WAC 296-54-505 Definitions. A-frame. A structure made of two independent columns fastened together at the top and separated by a reasonable width at the bottom to stabilize the unit from tipping sideways.

An operation. Any place where logging or log related activities are taking place.

Approved. Approved by the department of labor and industries.

Arch. Any device attached to the back of a vehicle and used for raising one end of logs to facilitate movement.

**Authorized person.** A person approved or assigned by the employer to perform a specific type of duty(s) or to be at a specific location at a certain time(s).

Backcut (felling cut). The cut in a felling operation made on the opposite side from the undercut.

**Backline.** The portion of the haulback that runs between the spar/spar tree and the corner block.

Ballistic nylon. A nylon fabric of high tensile properties designed to provide protection from lacerations.

Barrier. A fence, wall or railing to prevent passage or approach.

Base of tree. That portion of a natural tree not more than three feet above ground level.

Bight of the line. A hazardous zone created by running lines under tension. Any section of a line between the ends.

**Binder.** A hinged lever assembly for connecting the ends of a wrapper to tighten the wrapper around the load of logs or materials.

**Boomboat**. Any boat used to push or pull logs, booms, bundles, or bags, in booming ground operations.

**Boomscooter.** A small boat, usually less than fourteen feet in length, equipped with an outboard motor, having directional pushing capabilities of 360 degrees.

**Brailing.** When tiers of logs, poles, or piles are fastened together with a type of dogline and the ends of the side members are then fastened together for towing.

**Brow log.** A log or a suitable substitute placed parallel to any roadway at a landing or dump to protect the carrier and facilitate the safe loading or unloading of logs, timber products, or materials.

**Buck.** Means the process of severing a tree into sections (logs or bolts).

Butt. The bottom of the felled part of a tree.

Butt welding. The practice of welding something end to end.

Cable tree thinning. The selective thinning of a timber stand using mobile yarding equipment specifically designed or adapted for the purpose. Cable tree thinning includes skyline, slackline, or modified slackline, overhead cable systems.

Cable yarding. The movement of felled trees or logs from the area where they are felled to the landing on a system composed of a cable suspended from spars and/or towers. The trees or logs may be either dragged across the ground on the cable or carried while suspended from the cable.

Chain shot. When the saw chain breaks, when using a mechanical timber harvester or processor, fragments or pieces are projected with tremendous force, and can travel a distance greater than 250 feet.

Chain shot danger zone or shot cone zone. The area included within 15 degrees on either side of the guide bar and up to a distance of at least 250 feet.

Chock. A block, often wedge shaped, which is used to prevent movement; e.g., a log from rolling, a wheel from turning.

**Choker.** A length of wire rope with attachments for encircling the end of a log to be yarded.

Chunking. To clear nonusable material from a specified area.

Cold deck. A pile of yarded logs left for future removal.

Competent person. One who is capable of identifying hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous.

Corner block. The first block the haulback passes through on its way to the tail block.

Crotch line. Two short lines attached to the same ring or shackle, used for loading or unloading.

Cutter. An employee whose primary job is to fall, buck, or limb trees before they are moved to the landing area.

Danger trees. Any tree of any height, dead or alive, that presents a hazard to workers because of rot, root, stem or limb damage, lean, or any other observable condition created by natural process or man-made activity.

DBH. Diameter at breast height.

Deadman. Buried log or other object used as an anchor.

**Debark.** To remove bark from trees or logs. Debark generally denotes mechanical means as opposed to manual peeling.

Deck. A stack of trees or logs.

Designated person. An employee who has the requisite knowledge, training, and experience to perform specific duties.

**Directional falling.** A mechanical means to control the direction of falling timber.

**Domino felling.** The partial cutting of multiple trees which are left standing and then pushed over with a pusher tree.

Donkey. Any machine with a series of drums used to yard logs.

Double ended logs. Two logs end to end on the same lay.

