the nut and pin.
- (g)** Be equipped with a sheave not less than 6 inches in diameter.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-E (Mandatory)

Rigging Wooden Spar Trees

- (1)** Spar trees must be:
 - (a)** Examined carefully for defects before being selected.
 - (b)** Sound, straight, green wood.
 - (c)** Of sufficient diameter to withstand the strains to be imposed.
- (2)** Trees having defects that impair their strength must not be used for spar trees.
- (3)** Douglas fir or spruce must be used as spar trees when they are available.
- (4)** If species other than douglas fir or spruce must be used as a spar tree, additional guylines, tree plates or other precautions must be taken to ensure that the tree will withstand the strains to be imposed.
- (5)** Raised trees must be identified and marked as such.
- (6)** Wood spar lead blocks used for yarding, swinging, loading and unloading must:
 - (a)** Be of the type and construction designed for this purpose;
 - (b)** Be bolted with not less than two bolts through the shells below the sheaves in a manner that will retain the sheave and line in case of bearing pin failure (this does not apply to haulback lead blocks); and
 - (c)** Have a sheave diameter of not less than 20 times the diameter of the mainline.
- (7)** Blocks used to lead lines directly to yarding, loading or unloading machines other than passline or strawline blocks must be hung:
 - (a)** In both eyes or "D"s of the straps (threaded straps are prohibited); or
 - (b)** With a choker(s) that has the ferrule seated in the socket of the bell or hook in a manner that will prevent the ferrule from coming unbuttoned.
- (8)** Wood spar haulback and mainline loading blocks must be hung as close as possible to support guylines.
- (9)** All wood head spar trees must be equipped with passlines, chains and blocks as required by Appendix 7-D.

Appendix 7-E (Mandatory)

Rigging Wooden Spar Trees

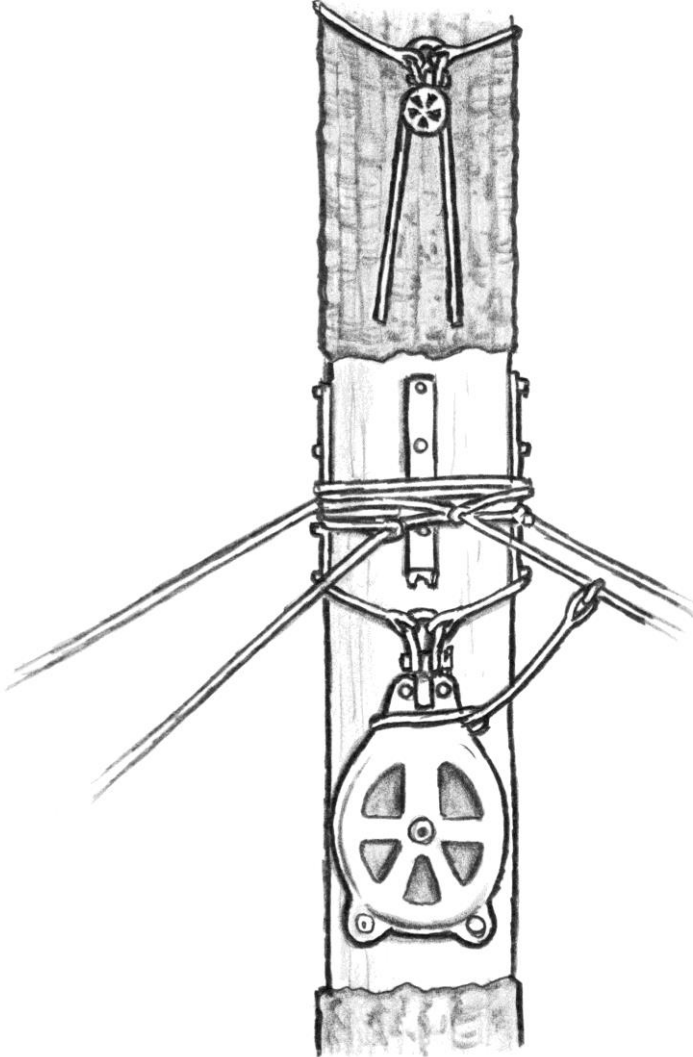


Figure 7-38 – Rigging – Wood Spar

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-F (Mandatory)

Radio Permits and Radio Signal Permit Area Map

RADIO PERMITS

Permits for either radio-activated signaling or machine functions in cable logging operations will be issued by the Department of Consumer and Business Services, Oregon Occupational Safety and Health Division (Oregon OSHA), on the following basis:

(1) Radio equipment, in use at cable logging sites, which is primarily used for voice communication must be on a separate assigned frequency from radio equipment primarily used to initiate whistles or other audible signaling devices or to control any machine, material handling device, or other equipment hazardous to employees.

(2) Any radio frequency, governed by the Federal Communications Commission, for tone coded control of audible signal or machine functions will be issued permits contingent on compatibility with other systems in use and based on OAR 437-007-1405.

(3) 154.57, 154.60, 75.48 and 75.56 MHz channels are to be used as two tone sequential coded channels for activation of the audible signaling devices and machine functions in cable logging with a maximum 1/2 watt output measured at the antenna terminals. 75.56 MHz is to be used for machine functions only.

(4) All radio devices, tone coded for either signal or machine functions, associated with logging except those used for voice communications, must meet or exceed the following requirements, specifications, tolerances and tests:

(a) Transmitters used for voice transmission will comply with Federal Communications Commission requirements.

(b) Tone-coded radio systems which activate audible signals or machine functions must transmit and decode only by the use of multi-tone frequencies assigned by the Department of Consumer and Business Services, Oregon-OSHA.

(c) The receiver sensitivity must be capable of attaining .6 microvolt, or greater, for 12 db SINAD ratio for VHF frequencies and .7 microvolt, or greater for UHF frequencies. Effective January 1, 1984, all radio systems receiver sensitivity must be capable of attaining .4 microvolt, or greater, for 12 db SINAD ratio for VHF frequencies and .5 microvolt, or greater, for UHF frequencies. When interference is a factor, the receiver may be desensitized for the promotion of safety by a person qualified in accordance with OAR 437-007-1405.

(d) The receiver spurious response attenuation shall be at least 40 db on present systems. On all new radio systems put into service after January 1, 1992, the receiver spurious response attenuation must be at least 60 db. These measurements shall be made as specified by the Electronics Industries Association (EIA).

Appendix 7-F (Mandatory)

Radio Permits and Radio Signal Permit Area Map

(e) The receiver selectivity must be more than 40 db at ± 30 KHz. On all new radio signal systems put into service after January 1, 1992, the receiver selectivity must be at least 60 db at ± 30 KHz. This measurement shall be made by EIA standards.

(f) The receiver decoder tone frequency must not exceed 6 Hertz above or below the assigned tone frequency.

(g) The drift of the transmitter encoder must not exceed 6 Hertz above or below the assigned tone frequency.

(h) Radio systems must operate within the specified tolerances at any temperature within the range of -30 degrees C to +60 degrees C.

(i) Radio-signaling systems which may be subjected to the entrance of moisture during use, must be tested within 15 minutes after being subjected to the following conditions and must continue to function properly. The transmitter and receiver must be placed in a humidity chamber for eight hours where the humidity has been maintained at not less than 90 percent and where a 40 degrees C temperature has been maintained.

(j) Switches of transmitters used to send whistle signals or activate equipment associated with cable systems of logging must be designed in such a manner whereby two buttons, motions or a combination of these must be required simultaneously to cause activation of the system. Arrangement of the activating switches must be such that the operator can transmit signals easily by the use of either hand but cannot easily activate the transmitter accidentally.

(k) All receivers intended to be mounted on or in the yarder or similar equipment and all portable transmitters shall continue to maintain specified mechanical and electrical performance during and after being subjected to vibration of the magnitude and amplitude as follows:

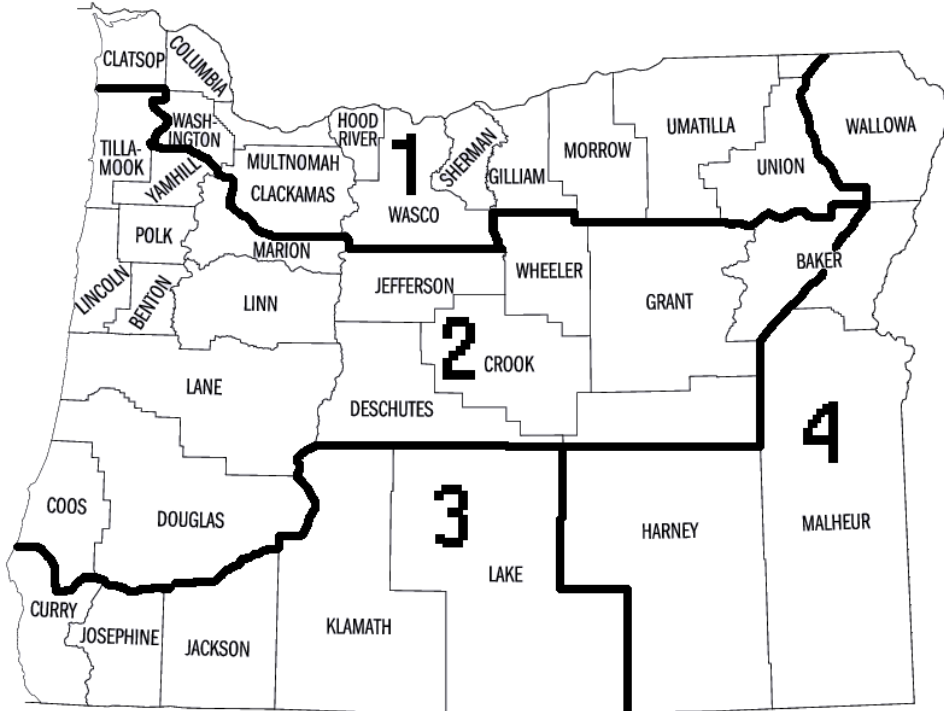
(A) The equipment must meet all electrical requirements after being vibrated with simple harmonic motion having an amplitude of 0.015" (total excursion of 0.030") with the frequency varied uniformly between 10 and 30 cycles per second, and an amplitude of 0.0075" (total excursion of 0.015") with the frequency varied uniformly from 30 to 60 cycles per second.

(B) The entire cycle of frequencies for each group, i.e., 10 to 30 cps and 30 to 60 cps, shall be accomplished in five minutes and repeated three times. The above motion must be applied for a total period of 30 minutes in each of three directions, namely, the directions parallel to both axes of the base, and perpendicular to the plane of base.

