WRITTEN SAFE WORK PROCEDURES

FELLER BUNCHER OPERATOR

PERSONAL PROTECTIVE EQUIPMENT: Hi-vis Hard Hat
Hearing Protection
Substantial appropriate Footwear
Hi –Vis Vest when off machine

Procedures:

• Inspect machine to ensure it is in safe operating condition before using

• Wear seat-belts while operating machine.

• Keep doors closed so that guarding is effective when working.

• Ensure good housekeeping is maintained.

• Operate at a safe speed.

• Maintain at least two-tree lengths distance from other works and equipment at all times while cutting.

• Exercise due caution while working on hillsides.
  • Do not travel across a slope that is too steep for maintaining proper stability of the machine.
  • Confine travel to up and down the slope.
  • When traveling across any slope, avoid running over logs, chunks, stumps etc. which could cause the machine to become unstable.
  • Review and follow the safe work procedures for operating machinery on steep slopes.

• Ensure the tracks are adequately caulked with ice lugs for winter operations.

• Ensure a man-check system is established. It is recommended feller buncher machines are equipped with a 2-way radio.
WRITTEN SAFE WORK PROCEDURES

FELLER BUNCHER OPERATOR Continued

• If at any time the machine becomes unstable, shut it down and request assistance.

• Traffic control must be set up when falling trees within two tree lengths of roadways and other work area. The roadway must be positively blocked with signs in place unless traffic control persons are employed.

• Follow the lock-out or de-energization procedures while conducting maintenance work on the machine.

• Do not try to fell trees which are larger than what the machine is designed for.

• Always enter and leave the machine in a safe manner. Use the handholds for stability and beware of the slipping hazards that exist, particularly in the winter.
WRITTEN SAFE WORK PROCEDURES

DELIMBER OPERATOR

PERSONAL PROTECTIVE EQUIPMENT:
- Hi-vis Hard Hat (to be worn when outside of machine)
- Hearing Protection
- Substantial appropriate Footwear
- Hi-vis Vest when off machine

PROCEDURES:

- Check to ensure machine is in safe operating condition before using.
- Ensure workers are clear of the hazardous area.
- Ensure guarding is being maintained.
- Maintain good housekeeping.
- Operate at a safe speed.
- Follow the lock-out or de-energization procedures while conducting maintenance work on the machine.
- Always enter and leave the machine in a safe manner. Use the handholds and beware of the slipping hazards that exist, particularly in the winter.
- Ensure a man-check system is set up while working alone.
- Ensure tracks are adequately caulked with ice lugs for winter operations.
- Wear the seat-belts when traveling.
WRITTEN SAFE WORK PROCEDURES

BUCKER

PERSONAL PROTECTIVE EQUIPMENT:  
- Hi-vis Hard Hat
- Hi-vis Vest
- Leg Protection
- Hearing protection
- Suitable Footwear
- Gloves
- Eye Protection

PROCEDURES:

- Bucker is to control traffic on landings.
- Ensure other workers are clear of your hazardous area.
- Watch for pivot points and scissor logs while bucking.
- Stand on the upper side of log situated on an incline.
- Be certain you are not standing on the whip side.
- Logs must not be partially bucked.
- When limbing, stand with both legs on the opposite side of the log.
- Avoid stepping on chunks.
- Ensure danger trees are removed by qualified worker from around the landing.
- Keep clear of loader and skidding machines.
- Never turn your back to approaching equipment. Watch for trees that may hang-up and pivot while being skidded onto the landing.
- Do not start limbing or bucking until chokers have been removed.
- Make sure logs are stable before bucking.
- Never walk under a log that is being held up by the loader.
- Choose a maintenance area away from other work activity. Go to this safe zone when bucking is completed.
- If all chokers cannot be unhooked, stand well in the clear when the skidder moves ahead to clear the drag.
WRITTEN SAFE WORK PROCEDURES

BUCKER Continued

CHAINSAW SAFETY:

- Saws are to be maintained in good running order.
- Place saw on a firm base when starting.
- Shut off saw when cleaning it.
- Fuel is to be carried in an approved container suitably marked.
- Be aware of hot exhaust system when servicing and filling.
- Do not smoke when refueling.
- Fit handles on all files; do not carry files in your pocket.
- Shut off saw when carrying it any distance.
- When carrying the saw, keep the bar to the rear to avoid falling on the chain if you trip.
- To reduce the risk of kickbacks, keep a firm grip on the saw.
- Avoid touching limbs or other objects with the tip of the bar.
- Chain brakes are to be maintained in good order.
- Stop chain when moving from cut to cut.
WRITTEN SAFE WORK PROCEDURES

CHOKERMAN

GROUND SKIDDING

PERSONAL PROTECTIVE EQUIPMENT:  Hi-vis Hard Hat
                                           Hi-vis Vest
                                           Gloves
                                           Proper Footwear

PROCEDURES:

• Chokerman must, at all times, obey the instructions given by the machine operator.

• Must know verbal and OH&S regulations approved hand signals.

• Stay within sight of the equipment operator.

• Stand well in the clear before signaling cat to move.

• Do not follow too close behind a turn.

• Pick top logs when setting turns to avoid rolling or pivoting logs.

• Point out skid trail hazards to cat operator. Report any snags, danger trees or unsafe acts.

• Always stay at least two tree lengths away from tree falling activity.

• Do not ride on the skidding machine unless an adequate seat and seat-belts are provided.
WRITTEN SAFE WORK PROCEDURES

SKIDDER OPERATOR (LINE)

PERSONAL PROTECTIVE EQUIPMENT: Hi-vis Hard Hat
                                      Hearing Protection
                                      Gloves
                                      Suitable Footwear
                                      Hi-vis Vest

PROCEDURES:

• Check to ensure machine is in safe operating condition before using.

