

# **The Port of Virginia**

## **Operations and Maintenance Standards**

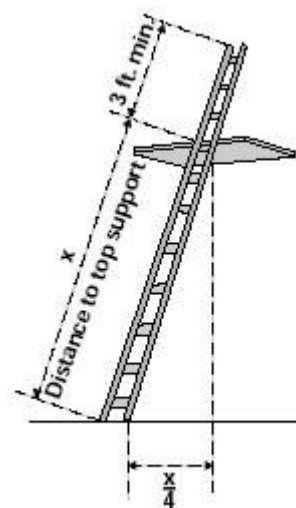
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➤ **General Terminal Procedures**



1. Every person working on Port of Virginia property has the authority and obligation to STOP WORK if there is a condition or behavior that presents imminent danger to persons, equipment, or the environment.
2. On Port of Virginia property, compliance with these POV Operations and Maintenance Standards is mandatory.
3. The top 3 causes of fatalities at marine cargo terminals world-wide are pedestrians being struck by vehicles/equipment, being crushed by suspended loads, and falls from height.
4. When operating equipment, priority #1 is to clear your path of travel. Continuously scan surroundings as people and objects in the work area will change without notice.
5. Fatigue, Distracted Driving, and Aggressive Driving are key contributors to mishaps. If you are too tired to work, please tell your supervisor. Employees are expected to arrive for work rested and ready to perform their duties and are therefore prohibited from dozing off or sleeping while operating company vehicles/equipment.
6. Three rules to live by are “Be Predictable”, “Never turn your back on the work” and “Do not rush. Talk to people who have gotten injured while taking short cuts.
7. Employees who are involved in or witness a mishap or near miss may not leave the scene. Report all mishaps and near miss events immediately to the AOM/superintendent.
8. Employees have the right to report work-related injuries and illnesses free from retaliation by their employer.
9. As a part of all pre-use inspections, ensure the operator’s cab video monitoring system is not obstructed, if equipped.
10. When an equipment operator has a maintenance problem, inform the supervisor that you are leaving the frequency to call maintenance. Coordinating through any 3<sup>rd</sup> party to relay maintenance needs is prohibited.
11. When maintenance is working on a piece of equipment, they are in authority. Operators, Deckman, Slingers, etc., must follow the directions of the maintenance technician until the equipment is released back to the operator.
12. During maintenance on any equipment/vehicle, the operator is required to remain with the equipment/vehicle unless it is their meal hour, cut time, or unless they have contacted the Operations AOM and received authorization to depart.
13. When on the dock, vendors/contractors must park at the stern of the vessel or on a crane leg and keys must remain in the vehicle.
14. Stop and sound the horn at the entry and exit of warehouses or maintenance facilities where visibility may be obstructed. As a pedestrian, when crossing warehouse doors, look for forklifts. Make eye contact with operators before approaching.
15. Upon detecting a petroleum or engine fluid leak while operating any equipment, avoid the drains, pull over, shut down and inform maintenance.
16. Upon detecting a persistent smell of exhaust fumes in the cab of any equipment, promptly shut down and inform maintenance.
17. WARNING: When entering a vessel hold in which there is any question of a toxic atmosphere or insufficient oxygen, AOMs/superintendents are required to have the atmosphere tested. The vessel crew may accomplish this, but the stevedore representative is responsible to ensure it is satisfactory. Anytime the hold includes decomposing organic

materials such as logs, steel that could be rusting, hazardous tank containers with gas, or any material that can have an adverse impact on the breathable air, the atmosphere must be tested.

18. Shorts are authorized for VIT employees, except for Ship Gangs, Vessel Lashing Gangs, or for any employee who boards a vessel. CP&O does not permit shorts.
19. Mount and dismount equipment via the stairs/ladder while **FACING** the machine and use 3-points of contact.
20. When required to climb up or down a vessel gangway when an STS crane is working overhead, inform the Slinger, Deckman, or Vessel Foreman first so they may coordinate with the crane operator. Do not climb the gangway if the bar is being moved overhead.
21. The Terminal Transportation team will escort vendors to the dock and will provide transportation for pedestrians such as vessel crews, pilots, etc.
  - a. Terminal Transportation may not drive under an active STS Crane.
  - b. **DURING OPERATIONS:** Terminal Transportation is required to notify the Dock Foreman/VC Checker by calling on the radio channel of the crane(s) working near the gangway **prior** to approaching the working area. Deliver pedestrians as close to the gangway as possible and instruct individuals to remain in the vehicle until cleared to exit. When unable to establish communications, park at the stern of the vessel to pick-up or drop-off personnel.
  - c. If dropped off at the stern of the vessel, pedestrians will be required to walk between the crane and the bull rail to reach the gangway. Terminal Transportation will instruct pedestrians to not walk underneath a suspended load.
22. Ladders
  - a. Inspect the ladder prior to use. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded. Ladders may not be modified.
  - b. When being transported, ladders must be secured in a vehicle ladder rack or stored within the vehicle bed.
  - c. Read and follow all labels/markings on the ladder.
  - d. Do not exceed the maximum load rating to include the weight of tools/equipment.
  - e. Ladders must be free of any slippery material on the rungs, steps or feet.
  - f. Be sure that all locks on an extension ladder are properly engaged.
  - g. Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
  - h. Avoid electrical hazards! – Look for overhead power lines before handling a ladder. Do not use a metal ladder near power lines or exposed energized electrical equipment.
  - i. Do not use a self-supporting ladder (e.g., step ladder) as a straight ladder or in a partially closed position.
  - j. Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height.
  - k. When portable straight ladders are used, they shall be long enough to extend three feet above the upper landing surface.
  - l. The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall. (see diagram)



- m. If a ladder is placed in any location where it can be displaced by other work activities, it must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
  - n. Maintain 3-points of contact (two hands and a foot, or two feet and a hand) on the ladder when climbing. Use a tool belt as necessary to keep hands available. Keep your body near the middle of the step and face the ladder.
  - o. Do not use the top step/rung of a ladder as a step/rung.
  - p. Only one person at a time may use a ladder.
23. Hand Signals

 <p><b>LOWER:</b> Arm extended down, forefinger down, move hand in small horizontal circles.</p>	 <p><b>HOIST:</b> Arm extended up, forefinger up, move hand in small horizontal circles.</p>	 <p><b>CRANE OPERATOR STOP:</b> Arms in across chest then fully extended with palms down.</p>
 <p><b>DOWN EASY:</b> Forefinger down, move hand in slow circles over palm of other hand.</p>	 <p><b>ALL CLEAR:</b> Hand over hard hat, palm down, move hand forward and backward 2-3 times.</p>	
 <p><b>Move Spreader bar/hook in the direction indicated.</b></p>	 <p><b>GANTRY CRANE:</b> Roll hands one over the other in the desired direction of travel.</p>	 <p><b>SLOW MOVEMENT:</b> With arms outstretched, rub palms together and then give the hand signal for the action that is to be accomplished at slow speed.</p>
 <p><b>GANG IS PINNING or DE-PINNING:</b> Keep hand on container OR arm outstretched in view of Crane Operator.</p>	 <p><b>GROUND TRAFFIC STOP:</b> Raise arm and make a fist.</p>	

➤ **Terminal Safety Excellence Program (TSEP)**

- I. The TSEP policy and rules are available at the Port of Virginia web site. Look under “Who we Are” and then Health and Safety. <https://www.portofvirginia.com/who-we-are/health-and-safety>

➤ **Ship-to-Shore Crane Operations**

- I. General

- a. Communications

- i. The Vessel Foreman, Deckman, and Slinger are required to have a radio.
    - ii. The Vessel Foreman may not transmit when a container is being lowered to or lifted from directly above the dock or vessel, except in an emergency.
    - iii. The lashing gang may speak on this frequency during lashing cage operations.
    - iv. The Checker may not transmit, except in an emergency.

- b. **WARNING:** Exercise care to not touch controls that would activate the flippers while longshoremment or crane technicians are near the spreader bar.

2. STS Crane Positioning

- a. For Vessel arrivals/departures, STS cranes will be located at the amidships section of the vessel OR staged off of the vessel at least 100 feet from the bow/stern. The boom of an idle crane within 100 feet of the vessel berthing area shall be boomed up.

- b. The vessel berthing AOM will be responsible for entering prestaging footmarks and the vessel's estimated alongside time on all docking instructions.

- c. The Vessel Operations AOM is responsible for communicating with Crane Maintenance to request the staging of cranes on both dockings and sailings as well as monitoring STS position in preparation for dockings and sailings.

- d. Vessel Docking

- i. Prior to vessel arrival, the vessel berthing AOM will determine the designated pre-stage location for STS cranes as well as the estimated berthing time of the vessel. The estimated berthing time should be used by crane maintenance as a deadline to pre-stage cranes.
    - ii. At NIT, the AOM will send an email to NIT Crane Management that includes vessel name, expected time of arrival, cranes assigned, mid-ship footmarks for pre-staging, and shuttles assigned. An ACM shall confirm receipt or a follow-up call by the AOM is required.
    - iii. The Vessel AOM will use berth cameras to spot check STS placement prior to vessel docking. In the event an STS Crane is boomed down OR out of the pre-stage position, the ACM will contact pier watch via radio to move and/or boom up the STS Crane.

- e. Vessel Sailing

- i. The vessel AOM will communicate with the stevedores to instruct STS operators to move their crane into the designated staging area after being cut, as guarantee allows. The last STS operator to finish should have their crane moved into the designated staging location prior to leaving, as guarantee allows.
    - ii. Upon setting up a sailing time with Agents, the Vessel AOM will notify crane maintenance (ACM or pier watch) via radio of the projected sailing time and

request that STS cranes be moved into the pre-stage position listed on the docking instructions, prior to the vessel sailing time.