Appendix 7-F (Mandatory)

Radio Permits and Radio Signal Permit Area Map

(I) All portable transmitters must continue to maintain specified mechanical and electrical performance after being subjected to the following shock test. The equipment must be dropped once on each of five surfaces from a height of 4 feet onto a smooth concrete floor.



Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

To the employer:

Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Can you read (circle one): Yes / No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____
2. Your name: _____
3. Your age (to nearest year): _____
4. Sex (circle one): Male / Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): (_____) _____
9. The best time to phone you at this number: _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes / No
11. Check the type of respirator you will use (you can check more than one category):
_____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
_____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

12. Have you worn a respirator (circle one): Yes / No

If "yes," what type(s): _____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month:
Yes / No

2. Have you ever had any of the following conditions?

a. Seizures (fits): Yes / No

b. Diabetes (sugar disease): Yes / No

c. Allergic reactions that interfere with your breathing: Yes / No

d. Claustrophobia (fear of closed-in places): Yes / No

e. Trouble smelling odors: Yes / No

3. Have you ever had any of the following pulmonary or lung problems?

a. Asbestosis: Yes / No

b. Asthma: Yes / No

c. Chronic bronchitis: Yes / No

d. Emphysema: Yes / No

e. Pneumonia: Yes / No

f. Tuberculosis: Yes / No

g. Silicosis: Yes / No

h. Pneumothorax (collapsed lung): Yes / No

i. Lung cancer: Yes / No

j. Broken ribs: Yes / No

k. Any chest injuries or surgeries: Yes / No

l. Any other lung problem that you've been told about: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

4. Do you currently have any of the following symptoms of pulmonary or lung illness?
- a. Shortness of breath: Yes / No
 - b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes / No
 - c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes / No
 - d. Have to stop for breath when walking at your own pace on level ground: Yes / No
 - e. Shortness of breath when washing or dressing yourself: Yes / No
 - f. Shortness of breath that interferes with your job: Yes / No
 - g. Coughing that produces phlegm (thick sputum): Yes / No
 - h. Coughing that wakes you early in the morning: Yes / No
 - i. Coughing that occurs mostly when you are lying down: Yes / No
 - j. Coughing up blood in the last month: Yes / No
 - k. Wheezing: Yes / No
 - l. Wheezing that interferes with your job: Yes / No
 - m. Chest pain when you breathe deeply: Yes / No
 - n. Any other symptoms that you think may be related to lung problems: Yes / No
5. Have you ever had any of the following cardiovascular or heart problems?
- a. Heart attack: Yes / No
 - b. Stroke: Yes / No
 - c. Angina: Yes / No
 - d. Heart failure: Yes / No
 - e. Swelling in your legs or feet (not caused by walking): Yes / No
 - f. Heart arrhythmia (heart beating irregularly): Yes / No
 - g. High blood pressure: Yes / No
 - h. Any other heart problem that you've been told about: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

6. Have you ever had any of the following cardiovascular or heart symptoms?
- a. Frequent pain or tightness in your chest: Yes / No
 - b. Pain or tightness in your chest during physical activity: Yes / No
 - c. Pain or tightness in your chest that interferes with your job: Yes / No
 - d. In the past two years, have you noticed your heart skipping or missing a beat:
Yes / No
 - e. Heartburn or indigestion that is not related to eating: Yes / No
 - f. Any other symptoms that you think may be related to heart or circulation problems:
Yes / No
7. Do you currently take medication for any of the following problems?
- a. Breathing or lung problems: Yes / No
 - b. Heart trouble: Yes / No
 - c. Blood pressure: Yes / No
 - d. Seizures (fits): Yes / No
8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9 _____.)
- a. Eye irritation: Yes / No
 - b. Skin allergies or rashes: Yes / No
 - c. Anxiety: Yes / No
 - d. General weakness or fatigue: Yes / No
 - e. Any other problem that interferes with your use of a respirator: Yes / No
9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

Questions 10 through 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently): Yes / No
11. Do you currently have any of the following vision problems?
- a. Wear contact lenses: Yes / No
 - b. Wear glasses: Yes / No
 - c. Color blind: Yes / No
 - d. Any other eye or vision problem: Yes / No
12. Have you ever had an injury to your ears, including a broken ear drum: Yes / No
13. Do you currently have any of the following hearing problems?
- a. Difficulty hearing: Yes / No
 - b. Wear a hearing aid: Yes / No
 - c. Any other hearing or ear problem: Yes / No
14. Have you ever had a back injury: Yes / No
15. Do you currently have any of the following musculoskeletal problems?
- a. Weakness in any of your arms, hands, legs, or feet: Yes / No
 - b. Back pain: Yes / No
 - c. Difficulty fully moving your arms and legs: Yes / No
 - d. Pain or stiffness when you lean forward or backward at the waist: Yes / No
 - e. Difficulty fully moving your head up or down: Yes / No
 - f. Difficulty fully moving your head side-to-side: Yes / No
 - g. Difficulty bending at your knees: Yes / No
 - h. Difficulty squatting to the ground: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

- i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes / No
- j. Any other muscle or skeletal problem that interferes with using a respirator: Yes / No

Part B. Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes / No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes / No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes / No

If "yes," name the chemicals if you know them: _____

3. Have you ever worked with any of these materials, or under any of the conditions, listed below:

- a. Asbestos: Yes / No
- b. Silica (e.g., in sandblasting): Yes / No
- c. Tungsten/cobalt (e.g., grinding or welding this material): Yes / No
- d. Beryllium: Yes / No
- e. Aluminum: Yes / No
- f. Coal (for example, mining): Yes / No
- g. Iron: Yes / No
- h. Tin: Yes / No
- i. Dusty environments: Yes / No
- j. Any other hazardous exposures: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

If "yes," describe these exposures: _____

4. List any second jobs or side businesses you have:

5. List your previous occupations:

6. List your current and previous hobbies:

7. Have you been in the military services? Yes / No

If "yes," were you exposed to biological or chemical agents (either in training or combat) Yes / No

8. Have you ever worked on a HAZMAT team? Yes / No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes / No

If "yes," name the medications if you know them: _____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters: Yes / No

b. Canisters (for example, gas masks): Yes / No

c. Cartridges: Yes / No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

a. Escape only (no rescue): Yes / No

b. Emergency rescue only: Yes / No

c. Less than 5 hours per week: Yes / No

d. Less than 2 hours per day: Yes / No

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

2 to 4 hours per day: Yes / No

Over 4 hours per day: Yes / No

12. During the period you are using the respirator(s), is your work effort:

a. Light (less than 200 kcal per hour): Yes / No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.

b. Moderate (200 to 350 kcal per hour): Yes / No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. Heavy (above 350 kcal per hour): Yes / No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes / No

If "yes," describe this protective clothing and/or equipment: _____

14. Will you be working under hot conditions (temperature exceeding 77 degrees F):
Yes / No

15. Will you be working under humid conditions: Yes / No

16. Describe the work you'll be doing while you're using your respirator(s):

Appendix 7-G (Mandatory)

Respirator Medical Evaluation Questionnaire

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of the first toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the second toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the third toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

The name of any other toxic substances that you'll be exposed to while using your respirator: _____

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security): _____

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Apéndice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

Este es un apéndice que no es obligatorio añadir al OAR 437-004-1040, Respiradores.

COMPAÑÍA Y/O PATRON: Tienen que proveer la información en parte B de este documento.

A. TRABAJADOR: Su compañía o patrón debe dejarlo responder estas preguntas durante horas normales de trabajo o durante una hora y lugar que sea conveniente para usted.

(Obligatorio) La siguiente información tiene que ser provisto por cada empleado que es designado a usar cualquier tipo de respirador (escribe claro por favor).

Fecha de Hoy: _____ Su nombre: _____ Edad: _____

Género: M / F Estatura: _____ Peso: _____

Ocupación, título or tipo de trabajo: _____

Un número de teléfono donde el profesional de salud quien revisa este cuestionario puede comunicarse con usted (incluya el código de área): _____

La mejor hora de comunicarse con usted ha este número de teléfono: AM / PM (Marque uno): _____

¿Le explicó su patrón como comunicarse con el profesional de salud revisando este cuestionario? Si / No

Marque el tipo de respirador que usa (puede marcar más de uno):

- a. ___ N, R, o P respirador desechable (máscara con filtro, sin cartucho)
- b. ___ Otra clase de respirador (por ejemplo, máscara de media cara, máscara completa, tanque de aire, sistema completo de protección pulmonar).

¿Ha usado usted un respirador? Si / No

Si es afirmativo, ¿Que estilo(s)? _____

Apendice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

(Obligatorio) Preguntas del 1 al 9 tienen que ser contestadas por todo empleado que es designado ha usar cualquier clase de respirador (circule su respuesta).

1. ¿Actualmente, fuma tabaco, o ha fumado tabaco en el último mes? Si / No

2. ¿Ha padecido usted de lo siguiente?:
 - Convulsiones Si / No
 - a. Diabetes (azúcar en la sangre) Si / No
 - b. Reacciones alérgicas que interfieren con su respiración Si / No
 - c. Claustrofobia (temor a espacios cerrados) Si / No
 - d. Problemas del olfato Si / No

3. ¿Ha padecido usted de los siguientes problemas pulmonares?
 - a. Asbestosis Si / No
 - b. Asma Si / No
 - c. Bronquitis crónica Si / No
 - d. Enfisema Si / No
 - e. Neumonía Si / No
 - f. Tuberculosis Si / No
 - g. Silicosis Si / No
 - h. Neumotorax (desinfe del pulmón) Si / No
 - i. Cáncer del pulmón Si / No
 - j. Fracturas de las costillas Si / No
 - k. Lesiones o cirugía del pecho Si / No
 - l. Otros problemas del pulmón Si / No

4. ¿Actualmente tiene Usted alguno de los siguientes síntomas pulmonares o enfermedades del pulmón?:
 - a. Falta de aire Si / No
 - b. Falta de aire cuando camina rápido en superficie plana o cuando el camino es elevado Si / No
 - c. Falta de aire cuando camina con otras personas, normalmente
 - d. en superficie plana Si / No
 - e. El tener que parar para coger aire cuando camina a su ritmo
 - f. en superficie plana Si / No
 - g. Falta de aire cuando usted se lava o se viste Si / No
 - h. Falta de aire lo cual interfiere con su trabajo Si / No
 - i. Tos, la cual produce flema espesa Si / No
 - j. Tos, la cual lo despierta Si / No
 - k. Tos, la cual se manifiesta cuando esta acostado Si / No
 - l. Tos con sangre durante el mes pasado Si / No
 - m. Respiración jadiante Si / No
 - n. Respiración jadiante, la cual interfiere con su trabajo Si / No
 - o. Dolor en el pecho cuando respira profundamente Si / No
 - p. Cualquier otro síntoma o problema el cual usted cree esta relacionado a problemas del pulmón Si / No