**Drop zone.** The area where the helicopter delivers logs from the logging site.

**Droplines.** A short line attached to the carriage or carriage block which is used as an extension to the main line.

**Drum.** A mechanical device on which line is spooled or unspooled.

Dry land storage. Decks of logs stored for future removal or use. Dutchman.

- (a) A block used to change direction of line lead (sideblocking).
- (b) A method used to pull a tree against its lean by leaving a section of the undercut on one corner of the face. The portion left consists of a single saw kerf in one side of the face, with the face completely removed on the opposite side of the face cut. A single saw kerf must never extend completely across the stump.

**Experienced person.** A person who has been trained and has participated in the subject process for a period of time long enough to thoroughly acquaint the person with all facets of the process.

F.O.P.S. Falling object protective structure.

Fair lead. Sheaves, rolls, or a combination thereof arranged to receive a line coming from any direction for proper line spooling on to a drum.

Fell (fall). To cut down trees.

Feller (faller). An employee who fells trees.

Front end loader. A mobile machine mounted on a wheeled or tracked chassis, equipped with a grapple, tusk, bucket, or fork-lift device, and employed in the loading, unloading, stacking, or sorting of logs or materials.

**Grounded.** The placement of a component of a machine on the ground or on a device where it is firmly supported. Grounded may also relate to the placement of a tree on the ground or a method to dissipate static or electrical charges.

**Guarded.** Covered, shielded, fenced, enclosed, or otherwise protected by means of suitable enclosures, covers, casings, shields, troughs, railings, screens, mats, or platforms, or by location, to prevent injury.

Guard rail. A railing to restrain a person.

Guyline. A line used to support or stabilize a spar, tail/lift tree, intermediate support tree or equipment. A guyline is considered a standing line.

**Gypsy drum.** A mechanical device wherein the line is not attached to the drum and is manually spooled to control the line movement on and off the drum.

**Haulback.** A line used to pull the buttrigging and mainline to the logs to be yarded.

**Haulback block.** Any block the haulback line passes through including the corner block and tailblock.

## Hay rack.

- (a) A type of loading boom where two tongs are used and logs are suspended.
- (b) A transporting vehicle with multiple sets of bunks attached to a rigid frame usually used for hauling logs.

Haywire. See strawline.

**Hazardous falling area.** The area within a circle centered on the tree being felled and having a radius not less than twice the height of that tree.

Head tree. The tree where yarding and/or loading takes place.
(See spar)

**Heel boom.** A type of loading boom where one tong is used and one end of the log is pulled up against the boom.

High lead. A system of logging wherein the main line is threaded through the main line block, which is attached near the top of the spar, to obtain a lift of the logs being yarded.

High visibility colors. White, bright, or fluorescent colors that stand out from the surrounding background color so they are easily seen

Hobo log and/or hitchhiker. A free or unattached log that is picked up by a turn and is transported with the turn.

**Hooktender.** The worker that supervises the method of moving the logs from the woods to the landing.

Hot deck. A landing where logs are being moved.

Hydraulic jack. A mechanical device, powered by internal pressure, used to control the direction in which a tree is to be felled.

In the clear. A position within the work area where the probability of hazardous contact with falling trees, moving logs, rootwads, chunks, material, rigging and equipment is minimized by distance from the hazards and/or use of physical barriers, such as stumps, trees, terrain or other objects providing protection.

## Examples:

- (a) Back behind on the uphill side of the turn and out of reach of any upending logs.
  - (b) Out of the bight.
  - (c) In the logged off area.
  - (d) In a position where movement will not be obstructed.

Intermediate support system. A system for supporting a loaded skyline in a support jack by one of the two following methods:

- (a) Double tree support The skyline is suspended on a single piece of wire rope supported by two trees so that the load is shared between the two trees.
- (b) Single tree support The skyline is suspended on a single piece of wire rope, single-eyed choker or double-eyed strap supported by a single tree. The support tree may be vertical or leaning.

Jackstrawed. Trees or logs piled in an unorderly manner.

Jaggers. Any projecting broken wire in a strand of cable.

Kerf. The part of timber products taken out by the saw teeth.

Knob. A metal ferrule attached to the end of a line.