- iii. The Vessel AOM will visually verify STS placement prior to the estimated sailing to ensure proper STS placement. In the event an STS Crane is boomed down or out of the pre-stage location, the Vessel AOM will contact the ACM or Pier Watch at VIG and the ACM at NIT via radio/phone to move the STS cranes to the proper location and/or boom up the STS Crane.
- iv. At NIT, when the situation does not allow for Crane Operators to post-stage in the proper location, an email will be sent to NIT Crane Management detailing the post stage footmarks. An ACM will confirm receipt of this email in a timely manner, otherwise the AOM must follow up with by a radio/phone call.
- v. In the event an STS crane cannot be moved into a safe zone either amidships or staged off of the vessel at least 100 feet from the bow/stern, the Vessel AOM will contact the vessel's Captain and/or Pilot to ensure they are made aware of the potential hazard prior to sailing.

### 3. Moving the Crane

- a. **With** a ship along the STS gantry path, use a two person team.
  - i. The crane may be moved from the operators cab OR the ground station.
  - ii. Check for clearance of all collision points on the vessel, in-shore and off-shore crane tracks, and gangway. Check for clearance between the ship's structures and boom heel/lugs track.
  - iii. The person activating the controls is solely responsible to ensure clearance.
  - iv. Ensure the Slinger is clearing the path. Before or after operations, Pier Watch will act as the spotter for the operator.
- b. **Without** a ship in the STS gantry path, a second person is not required.
  - i. The person activating the controls is solely responsible to ensure clearance.
  - ii. The crane may be moved from the operators cab OR the ground station.
  - iii. Clear the path of travel before moving the crane.

### 4. Pin-bins

- a. When picking up pin-bins from the dock, ensure the STS Crane flippers are NOT in automatic. Workers in the vicinity can be struck.
- b. Pin-bin racks will be discharged to the ground, except when a hybrid Shuttle Truck is not available at VIG. Forklift operators may only pick up pin-bins when the rack is at its final point of rest and disconnected from the Hustler. Forklift operators may not pick up pin-bins from the pin-bin rack when under the crane.

### 5. Deckman/Slinger Coordination

- a. If the Deckman and Slinger are not present and in position, crane operators are prohibited from discharging/loading containers, pin-bins, or hatch covers.
- b. To protect the operator, do not accept a chimney stack of containers more than two-high on the hard inshore side. Remove containers and let the clerk know the restow plan.
- c. The following tasks are SENSITIVE for coordination with the Deckman and Slinger.
  - i. Discharging from the deck: To identify stuck pins to prevent lifting multiple containers.



- ii. Discharging in the BLIND to prevent lifting multiple containers.
  - iii. Discharging below-deck 20s to prevent lifting multiple containers that is caused by deck pins being used instead of dummy pins.
  - iv. Loading above and below deck to ensure all containers are “down.”
  - v. Loading in the BLIND below deck to prevent striking cell guides OR having the head block strike a container already on the ship.
  - vi. Ensuring twist locks are properly engaged with the speed bar, hatch covers, and flat rack with the ends up or down.
  - vii. Ensuring that hatch covers do not have any loose gear on top such as pins, wires, lashing rods or anything that might fall.
  - viii. Ensuring that the center twist locks are down prior to performing a twin pick.
  - ix. Before replacing a hatch cover, ensure the Deckman checks the top container height to ensure the hatch cover will not crush the container.
5. Shuttle Truck and STS spreader bar separation
- a. Operators shall confirm the location of the bar before entering under the vessel.
  - b. WARNING: Operators shall NOT enter under the crane when the spreader bar is coming in-shore from the vessel, as defined by the lighted arrow.
  - c. Shuttle Trucks MAY enter under the crane when the STS spreader bar is landed on a grounded container in a lane off-shore of the Shuttle Truck, with at least one lane of separation.
  - d. The STS spreader bar may enter from the vessel to a lane OFF-SHORE of a Shuttle Truck that is already established under the crane with at least ONE LANE OF SEPARATION. (i.e. The STS spreader bar may come off the vessel into Lane 2 if there is already a Shuttle Truck in Lane 4.)
  - e. If one lane of separation cannot be obtained, STS operators will wait with the bar over the vessel. STS operators may also hold with the bar in the back reach when necessary. At no time may the bar pass over a Shuttle Truck.
6. Platforms
- a. The platforms will be used when there are 10 or more containers in a given hatch, unless a non-standard situation exists in which the AOM/Superintendent determines that the platforms should not be used.
  - b. A maximum of two platforms, placed in Lanes 2 and/or 4, may be used for container operations. Pin bins will be placed on each end of the platform inside the holding bracket.
  - c. A grounded container MAY NOT be placed in a lane next to a platform that is being used for pin work. A grounded container MAY be placed in a lane next to a platform that is not being used for pin work.
  - d. When gantrying from one bay to another, the STS Crane shall carry the platform at a height just above the pavement. Pin bins may be left in the platform rack holders
7. Loading/Discharge
- a. NIT & VIG: For DISCHARGE, Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
    - i. Discharge from below deck (no pins) is permitted to all lanes.
    - ii. Discharge from above deck (with pins) is permitted only to lanes 2 and 4, with or without platforms.

- iii. When platforms are NOT being used, containers with pins will be floated in Lanes 2 and 4 as if the platform were in place, while the gang completes the pinning process. Lanes 1 and 3 will remain clear of activity and will serve as safety lanes.
- iv. Containers may only be worked 1-high on the dock when using the platforms.
- b. NIT & VIG: For **LOADING**, Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
  - i. Loading containers below deck (no pins) is permitted from all lanes.
  - ii. Loading containers above deck (with pins) will be accomplished only from lane 2 and 4, with or without platforms.
  - iii. When platforms are NOT being used, containers with pins will be floated in Lanes 2 and 4 as if the platform were in place, while the gang completes the pinning process. Lanes 1 and 3 will remain clear of activity and will serve as safety lanes.
- c. NIT & VIG: For Loading and Discharging **AT THE SAME TIME** (“Coming and Going”), Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
  - iv. With **BOTH** loads and discharges having pins, discharge **ONLY** to Lane 4 and load back **ONLY** from Lane 2.
  - v. With **NEITHER** loads or discharges having pins, discharge **ONLY** to Lane 3&4 (in-shore lanes) and load back **ONLY** from Lane 1&2 (off-shore lanes).
  - vi. If containers with **BOTH** pins and without pins are being cycled, remove the platform in the lane being used for containers without pins and keep the platform in the lane for containers with pins.
- d. Hatch covers will remain locked until empty. When lifting a container directly on top of the hatch cover, do so slowly in the event it is still connected. Snatching the load in this case has pulled up the hatch cover, thus sending other containers into the water.
- e. Take the bar out of “auto” after a twin pick...and verify it is out of “auto” when entering the crane cab, so that the bar does not automatically open and cause impact to the vessel or containers in its path.
- f. **WARNING:** When the bar will not hoist up in 40 foot mode, because the sensors indicate it is Twin-20 foot containers, the operator will verify with the Deckman that the lift is NOT twin-20s. If it is NOT twin-20s, the crane operator will select the bypass for a single lift.
- g. Note: The twin-20 detection system may not detect twin-20s in the case of rain/high winds, damage to containers, or when there are no gaps between the twin-20’s. This system is a backup to the STS Operator and Deckman team coordination.
- h. The Lift and Shift (six inch rule) will be used in the following situations.
  - i. Hard In-Shore On-Deck **DISCHARGE** requires the load to be floated slightly (approximately 6 inches)...then slid one foot toward the **dock** to ensure the pins are free from the container/flat-rack below, before hoist. The Deckman must closely observe these lifts.
  - ii. Hard Off-Shore On-Deck **DISCHARGE** requires the load to be floated slightly (approximately 6 inches)...then slid one foot toward the **river** to ensure the pins are free from the container/flat rack below, before hoist. The Deckman must closely observe these lifts.



- iii. Lifts in the “second position from Hard Off-Shore” also require the same procedure, unless there are containers in the Hard Off-Shore position.
  - i. Ship movement during operations causes a significant risk. If the vessel is moving, have the Deckman tell the foreman/vessel crew to tighten the lines. If they fail to act, contact the vessel AOM/foreman.
  - j. When planning clerks stow a vessel, the #1 hazard for having containers wedged in a cell and causing damage is having an empty 20 foot container matched up next to a heavy 20 foot container. For ANY unbalanced load, such as a 40 foot grain container, crane operators must slow down and attempt to level the load with the trim option.
  - k. When lifting a yacht, ensure that the crew complies with the federal regulation against riding the load.
  - l. The Slinger is required to keep their hand on the container OR their hand outstretched in view of the crane operator whenever the gang is still pinning or de-pinning a container.
  - m. Longshoremen may not stand next to or lean on the legs of the crane in the area that a 45 foot container could swing and hit the crane legs.
  - n. Do not suspend a container or empty spreader bar over the inshore walkway of the vessel while waiting to come in-shore as Lashers use this walkway. Also, do not lift a container over the gangway when personnel are on the gangway.
  - o. If working a hatch next to the house of a vessel, if smoke is coming into the cab, contact the foreman to have the vessel stop or at least reduce the production of smoke.
  - p. The OSHA rule governing the lifting of bundled flat racks has been modified to allow lifting bundled flat racks that are locked together using the manufacturer’s guidelines. Generally, this means that no more than four flat racks may be lifted per bundle as long as they are connected via the locking mechanisms built into the flat racks specifically for that purpose.
8. Hatch Cover Operations
- a. The Slinger and General Longshoreman must be present in the back reach before the Crane Operator hoists a hatch cover from the vessel or the dock. The Slinger must inform the Crane Operator, “Operator, back-reach is Clear” to communicate that the back-reach has been inspected and found to be clear of pedestrians, vehicles, or any other obstructions. Once this call has been made, the lift may begin and therefore the Slinger and General Longshoremen may not swap out with others on the bus.
  - b. The “Slow Down” trigger will be engaged when removing or replacing hatch covers, until clear of obstacles on the vessel or the berth.
  - c. When crane operators swap out, it is important to check that the vessel has not shifted because the hatch covers may no longer be aligned with the hatch. This may cause the hatch cover to strike the vessel or containers on board.
9. Over-High Bar/Speed Bar
- a. When in doubt regarding the height of a load, use the Over-High bar.
  - b. The manual Over-High bar may be used above or below deck without restrictions.
10. Lifting Personnel Aloft
- a. Ensure one employee has a radio and establish communications prior to movement.
  - b. Place the spreader bar on the ground to enable employees to mount safely.
  - c. Do not move the bar until personnel are inside the cage and the chains are secured.