Apéndice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

5. ¿Ha padecido usted de los siguientes problemas cardiovasculares o del corazón?:
- a. Ataque al corazón: Si / No
 - b. Derrame cerebral o Embolia: Si / No
 - c. Angina: Si / No
 - d. Problemas del corazón: Si / No
 - e. Hinchazón de las piernas o pies (no causada por el andar): Si / No
 - f. Arritmias del corazón (palpitación irregular): Si / No
 - g. Presión alta de la sangre: Si / No
 - h. Otros problemas del corazón: Si / No
6. ¿Ha padecido Usted de los siguientes síntomas cardiovasculares o del corazón?:
- a. Dolor o presión frecuente del pecho: Si / No
 - b. Dolor o presión del pecho durante actividad física: Si / No
 - c. Dolor o presión del pecho lo cual interfiere con su trabajo: Si / No
 - d. En los últimos dos años ha notado cambios en el ritmo de su corazón: Si / No
 - e. Agrura o indigestión, no ocasionada por la comida: Si / No
 - f. Otros síntomas los cuales usted cree están relacionados a problemas del corazón o circulación: Si / No
7. ¿Actualmente toma usted medicamentos para algunos de los siguientes problemas?:
- a. Problemas de la respiración o de los pulmones: Si / No
 - b. Problemas del corazón: Si / No
 - c. Presión: Si / No
 - d. Convulsiones: Si / No
8. Si Usted ha usado un respirador, ¿ha tenido en alguna ocasión alguno de los siguientes problemas? (Si usted nunca ha usado un respirador por favor continúe con la pregunta #9).
- a. Irritación de los ojos: Si / No
 - b. Irritación o alergias de la piel: Si / No
 - c. Ansiedad: Si / No
 - d. Agotamiento o debilidad: Si / No
 - e. Algún otro problema que interfiere con el uso del respirador: Si / No
9. Quiere hablar de sus respuestas con el trabajador de salud el cual va a revisar su cuestionario? Si / No

Apéndice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

(SCBA Máscara completa o aparato completo con aire) Estas preguntas tienen que ser contestadas obligatoriamente por todo empleado que es designado a usar cualquiera de los siguientes respiradores: máscara completa o aparato completo con aire (SCBA).

1. ¿Ha perdido la vista (temporalmente o permanentemente) en uno o ambos ojos?:
Si / No

2. ¿Actualmente tiene alguno de los siguientes problemas de la vista?:
 - a. Usa lentes de contacto: Si / No
 - b. Usa anteojos: Si / No
 - c. Dificultad en distinguir los colores (acromatopsia): Si / No
 - d. Otros problemas con los ojos o vista?: Si / No

3. ¿Ha tenido un trauma en los oídos, incluyendo daño al tímpano?: Si / No

4. ¿Actualmente tiene algunos de los siguientes problemas con los oídos?:
 - a. Dificultad al oír: Si / No
 - b. Usa prótesis en el oído: Si / No
 - c. Cualquier otro problema con el sentido de los oídos: Si / No

5. ¿Se ha lesionado la espalda?: Si / No

6. ¿Actualmente tiene alguno de los siguientes problemas musculoesquelético?:
 - a. Debilidad de los brazos, manos, piernas y pies: Si / No
 - b. Dolor de la espalda: Si / No
 - c. Dificultad al mover los brazos y piernas: Si / No
 - d. Dolor o dificultad al doblar la cintura: Si / No
 - e. Dificultad al mover la cabeza hacia arriba y abajo: Si / No
 - f. Dificultad al mover la cabeza de un lado a otro: Si / No
 - g. Dificultad al doblar las rodillas: Si / No
 - h. Dificultad al ponerse de cuclillas: Si / No
 - i. Subiendo gradas o una escalera cargando más de 25 libras: Si / No
 - j. Cualquier otro problema del esqueleto o de los músculos al cual va interferir con el uso del respirador: Si / No

Alto: Conteste las siguientes nueve preguntas si se lo indica el trabajador de salud.

1. ¿En su trabajo presente, trabaja en lugares con medidas bajas de oxígeno?: Si / No

¿Si es afirmativo, tiene mareos, falta de aire, presión en el pecho, u otros síntomas cuando esta trabajando bajo estas condiciones?: Si / No

2. ¿En el trabajo o su casa, ha sido usted expuesto a solventes peligrosos, químicas peligrosas transportadas por el aire, (gases, humos, o polvos), o contacto a la piel con químicos peligrosos?: Si / No

Apendice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

Si es afirmativo, nombre del (los) químico(s): _____

3. ¿Ha trabajado Usted con los siguientes materiales, o bajo alguna de las siguientes condiciones?:

- | | |
|---|---------|
| a. Asbestos | Si / No |
| b. Sílice | Si / No |
| c. Cobalto (fibra de metal o material de soldadura) | Si / No |
| d. Berilio | Si / No |
| e. Aluminio | Si / No |
| f. Carbón (trabajo en minas) | Si / No |
| g. Hierro | Si / No |
| h. Estaño | Si / No |
| i. Ambiente polvoroso | Si / No |
| j. Otra exposición química | Si / No |

Si es afirmativo, describa la(s) exposiciones: _____

4. Liste trabajos secundarios u otros trabajos: _____

5. Liste sus ocupaciones anteriores: _____

6. Liste Pasatiempos presentes y pasados: _____

7. ¿Servicio Militar?: Si / No

Si es afirmativo, ¿estuvo expuesto a agentes biológicos o químicos (durante entrenamiento o combate)? Si / No

8. ¿Ha trabajado en un equipo HAZMAT(Grupo de emergencia)? Si / No

9. ¿Fuera de medicinas para la respiración, los pulmones, problemas del corazón, presión, y convulsiones mencionadas anteriormente en este cuestionario, está usted tomando otras medicinas (incluyendo medicinas sin receta médica)? Si / No

Si es afirmativo, nombre las medicinas: _____

Apéndice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

B. INFORMACION PROPORCIONADA POR LA COMPAÑÍA Y/O PATRON

1. ¿Va el empleado a utilizar alguno de los siguientes artículos con su respirador?
- a. Filtros HEPA Si / No
 - b. Canisters (por ejemplo, máscaras para gas) Si / No
 - c. Cartuchos: Si / No

2. ¿Con que frecuencia usará el empleado el respirador (circule todas las respuestas que sean necesarias)?:

- a. Solamente para escape (sin rescate) Si / No
- b. Rescate de emergencia Si / No
- c. Menos de 5 horas por semana Si / No
- d. Menos de 2 horas por día Si / No
- e. 2 a 4 horas por día Si / No
- f. Más de 4 horas por día Si / No

3. ¿Durante el periodo que el empleado usa el respirador, el esfuerzo de trabajo es?:

- a. Liviano (menos de 200 Kcal por hora) Si / No

Si es afirmativo, promedio de horas durante turno de trabajo:

horas _____ minutos _____

Ejemplos de trabajo liviano son: estar sentado cuando escribe, computación, haciendo planos, o de pie operando maquinaria.

- b. Moderado (200 a 350 Kcal por hora) Si / No

Si es afirmativo, promedio de horas durante turno de trabajo:

horas _____ minutos _____

Ejemplos de trabajo moderado son: estar sentado cuando martilla o archiva, manejar un bus o camión en trafico de la ciudad, perforar, martillar o ensamblar cargas moderadas (35 libras) a nivel de la cintura mientras esta de pie; caminando en superficie plana a 2 mph o hacia abajo, a un nivel de 5 grados a 3 mph; o empujando una carretilla con carga pesada (100 libras) en superficie plana.

- c. Pesado (más de 350 Kcal por hora): Si / No

Si es afirmativo, promedio de horas durante turno de trabajo:

horas _____ minutos _____

Ejemplos de trabajo pesado son levantar cercas de 50 libras del suelo a la cintura o hombros, remover material con una pala, empacar heno, caminar hacia arriba a 8 grados a 2 mph, subiendo gradas cargando carga pesada (50 libras).

Apendice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

4. ¿Va el empleado a utilizar ropa o equipo protector además del respirador? Si / No

Si es afirmativo describa el equipo que va a usar: _____

5. ¿Va el empleado a trabajar en temperaturas altas (temperaturas mas de 77 F)?
Si / No

6. ¿Va el empleado a trabajar en condiciones húmedas? Si / No

7. Describa el trabajo que el empleado hará cuando usa el respirador: _____

8. Describa condiciones especiales o condiciones peligrosas las cuales el empleado puede enfrentar cuando usa el respirador (por ejemplo, espacios confinados, gases fulminantes):

9. Provea la siguiente información por cada sustancia tóxica a que el empleado puede estar expuesto cuando use el (los) respiradores):

Primera sustancia tóxica: _____

Nivel máximo de exposición por turno de trabajo: _____

Tiempo de exposición por turno de trabajo: _____

Segunda sustancia tóxica: _____

Nivel máximo de exposición por turno de trabajo: _____

Tiempo de exposición por turno de trabajo: _____

Tercera sustancia tóxica: _____

Nivel máximo de exposición por turno de trabajo: _____

Tiempo de exposición por turno de trabajo: _____

Apendice 7-G (Obligatorio)

CUESTIONARIO DE EVALUACION MEDICA RESPIRATORIA

El nombre de cualquier otra sustancia tóxica(s) al cual ellos puedan estar expuestos mientras usan el respirador: _____

10. Describa otras responsabilidades especiales que los empleados tendrán que usar durante el tiempo que estarán usando respiradores que pueden afectar la seguridad de otras personas (por ejemplo, rescate, seguridad): _____

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-H (Mandatory)

A-Frames and V-Leads

A-Frames

- (1) A-frames must be guyed or braced to provide stability and prevent tipping.
- (2) A-frame bases must be secured against displacement and the tops must be securely bolted or lashed to prevent displacement.
- (3) Where guylines are used, A-frames must be provided with not less than one snap guy and two guylines securely attached, anchored and spread to form an angle 70 degrees to 90 degrees opposite the direction of stress or strain.