• Wear seat-belt when operating machine.

• Ensure good housekeeping to prevent slipping or tripping when entering or leaving machine. All fire extinguishers and other items must be secured in a safe location. Do not carry loose articles in the cab.

• Do not enter an active falling area. Stay a minimum of two tree lengths away. Do not skid trees past a faller on r/w or other active falling areas.

• Travel at a safe speed with or without a turn.

• Exercise caution when working on hillsides.

• Make sure chokers and mainline are in safe working condition.

• When winching, align the machine with the direction of pull.

• Watch for whip action of logs being skidded.

• When entering the landing, make sure buckers and loader are in clear view and you are given approval to enter.

• Lower the blade and set parking brake before leaving the machine.

• Wear eye protection when cutting cables.
WRITTEN SAFE WORK PROCEDURES

SKIDDER OPERATOR (LINE) Continued

SKIDDING ON SLOPES:

- Do not attempt to travel across a slope that is too steep for maintaining proper balance of the machine.

- Confine your travel to straight up and down slopes when steepness is a problem. Any slope greater than 35% shall not be traveled without specific safe work procedures in place. The procedures must be reviewed before operating on steep slopes.

- When traveling across any slope, avoid running over chunks and stumps because of the increased possibility of upset.

- Keep turn winched up tight to apron or fairlead to prevent turn from running into back of machine causing balance and directing problems.

- Release the turn when making a tight corner.

- When skidding on side cuts (trails) on steep ground, maintain safe distance from edge of cut in order to prevent sloughing of outer edge and rollover.

- Do not attempt to bulldoze trees that are hanging over or across skid trails on side cuts as they could snap and spring back into operator’s cab.

- When setting a turn lower blade to ground (try to lower blade behind a stump) and set brakes to prevent runaway.

- Use tire chains for traction on steep ground and when slippery.

- Exercise care when using chains that chunks are not caught and flung up into the cab.

- When coming down steep slopes, make sure the corner of the blade does not hook a stump or rock, causing machine to swing sideways and subsequently upset.

- Remember, if you encounter any unsafe skidding situations in the course of your shift, inform your supervisor and alternate methods will be initiated.

- If at any time the machine becomes unstable, shut it down and request assistance.
WRITTEN SAFE WORK PROCEDURES

SKIDDER OPERATOR (LINE) Continued

SKIDDING ON SLOPES:

• Follow the lock-out or de-energization procedures while conducting maintenance work on the machine.

• Always enter and leave the machine in a safe manner. Use the hand holds for stability and beware of slipping hazards that exist, particularly in winter.
WRITTEN SAFE WORK PROCEDURES

SKIDDING MACHINES (GRAPPLE)

PERSONAL PROTECTIVE EQUIPMENT:  Hi-vis Hard Hat
                                           Hearing Protection
                                           Gloves
                                           Suitable Footwear
                                           Hi-vis Vest

Procedures:

• Check to ensure machine is in safe operating condition before using.

• Wear seat-belts when operating machine.

• Ensure good housekeeping to prevent slipping or tripping when entering or leaving machine. All fire extinguishers and other items must be secured in a safe location. Do not carry loose articles in the cab.

• Do not enter an active falling area. Stay a minimum of two tree lengths away. Do not skid trees past a faller on r/w or other active falling areas.

• Travel at a safe speed with or without a turn.

• Exercise caution when working on hillside slopes.

• Try to align machine straight with bundles when picking up a turn.

• Use caution when making turns when skidding bundles of trees.

• When entering the landing, make sure workers are in the clear and you are given approval to enter.

• Lower the blade and set parking brake before leaving the machine.

• Follow the lock-out or de-energization procedures while conducting maintenance work on the machine.

• Always enter and leave the machine in a safe manner. Use the handholds for stability and beware of slipping hazards that exist, particularly in winter.
WRITTEN SAFE WORK PROCEDURES

SKIDDING MACHINES (GRAPPLE)

SKIDDING ON SLOPES:

- Do not attempt to travel across a slope that is too steep for maintaining proper balance of the machine.

- Confine your travel to straight up and down slopes when steepness is a problem. Specific safe work procedures must be established for the different types of skidding machines. These procedures must be reviewed before operating on steep slopes.

- Avoid running over chunks and stumps because of increased potential for machine upset.

- Use caution when traveling on trails by maintaining a safe distance from the outer edge of the trail.

- Use tire chains for traction on steep ground and when slippery.

- Be aware of limbs and chunks that may catch in the chains.

- When traveling down steep slopes, make sure the blade does not hook on a stump or rock, causing the machine to swing sideways and upset.

- If you encounter unsafe skidding conditions inform your supervisor and alternate methods will be initiated.

- If at any time the machine becomes unstable, shut it down and request assistance.
SAFE WORK PROCEDURE
CRAWLER MACHINE (SKIDDING AND TRAIL CONSTRUCTION)

PERSONAL PROTECTIVE EQUIPMENT:  
Hi-vis Hard Hat  
Hearing Protection  
Gloves  
Substantial Footwear  
Hi-vis Vest

PROCEDURES:

• Check to ensure machine is in safe operating condition before using.

• Wear seat belt when operating the machine.

• Make sure good housekeeping is maintained. Ensure fire extinguishers and other items are securely fastened in a safe location. Do not carry loose items in the cab.

• Know the location of fellow workers, particularly when using a chokerman.