- d. Crane Operators shall use the “Slow Down” trigger prior to picking up or landing the bar. Use caution to ensure slow and smooth movements.
  - e. Communicate with the Deckman if going below deck to ensure a clear path and prevent snagging the bar on a cell guide.
  - f. Place the spreader bar in the 20 foot position for movement into or out of a cell guide.
  - g. Do not move personnel with wires/auxiliary gear attached to the bar. These wires can snag during movement and cause the bar to tilt.
  - h. For personnel mounting/dismounting, land the spreader bar squarely on a container OR place the spreader bar against the side of a container to prevent the bar from moving.
11. Discharging to a chassis
- a. With Pins
    - i. The driver pulls a chassis under crane and the slinger spots the chassis 2-3 feet forward of where the front edge of the container will land.
    - ii. WARNING: Employees may not proceed out from under the crane into the line in order to unlock pins in advance of the UTR arriving under the crane.
    - iii. The crane operator will land the container on the gooseneck and hold it, allowing the ship gang members to remove pins. WARNING: When removing front pins, do not step into the bite.
    - iv. After the pins are removed, the Slinger verifies that all employees are clear.
    - v. The Slinger then instructs the hustler operator to back up until the container comes into contact with the chassis bolster.
    - vi. The Slinger then radios or signals the crane operator to lower the aft end of the container onto the 2 locking pins.
  - b. Note: When discharging a closed 40' Flat Rack onto a chassis, after landing, before disconnecting the bar, the Slinger must pull the UTR forward slightly to ensure the flat rack does not swing forward and hit the cab of the UTR.
12. Lifting a container from a chassis
- a. WARNING: “Float the load” when lifting a container from a chassis until the Slinger gives the “All Clear” signal (hand over hardhat, palm down, moving the hand forward/backward 2-3 times) once there is clear separation between the container and chassis/bomb cart and all personnel are clear of the lift.
  - b. As the container is floated, the slinger will direct the UTR to pull forward 1-2 feet so that the STS operator can see the chassis front bolster separation with the container.
13. Lasher Coordination
- a. In general, if one container is found locked...there will likely be others. When in doubt, slow down and have the Deckman take a close look.
  - b. Performing a vertical tandem lift is prohibited. When a pin is stuck during 4-high operations or greater, use the cage of the spreader bar or lashing cage to bring the lasher into position. If the lashers are unable to free the pin, alternatives include a ship-line hired maintenance company or the vessel crew to burn the pin free or to not discharge the load.
  - c. Do not stack 40' containers on top of 45' containers. This is prohibited because the lashers are not able to access the locking pins.
  - d. Lashing Cage – Crane Operator Procedure

- i. Follow directions of the Lasher with the radio.
- ii. **Slow Lift. Slow** movement across containers during unlocking. **Slow** landing.
- iii. **WARNING:** After landing, the lasher with the radio is responsible to inform the crane operator “cleared to lift” to place it back on the bombcart once the safety chains are removed. If one chain is still connected, this could cause an inadvertent and unbalanced lift of the cage, potentially with other employees in the area.

#### 14. Degraded Operations

- a. Gantry Motion: If the gantry motion is inoperative, the crane will be pushed into place, and the operation will continue.
- b. Trolley or Hoist Motion: If the trolley or hoist motion is inoperative, the crane will be placed out of service until the repairs can be completed.
- c. Boom Lights: During the hours of dusk to dawn, if all of the boom lights are inoperative, the crane will be placed out of service. Illumination for cargo transfer operations shall be of a minimum light intensity of five foot-candles.
- d. Radio: If the radio is inoperative, the crane operator will be issued a hand held radio, and the operation will continue.
- e. Sill Beam Arrows: If the sill beam light arrows are inoperative, the operation will continue. If the arrows are partially inoperative, the AOM will ensure that maintenance covers the device.
- f. Back Reach/Lane Camera View: Only the farthest in-shore lane (Lane 4) may be used when the monitor is inoperative.

#### 15. Production Tips (Optional)

- a. When loading 20s that will be stacked > 4-high, load the forward end of the hatch 2-high all the way across, then gantry 20 feet and load the aft end of the hatch 2-high all the way across, then switch back to the forward end, etc. unless otherwise directed by the AOM/Foreman.
- b. If the vessel is listing while loading 20s below deck, Trim the bar so it goes into the cell guide evenly, then remove the trim upon exiting the cell guide, unless otherwise directed by the AOM/Foreman.
- c. When discharging 20s from below deck with the bow of the vessel riding higher out of the water than the stern, discharge forward end containers first...unless directed otherwise by the AOM/Foreman.

#### ➤ Shuttle Truck

1. The Operator is ultimately responsible for clearance from other objects when moving. Visual search is the #1 priority to prevent striking people or objects.
2. Inspect all machines before use. Inform maintenance if there is damage or leaks. Ensure the operator's cab video monitoring system is not obstructed. Ensure that the following items are in good working condition: seatbelt, horn, wipers, tires, brakes, steering system, and signal light panel. If these items are not working, inform maintenance and do not accept the equipment until the safety item is corrected. Wipers are not required unless it is actively raining. Lights are not required for daytime operations.
3. Only Shuttle Trucks assigned by Maintenance may be used.
4. The lap belt is required to be worn during operations.
5. Operators are required to log-in with port number.

6. Prior to departing the rack, accomplish a 360 degree visual check to ensure it is clear to proceed. Check the direction of the tires to ensure that the Shuttle Truck will not impact the rack. For Straddle Carriers, lower the bar to the two-high or lower position and for Shuttle Trucks or lower the bar to the one-high position before leaving the rack.
7. When pulling out, use caution for pedestrians/vehicles and maintain 5 MPH Maximum, until clear of the entire parking area.
8. If leaking...move away from the drains and shut the machine down completely. For Straddle Carriers, use the E-Stop and then verify engine shut-down and for Shuttle Trucks use the SQUARE engine stop button on the arm rest and then verify engine shut-down.
9. Please report any loose debris on top of containers (Large rocks, lashing gear, etc.) to a supervisor.
10. Avoid braking suddenly, especially when the load is in the 3-high or 2-high position or when cornering, because of the tipping hazard. Braking suddenly also presents a hazard to others who are following.
11. To avoid contact with uneven pavement, rail tracks, or low obstacles, carry containers 2-3 feet off the ground. A "Red Line" indicates this height on Shuttle Trucks and a "White Line" indicates this height on Straddle Carriers.
12. In snow/ice conditions, if immobilized or without traction, call maintenance. Do not allow another Shuttle Truck to push your machine and do not spin the tires.
13. WARNING: Straddle Carriers are prohibited from using the SNIT South Access Road that becomes Railroad Avenue. High Voltage power lines make this path unusable.
14. When inside the container stacks/buffer zones/transfer zones, Shuttle Trucks must have a lane of separation when passing each other or they must wait to enter. Equipment may not pass in adjacent lanes because Shuttle Trucks will be occupying the same wheel lanes.
15. Shuttle Truck approach to the STS
  - a. When turning from the main travel lanes on the Berth Highway to approach the Ship to Shore crane, use an approximate 90 degree turn. Do not cut the corner across the back-reach. This is the same when going from the crane back to the Berth Highway.
  - b. Use caution for pedestrians/vehicles around the legs of the STS.
  - c. Do not attempt to pull under the crane until verifying that all persons are clear of Shuttle Truck travel lane and do not enter under the STS Crane when ship-gang members are marking lines on the ground or discharging/loading break-bulk cargo. When Break-Bulk cargo is lashed to a flat rack, it is considered to be containerized.
  - d. Shuttle Trucks may ONLY enter/depart from one designated side of the assigned crane. Traffic is prohibited from entering/departing from the other side.
  - e. WARNING: Shuttle Trucks will enter under the crane CAB-FORWARD.
  - f. WARNING: When crossing the in-shore crane track, the maximum speed is 10 mph.
  - g. WARNING: Prior to the approach of a platform, ensure the spreader bar is raised high enough to safely clear the container.
16. Shuttle Trucks and STS bar separation
  - a. WARNING: Operators shall confirm the location of the bar before entering under the STS Crane. Operators shall NOT enter under the crane when the lighted arrow indicates that the spreader bar is coming in-shore from the vessel. If in doubt as to who has the right of way, STOP and remain outside of the crane legs.