V-Leads

- (1) Swinging or yarding with a V-lead is prohibited, except under the following conditions:
 - (a) No additional hazards to the logging machine operator or to other employees in the area will be created because of this operating procedure.
 - (b) The spar must be equipped with fairleads for both main and haulback lines.
 - (c) The mainline and haulback drums must be located not more than 25 feet from the base of the spar.
 - (d) Not less than six guylines must be used.
 - (e) Each guyline on the side opposite the direction of stresses imposed by yarding or swinging must have a breaking strength at least 20 percent greater than that of the mainline used, or one extra guyline at least equal in strength to the mainline used must be placed to oppose the stresses imposed by yarding or swinging in a V-lead, and when the lead is changed, the required extra guyline must be repositioned to oppose the stresses due to this changed direction of pull.
 - (f) No yarding or swinging in a V-lead is performed at less than an angle of 67.5 degrees formed between the logging machine, fairlead and the yarding or swing road on either side of the spar, unless the machine controls and operator are located in a safe position beyond possible contact by chokers, lines, rigging, or logs.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-I (Mandatory)

Guyline Positioning

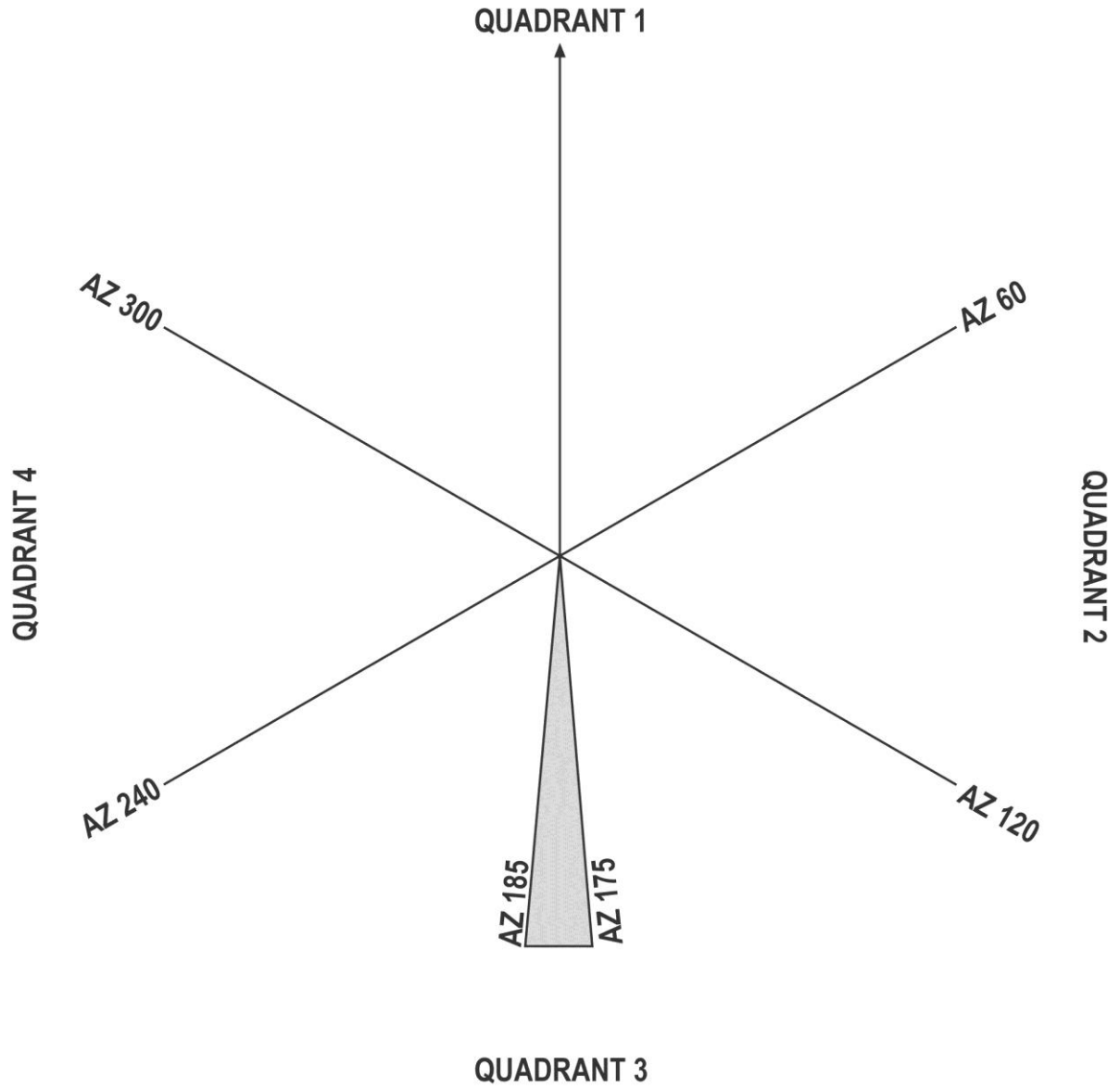


Figure 7-39 – 1 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

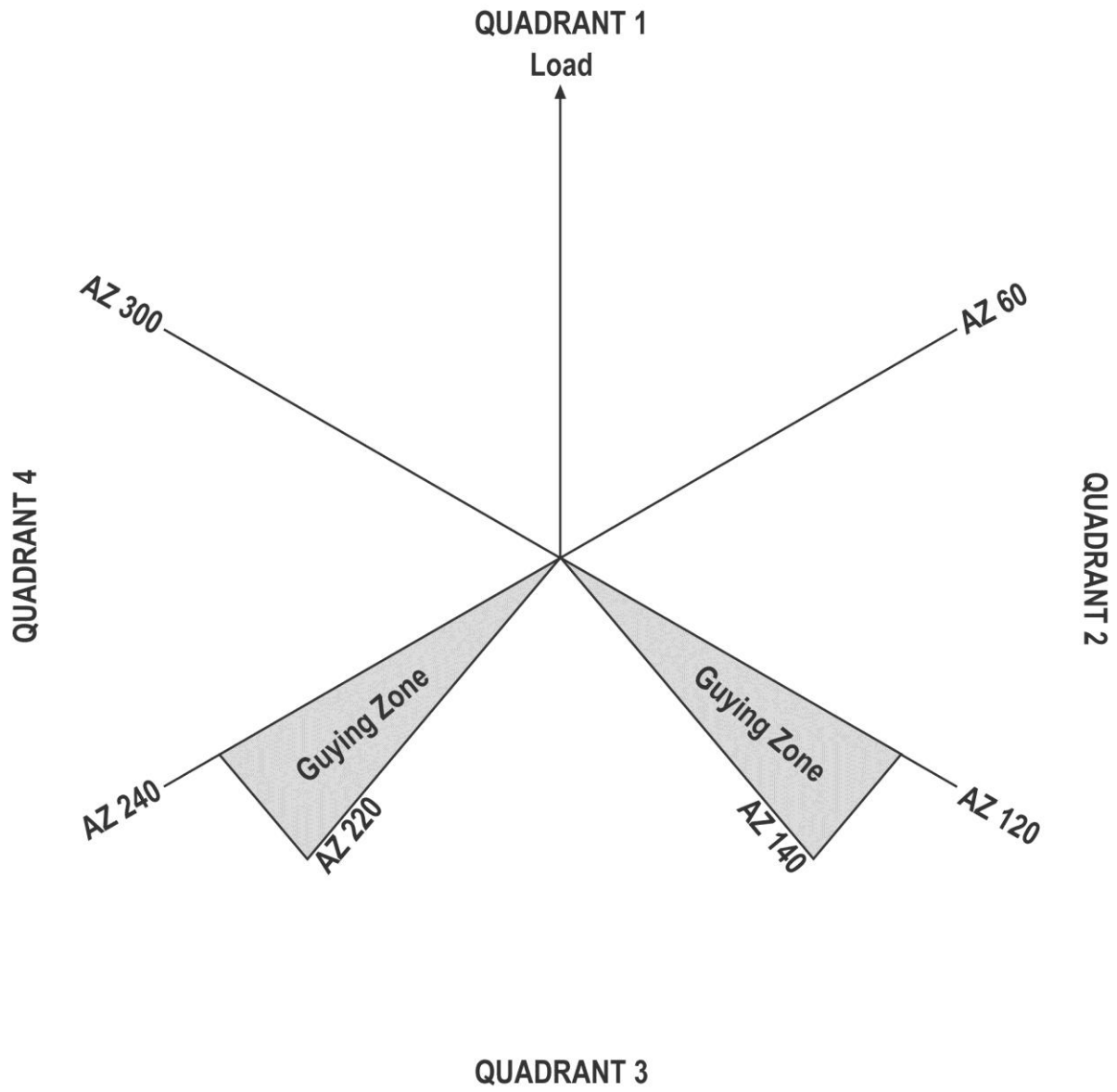


Figure 7-40 – 2 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

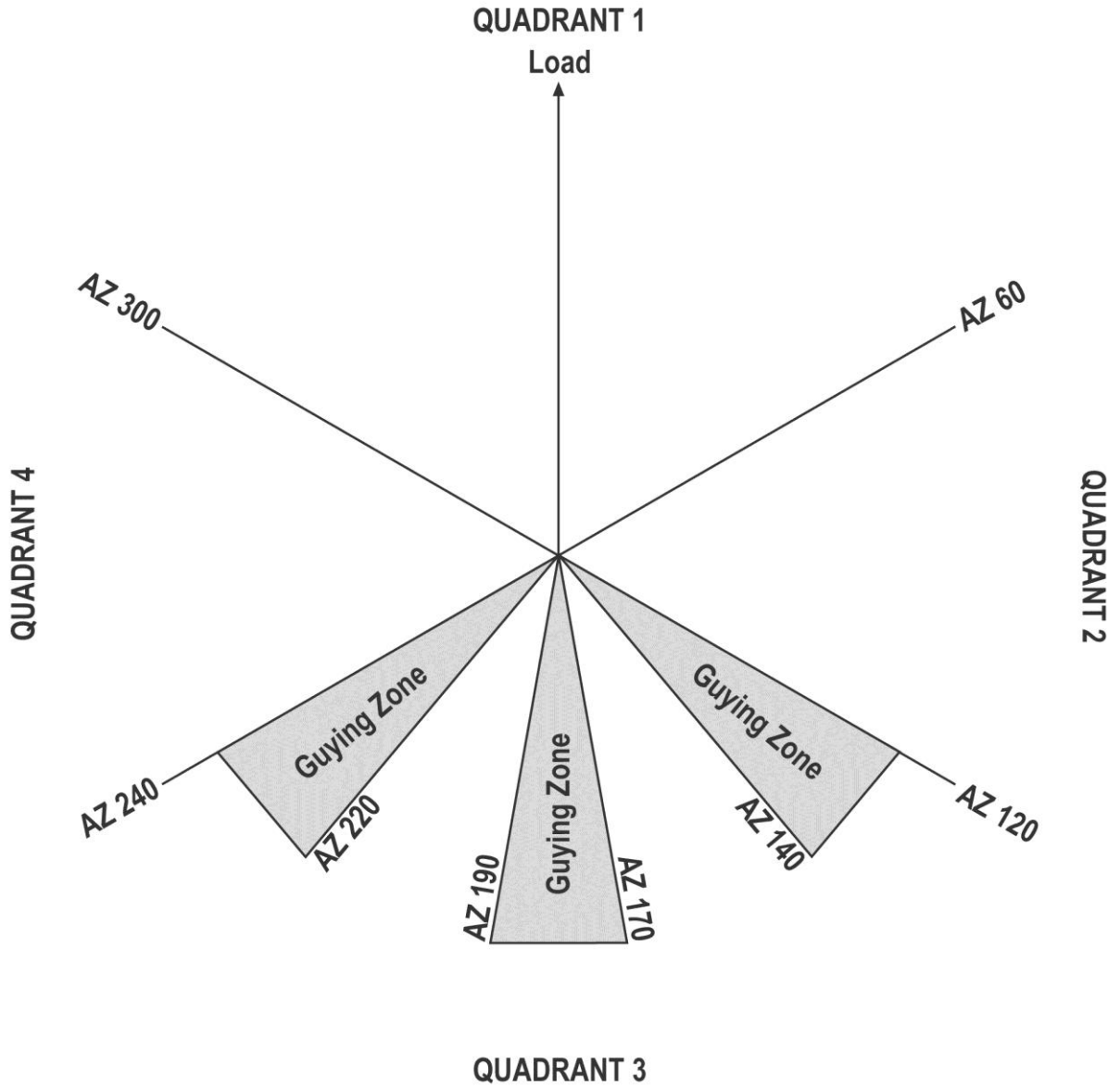


Figure 7-41 - 3 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

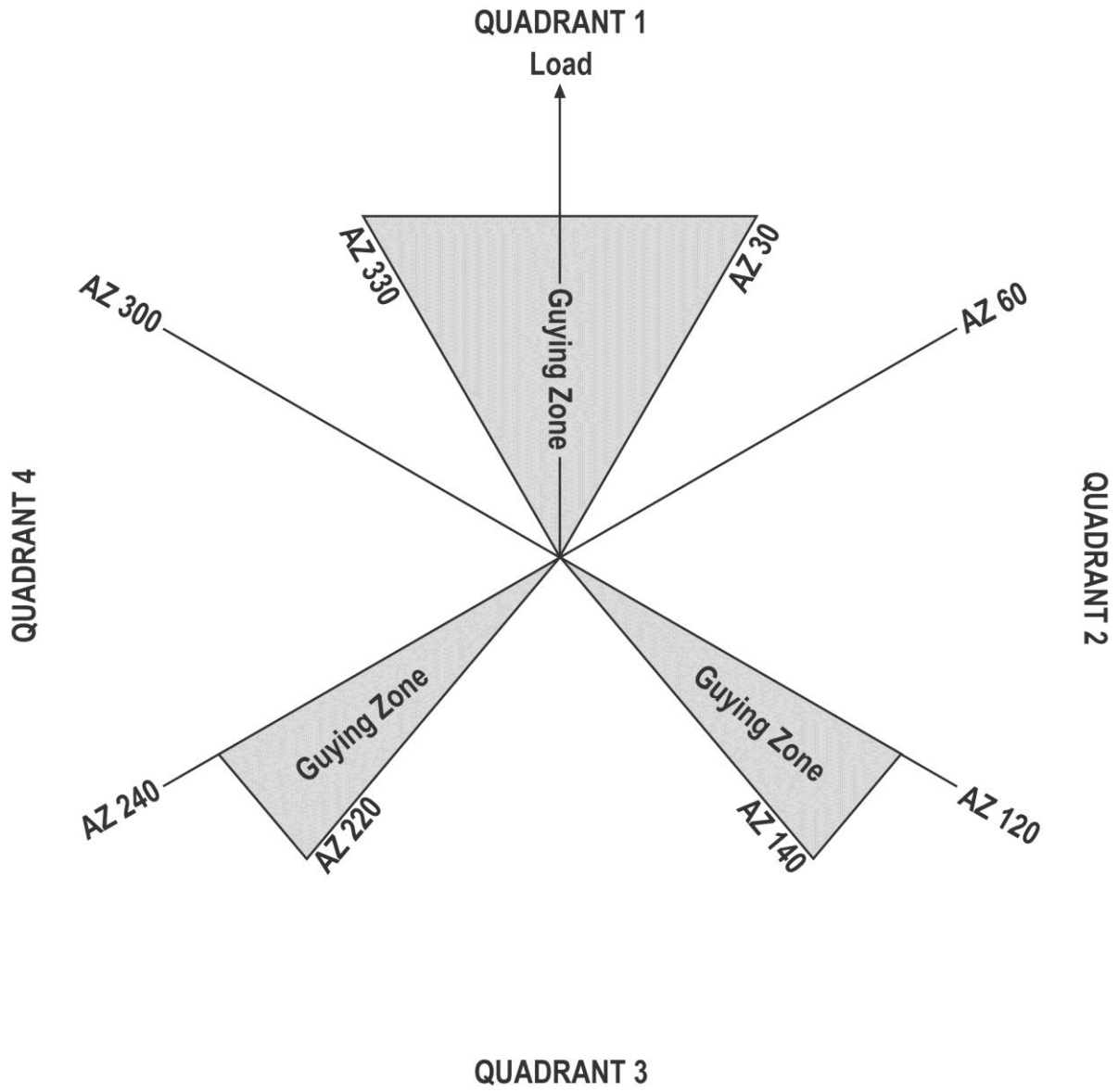


Figure 7-42 – 3 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

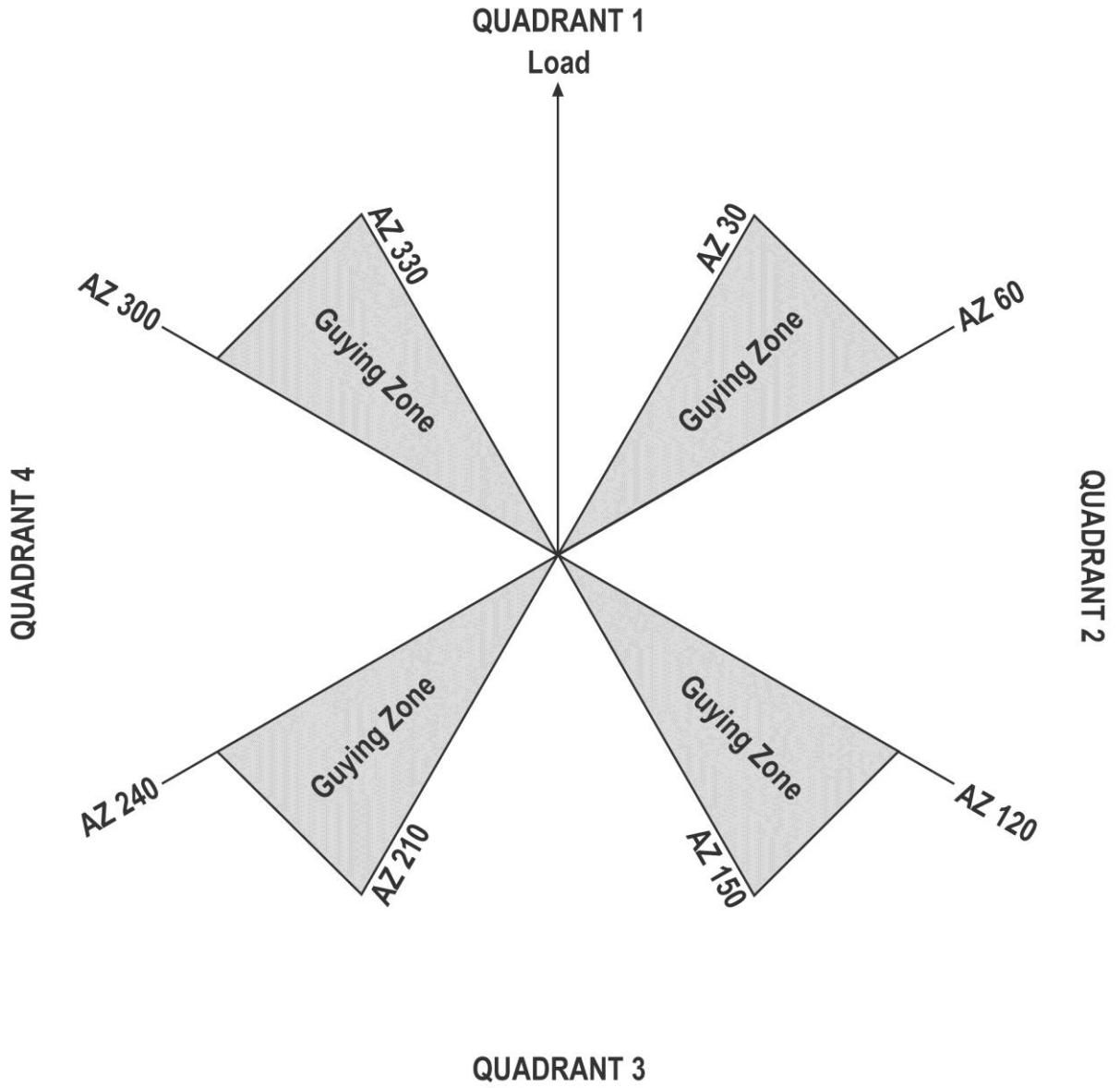


Figure 7-43 – 4 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