• When using a chokerman, make sure all verbal and Workers' Compensation Board approved hand signals are used and understood before moving machine or lines.

• Travel at a safe speed.

• Exercise caution when working on hillsides. Review and follow the written safe work procedures for operating on steep slopes.

• Make sure chokers and mainline are in safe working condition.

• When winching, align the machine with the direction of pull.

• Do not enter an active falling area; stay a minimum of two tree lengths away.

• Do not work in areas where there is a danger of pushing trees, rocks or other debris into an active work area.

• When pushing trees over, remove the tension out of the trees using the blade or winch so three may be bucked without danger of tree springing back.

• Build skid trails wide enough for safe skidder operation.
SAFE WORK PROCEDURES

CRAWLER MACHINE (SKIDDING AND TRAIL CONSTRUCTION)
(Continued)

PROCEDURES, Continued

- Slope trails towards the inside bank, never outwards.
- Before leaving machine, lower the blade and set the parking brake.
- Remember, if you encounter difficulty, see your supervisor.
- If the machine becomes unstable, shut it down and request assistance.
- Ensure tracks are quipped with ice lugs in winter.
- Follow the lock-out or de-energization procedures while conducting maintenance work on the machine.
- Always enter and leave the machine in a safe manner. Use the handholds for stability and beware of slipping hazards that exist, particularly in winter.
SAFE WORK PROCEDURES

LOADER OPERATOR

PERSONAL PROTECTIVE EQUIPMENT:  Proper Footwear
                                      Hi-vis Hard Hat
                                      Gloves
                                      Hearing Protection
                                      Hi-vis Vest

PROCEDURES:

• Check to ensure the machine is in safe operating condition before use.

• Wear seat belt at all times when machine is operating.

• Ensure all workers are in the clear.

• Do not move logs overhead of workers on landing.

• Communicate either verbally or by hand signals.

• Spread logs for bucker.

• Organize landing, log decks, debris pile and truck loading.

• Keep landing clear of bucked off ends and other debris.

• Operate at a safe speed.

• If logs are above the log truck stakes, restrain the load until wrappers have been installed.

• Follow lock-out or de-energization procedures while conducting maintenance work on the machine.

• Always enter and leave the machine in a safe manner. Use the handholds for stability and beware of slipping hazards that exist, particularly in winter.
SAFE WORK PROCEDURES

LOADER OPERATOR Continued

LOG TRUCK LOADING

- All landing workers, including truck drivers, must be in view, in the clear or their whereabouts known before logs or equipment are moved.
- Logs should be decked to facilitate loading.
- Keep all butts or ends even.
- Turn logs that should be loaded butt ahead.
- Position log decks to eliminate extra maneuvering when loading.
- Have all logs bucked, limbed and stamped when required.
- The truck must always be positioned properly for loading before hooking up the trailer.
- Always use proper signals when directing truck movements.
- A distinctive signal to indicate that the load is finished should be used. Ensure all workers are in the clear.
- Lift trailers off with caution and ensure that the trailer lifting-strap has not deteriorated.
- Providing that the loader can easily handle the trailer, the lifting-strap should be properly positioned on the trailer. This will make it convenient for the driver to guide the reach and by the proper handholds, which should be provided on the reach.
- With some trucks, the compensator can also be moved to facilitate hookup.
- If the truck is to be backed onto the reach and coupled, the trailer lifting-strap can be repositioned slightly to permit the reach to lift off the ground before the trailer wheels are lifted.
- The person hooking up the trailer should always stand off to the side to enable the operator to see the reach and the hitch.
SAFE WORK PROCEDURES

LOADER OPERATOR Continued

LOG TRUCK LOADING

- If the deck is beside the truck, logs shall not be picked up from it until the driver and/or other workers have finished their duties and have moved to the safe zone.

- Loading shall cease at any time that the loader operator is uncertain that the driver is in the cab or is in the clear in front of the truck.

- When approaching a truck with a grapple full of logs, avoid traveling with the grapple at full height. Keep the grapple low until near the truck, then raise the grapple. This will ensure better control of the loader at all times.

- Logs shall be loaded to ensure the stability of the vehicle and load while in transit.

- Logs shall be well positioned in their lay, without crowding, to avoid excessive strain on the stake-liner and stakes.

- To ensure stakes remain at a safe angle, logs shall be laid tight to minimize slack in the stake cables.

- Bunk and stake logs shall extend not less than 12 inches (30 cm) beyond the bunks or stakes.

- Logs shall be loaded clear of the bulkhead to avoid being bunk-bound on corners.

- When loading small diameter logs, two tiers should be used as bunk and stake logs before loading short logs onto the load.

- Never place split, cracked or shattered logs on the bunk or against the stakes.

- Not more than one-third of the weight of the logs shall extend beyond the trailer bunk or beyond the ends of the logs supporting them.

- Care should be taken to properly balance the load, especially on off-highway trucks. A side heavy load or a load with too much weight on the trailer could cause a truck to tip over or "spin out" under wet or icy conditions.
SAFE WORK PROCEDURES

LOADER OPERATOR Continued

LOG TRUCK LOADING

- Workers are not permitted to stand on the cab platforms of trucks when loading by conventional methods. If this occurs, the loader operator shall cease loading until the worker is removed.

- Operators shall ensure that all workers are safely in the clear before initiating or continuing the motion of any mobile equipment.

- Although operators are responsible, it is also the responsibility of buckers and other workers to stay clear of any area considered to be hazardous due to the movement of such equipment.