- b. Do not block the STS spreader bar from coming in-shore by delaying exit from a lane. For example, remaining in lane 2 after dropping off a container to stop the STS bar so that another operator can enter lane 4, is prohibited.
  - c. During ANY change under the STS Crane, STOP. This includes departing from under the STS with intent to reposition due to system error. Be sure to locate the spreader bar prior to continuing.
  - d. Shuttle Trucks will comply with Slinger direction to STOP, and will remain stopped, until released by the Slinger. The Slinger will stand at the opposite end from that being used for Shuttle Truck entry in order to see all equipment movement. The standard Slinger hand signal to command a STOP is a raised closed fist. The standard radio call for an emergency stop is "STOP, STOP, STOP."
  - e. Shuttle Trucks may enter under the crane when the STS spreader bar is landed on a grounded container in a lane off-shore of the Shuttle Truck, with at least one lane of separation. Shuttle Trucks may not enter in a lane off-shore of the STS spreader bar that is on a grounded container.
  - f. The STS spreader bar may enter from the vessel to a lane OFF-SHORE of a Shuttle Truck that is already established under the crane with at least ONE LANE OF SEPARATION. (i.e. The STS bar may come off the vessel into Lane 2 if there is already a Shuttle Truck in Lane 4.)
  - g. If one lane of separation cannot be obtained, STS operators will wait with the bar over the vessel, not over the inshore vessel walkway. STS operators may also hold with the bar in the back reach when necessary. At no time may the bar pass over a Shuttle Truck.
  - h. At no point may a grounded container be placed in a lane next to a platform that is being used for pin work. Doing so would remove the lane of separation needed for the protection of the individuals on the ground. To be clear, a grounded container MAY be placed in a lane next to a platform that is NOT being used for pin work.
17. Shuttle Truck departing from the STS
- a. When departing from under the STS Crane, the cab of the Shuttle Truck must be past the crane leg before turning toward the Berth Highway.
  - b. Use caution to ensure there is clearance from the end of the platform before turning.
  - c. When departing from under the STS Crane, yield the right of way to vehicles already established on the berth highway.
18. Restows must be placed so they do not interfere with entering/exiting under ANY working crane. A clear path must be provided for equipment and vehicles.
19. Approach Reefers cab forward, and verify that the reefer is unplugged before pulling away.
20. When approaching a container on wheels, proceed cab forward and ensure the driver is accounted for...also use caution for an adjacent wheeled container where another driver may be unlocking a chassis.
21. When entering the overall parking area, use caution for pedestrians/vehicles and maintain 5 MPH Maximum.
22. When parked, prior to shutting down, turn the steering wheel slightly to the right so that the Shuttle Truck will automatically turn slightly away from the rack so that the next person does not hit the rack when pulling away.
23. After parking, inform maintenance of any caution light or fault prior to exiting the cab. Then raise the spreader bar all the way up, close the door and windows, and log out. Before

getting out of the seat, ensure that the parking brake is engaged, the machine is out of gear, and that the machine is turned off. A good indication that the machine is still in gear is either a motion tone when outside the cab or active external strobe lights.

24. When exiting, operators are responsible to remove their Paperwork and Personal Debris.
25. When Shuttle Truck operators have a maintenance problem, inform the supervisor that you are leaving the frequency to call maintenance. Coordinating through any 3<sup>rd</sup> party to relay maintenance needs is prohibited. This may only be accomplished directly with maintenance.
26. When Maintenance Technicians are performing troubleshooting in the field, they will approach and park so that the operator can see the technician, if room permits. Technicians will not begin the work unless visual contact with the operator has been made. Operators are required to remain on the “Pier Watch” maintenance frequency.
27. When a spreader bar has a suspended container that will not release, the lanes directly below and next to the hung container will not be used. (i.e. if the container is suspended above Lane 3, then Lanes 2, 3, and 4 will be closed.) Maintenance will place jersey barricades in front of all (3) lanes.
28. Waterside Buffer Area (WSBA)
  - a. When entering or departing the WSBA or Transfer Zones, use caution for vehicles working near the stacks or entry gates between the stacks.
  - b. WARNING: Do not place a container with twist locks into the WSBA.
  - c. Please note the door direction when entering the WSBA and ensure that the doors face the water. If the doors are open, report this to operations.
  - d. Light system
    - i. Red/Red means that the RMG is occupying the WSBA OR that it is coming into the WSBA. Entry with a Red X or Red light is prohibited.
    - ii. Red/Yellow means that there is a Shuttle Truck in the WSBA and that the RMG wants to enter. Shuttle Trucks are prohibited from entering at this time.
    - iii. Green/Green means that entry is authorized.
    - iv. Green/Yellow means that a Shuttle Truck has entered the WSBA and the system sees the Shuttle Truck. Upon entry, if the lights remain Green/Green it means that the high mounted laser does not see the Shuttle Truck. Depart the WSBA without delay and inform maintenance.
    - v. When the small blue light is on, this indicates the lower traffic laser is being used and that containers are limited to being stacked one-high in the zone.
  - e. When there is a system fault due to an unauthorized entry of a Shuttle Truck or any number of other reasons, the RMG will stop moving and the spreader bar will stop moving, until reset.
  - f. Holding the WSBA “open” for other Shuttle Trucks is prohibited.
  - g. Stack containers a maximum of two-high in the WSBA.
  - h. While waiting to enter the WSBA, hold in the back-reach area or in front of the WSBA within the lines. Do not loiter on the berth highway.
  - i. While waiting to enter the WSBA, keep the container in the I-high position. If the container is held higher than this, it blocks the vision of other Shuttle Trucks traveling on the Berth Highway.



29. Do not proceed under an RMG spreader bar at any time, active or secured for maintenance. This is considered a suspended load.
30. WSBA Lane Closures.
- Place the RMG to be worked on out of service and secure it in the WSBA.
  - Temp block lanes in which maintenance is working PLUS one buffer lane. For example, the bar in lane 1, the aerial lift in lane 2, with lane 3 as a buffer. For example, if the spreader bar is in Lane 1 and there is no aerial lift, then Lanes 1 & 2 will be closed. If the spreader bar is in Lane 2, then Lanes 1, 2 and 3 will need to be closed.
  - WARNING: All lanes of the WSBA will be closed if both horn lasers are disabled/inoperative.
  - Place jersey barriers in front of the closed lanes. Maintenance vehicles with their hazard lights/rooftop beacons on may also be used as a physical barricade.
  - WARNING: Remain in the lanes designated for work and do not enter the area between the RMG and the stack (i.e. row 202).
  - If an RMG is parked in the WSBA without a suspended container, but maintenance is not being accomplished, the only lane that is closed is the one with the spreader bar. If an RMG is parked in the WSBA with a suspended container, the lane with the suspended container plus a buffer lane on both sides will be closed.
31. USCBP Live Inspections of imports discharged from a vessel
- Inspection stations will be off of the bow, stern, or both ends of the vessel at the same time, depending on berth congestion.
  - The Shuttle Truck takes discharge from the STS to an open CBP lane. Although the work instruction screen directs the operator to the Waterside Buffer Area, complete the inspection first.
  - CBP is expected to stand behind cones and use hand signals to communicate to Shuttle Truck operators until they reach the inspection station. CBP will have a handheld radio on the same channel as the Extra Clerk to communicate any issues or instructions.
  - Once the Shuttle Truck enters the inspection area and comes to a stop, place the container on the ground BUT REMAIN LOCKED INTO THE CONTAINER. DO NOT UNLOCK.
    - Put the E-brake ON and remain in neutral.
  - CBP will open the container doors and inspect inside. Once finished, CBP will clear the area and then use hand signals for the operator to proceed.
    - If CBP needs to further inspect a "HOT" container, they will communicate to the Extra Clerk to send the Shuttle Truck operator to a designated location on the dock.
32. North NIT: Shuttle Trucks are not permitted to "cut through" container rows or pads in which they do not have active moves. (I.e. Do not cut through the 100 rows to get to the 200 rows.)
33. North NIT: The container row next to the roadway in the P1 and the Q1 pads will have a maximum of 2-high containers. The second row in will have a maximum of 2-high containers in the two 20' positions on each end of the row. This is to enable acceptable Shuttle Truck visibility. These 2-high restrictions are established in XPS.

34. North NIT: when parking near container stacks, the vehicle will be parked within the safety lines by the light pole, use flashers or beacon, with the radio turned off and the windows lowered.
35. North NIT: Straddle Carrier entry into an area with “Men Working” displayed on the computer screen is prohibited and may not be waived by anyone.
36. NIT Motor Carrier Transfer Zone: When approaching the Transfer Zone, the primary concern is to verify that the Truck Driver has at least one foot in the booth before entering the lane. If unable to see the Truck Driver in the booth, do not proceed.
37. NIT Motor Carrier Transfer Zone: When approaching a truck to REMOVE a container, approach cab forward.
38. NIT Motor Carrier Transfer Zone: When removing a container, lift the rear of the container off of the pins just enough to enable shifting the rear of the container away from the Straddle Carrier cab. Once able to see the rear pins, then slide the container backwards until just clear of the front pins and begin a gentle hoist.
39. NIT Motor Carrier Transfer Zone: Do not move the container or pull away until re-verifying that the Driver is “clear.”
40. NIT Motor Carrier Transfer Zone: After the container has been loaded, pull back until “just clear” of the container to observe from a different vantage point to look at the rear bolsters and determine if the load is properly seated. This will reduce the probability of being called back for an adjustment.
41. NIT Motor Carrier Transfer Zone: If there is a problem, do not allow the truck driver to participate...get the Groundman. Under all circumstances, do not move back onto the container, unless the Driver has at least one foot in the booth.
42. Shuttle Truck/ Straddle Carrier Groundman Responsibilities
  - a. The Groundman is responsible to unlock UTR chassis pins and to assist with OTR adjustments. The Groundman is not responsible for unlocking OTR chassis pins.
  - b. Only proceed to a stack/lane when instructed by the equipment operator/AOM.
  - c. Upon arrival, park in a position to block the stack/lane and stand next to the booth, remaining clear of any suspended load.
  - d. Notify and receive acknowledgment from the SC operator via visual signal or radio call to STOP all movement before proceeding toward the container/chassis.
  - e. Direct the OTR/UTR driver to remain in the booth while the Groundman is working.
  - f. Once finished and clear of the operating space, notify the SC operator via radio that it is safe to resume operations.

➤ **Slinger**

1. General

- a. Effective January 1, 2024, all Slinger, Deckman, and General Longshore Workers must have a current HRSA Ship Gang Certification in order to work in these positions. Experienced longshoremen will provide additional guidance and coaching.