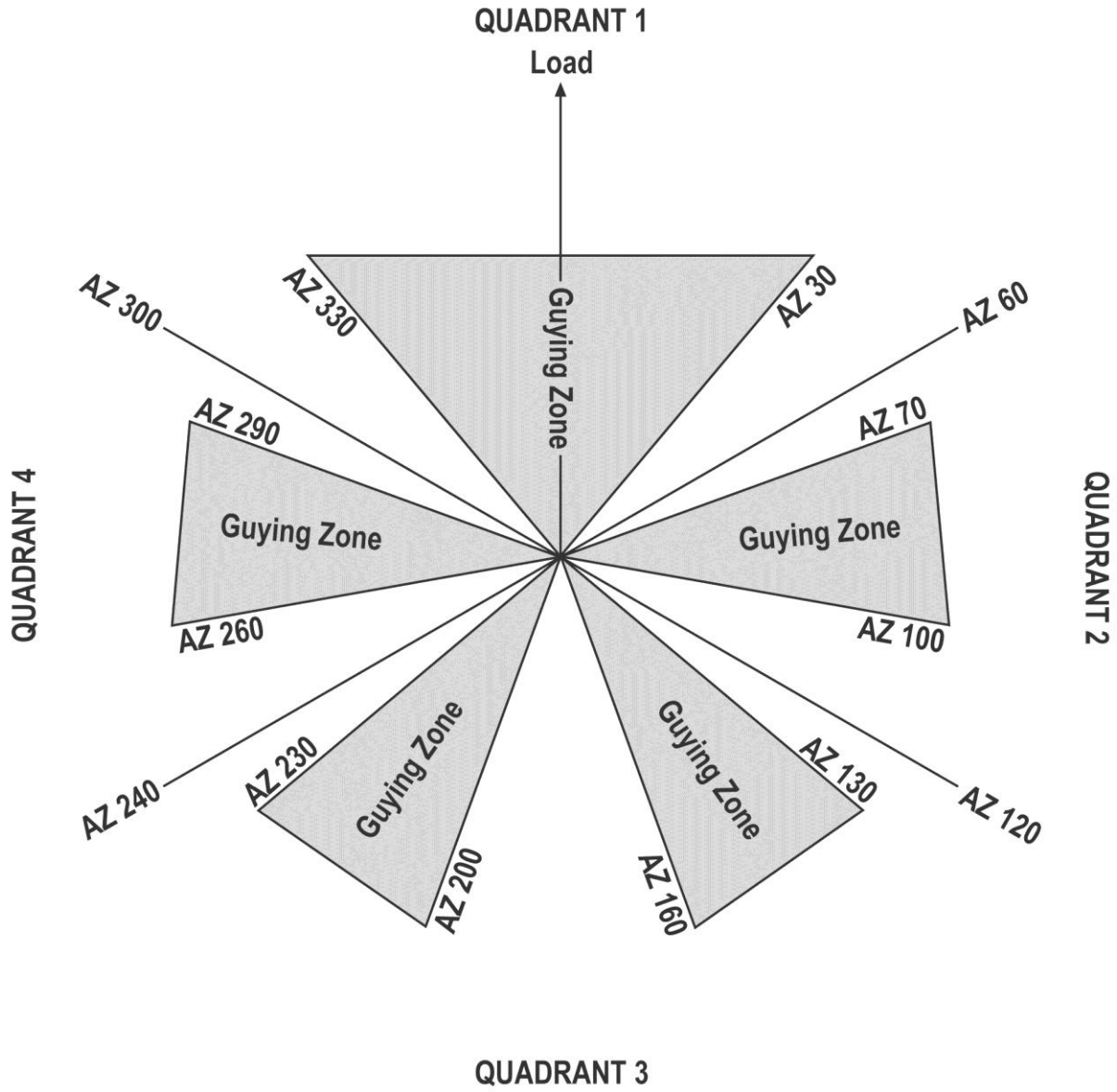


Figure 7-44 – 5 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

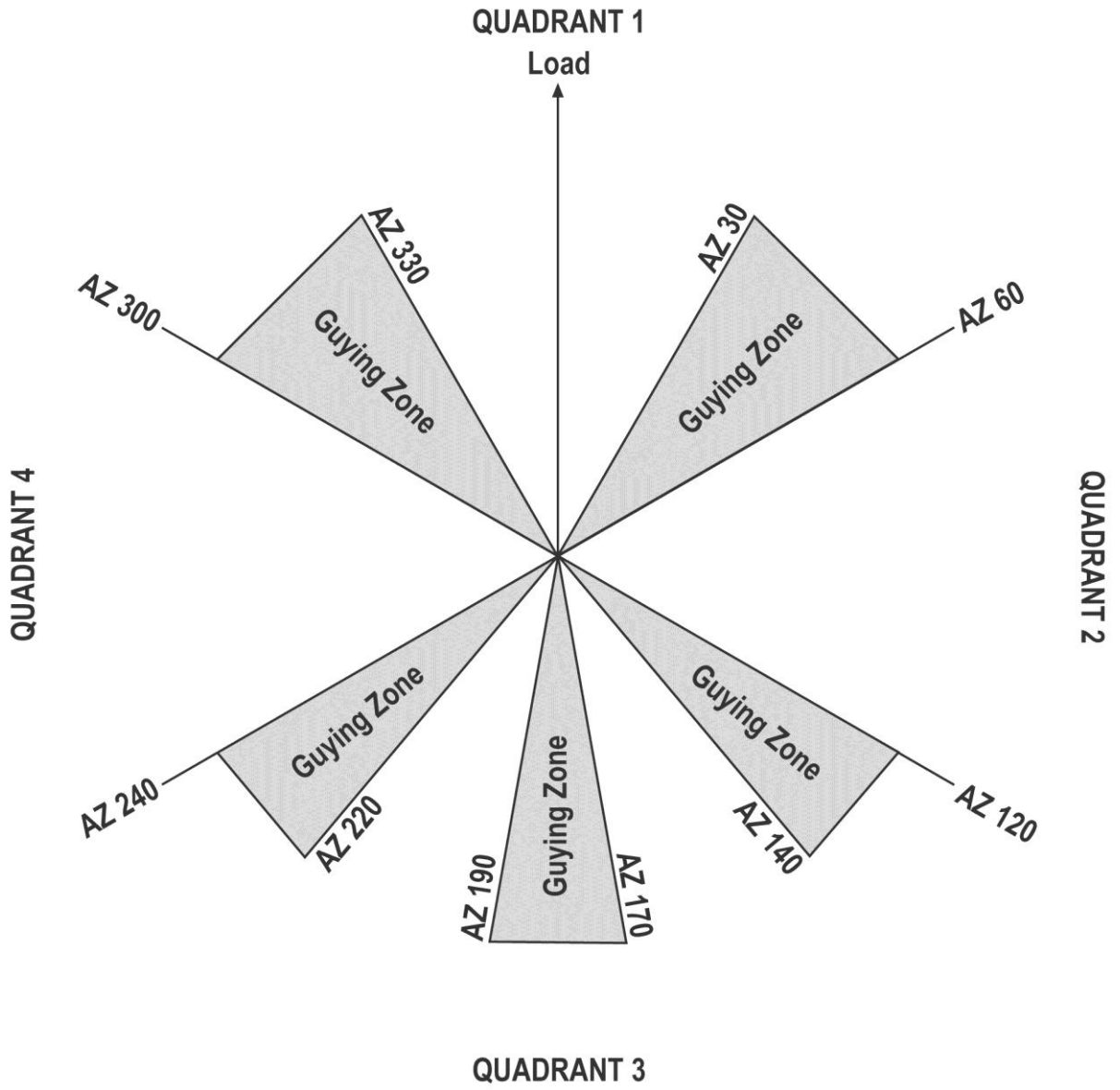


Figure 7-45 – 5 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

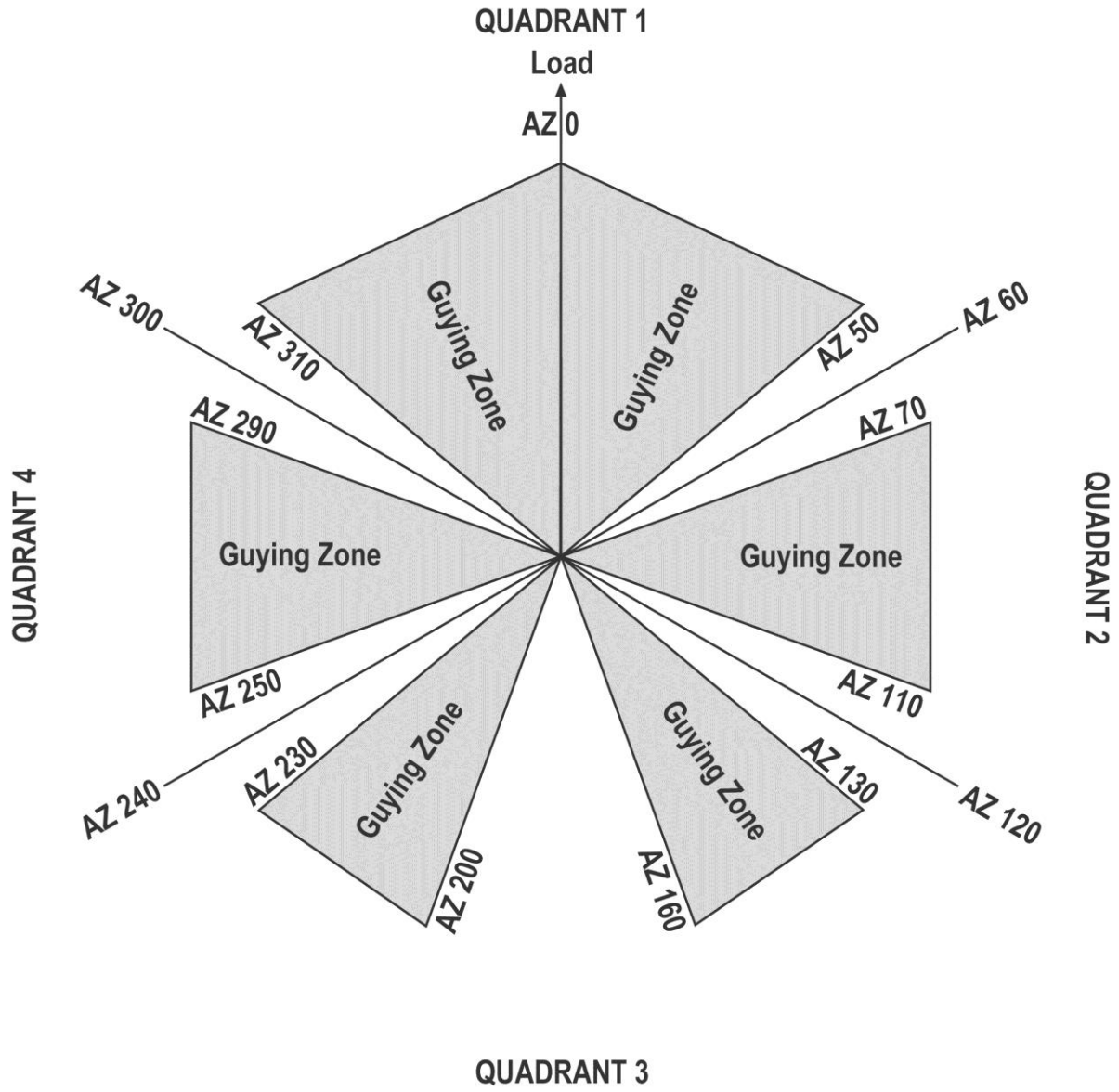


Figure 7-46 – 6 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

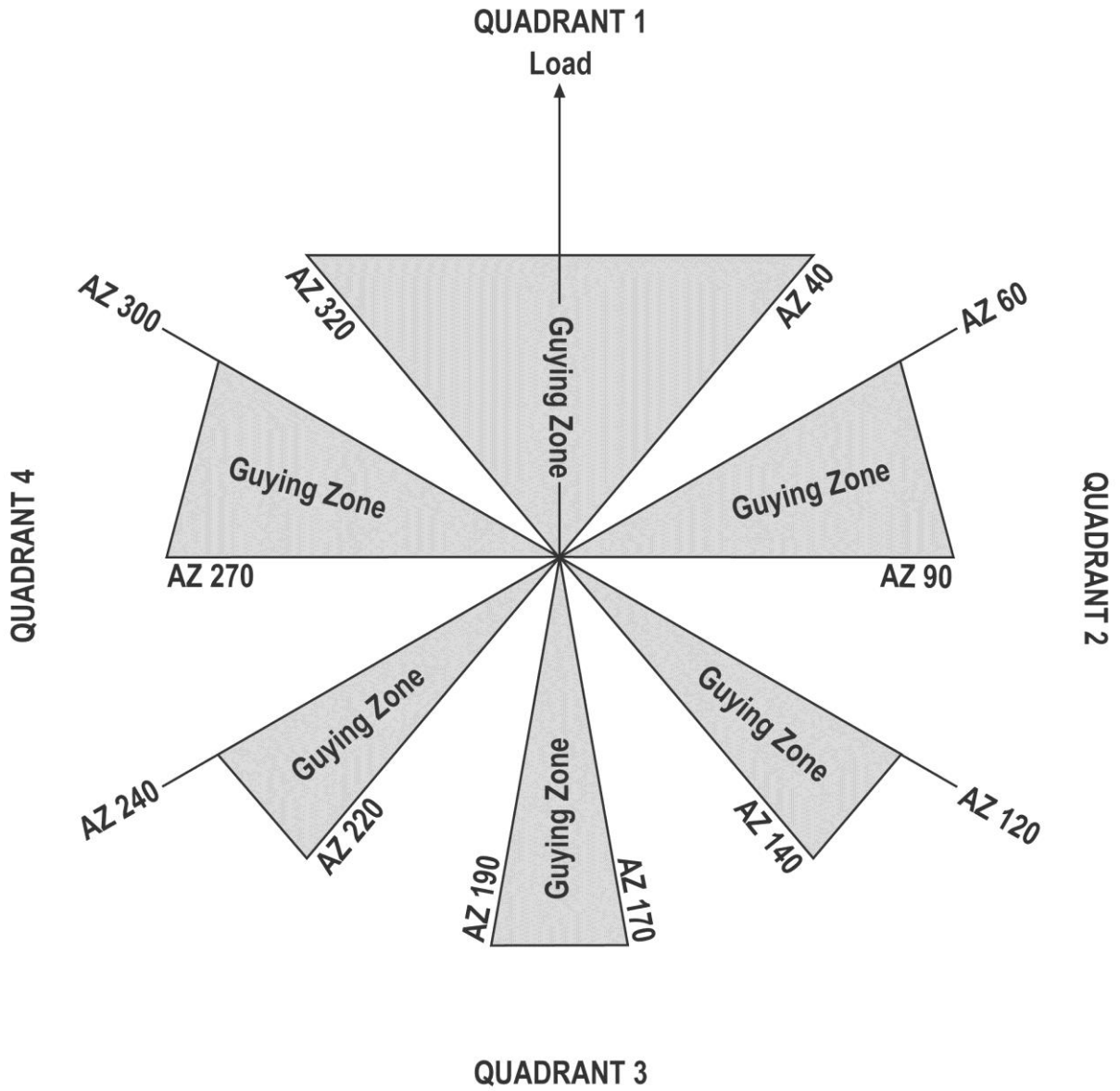


Figure 7-47 – 6 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

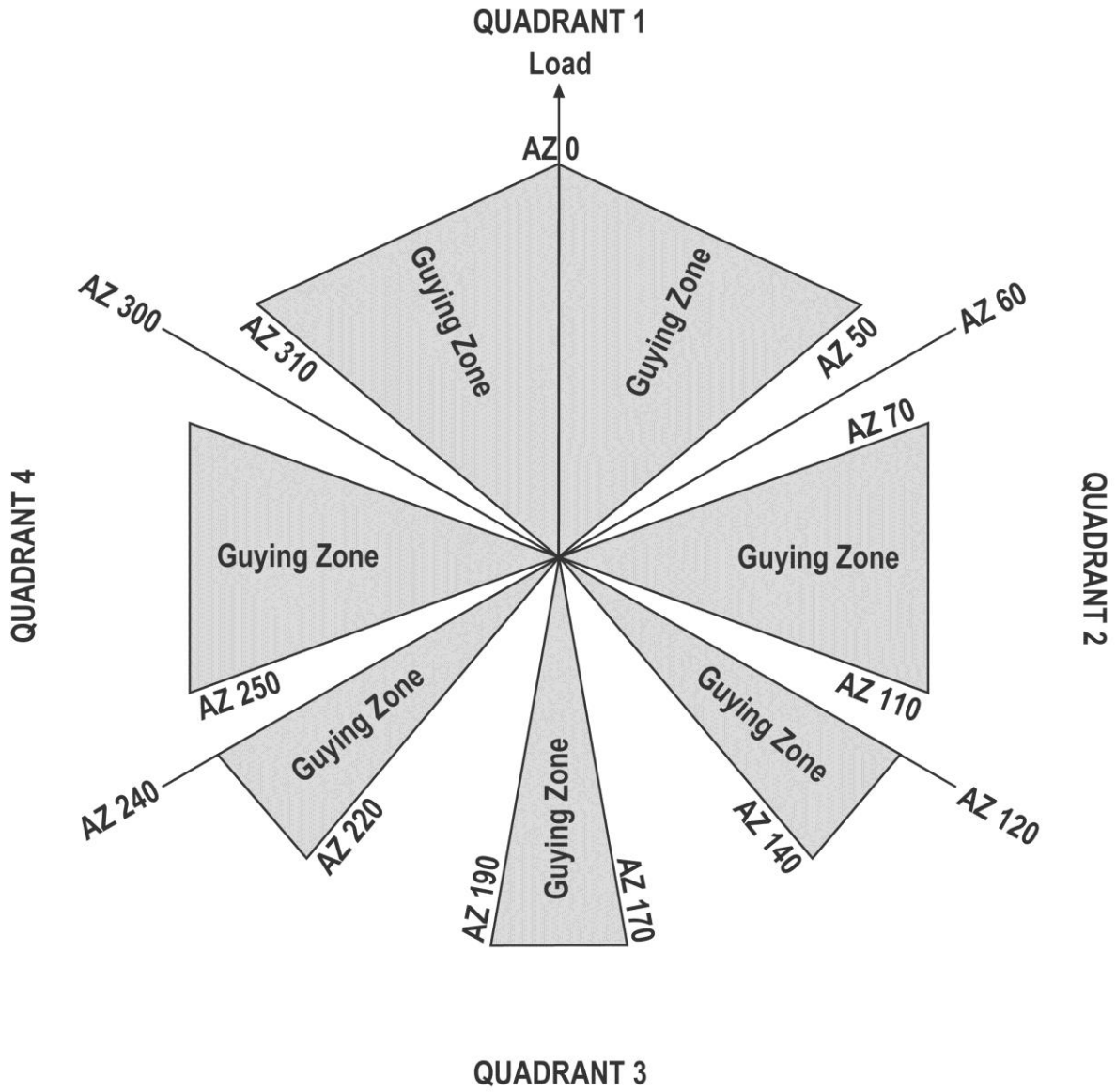


Figure 7-48 – 7 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

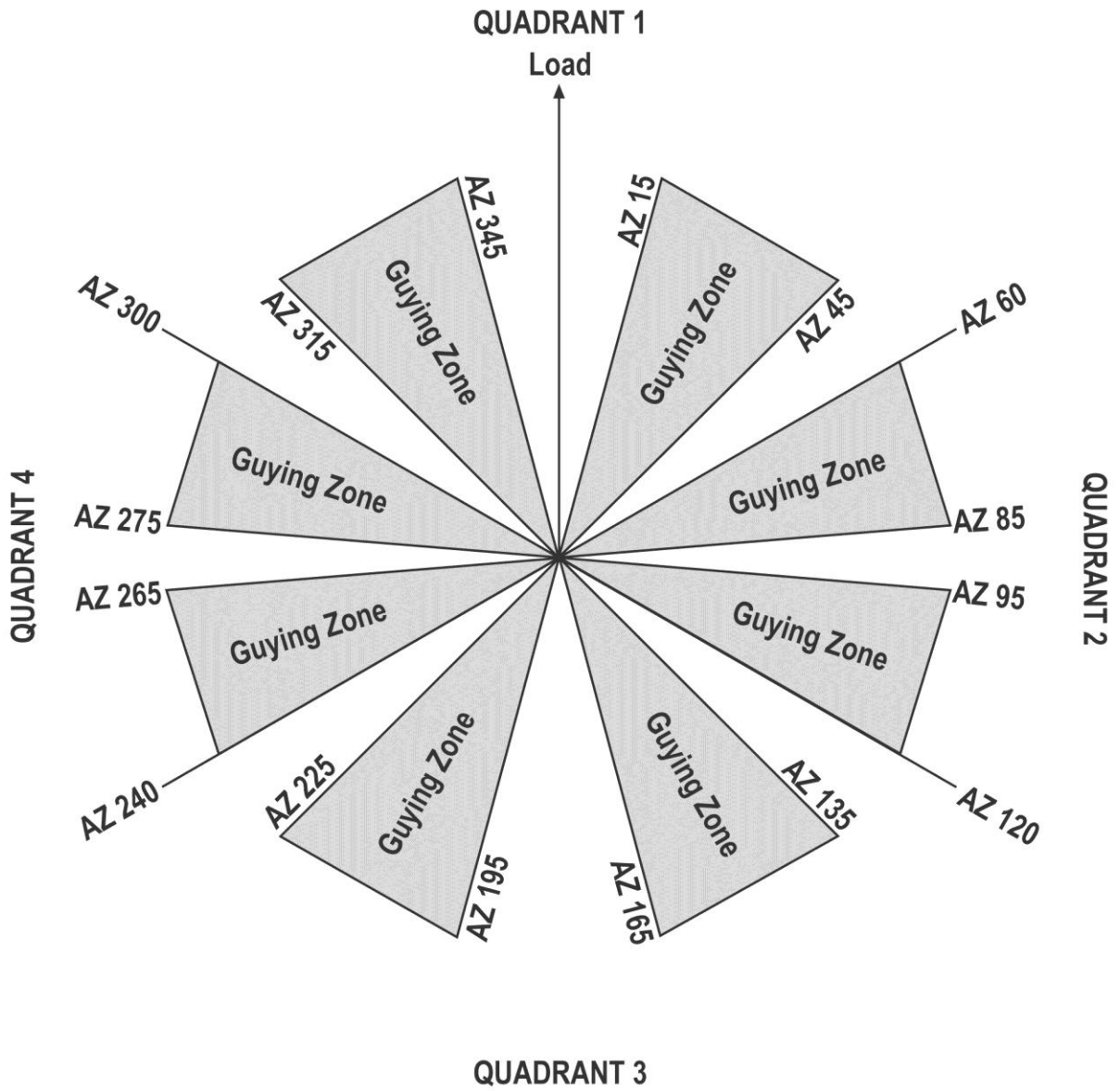


Figure 7-49 – 8 Guyline Case

Appendix 7-I (Mandatory)