- There must be a specific procedure for all equipment and vehicle operators, to allow safe movement through active log landings. Landing workers in charge of traffic control shall be thoroughly instructed in this procedure.

- Truck drivers must wear a hi-vis orange or red hard hat and a hi-vis vest at all times when within the boundaries of the logging area.

- The truck driver must not move his load until the load has proper binders attached.
SAFE WORK PROCEDURES

LOGGING TRUCK DRIVER

PERSONAL PROTECTIVE EQUIPMENT:
Adequate Footwear with Good Traction Soles
Hi-vis hardhat
Gloves
Hi-vis Vest
Hearing Protection

Procedures:

Vehicle Inspections

• Inspect the logging truck to ensure it is in safe operating condition.

• Check the logging rigging regularly to ensure the cables, bunks, stakes, lift straps, couplings, lights and other critical components are free of defects and in good working order.

• Check the condition of the brakes and adjust them regularly to ensure they are functioning properly.

• Ensure the required government inspections of the vehicle are conducted and are current.

Operating the Vehicle

• All logging trucks must be equipped with a two-way radio using the frequency posted for the particular haul road.

• Drive with the headlights on at all times.

• Passengers are not allowed unless they have proper authorization.

• Operate the logging truck in a safe manner. Drive within the posted speed limits and/or within safe speeds determined by the conditions of the road.

• Always get into and leave the truck in a safe manner using the handholds provided to prevent slipping and tripping.

• Wear the personal protective equipment required when getting out of the vehicle.
SAFE WORK PROCEDURES

LOGGING TRUCK DRIVER Continued

• Refer to Section “Rules of the Road” for Operating the vehicle on industrial forest roads and use of the two-way radio system.

• Report any observed unsafe haul road conditions to your supervisor, the logging contractor or the sawmill personnel.

Tire Chains

• Where winter conditions prevail, always adequately chain up the vehicle in a safe flat location before you encounter areas where vehicle traction is questionable. You must be prepared to stop suddenly if you meet unexpected traffic or an unforeseen event occurs.

• Always follow proper lifting techniques when handling tire chains. Bend your legs and keep your back straight while lifting the chains.

Log Loading

• Ensure there is a safe area for loading.

• Follow the communication system established at the loading site with the loaderman.

• Always wear required personal protective equipment when outside the vehicle.

• Use caution and communicate with the loaderman when coupling up the trailer unit.

• Do not walk along slippery narrow components of the logging truck and trailer unit to release stake extensions and straighten bunks.

• The location of the driver must be known by the loaderman at all times. Stay inside the truck cab or out in front of the unit while being loaded.

• Do not climb on top of the truck or the load. Branches must be trimmed from the logs before they are placed on the load. Logs with protruding branches placed on top of the load must be removed by the loader and branches trimmed at ground level.

• Communicate with the loaderman that the loading is complete and ready to install load wrappers.
SAFE WORK PROCEDURES

LOGGING TRUCK DRIVER Continued

• Have the loaderman restrain the load on the side where wrappers will be installed if possible.

• Observe the area for hazards before installing wrappers i.e. moving equipment, debris, icy conditions etc.

• Ensure good footing while throwing wrappers over the load.

• All logs must be restrained with a minimum of two wrappers. Ensure firm grip on the cinch handle when closing the cinch.

• Give notice on proper radio channel that you are leaving the landing and ensure all workers are in the clear before pulling out.

Unloading

• Approach the unloading area in a safe manner. Watch for other workers and machinery which might be present.

• Wear required P.P.E. when outside the vehicle.

• Follow the safe unloading procedures established at the unloading site.

• Ensure good communications with the loaderman.

• The load must be restrained before wrappers are removed from the load.

• Remain in a safe location and in view of the loaderman while being unloaded. Usually the driver will remain in the cab of the truck or out in front of the truck. Follow the posted unloading procedures at the unloading site.

• Ensure workers and machinery are in the clear before moving through the log yard.
SAFE WORK PROCEDURES

CABLE YARDING AND LOADING

OPERATIONAL SIGNALS FOR HIGH LEAD LOGGING

Ahead:
Three short whistles.

Ahead on Strawline *
Three short - pause - one short whistle.

Back **
Two short - pause - two short whistles.

Slack Haulback
Two short - pause - series of short whistles.

Slack Mainline
Series of short whistles.

Slow
One long whistle (precedes any signal for slow operation).

Stop All Lines
One short whistle.

Tighten Lines
Three short - pause - two short whistles.

When Butt Rigging At Tree Send Out Strawline
Three short - one long whistle.

When Butt Rigging Is At Tree
Two short - followed by a number of long whistles indicates the number of chokers required.

* "Ahead" means haulage line moves toward machine.

** "Back" means haulage line moves away from machine.
## AUDIBLE HIGH-LEAD SIGNALS

### OPERATIONAL SIGNALS

<table>
<thead>
<tr>
<th>Signal Description</th>
<th>Signal Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start work</td>
<td>1 long</td>
</tr>
<tr>
<td>Stop any movement</td>
<td>1 short</td>
</tr>
<tr>
<td>Ahead on mainline</td>
<td>3 short</td>
</tr>
<tr>
<td>Slack the mainline</td>
<td>5 short</td>
</tr>
<tr>
<td>Ahead on the haulback</td>
<td>2 short, 2 short</td>
</tr>
<tr>
<td>Slack the haulback</td>
<td>2 short, several short</td>
</tr>
<tr>
<td>Tightline</td>
<td>3 short, 2 short</td>
</tr>
<tr>
<td>Tightline on inhaul</td>
<td>3 short, 2 short</td>
</tr>
<tr>
<td>Cancel tightline on inhaul</td>
<td>3 short</td>
</tr>
<tr>
<td>Ahead on strawline</td>
<td>3 short, 1 short</td>
</tr>
<tr>
<td>Slack the strawline</td>
<td>3 short, 1 short</td>
</tr>
<tr>
<td></td>
<td>1 short, several short</td>
</tr>
<tr>
<td>Pick up the guyline</td>
<td>2 short, 2 short</td>
</tr>
<tr>
<td></td>
<td>2 short, 1 short</td>
</tr>
<tr>
<td>Slack the guyline</td>
<td>2 short, 2 short</td>
</tr>
<tr>
<td></td>
<td>2 short</td>
</tr>
</tbody>
</table>
Extreme hazard present  1 long, sustained until hazard has stopped or cleared
(run-away log, etc.)