2. Communications

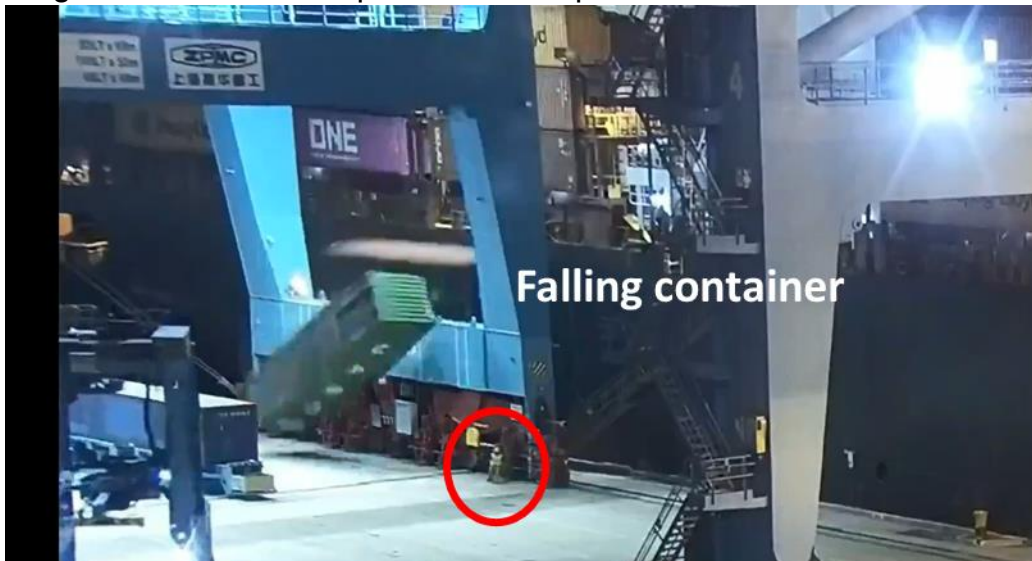
- a. Establish communications with the crane operator when starting the job. Otherwise, minimize communications.

- b. The Slinger is responsible to ensure that ship gang members maintain awareness on the location of the bar. General Longshoremen are also responsible to maintain awareness on the location of the bar.
  - c. The Slinger is responsible to enforce proper parking at the vessel. Lashers will park at the aft end of the vessel, in Lane 1, if clear. Do not allow anyone or anything to park on the crane tracks, except the foreman/checker parking on the off-shore tracks.
  - d. The standard Slinger hand signal to command a STOP is a raised closed fist. The standard radio call for an emergency stop is "STOP, STOP, STOP."
  - e. The Slinger is required to keep their hand on the container OR their hand outstretched in view of the crane operator whenever the gang is still pinning or de-pinning a container.
3. Moving the Crane
- a. Prior to STS Crane movement, the Slinger will verbally confirm for the crane operator that the tracks are clear on the dock.
  - b. When the STS Crane is about to move and when it is in motion, the Slinger will walk in advance of the crane and ensure that there are no obstacles in its path.
4. Preparation for Operations
- a. Lines need to be drawn at both ends of the spreader bar, dark enough so that the Shuttle Trucks can see them. If not, the container will start with a swing when brought to the vessel and potentially hit objects due to tight conditions. If platforms are used, chalk lines are not required.
  - b. Shuttle Trucks may not enter under the STS when ship gang members are marking the lines.
  - c. Do not approach or start to mark lines on the ground until after the spreader bar is landed on the ground. Do not touch the spreader bar and remain clear of the flippers.
  - d. Forklift operators may only pick up pin-bins when the rack is at its final point of rest and disconnected from the UTR. Do not pick up pin-bins under the crane from the pin rack.
  - e. NIT & VIG: Pin-bins may only be placed between Lanes 1&2 as well as between Lanes 3&4 and at least 5 feet outboard from the end of the 40 foot container. The placement of middle pin-bins is permitted during the discharge of twin 20s. When Coning Platforms are used, pin-bins will be placed on the ends of the platform in the designated holders.
5. Operations General
- a. WARNING: Touching the STS spreader bar is prohibited, except for maintenance personnel.
  - b. WARNING: The flippers on the spreader bar can cause serious injury if they strike an employee when activated. Slingers are responsible to use the E-STOP on the crane before approaching the spreader bar when attaching or detaching rigging gear or anytime that an employee is required to work in a position in which they may be struck by a flipper.
  - c. Slingers will stand at the opposite end from that being used for Shuttle Truck/UTR entry in order to see all equipment movement.
  - d. Shuttle Trucks will comply with Slinger direction to STOP, and will remain stopped, until released by the Slinger.
  - e. The Slinger shall ensure that all the twist locks are removed prior to the container being taken to the RMG stack. The Hatch Boss is ultimately responsible.

- f. The Slinger is responsible to ensure that the gang does not approach or touch a discharge container that is being landed on a platform until the spreader bar is removed from the container. The Slinger alone may approach, but in no case touch the container.
- g. The Slinger is responsible to ensure that general longshoremen do not turn their backs on the Shuttle Truck or a container that is being moved and that they walk three feet directly away from the container after removing or installing a twist lock to enable the crane operator to see them. General Longshoremen are also responsible for this.
- h. The Slinger is responsible to notify the crane operator of pedestrian traffic on the gangway and restrict any overhead movement while personnel are using the gangway.
- i. **WARNING:** Sitting, leaning, or standing next to the in-shore crane legs at lane 4 where a container would swing and hit the crane legs upon a no-notice shutdown, is prohibited.



- k. The Slinger is responsible to ensure that General Longshoremen walk directly back to the legs of the crane without cutting the corner in Lane 4 (farthest in-shore lane under the crane) and that General Longshoremen do not walk under the spreader bar or under a load. **A good rule of thumb is to walk along the length of the portal beam.** General Longshoremen are also responsible for this precaution.



- h. Do not use lane 1 as a safety lane.
  - i. Working Lane 5 & 6
    - i. AOM/Superintendent will speak with the hatch boss to provide a briefing for all involved to include the dock foreman, checker, slinger and ST operators.
    - ii. When 3 or more cranes are tight, the middle crane(s) may use Lanes 5 and 6.
    - iii. The middle crane(s) may place hatch covers in between the STS Crane legs.
    - iv. Park vehicles on the leg of the adjacent crane or at the stern of the vessel. The checker may park across the berth highway slightly offset from the entry gate to the RMG stacks and back as close to the fenceline as possible so as to not create a hazard for Shuttle Trucks departing the WSBA.
  - j. The door of the small cab on the in-shore crane leg may not be used and will remain locked.
5. Shuttle Truck and STS spreader bar coordination
- a. WARNING: Operators shall NOT enter under the crane when the spreader bar is coming in-shore from the vessel, as defined by the lighted arrow.
  - b. Do not enter under the STS Crane when ship-gang members are marking lines on the ground or discharging/loading break-bulk cargo. When Break-Bulk cargo is lashed to a flat rack, it is considered to be containerized.
  - c. Shuttle Trucks will comply with Slinger direction to STOP, and will remain stopped, until released by the Slinger. The Slinger will stand at the opposite end from that being used for Shuttle Truck entry in order to see all equipment movement. The standard Slinger hand signal to command a STOP is a raised closed fist. The standard radio call for an emergency stop is "STOP, STOP, STOP."
  - d. Shuttle Trucks may enter under the crane when the STS spreader bar is landed on a grounded container in a lane off-shore of the Shuttle Truck, with at least one lane of separation. Shuttle Trucks may not enter in a lane off-shore of the STS spreader bar that is on a grounded container.
  - e. The STS spreader bar may enter from the vessel to a lane OFF-SHORE of a Shuttle Truck that is already established under the crane with at least ONE LANE OF SEPARATION. (i.e. The STS bar may come off the vessel into Lane 2 if there is already a Shuttle Truck in Lane 4.)
  - f. If one lane of separation cannot be obtained, STS operators will wait with the bar over the vessel, not over the inshore vessel walkway. STS operators may also hold with the bar in the back reach when necessary. At no time may the bar pass over a Shuttle Truck.
  - g. At no point may a grounded container be placed in a lane next to a platform that is being used for pin work. Doing so would remove the lane of separation needed for the protection of the individuals on the ground. To be clear, a grounded container MAY be placed in a lane next to a platform that is NOT being used for pin work.
6. Platforms
- a. The platforms will be used when there are 10 or more containers in a given hatch, unless a non-standard situation exists in which the AOM/Superintendent determines that the platforms should not be used.
  - b. A maximum of two platforms, placed in Lanes 2 and/or 4, may be used for container operations. Pin bins will be placed on each end of the platform inside the holding bracket. Platforms may also be used in the back reach.

- c. Slingers and General Longshoremen must not be on the ends of the platforms when a Shuttle Truck has crossed the crane track.
  - d. When gantrying from one bay to another, the STS Crane shall carry the platform at a height just above the pavement. Pin bins may be left in the platform rack holders when being moved from bay to bay.
7. Loading/Discharge
- a. NIT & VIG: For DISCHARGE, Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
    - i. Discharge from below deck (no pins) is permitted to all lanes.
    - ii. Discharge from above deck (with pins) is permitted only to lanes 2 and/or 4, with or without platforms. When platforms are NOT being used, containers with pins will be floated in Lanes 2 and 4 as if the platform were in place, while the gang completes the pinning process. Lanes 1 and 3 will remain clear of activity and will serve as safety lanes.
    - i. Containers may only be worked 1-high on the dock when using the platforms.
  - b. NIT & VIG: For LOADING, Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
    - i. Loading containers below deck (no pins) is permitted from all lanes.
    - ii. Loading containers above deck (with pins) will be accomplished only from lane 2 and/or 4, with or without platforms. When platforms are NOT being used, containers with pins will be floated in Lanes 2 and 4 as if the platform were in place, while the gang completes the pinning process. Lanes 1 and 3 will remain clear of activity and will serve as safety lanes.
    - iii. Containers may only be worked 1-high on the dock if using the platforms.
  - c. NIT & VIG: For Loading and Discharging AT THE SAME TIME (“Coming and Going”), Crane Operators will follow the directions of the Slinger, Deckman, and Hatch Boss, as well as the Stevedore Foreman.
    - i. With BOTH loads and discharges having pins, discharge ONLY to Lane 4 and load back ONLY from Lane 2.
    - ii. With NEITHER loads or discharges having pins, discharge ONLY to Lane 3&4 (in-shore lanes) and load back ONLY from Lane 1&2 (off-shore lanes).
    - iii. If containers with BOTH pins and without pins are being cycled, remove the platform in the lane being used for containers without pins and keep the platform in the lane for containers with pins (i.e. Lane 4 for discharge or Lane 2 for load back).
  - d. A grounded container may NOT be placed in a lane next to a platform that is being used for pin work. Doing so would remove the lane of separation needed for the protection of the individuals on the ground. A grounded container MAY be placed in a lane next to a platform that is NOT being used for pin work.
  - e. Shuttle Trucks may enter under the crane when the STS spreader bar is landed on a grounded container in a lane off-shore of the Shuttle Truck, with at least one lane of separation.
  - f. The STS spreader bar may enter from the vessel to a lane OFF-SHORE of a Shuttle Truck that is already established under the crane with at least ONE LANE OF SEPARATION.