Landing. Any place where logs are laid after being yarded, awaiting subsequent handling, loading, and hauling.

Landing chute. The head of the skid trail or road where the logs

are temporarily placed before handling, loading and hauling.

## Lay.

- (a) The straight-line distance it takes a strand of wire rope to make one complete spiral around the core of a rope.
- (b) The position of a log in a pile, on a load, or in the fell and bucked.

Limbing. To cut branches off felled or standing trees.

Loading boom. Any structure projecting from a pivot point to quide a log when lifted.

Lodged tree (hung tree). A tree leaning against another tree or object which prevents it from falling to the ground.

Log. A tree segment suitable for subsequent processing into lumber, pulpwood, or other wood products, including, but not limited to, poles, piling, peeler blocks, sections and/or bolts.

Log bronco. A sturdily built boat usually from twelve to twenty feet in length, used to push logs or bundles of logs in a generally forward direction in booming and rafting operations.

Log dump. A place where logs are removed from transporting equipment. It may be either dry land or water, parbuckled over a brow log or removed by machine.

Log stacker. A mobile machine mounted on a wheeled or tracked chassis, equipped with a frontally mounted grapple, tusk, or forklift device, and employed in the loading, unloading, stacking, or sorting of logs.

Logging machine. A machine used or intended for use to yard, move, or handle logs, trees, chunks, trailers, and related materials or equipment.

Note: A self-loading log truck is only considered a logging machine when in use for loading and unloading.

Note: A helicopter is not considered a logging machine.

Logging operations. Operations associated with felling and/or moving trees, logs, veneer bolts, poles, pilings, and other forest products from the stump to the point of delivery. Such operations are such, but not limited to, marking, felling, bucking, limbing, debarking, chipping, yarding, loading, unloading, storing, and the transporting of machines, equipment and personnel from one site to another.

Long sticks. An overlength log or tree length that creates a hazard by exceeding the safe perimeters of the landing.

Machine. A piece of stationary or mobile equipment having a selfcontained power plant, that is operated off-road and used for the movement of material. Machines include but are not limited to tractors, skidders, front-end loaders, scrapers, graders, bulldozers,

rough terrain logging shovels, log stackers and mechanical felling devices, such as tree shears and feller-bunchers.

Mainline. The line attached to the buttrigging used to pull logs to the landing.

Mainline block. The block hung in the portable spar or tower through which the mainline passes.

Matchcutting. The felling of trees without using an undercut.

Mechanized falling. Falling of standing timber by a self-propelled mobile wheeled or tracked machine equipped with a shear or other powered cutting device.

**Mechanized feller.** Any such machine as described in WAC 296-54-541 and 296-54-543, and includes feller/bunchers and similar machines performing multiple functions.

Mechanized logging machine. A feller-buncher, single-grip harvester, processor, forwarder, clambunk, or log loader.

Mobile log loader. A self-propelled log loading machine mounted on wheels or tracks, incorporating a boom and employed in the loading or unloading of logs by means of grapples or tongs.

Mobile yarder. A logging machine mounted on wheels, tracks, or skids, incorporating a vertical or inclined spar, tower, or boom, employed in skyline, slackline, high lead or grapple overhead cable logging systems.

**Molle.** A single strand of wire rope rolled into a circle with six wraps. A molle can be used as a temporary method of connecting the eye splices of two lines. A molle is used in most pin shackles in place of a cotter key.

Must. The same as "shall" and is mandatory.

New job site. A location of operations when the loading station and/or the yarder or cutting operations are moved to a new area outside of the current sale or contracted unit.

Pass line. A small line threaded through a block at the top of the spar to assist the high climber.

Permissible (as applied to any device, equipment or appliance). Such device, equipment, or appliance has the formal approval of the United States Bureau of Mines, American Standards Association, or National Board of Fire Underwriters.

Portable spar or tower. A movable engineered structure designed to be used in a manner similar to which a wood spar tree would be used.

Qualified person. A person, who by possession of a recognized degree, certificate, professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated ability to solve or resolve problems relating to the subject matter, the work, or the project.