Accident  7 long

Fire  1 long, several short, repeat __ • • • •

**WHEN BUTT RIGGING IS AT THE LANDING**

Check the rigging  5 short • • • •

Send out strawline extension  3 short, 1 short, and 1 short for each extension • • • •

Send out strawline in the haulback eye  3 short, 1 long • • • •

Chokers required  2 short and 1 short or long for each choker required • • • •

Put on/take off scab block  1 long __

Calling foreman  4 long — — — — — —

Calling hooktender  3 long — — — —

Calling hooktender ;and crew  3 long, several short — — — — • • • •

Calling for water bag  1 short, 1 long • •

Calling for block and strap  1 long, 1 short __ •

- Any regular signal preceded by a long signal is a “slow” signal
- Any signal that the engineer is not sure of is a “stop” signal
AUDIBLE SLACKLINE SIGNALS

- Refer to the standard high-lead whistle signals for most line control signals. The following are additional whistle signals to be used for SLACKLINE operations.

OPERATIONAL SIGNALS

Stop outhaul and slack skyline
Pick up the skyline 1 short, 2 short
Slack the skyline 5 short
Pick up skyline on inhaul to clear obstruction 2 short
Pick up skidding line after obstruction is cleared 3 short
Slack the skidding line 3 short, several short

CARRIAGE ON OUTHAUL

Hold Skidding line tight, keep coming back until stop signal is given 3 short
Hold skidding line tight, slack skyline, keep coming 2 short
Slack skyline faster 2 short

- “Slack skidding line” signal given as “skyline is slacked” means “slack both lines at the same time”

WHEN CARRIAGE IS AT HEAD SPAR

Send strawline out in choker 3 short, 1 short,
bell for a dead line 2 short, 2 short
Send out that many coils 3 short, 1 short 1 short for each coil needed
Calling second rigger 2 long, 1 short

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**SKYLINE CARRIAGE SIGNALS**

- All standard high-lead and slackline whistle signals apply to carriages.

**GRAVITY/SHOTGUN CARRIAGE**

Standard slackline whistle signals will apply.

**DROPLINE/ACCUMULATOR CARRIAGE**

- Ahead on carriage
  - 3 short
  - skidding line

- Slack the carriage
  - 3 short, several short
  - skidding line

**RADIO-CONTROLLED MOTOR-DRIVEN SLACK PULLER, SKYLINE LOCK**

- These carriages are fitted with and controlled by an onboard computerized radio control system

- This radio system is operated independently through a transmitter separate from that of the yarder

- The yarding and carriage frequencies must be separate, registered, and coordinated through the W.C.B. co-ordination system to ensure that one does not interfere with the other or with another operation. Contact the W.C.B. Engineering Department for more information.

- An audible signal must be sounded at the carriage and not at the yarder. This signal must have a tone different from that of the yarder signal.

- Lock/unlock skyline clamp
  - 2 short

- Slack the dropline
  - 5 short

- Stop dropline
  - 1 short

- Ahead on the carriage
  - 3 short

- If fitted with engine controls:

  - Stop engine
    - 1 short, 1 long

  - Start engine
    - 1 long, 1 short

- Carriages with variable dropline speeds must have a special signal for the speed changes. These signals must be different from standard yarding signals.
**RADIO CONTROLLED MOTORIZED SELF-CONTAINED YARDING CARRIAGE**

- This system is similar to the “radio-controlled motor-driven slack puller, skyline lock” carriage, but does not have a skyline lock.

Slack the dropline 3 short, several short ••••

Stop the dropline 1 short •

Ahead on dropline 3 short ••

If fitted with engine controls:

stop engine 1 short, 1 long • __

Start engine 2 short ••

- Any signal preceded by a long signal is a “slow” signal

**MECHANICAL SLACK PULLER**

Ahead on slack puller 1 long, 1 short ____ •

Ahead on drop line 2 short ••

- When the haulback is used as a running skyline, standard high-lead signals apply
SAFE WORK PROCEDURES

CABLE YARDING

HOOKTENDER

PERSONAL PROTECTIVE EQUIPMENT: Caulk Boots
                        Hi-vis Hard Hat
                        Gloves
                        Stagged Pants
                        Hi-Vis Vest

Responsibility to Others:

• The primary responsibility of the Hooktender is the safety of the crew he directs.

• Ensure safe work procedures are reviewed with all new workers before they start work.

• Observing and correcting the unsafe work practices of his crew workers.

• It is important that he plans his moves ahead and communicates the plan to the crew, making sure each man understands what is expected of him.

• He must provide strong leadership and fairness to others on his side.

• He will create safe and efficient work habits, setting an example for others.