One lane of separation must be maintained. (i.e. The STS spreader bar may come off the vessel into Lane 2 if there is already a Shuttle Truck in Lane 4.)

- g. If one lane of separation cannot be obtained, STS operators will wait with the bar over the vessel. STS operators may also hold with the bar in the back reach when necessary. At no time may the bar pass over a Shuttle Truck.
- 8. Sensitive lifts
  - a. The Slinger must be especially aware to ensure twist locks are properly engaged with the over-high bar, hatch covers, and flat rack with ends up or down.
  - b. Hatch Covers
    - i. If Deckman and Slingers are not present, crane operators are prohibited from discharging/loading containers or hatch covers.
    - ii. Be assertive to stop traffic in both lanes at North NIT.
    - iii. The Slinger and a General Longshore worker must be in the back reach before the Crane Operator hoists a hatch cover from the vessel or the dock. Before stepping off the bus, always look overhead for hatch covers/containers that are being lowered. The Slinger must inform the Crane Operator, "Operator, back-reach is Clear" to communicate that the back-reach has been checked and found to be clear of pedestrians, vehicles, or any other obstructions. Once this call has been made, Slingers and General Longshoremen may not swap out until the hatch cover is on the ground. Mark each corner with a cone upon landing.
    - iv. When crane operators swap out, it is important to check that the vessel has not shifted because the hatch covers may no longer be aligned with the hatch. This may cause the hatch cover to strike the vessel or containers on board.
    - v. Twin picks require the Slinger to provide visual confirmation that the center twist locks are in the "down" position prior to performing the twin pick. If not, inform the crane operator.
    - vi. The OSHA rule governing the lifting of bundled flat racks has been modified to allow lifting bundled flat racks provided that they are locked together using the manufacturer's guidelines. Generally, this means that no more than four flat racks may be lifted per bundle as long as they are connected via the locking mechanisms built into the flat racks specifically for that purpose.
- 9. Discharging to a chassis
  - a. With Pins
    - i. Employees may not proceed out from under the crane into the line of vehicles in order to unlock pins in advance of arriving under the crane.
    - ii. Driver pulls chassis under crane and the slinger spots the chassis 2-3 feet forward of where the front edge of the container will land.
    - iii. Crane operator lands the container on the gooseneck and holds it, allowing the ship gang members to remove pins. **WARNING:** When removing front pins, do not step into the bite.
    - iv. **WARNING:** Under no circumstances will any person place their hands between a chassis and a container. If this is witnessed, **STOP** and notify the Health and Safety Department immediately.
    - v. **CRITICAL STEP:** After pins are out, Slinger verifies that **ALL** employees are clear.

- vi. Slinger then instructs the hustler operator to back up until the container comes into contact with the chassis bolster.
  - vii. Slinger then radios/signals the crane operator to lower the aft end of the container until it lands on the 2 locking pins.
10. Discharging to a Bomb Cart
- a. **WARNING:** Blue bomb carts have open corners that allow a container to be landed with pins installed. The Slinger may not release the Hustler until verifying that all employees are clear of all four corners.
11. Loading from a Chassis
- a. **WARNING:** “Float the load” when lifting a container from a chassis until the Slinger gives the “All Clear” signal (hand over hardhat, palm down, moving the hand forward/backward 2-3 times) once there is clear separation between the container and chassis/bomb cart and all personnel are clear of the lift.
  - b. As the container is floated, the slinger will direct the UTR to pull forward 1-2 feet so that the STS operator can see the chassis front bolster separation with the container.
12. Out of Gauge Lifts
- a. See the Out of Gauge section in this document.
13. Gang Bus
- a. Follow the established traffic pattern on the berth highway and drive in the correct lane on right side of double yellow line.
  - b. In the parking area, the Gang Bus must be parked in a designated space.
  - c. When the STS moves, the Gang bus must move with it.
  - d. Do not touch/adjust the knob at the end of the parking brake lever. This knob adjusts the parking brake tension and can cause the brakes to go out of adjustment.

➤ **Deckman**

**1. General**

- a. **Effective January 1, 2024, all Slinger, Deckman, and General Longshore Workers must have a current HRSA Ship Gang Certification in order to work in these positions.**
2. Communications
- a. Only the Crane Operator, Deckman, and Slinger may talk on the Crane Operator frequency under normal circumstances. It is prohibited for the Foreman to circumvent the Deckman by calling out containers to the Crane Operator. This interrupts the process and generates unpredictability.
3. Preparations for Operations
- a. **WARNING: Stepping into an open personnel hatch can result in serious injury. Ensure personnel access hatches at the top of ladders are CLOSED or protected with a railing.**
  - b. If Deckman and Slingers are not present, crane operators are prohibited from discharging/loading containers or hatch covers.
  - c. The Deckman is responsible to know if there are any Pin-bins that will be discharged.
  - d. The Deckman is responsible to check for damaged cell guides after the hatch covers are removed before the start of loading or discharging containers. If damage is found, inform the crane operator.
4. Operations

- a. **WARNING:** Being struck by a falling twist lock during container discharge or loading is a major hazard. The Deckman's position is on the adjacent hatch cover, if empty. If the adjacent hatch cover is not available and standing in the isle is necessary, then remain off-shore from the container being discharged or loaded.
  - b. The Deckman is responsible to ensure that locks are disengaged on the hatch cover prior to discharge.
  - c. Do not walk underneath a lashing operation.
  - d. Do not cross the railings to perform a task at the edge of the hold, such as untangling over-high bar wires, unless proper fall protection is used.
  - e. Discharging from the deck: It is critical to identify stuck pins to prevent lifting multiple containers.
  - f. During Blind discharge, the Deckman and Vessel Foreman act as the eyes of the Crane Operator on opposite ends of the container to prevent lifting multiple containers.
  - f. During blind loads, the Deckman and Vessel Foreman act as the eyes of the Crane Operator on opposite ends of the container to prevent striking cell guides.
  - g. Twin picks require the Deckman to visually confirm that the center twist locks are "down" prior to performing the twin pick and to observe the lift to ensure that deck pins are not being used instead of dummy pins.
  - h. The Deckman must be especially aware to ensure that twist locks are properly engaged with the over-high/speed bar, hatch covers, and flat racks with the ends up or down.
  - i. The Deckman and foreman are important while loading above and below deck, to ensure that all containers are "down."
  - j. Ship Gang members are not permitted to sit in chairs while on board vessels. Personal chairs are not permitted on vessels.
  - k. The OSHA rule governing the lifting of bundled flat racks has been modified to allow lifting bundled flat racks provided that they are locked together using the manufacturer's guidelines. Generally, this means that no more than four flat racks may be lifted per bundle as long as they are connected via the locking mechanisms built into the flat racks specifically for that purpose.
5. Discharging Hatch Covers
- a. Prepare for the hatch cover removal when deck containers are down to "one-high" and therefore have no pins.
  - b. Ensure that Lashers have removed turnbuckles on the ends and that lashing gear will not impede the lift. Some hatch covers have turnbuckles attached that need to be laid flat.
  - c. Ensure that there are no pins, wires, lashing rods, or twist locks on top of the hatch cover or anything else that might fall.
  - d. Ensure that a container is not resting on the hatch cover.
  - e. Check forward and aft to ensure no 45' containers are blocking the hatch cover.
  - f. Verify that there are no reefer cords across the hatch cover.
  - g. Ensure that hatch covers are unlocked.
  - h. When crane operators swap out, it is important to check that the vessel has not shifted because the hatch covers may no longer be aligned with the hatch. This may cause the hatch cover to strike the vessel or containers on board.

- i. When replacing a hatch cover, ensure the path is free of lashing gear extending out from the lashing platforms. Also ensure the hatch cover does not crush cargo in the bay. If a high-cube is miscoded, the stack will be higher than expected.
  - j. When a container is being loaded on top of a hatch cover, ensure it is locked to the hatch cover.
6. Gang Bus
- a. Follow the established traffic pattern on the berth highway and drive in the correct lane on right side of double yellow line.
  - b. In the parking area, the Gang Bus must be parked in a designated space.
  - c. When the STS moves, the Gang bus must move with it.
  - d. Do not touch/adjust the knob at the end of the parking brake lever. This knob adjusts the parking brake tension and can cause the brakes to go out of adjustment.

➤ **Barge Operations**

- 1. Preparation for Operations
  - a. Provide a life vest to the Deckman and additional vests for any person who seeks to step on or over the bull rail. There are emergency life vests in the cabinets on every crane.
  - b. Ensure there is a Fall Protection Harness and Wand present to go aloft.
- 2. Mounting the Barge
  - a. As a primary means, use a walking bridge OR spreader bar cage to mount/dismount the barge. If a forklift with a lifting-basket is used, a spotter needs to be present to verify the distance to the edge of berth to minimize the gap between the basket and the barge.
- 3. Unlashing
  - a. All gang members will assist with unlashing except for the two Slingers who will accomplish duties as assigned by the Foreman.
  - b. When unlashing any container that is 4-high or higher, there will be 2 lashers handling the lashing rod, one to hold the base and raise it while the other helps “walk” it up.
  - c. When going aloft to unlash 5/6-high containers, there will always be two longshoremen acting as a team. One longshoreman must have a radio and be in contact with the Deckman.
  - d. When unlashing 5/6-high stacks, there are two options.
    - i. The Primary option is to unlash all of the 5/6-high containers at the beginning of the barge. When going aloft, remain in the cage on the spreader bar until safely landed on the container stack. Once the current section is unlashed, the lashers will re-enter the cage and remain inside during gantry to the next stack OR the lashers may re-enter the cage, be lowered to the dock, step out of the cage, wait for the crane to gantry, re-enter the cage and be lifted to the next 5/6-high stack.
    - ii. The alternate option is to unlash the 5/6-high containers after the discharge/loadback process for each stack.
- 4. Barge Foreman Duties
  - a. The foreman assigns container locations on the barge and monitors yard operations.
  - b. The Foreman communicates with the Deckman about where the containers are planned to be landed and what freight is coming off of the barge.