Guyline Positioning

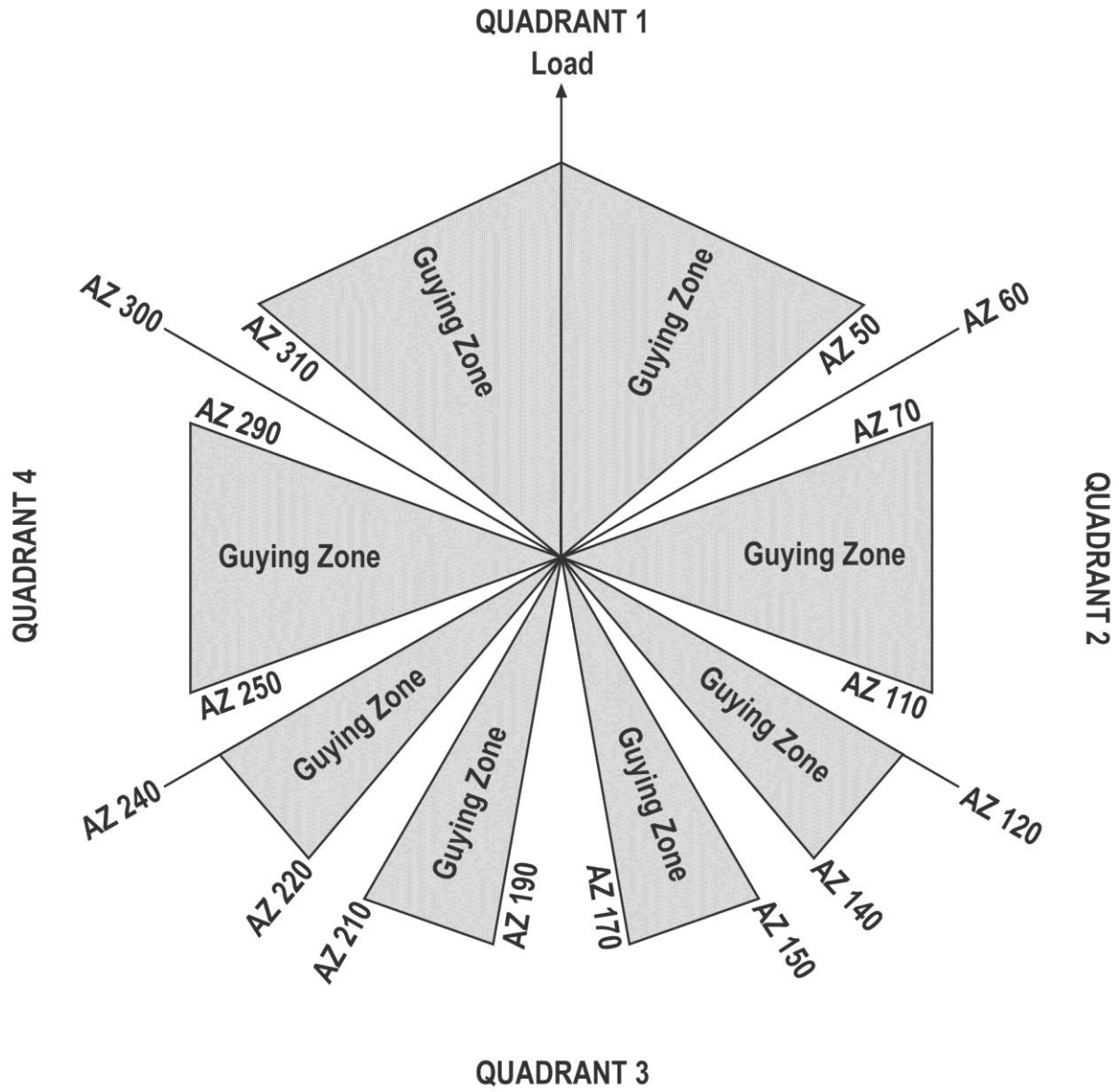


Figure 7-50 – 8 Guyline Case

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-J

Standard Hand Signals



Figure 7-51 – Stop Any Moving Line and Hold
(Raise both arms)



Figure 7-52 – Mainline Ahead Slow
(Both arms raised)

Appendix 7-J

Standard Hand Signals



**Figure 7-53 – Mainline Ahead Normal
(Raise one arm)**



**Figure 7-54 – Mainline Ahead
(One arm raised, hand fluttering)**

Appendix 7-J

Standard Hand Signals



Figure 7-55 – Slack the Mainline Easy
(Both hands extended at side, hands fluttering)



Figure 7-56 – Slack Mainline All Off
(Arm extended at side, flipping wrist)

Appendix 7-J

Standard Hand Signals



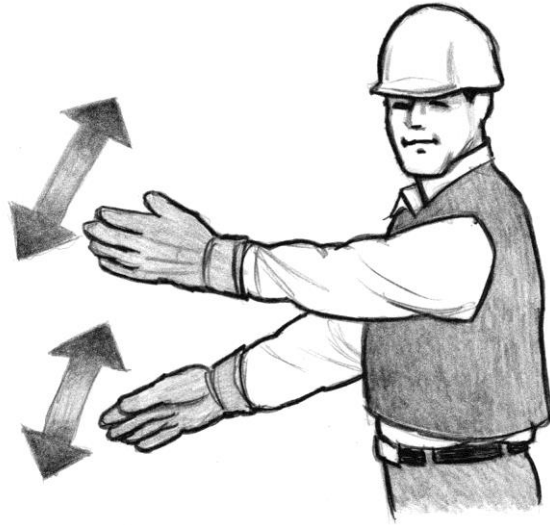
Figure 7-57 – Ahead On The Dropline
(Cross arms in front)



Figure 7-58 – Tightline
(Hands over head – fingertips touching)

Appendix 7-J

Standard Hand Signals



**Figure 7-59 – Slack the Haulback
(Hand in front of body using chopping motion)**



**Figure 7-60 – Ahead On The Haywire
(Touch hand to bent elbow)**

Appendix 7-J

Standard Hand Signals

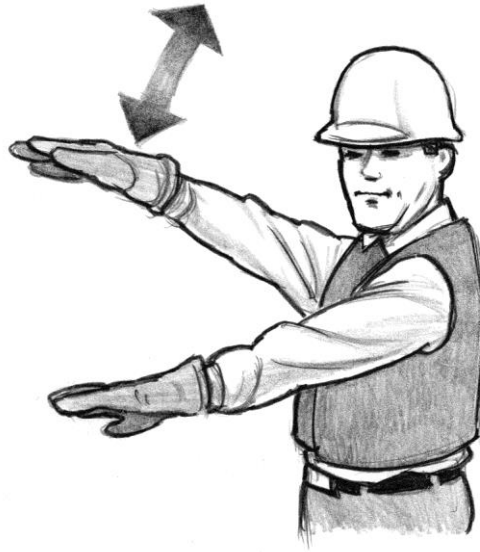


Figure 7-61 – Slack The Haywire
(Pat back of hand with other hand)



Figure 7-62 – Cable Up
(Touch top of head and raise hand up and down)

Appendix 7-J

Standard Hand Signals



**Figure 7-63 – Hold, Dog Drum or Brake Lever
(Clasp one hand with the other)**

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

Appendix 7-K (Mandatory)

Forest Activities Tree Climbing

Belayed (Snubbing) Climbing System

- (1) Single tree anchors used for a ground belay system must be:
 - (a) Straight sided or the belay line located above extreme butt swell, and
 - (b) At least 12 inches in diameter and free of rot.
- (2) When an adequate single tree anchor is not available for a ground belay system, use multiple smaller boles with a self-equalizing anchor system.
- (3) Locate ground belay climbing system anchor(s) so the belayer is:
 - (a) In the clear of falling object(s), and
 - (b) Able to attend the climber at all times.
- (4) Climbers and belayers must:
 - (a) Be in constant communication with each other, and
 - (b) Know and use agreed-on signals.
- (5) The belayer must attend to the climber at all times until the climber signals “off belay.”
- (6) The belayer’s brake hand must not be taken off the rope when a climber is on belay.
- (7) The belayer must be able to secure the belay at all times.

Belay Voice Signals

Both climber and belayer must use an agreed upon sequence of signals, commands, and reactions for a smooth, safe climb. The following is an example of signals that could be used:

Climber: “On belay” Meaning: I am about to climb. Are you ready to arrest my fall?

Belayer: “Belay on” Meaning: I am ready to arrest your fall.

Climber: “Climbing” Meaning: I am starting to climb.

Belayer: “Climb” Meaning: Go ahead.

Appendix 7-K (Mandatory)

Forest Activities Tree Climbing

Once a climber is at a location where a belay is no longer needed:

Climber: “Off belay” Meaning: I am in a secure place and no longer need a belay.

Belayer: “Belay off” Meaning: I am no longer belaying you.

Some additional signals can assist communication between the climber and belayer. None of these signals requires a verbal response from the belayer, only the action asked for by the climber.

Climber: “Slack” Meaning: There is too much tension on the rope, feed me some rope.

Climber: “Take in” Meaning: There is too much slack in the rope. Belayer needs to take some rope away from the climber.

Climber: “Tension!” Meaning: Take up all slack and hold the rope tightly until I signal differently.

Climber: “Falling!” Meaning: I am falling. Prepare to receive my full weight.

In the event that the belayer has problems and cannot maintain the belay:

Belayer: “Secure” Meaning: I cannot maintain the belay. Secure a lanyard around the tree and attach the lanyard to the safety harness.

Climber: “Secured” Meaning: I have secured a lanyard and am in a safe position.

If a belay is lost, the belayer should reestablish the belay or secure the belay rope to a firm anchor as quickly as possible. The climber and belayer should discuss the situation and take appropriate action. Appropriate action may include terminating the climb.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 3-2008, f. 3/7/08, ef. 7/1/08.