Attitude:

In accepting the position as Hooktender, one must realize that in addition to knowing how to use tools and equipment correctly, it is necessary to understand people. To create an atmosphere of cooperation, a Hooktender must earn the respect of his entire crew.

Picking Stumps

• Be sure guyline stumps are spaced as evenly as possible.

• Refer to diagrams for positioning guylines.

• Make sure stumps are secure and far enough out so as not to pull the notch.

• 45 degrees maximum to Spar.

• If in doubt, refer to the Cable Yarding Systems Handbook.
SAFE WORK PROCEDURES

CABLE YARDING

HOOKTENDER Continued

Notching Stumps

• Use proper tools for the job and make sure they are in good condition.

• Clear around the guyline stumps so as to get a clean work area.

• Use Vee notch.

• Only qualified people to use power saws, otherwise training is required by a qualified person.

• When using a power saw, wear the required personal protective equipment.

Rigging up/Raising a Spar

• It is important that the Hooktender plans ahead in rigging up the spar and communicating his plans to his crew, making sure each man knows his job.

• Ensure that the machine is level.

• Have sufficient blocking.

• Make sure the guylines are properly wrapped and shackled around the stump.

• For raising and lowering mobile spars refer to cable yarding systems hand book

Yarding:

• Yarding angle to minimize runaway logs on steep ground.

• A Hooktender should plan his setting for the safety of his crew and efficient logging.

• When it is necessary to use standing trees for tail blocks, trees must be tied back.

• Never allow your crew to work in bight of lines.
SAFE WORK PROCEDURES

CABLE YARDING

HOOKTENDER Continued

- Keep a close watch on the crew, especially new men. Make sure they go far enough back from the turn and off to the side, well in the clear.

- Inspect guyline stumps daily.

- Ensure logs are properly piled in the landings.

- Assist all crew members to learn to do their jobs correctly.

- Use authorized signaling devices.

- Check and keep track of all your equipment for its condition and availability; you are responsible for it.

Running in Lines:

- Lines must be spooled on drums correctly, hooks and rods are provided for this purpose.

- Never use hands alone for spooling lines.
SAFE WORK PROCEDURES

CABLE YARDING

RIGGING SLINGER

PERSONAL PROTECTIVE EQUIPMENT:
- Caulk Boots
- Hi-vis Hard hat
- Gloves
- Stagged Pants

Responsibility to Others:

• A Rigging Slinger is directly responsible for the safety of the men he directs.

• Ensure your crew are in a safe position at all times.

• Observe and correct the unsafe work practices of your crew.

• Communicate; tell them what you plan for the next turn.

• Insist that your crew pay attention to the turn while it's on its way in; that way they will be alert for sliding logs, rolling rocks, flying chunks or other hazards.

• Never permit the crew to work in the bight or near tailhold stumps.

• Ensure that the crew is above, behind and well in the clear of every turn before giving a "go ahead" whistle.

Responsibilities in General:

• A Rigging Slinger is directly under the supervision of the Hooktender.

• Plan your turns carefully, consider the route you will take and the logs to be choked.

• Inspect the rigging and lines for loose shackles, cracks, worn or damaged eyes, burnt lines or scab straps. Inspect the chokers for jaggers.

• Listen to the whistle, blow a stop immediately and correct if the wrong whistle has been given.

• Be careful not to slack lines too far down without instructing loaders to watch for lines.
SAFE WORK PROCEDURES

CABLE YARDING

RIGGING SLINGER Continued

• Do not set a turn under the pile if loading is in operation.

• If rigging is hung up on a limb or sapling, clear it by slacking the rigging down before setting the turn.

• Adequate training is required by a qualified person before using a power saw.

• Ensure equipment operators are aware of your intentions.

• Ensure equipment operators are aware of your intentions before entering a landing.

• Never allow yourself or your crew to walk into a landing behind or over a pile while a loader is in the landing.

• Use eye protection when cutting cable.

• Slack off lines before going into hang-up.

• Do not enter turn until butt rigging has been slacked to stop flying chokers.
SAFE WORK PROCEDURES

CABLE YARDING

CHOKERMAN

PERSONAL PROTECTIVE EQUIPMENT:
- Caulked Boots
- Hi-vis Hard Hat
- Gloves
- Stagged Pants

- A chokeman is under the direct supervision of the Rigging Slinger; the Hooktender being the supervisor of the side.
- If doubtful of anything, ask the Rigging Slinger or the Hooktender.
- Pull lines with your whole body, not just your arms. If too heavy for one man, get help.
- Grip the line firmly with your hands so that they won't slide. This prevents a jagger wound.
- Stay well away from bights and siwashes.
- Stand behind the Rigging Slinger when the butt rigging is moving.
- Never stand under the butt rigging when setting a choker.
- Learn the proper way to set a choker. If possible, always set the choker by putting the knob over the log. Watch for the choker bell sliding down the lines.
- Never stand close to the tail block or the stump, in case the strap or lines break or the stump pulls.
- Learn the proper way to pack a block so that it can be thrown clear in case of tripping.
- Never allow yourself to walk into a landing behind or over a pile while a loader is in the landing.
- Be aware of flying chokers.
- When unhooking guylines, stand on eye side of line.
SAFE WORK PROCEDURES

CABLE YARDING

LANDINGMAN

PERSONAL PROTECTIVE EQUIPMENT:

- Hi-vis Hard Hat
- Hi-vis vest
- Hearing Protection
- Eye Protection
- Leg Protection
- Caulked Boots

Responsibility to Others:

- Is responsible for the safety of himself and all others in or around the landing.
- Is responsible for directing traffic into or through the landing.
- Is responsible for directing the landing of logs when necessary.