Rated capacity. The maximum load a system, vehicle, machine or piece of equipment was designed by the manufacturer to handle.

**Reach.** A steel tube or wood timber or pole connected to the truck and inserted through a tunnel on the trailer. It steers the trailer when loaded and pulls the trailer when empty.

**Reload.** An area where logs are dumped and reloaded or transferred as a unit to another mode of transportation.

Rollway. Any place where logs are dumped and they roll or slide to their resting place.

Root wad. The ball of a tree root and dirt that is pulled from the ground when a tree is uprooted.

R.O.P.S. Roll over protection structure.

Rub tree. A tree used to guide a turn around an area.

Running line/running rope. Any moving line directly involved with the yarding of logs.

**Safety factor.** The ratio of breaking strength to a safe working strength or loading.

Safety glass. A type of glass that will not shatter when broken.

Sail block. A block hung inverted on the sail guy to hold the tong block in proper position.

**Scaler.** The person who measures the diameter and length of the logs, determines specie and grade, and makes deductions for footage calculations.

Serviceable condition. A state or ability of a tool, machine, vehicle or other device to operate as it was intended by the manufacturer to operate.

Shall. A requirement that is mandatory.

**Shear log.** A log placed in a strategic location to divert passage of objects.

Shore skids. Any group of timbers spaced a short distance apart on which logs are rolled.

Should. Means recommended.

**Signal person.** The person designated to give signals to the machine operator.

**Skidder.** A machine or animal used to move logs or trees to a landing.

**Skidding.** Movement of logs or trees on the surface of the ground to the place where they are to be loaded.

**Skidding line.** The main haulage line from a carriage to which chokers are attached. Sometimes referred to a mainline.

**Skyline.** The line suspended between two points on which a block or carriage travels.

**Slackline.** A form of skyline where the skyline cable is spooled on a donkey drum and can be raised or lowered.

Slack puller. Any weight or mechanical device used to increase the movement of a line when its own weight is inadequate.

**Slope (grade).** The increase or decrease in altitude over a horizontal distance expressed as a percentage. For example, change of altitude of 20 feet  $(6\ m)$  over a horizontal distance of 100 feet  $(30\ m)$  is expressed as a 20 percent slope.

**Snag.** A dead standing tree or a portion thereof. (See Danger tree)

**Snorkel.** A loading boom modified to extend its limitations for yarding.

Spar/spar tree. A tree or device (rigged for highlead, skyline or slackline yarding) used to yard logs by any method of logging.

Spike. A long heavy nail similar to a railroad spike.

**Springboard.** A board with an iron tip used by fallers to stand on while working above ground level.

Spring pole. A tree, segment of a tree, limb, or sapling which is under stress or tension due to the pressure or weight of another object.

Spurious response attenuation. A measure of the receiver's ability to discriminate between a desired signal to which it is resonant and an undesired signal at any other frequency to which it is also responsive.

Square lead. The angle of 90 degrees.

Standing line.

(a) Guyline.

(b) A nonoperating rope with end terminations to support a boom or mast.

**Stiff boom**. Two or more boom sticks wrapped together on which boom persons walk or work.

Strap. Any short piece of line with an eye or "D" in each end.

Strap socket or D. A socket with a closed loop arranged to be attached to the end of a line by the molten zinc, or an equivalent method. It is used in place of a spliced eye.

**Strawline.** A light cable used in rigging up, or in moving other cables or blocks. The smallest line on the yarder. (Mainline - Haulback line - Strawline.)

Strip. A definite location of timber on which one or more cutting crews work.

Swamping. The falling or cutting of brush around or along a specified place.

**Swede connection.** A line configuration made by wrapping two choker lines in the same direction around a tree or log connecting the line knobs to opposite line bells.

Swifter. A piece of equipment used to tie the side sticks of a log raft together to keep the raft from spreading.

**Swing cut.** An intentional dutchman left on one corner of an undercut or a backcut in which the holding wood on one side is cut through in conjunction with an intentional dutchman to achieve a desired lay for the tree being fell.