- c. The Foreman may not communicate with the Deckman on the crane operator's channel. Only the slinger, Deckman and crane operator may talk on the working channel.
- 5. Barge Deckman Duties
  - a. Remain on the Barge throughout the entire Operation.
  - b. Watch the operation to alert the crane operator of any risk for damage to Out-of-Gauge freight.
  - c. Only the Slinger, Deckman, and crane operator may talk on the working channel.
  - d. Communicate with the crane operator and slinger throughout operation via radio and ensure there is no outside chatter on crane operator frequency.
  - e. Do not instruct the crane operator to begin working until the entire hatch has been unlashed/unlocked at the beginning of the job.
  - f. Ensure containers are being placed in their proper location.
  - g. Ensure containers are properly locked in place with no loose pins.
  - h. When necessary, call for a general longshoreman to setup the deck with pins.
  - i. When necessary, call for a general longshoreman to assist with bad twist-locks.
- 6. General Longshore worker Duties (If added)
  - a. Setup pins on the deck
  - b. Be a second set of eyes on the other side of containers for the Deckman.
  - c. Secure/cut loose pin-bins on the bow of the barge.
  - d. Be responsible for broken or bad locks on 5/6-highs.
  - e. Begin lashing containers throughout the operation.
- 7. Specifics for the "Columbia Barges"
  - a. The Deckman's Life Jacket will be worn during the entire operation.
  - b. All gang members will assist with unlashing except for two Slingers to assist with checkers, traffic, pin-bins etc.
  - c. At the end of the operation, lashing will be performed by the ship and dock gang.
- 8. Specifics for the "Richmond Express" and "Virginia Express".
  - a. The Deckman's Life Jacket will be worn during the entire operation.
  - b. Unlash/setup pin-bins at the bow of the barge with the help of a general longshoreman.
  - c. The Deckman will go into the hold to unlock pins.
  - d. A general longshoreman will setup the deck pins/self-locking pins in the barge's "hold."
  - e. At the end of the operation, a general longshoreman will setup the pin-bin wire gear on the dock to be loaded back onto barge. Once the pin-bin is at rest, a general longshoreman will unhook the pin-bin on the barge.

➤ **Lashers**

- 1. General
  - a. Effective January 1, 2024, all Slinger, Deckman, and General Longshore Workers must have a current HRSA Ship Gang Certification in order to work in these positions.
- 2. Preparation for Operations
  - a. The primary risks of lashing include being struck by falling objects, being struck by falling rods, falling through an open personnel hatch, good housekeeping to prevent slip/trip/fall hazards, and soft tissue strains.
  - b. Personal protective equipment.
    - i. Safety shoes (metatarsal protection and heel protection recommended)

- ii. ANSI-2 Hard hat (mountain climbing style recommended)
  - iii. ANSI-2 vest, shirt, or coverall to ensure crane operators can see the lashers. Vests are available in a pull-away “Velcro” style to avoid snags.
  - iv. Work gloves are required.
  - v. Employees must wear fall protection when within 3 feet of the edge that would result in a fall of 8 feet or more.
  - c. Exercise caution for Reefer cords, which are a trip hazard.
  - d. Park the gang bus in lane one at the stern of the vessel. If this is blocked or unsafe, park on the leg of the STS Crane and leave keys in ignition.
  - e. Assess the vessel for hazards prior to the start of lashing operations. Report any deficiencies to the ship’s crew for correction.
3. Lashing Operations - General
- a. **WARNING: Stepping into an open personnel hatch can result in injury or items can fall through to the level below. Ensure personnel access hatches at the top of ladders are CLOSED or protected with a railing.**
  - b. **WARNING:** Employees shall not walk or work within three container cells outboard of an active hatch or in the aisles adjacent to this area while containers are being loaded or discharged so that at no time are containers moving overhead or in a position where a twist-lock could fall and strike a lasher.
  - c. **WARNING:** Lashers are responsible to ensure that no individuals are walking or working in the area below the lashing operation. Do not work below another lasher.
  - d. **WARNING:** Do not permit other workers within the length of a lashing rod in the event that a rod slips from a lasher’s grip.
  - e. **WARNING:** Work with a partner when connecting/disconnecting lashing rods.
  - f. **WARNING:** Do not leave lashing rods unsecured or freely hanging from the corner casting. When a container is landed on a container stack, it can knock out lashing rods, causing them to fall.
  - g. The ship’s crew is tasked with providing the turnbuckles and lashing rods. If gear is not available, report the issue to the Ship’s Crew and Vessel Foreman, and follow the directions of the Superintendent/AOM.
  - h. It is the responsibility of the ship’s crew to remove loose gear left on the hatch covers from previous ports. It is the Lashers responsibility to report these deficiencies to the Ship’s Crew and Vessel Foreman. A hatch cover may not be moved with loose gear on it.
4. Unlashing
- a. Unlashing and Lash-back should be viewed as one job.
  - b. **WARNING:** When removing a lashing rod, keep a firm grip on the rod and slide the hook/top end along the container until the bottom end is on the deck, then use a hand over hand process to walk the top end down until the rod is at shoulder height. Do not throw the rod and do not release the rod until it is close to the deck.
  - c. Unlash rods and gear and place them neatly on the walkway. Loose gear left on deck is a trip hazard and it can fall to decks below. Also, picking up gear that is not stowed neatly is much more work. Do not allow rods to hang over the edge of a catwalk.
5. Lashback



- a. The Lashing plans are on the ladder at the bay or by the house. If it is not there, have the boss ask the vessel crew.
- b. Do not pre-hang rods. When a container is landed, it can cause the rod to fall.
- c. When installing rods, give them a shake to ensure the rod is securely in the corner casting.

#### 6. Lashing Cage – Lift Procedure

- a. The cage may be used for unlocking twist-locks that cannot be reached with a 4-high pole. For example, if working from a 3-high lashing bridge, a 4-high pole should be able to unlock 7-high containers. The cage may be used to remove twist-locks remaining in/on a container. If the cage is not available, the expectation is that lashers will go aloft with the spreader bar cage and use the wand system. Use below deck is acceptable. Use for rescue is acceptable, as a backup to the rescue cage.
- b. The lashing header or acting header will be at the STS with a radio when a cage is in use.
- c. Transport cage via **UTR/Hustler to Lane 1**.
- d. Look at corner safety chains, fall arrest lines and look for visible damage. Ensure 20 foot internal chains are connected.
- e. Inform STS operator which mode will be used: 20 foot/40 foot/Inverse Gondola mode.
  - i. **40' mode:** remove from bombcart, place in lane 3 for boarding and connect safety chains.
  - ii. **20' mode:** place in lane 3, unhook 4 internal chains, dismount, place on bombcart and remove 20' section, then place in lane 3 for boarding and connect safety chains.
  - iii. **Reverse Gondola mode:** Place 40' in Lane 3, remove 20' section and place in Lane 1 back on the Bombcart. Use lane 3 for boarding and attach floor safety chains.
  - iv. Use of any other lane or the back-reach requires AOM/Superintendent approval.
  - v. **WARNING:** Ensure NO persons are in any part of the cage while removing or installing the 20 foot section.
  - vi. Max of 2 persons in each end of 40 foot cage/Max. of 4 persons in 20 foot cage.
  - vii. All lashers wear fall harness and tie off to safety lines. Maximum of one person per line in 40' cage. Maximum of 2 persons per line in 20' cage.
  - viii. Ensure one gang member inside the cage has a radio.

#### 7. Lashing Cage – Use Procedure

- a. Gang members inside the cage will hold a handrail while in motion.
- b. The lasher with the radio in the cage for clear crane operator for the lift.
- c. Once aloft, with lasher with the radio will direct cage to be **FLOATED** for **UNLOCKING** twist-locks OR **LANDED** for **REMOVAL** of a top twist-lock.
- d. Keep feet on floor. Climbing on the frame to gain extended reach is **PROHIBITED**.
- e. Reaching across with a pole to unlock the next hatch is **PROHIBITED**.
- f. Using the corner access door for anything other than pin removal is **PROHIBITED**.

#### 8. Lashing Cage – Landing Procedure

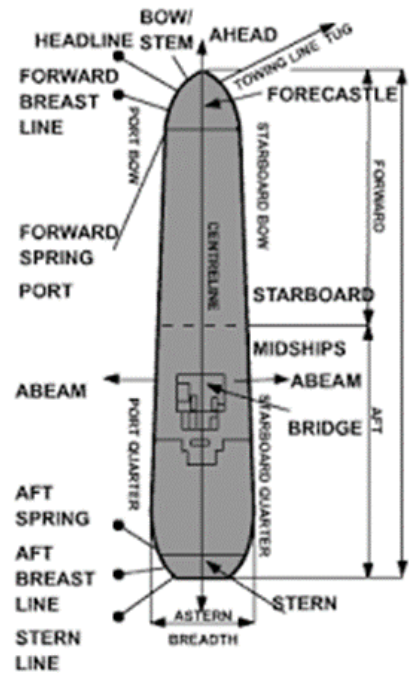
- a. Lasher with radio will inform STS operator and header when coming back to the dock.
- b. **WARNING:** The lasher with the radio is responsible to inform the crane operator, "landing area clear" prior to landing. This is a critical step over the long term and must be performed every single time.