Chasing:

- Keep in the clear of the turn when it is being landed (safe zone).
- Be sure logs are stable before going in to unhook them.
- Unhook bottom logs first and from the upper side when applicable.
- Never stand under the yarding lines when a turn is being yarded.
- Inspect the butt rigging regularly and report badly worn parts.
- Replace badly kinked and jaggered chokers.
- Ensure the yarder operator and loaderman know where you are at all times.
- Do not use gas to light fires.
- Keep landing area neat and tidy and equipment in good condition.
SAFE WORK PROCEDURES

CABLE YARDING

LANDINGMAN Continued

General:

- Do not look directly at the line when cutting.
- Use a soft hammer when cutting the line.
- Use eye protection when cutting the line.
- Use caution when using sharp tools.
- Wear leg pads whenever using a power saw.
- Adequate training is required by a qualified person before using a power saw.
- Check chokers for jaggers.
SAFE WORK PROCEDURES

CABLE YARDING

LANDING BUCKER

PERSONAL PROTECTIVE EQUIPMENT:
- Caulked Boots
- Protective Leg Wear
- Hearing Protection
- Eye Protection
- Hi-vis Vest
- Hi-vis Hard hat
- Gloves

- Make sure the Yarder and Loader Operator know where you are working at all times.
- Never work under the Mainline and haulback when the turn is being yarded.
- Stay clear of the machine counterweight at all times.
- File tangs must be bent over or a handle put on.
- Always keep a firm grip on the saw.
- Caution must be used to avoid kickbacks, never stand directly behind the saw. Always make sure the end of the bar does not strike an object causing a kickback. Whenever possible, avoid boring into a log.
- Before starting the cut, assess the situation and decide what the log is likely to do when the cut is completed.
- If the log is in an unsafe position to buck, leave it or get a machine to move it to a safer position.
- Watch for side bind or spring in long logs or windfalls.
- Broken ends not to be bucked on load.
- Never stand behind a bucked root, it could fall back.
- Watch for limbs with spring in them; they could strike you when cut off. Don't cut off limbs that may allow logs to roll on you.
- Don't use power saw gas for lighting fires.
SAFE WORK PROCEDURES

CABLE YARDING

LANDING BUCKER Continued

• Avoid using a saw above shoulder height unless it's necessary; then caution must be used.

• Maintain the saw in good working order for safety and performance.

• Use a designated safe area for saw maintenance, etc.
YARDING ENGINEERS

CABLE YARDING

SAFE WORK PROCEDURES

PERSONAL PROTECTIVE EQUIPMENT: Adequate Footwear
Hearing Protection
Hi-vis Hard Hat
Hi-vis Vest when off machine

Responsibility to Others:

• The Yarding Engineer's primary responsibility is to be sure that his actions do not create a hazard to the others working around him or to himself.

Checking Machine:

• Make sure machine is in a safe operating condition.

• Check the whistles to ensure that they are working properly.

• Be sure of your footing while moving around the machine.

• After using any guyline winch or when taking over a new machine, make a visual check of the guyline dogs.

• Always enter and leave machine in safe manner. Use handholds for stability.

Signals:

• Follow signals carefully; if in doubt about signal do not move the rigging - ask for a repeat.

IF IN DOUBT - STOP
YARDING ENGINEERS
CABLE YARDING
SAFE WORK PROCEDURES Continued

Yarding a Turn:

- Always start the turn off slowly.
- Slow down the turn when coming into the landing area.
- Make sure the crew and the loader are in the clear.
- Keep the landing of the logs as straight as possible.
- Make sure the logs are as secure as possible to minimize the danger of logs rolling onto the chaser.

Other Persons in the Cab:

- No unauthorized person will be in cab while actual yarding is taking place.
- Only authorized persons or those on a job-training program are allowed to run the machine.

Machine Maintenance:

- Good housekeeping is a must; with emphasis on oil spills, accumulations of gear dope and fine material under the drum and winches.
- Keep all guards in place.
- Shut down motor and winches when doing greasing and maintenance work on them.
- Lock-out/de-energize as required.

Spooling of Lines:

- Be sure a proper tool is used.
- No loose or ragged clothing is to be worn when spooling.

Radio Signals:

- Never shut the whistle off until the crew is in the landing.
SAFE WORK PROCEDURES

CABLE YARDING

SWING YARDER HOOKTENDER

PERSONAL PROTECTIVE EQUIPMENT: Caulk Boots
Hi-vis Hard Hat
Hi-vis Vest
Gloves
Hearing Protection as required


Back Spar - Cat - Excavator:

• When threading the guylines through the tower, watch your hands in pinch points.

• Watch for snags along the timber edge.

• Do not sit on the mobile back spar while yarding is in progress.

• Do not get too much bight on the mobile back spar.

• Ensure that the mobile back spar is in proper position and secured before starting to yard.

• Ensure boom is in lead and blade or bucket securely on ground.

• Watch that the running lines do not dislodge trees, logs or other materials when moving the mobile back spar on steeper logging sites. The back spar operator must be in a safe location before the running lines are tightlined.

• Always enter and leave machine in safe manner. Use the handholds provided.
SAFE WORK PROCEDURES

CABLE YARDING

SWING YARDER HOOKTENDER Continued

Communications:

- Use the approved voice terminology and hand signals.
- Radios must be in good working condition.
- When talking operator onto logs, ensure you are well clear of turn - to side and back.
- Make sure you are well clear of lines – remember these machines swing.
- Wear hi-vis vest/hi-vis hard hat

Rigging:

- Check the rigging periodically for loose shackles in the grapple and carriage.