Tail block. A block used to guide the haulback line at the back corner of the yarding area.

Tail hold. An anchor used for making fast any line or block.

Tail/lift tree. The tree at the opposite end from the head tree on which the skyline or other type rigging is hung.

**Tie back.** To use a twister(s) (or similar system/device) that has a breaking strength equal to fifty percent of the breaking strength of the mainline or skyline whichever is greater. To secure or support one anchor by securing it to a second anchor(s) such as wrapping one stump and choking another.

Tie down. A chain, cable, steel strips or fiber webbing and binders attached to a truck, trailer or other conveyance as a means to secure loads and to prevent them from shifting or moving when they are being transported.

**Tight line.** When either the mainline or haulback are held and power is exerted on the other or when power is exerted on both at the same time.

Tong line block. The block hung in a boom through which the tong line operates.

Tongue. A device used to pull and/or steer a trailer.

Topping. Cutting off the top section of a standing tree.

Tower. (See portable spar or tower).

Tractor. A machine of wheel or track design used in logging.

Tractor logging. The use of any wheeled or tracked vehicle in the skidding or yarding of logs.

Transfer (as used in loading). Changing of logs in a unit from one mode of transportation to another.

**Tree jack.** A grooved saddle of wood or metal rollers contained within two steel plates, attached to a tree with a strap, used as a guide for skyline, sail guy, or similar static line. It is also formed to prevent a sharp bend in the line.

Tree plates. Steel bars sometimes shaped as elongated J's, which are fastened near the top of a tree to hold guylines and prevent them

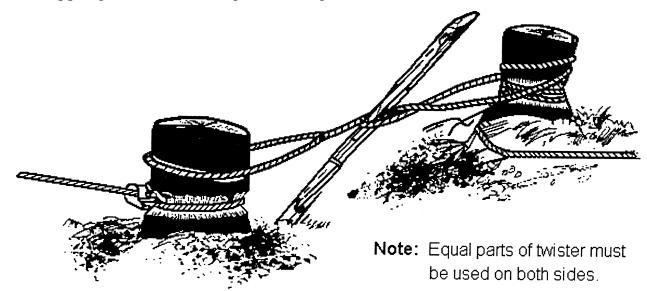
from cutting into the tree when tightened. The hooks of the J are also used to prevent the mainline block strap from sliding down the tree.

Tree pulling. A method of falling trees in which the tree is pulled down with a line.

Tug. A boat, usually over twenty feet in length, used primarily to pull barges, booms of logs, bags of debris, or log rafts.

Turn. Any log or group of logs attached by some means to power and moved from a point of rest to a landing.

Twister. A line (usually small diameter wire rope "haywire") that supports a tailhold stump, guyline stump, or tree that does not appear to be strong enough. This is done by connecting the tailhold to another stump or tree opposite by wrapping the two with a line. This line is then tightened by placing a piece of large-diameter limb between the wrappings and twisting them together.



## TWISTER ROPE

**Undercut.** A notch cut in a tree to guide the direction of the tree fall and to prevent splitting or kickback.

**V-lead.** A horizontal angle of less than ninety degrees formed by the projected lines of the mainline from the drum of the logging machine through the block or fairlead and the yarding log or turn.

Vehicle/crew bus. A car, bus, truck, trailer or semi-trailer owned, leased, or rented by the employer that is used for transportation of employees or movement of material.

WAC. Washington Administrative Code.

Waistline. That portion of the haulback running between the corner block and the tail block.

Winching. The winding of cable or rope onto a spool or drum.

Within the stakes. When one-half the log diameter is below the stake top.

Work areas. Any area frequented by employees in the performance of assigned or related duties.

Wrapper. A cable assembly or chain used to contain a load of logs.

Wrapper rack. Barrier used to protect a person while removing binders and wrappers from a loaded logging truck.

Yarder (donkey). A machine with a series of drums used to yard logs.

Yarding. The movement of logs from the place they are felled to a landing.

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