Rigging Backspar Trees:

- When using back spars ensure that proper rigging practices are used.
SAFE WORK PROCEDURES

CABLE YARDING

LOG LOADER OPERATORS

PERSONAL PROTECTIVE EQUIPMENT:

- Adequate Footwear
- Hearing Protection
- Hi-vis Hard Hat
- Hi-vis Vest when off machine

Responsibility to Others:

- The Loading Engineer's primary responsibility is to be sure that his actions do not create a hazard to the others working around him or to himself.

Machine Clearance:

- Maintain two ft. counterweight clearance.

Loading in Landings:

- Do not grapple logs in the pile while the chaser is unhooking the turn.
- Cooperate with the Chaser and the Yarding Operator.
- Watch out for guylines and yarding lines while working.
- Do not work in the pile while the rigging crew is directly behind the pile on the downhill side.
- Swing into the clear when the turn is coming into the landing.
- Be on the alert for other persons approaching the work area from any direction.

Trucks:

- Trucks to be backed into the landing on a signal only.
- Signal clearly when the load is finished.
- Trucks to leave the landing only when signal is given from a Landing Man or Loader Operator.
SAFE WORK PROCEDURES

CABLE YARDING

LOG LOADER OPERATORS Continued

Machine Maintenance:

• Good housekeeping is a must.

• Report all unsafe conditions to your Foreman.

• Maintain logbook.

• Lock-out/de-energize as required.

Other Persons on Machine:

• No unauthorized persons allowed in the cab while actual operating is taking place.

• Only authorized persons or those on a job-training program are allowed to run the machine.

Grapple:

• Leave the grapple or raised equipment on the ground when not in use.
SAFE WORK PROCEDURES

CABLE YARDING

MOBILE SWING YARDER/OPERATOR

PERSONAL PROTECTIVE EQUIPMENT:
- Adequate Footwear
- Hearing Protection
- Hi-vis Vest
- Hi-vis Hard Hat

It is the responsibility of the Operator to report maintenance problems which could interfere with the safe operation of the machine. An Operator is expected to operate the machine in a safe, efficient manner at all times.

Communication:

- A safe and efficient operation of a swing yarder demands a maximum of cooperation between the people involved.

- An authorized means of communication must be used.

- Both the Engineer and the Hooktender should set the radio to cut out a maximum of interference.

Safety Precautions:

- Ensure all personnel understand signals.

- Use proper signals at all times.

- Any signal that is not clearly understood shall be treated as a STOP signal and ask for a repeat. IF IN DOUBT - STOP.

- If there is a danger of signals not being understood, the operator shall repeat the signal before proceeding.

- Check radios daily at startup to ensure they are working properly.

Maintenance:

- If the machine is kept clean, the maintenance check can be done properly to correct problems before they become a safety hazard.
SAFE WORK PROCEDURES

CABLE YARDING

MOBILE SWING YARDER/OPERATOR Continued

Safety Precautions:

• Clean up oil spills to prevent slips and falls.
• Use solvent for cleaning, not gas or diesel.
• Keep guards in place.
• Shut down motor when refueling or doing, maintenance work on motors or winch.
• Never use compressed air to clean your person or clothes.
• Report any maintenance problems to the shop as soon as possible and use proper forms.
• The cleaning, oiling or adjusting of moving machinery is prohibited when contact with moving parts could injure a workman.

Rigging:

Safety Precautions:

• Inspect boom lines weekly and replace as required.
• Inspect all other lines and rigging regularly and replace it as necessary.
• Slack lines and place the grapple on the ground before leaving the machine unattended.
• Guylines must be marked if they are a hazard to traffic.
• Use proper spooling tool when spooling line.
SAFE WORK PROCEDURES

CABLE YARDING

MOBILE SWING YARDER/OPERATOR Continued

Moving:

Safety Precautions:

- Ensure everyone is clear and accounted for before moving.
- Give the proper signal with the horn before moving.
- Ensure traction is adequate before moving on snow or ice; use sand or a snub line if required.
- When moving on steep grades with the rigging out, lower the boom to counteract the weight of the counter weight.
- When traveling up a steep grade, lower the boom to avoid the boom coming back.
- Keep drive chains behind when moving up a steep grade and ensure the travel brakes are adjusted.
- Ensure path of the machine is clear of logs and other obstacles.
- Use a signal man when moving the machine in congested or hazardous areas (i.e. narrow road).
- Do not move the yarder and tailhold back spar at the same time.

Yarding:

- At no time should the grapple be handled when attempting to pick up a log. If the grapple cannot be talked onto a log, move the machine or use a choker.
SAFE WORK PROCEDURES

CABLE YARDING

MOBILE SWING YARDER/OPERATOR Continued

Safety Precautions:

• The back end of all mobile grapple yarders shall be at least 2 feet clear of all obstacles. Ensure no workman boards the machine without the Operator's permission.

• Make sure all crew members are in the clear before moving the turn.

• Be careful of jillpoking logs already in the landing.

• When necessary, take signals from the Chaser.

• Pile logs properly to avoid creating a hazard for loading crews.

• Extra care should be taken while yarding with a mobile tailhold back spar to avoid tipping it.

General:

Safety Precautions

• Report incidents or accidents to your Supervisor/Foreman or First Aid Man as soon as possible.

• No unauthorized personnel to be on the machine when yarding or moving.

• Wear a hard hat when outside the cab.

• Use personal protective equipment when required (i.e., hearing protection).

• Use safety goggles when cutting line.

• Watch footing on the machine to avoid slips and falls.