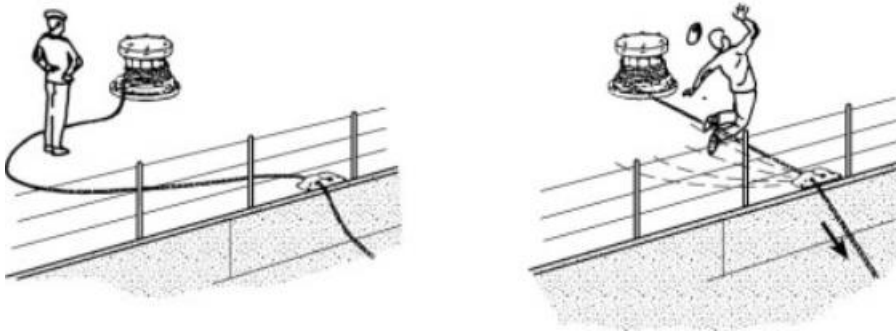
- c. **WARNING:** After landing, the lasher with the radio is responsible to inform the crane operator “cleared to lift” to place it back on the bombcart once the safety chains are removed. If one chain is still connected, this could cause an inadvertent and unbalanced lift of the cage, potentially with other employees in the area.
- 9. Lashing Cage – Crane Operator Procedure
  - a. Follow the directions of the Lasher with the radio.
  - b. **Slow Lift. Slow** movement across containers during unlocking. **Slow landing.**
- 10. Procedure for working within three feet of the container edge when exposed to a fall of eight feet or more.
  - a. Top Wand Review
    - 1. Yellow - Inspect Wand and harness
    - 2. Attach SRL hook to the wand
    - 3. Stay 3 feet from edge until locked in
    - 4. Use corner casting on top of container
    - 5. Stay within 1 container width
    - 6. Get back 3 feet from edge before disconnecting
- 11. Procedure for fall rescue with the Container Top Anchor Wand System
  - a. Call 757-440-7070 for paramedics
  - b. Obtain Rescue Pole with rope and pre-attached hardware.
  - c. Be properly locked in with wand to perform rescue.
  - d. Connect Large Hook on rope to Crane Spreader Bar.
  - e. Kneel or lay, extend Rescue Pole, Connect Carabiner into D-Ring located on the back of victim’s harness and pull the Rescue Pole free to lock the carabiner to the D-Ring.
  - f. Signal crane operator to gently lift the victim and place him on the container top.
  - g. Release the rescue line and the Wand connected to the victim when safe to do so.
  - h. Ensure that the victim remains in a sitting position for AT LEAST 30 minutes to guard against the potentially fatal effects of Suspension Trauma.

➤ **Linehandlers**

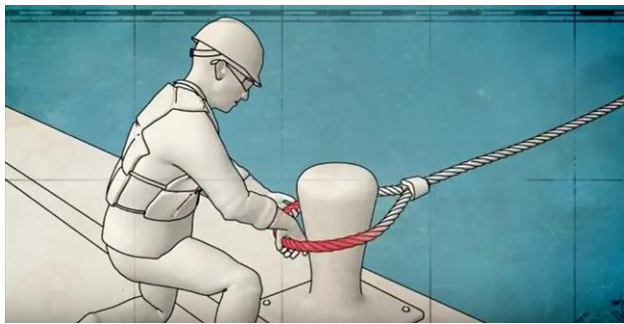
- I. Standard Terms
  - a. Header – The line handler responsible for leading the team to accomplish safe and efficient docking/sailing operations. The Header is also responsible for ensuring there is adequate transportation to the dock.
  - b. Line handlers – Group of employees who ensure that each vessel is safely and efficiently moored to the dock, in all weather conditions, 24/7. Line handlers are an important part of the Port of Virginia operation and represent the port as the first employees to be seen upon arrival of vessels and the last to be seen upon departure.

- c. Bow - The forward part of a vessel.
  - d. Stern - The rear section (or aft) of a vessel.
  - e. Moored – To tie-down a vessel to one place such as a bollard or cleat with lines.
  - f. Bollard – A strong nautical post for mooring vessels.
  - g. Cleat – A device with two projections pointing in opposite directions to which a line can be tied to secure a vessel.
  - h. Heaving Line – A light weight line with a heavy knot or other weight near the end that is attached to the heavy mooring line. The heaving line is thrown by the vessel crew onto the dock surface so that line handlers may pick it up and pull it in until safely gaining access to the mooring line.
  - i. Mooring Line – A heavy gauge material line that is used to secure vessels to the bollard.
  - j. Head Line/Stern Line – This is the mooring line that extends from the bow/stern of the vessel and is secured diagonally to the bollard or cleat.
  - k. Spring Line – This is the mooring line that extends from the side of the vessel on a diagonal to a bollard or cleat.
  - l. Breast Line – This is the mooring line that is rarely used and extends from the side of the vessel straight to the dock, not on a diagonal.
  - m. Pig Tail – The piece of rope attached to the heaving line and mooring line.
2. Vessel Pre-Arrival
- a. Vessel less than 600 feet.
    - i. 4 persons to dock – 2 at stern and 2 at bow.
    - ii. 2 persons to sail – both at one end of the vessel at a time.
  - b. Vessel more than 600 feet.
    - i. 6 persons to dock – 3 at stern/3 at bow, or greater as determined by operations.
    - ii. 4 persons to sail – 2 at stern/2 at bow, or greater as determined by operations.
  - c. All vessels shifting without a tugboat shall have a minimum of six line handlers.
3. Line handler Arrival at Terminal
- a. Pick-up the forklifts
    - i. To operate a forklift, operator must be certified by HRSA.
    - ii. Line handlers will have experience in the ground position before performing the forklift position. Only the header may waive this requirement.
4. Key Safety Procedures
- a. Priority #1 is to ensure a safe working space to secure the vessel.
  - b. Arrive at the job location with ANSI-2 safety vest and hard hat, safety shoes, leather gloves, **working helmet light**, and a USCG approved floatation vest. The personal floatation device (PFD) is also required when driving the forklift and the snap must be secured.

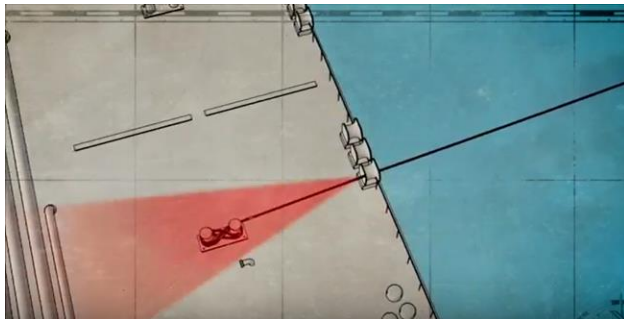




- c. **WARNING:** NEVER step “in the bite” of the line. This means that if there is a slack line, never step in the area that the line would travel if tension were applied without notice.



- e. **WARNING:** NEVER place hands in a pinch point.



- f. **WARNING:** Remain clear of the snapback zone because if a line parts or snaps, the energy is dangerous.

- g. Keep feet clear of entanglement with the lines at all times.

- h. **Do not use cleats to secure vessel mooring lines unless instructed to do so by an AOM.**

## 5. Docking Administrative Items

- Headers must check Marine Radios in and out at the Equipment Distribution Center at NIT and the security front desk at VIG.
- Line handlers will wait in the assigned vehicle at the designated “foot-mark” on the dock that is communicated to the Header by the Harbour Master.
- Contact the Docking Pilot via Marine Radio and inform them that line handlers are in position. [Moran 65a or 80a // McAlister 9 or 10 // Ship-to-Ship 13]
- Confirm the footmark that the vessel is scheduled to berth and if there is a conflict, contact the Vessel AOM or the Vessel Manager.

- e. The pilot guides the vessel to the berth with tugs to assist the vessel to the assigned “foot-mark.”
  - f. If the vessel is not at the correct footmark, instruct the Docking Pilot to move the vessel to the correct footmark.
6. Linehandler Forklift Operations
- a. Never assume that the forklift is seen by operators of other equipment.
  - b. Maintain a safe speed appropriate to the task. For example, when near or under the STS Crane, the maximum speed for a forklift is a walking pace.
  - c. Do not park in the yellow area that marks STS Crane rails.
  - d. Forklifts will move along the dock on the Berth Highway.
7. Linehandler Vessel Docking Operations
- a. When line handlers request that maintenance move a crane to enable a safe working surface to secure a vessel, the crane will be promptly moved.
  - b. The crane may not be moved over a vessel to prepare for operations while line handlers are securing the lines for the vessel.
  - c. Line handlers will ensure vessel crews acknowledge their presence before handling lines on each end of the vessel.
  - d. The Heaving Line is thrown to the surface of the dock. Line handlers will maintain at least two lanes of space from the off-shore crane rail while the heaving line is thrown to prevent being struck. Establish eye contact with the vessel crew member and then point to the location where the heaving line should be thrown. If a crew member ever throws the heaving line directly at a line handler, call the Port Police at 757-440-7070.
  - e. The ground line handler will then begin to pull the heaving line toward the dock, which will then give way to the mooring line as it is pulled in.
    - i. If the mooring line is too heavy to be pulled in by the line handler to the forklift on the dock, attach the heaving line to the forklift and use the forklift to bring the mooring line to the dock.
    - ii. After connecting the line to the forklift, do NOT raise the hooks higher than the forklift seat to prevent tipping over.
  - f. Immediately untie the heaving line from the mooring line before securing the pig tail to the forklift. Prior to securing the pigtail to the forklift, be sure to be on the land-side of the lines.
  - g. The line handler then removes the mooring line(s) from the forklift and places the mooring line onto the bollard.
  - h. **WARNING:** Do not place hands/arms on or near the mooring lines when retrieving the heaving line until the vessel crew clearly acknowledges Linehandler intended actions.
  - i. These steps are repeated until all lines are secured to the dock.
  - j. Do not stand or lean on bollards or mooring lines at any time.
8. Linehandler Vessel Sailing Procedures
- a. Line handlers will wait at the vessel to be sailed. If a vessel has not completed operations, the line handlers will wait until the vessel operation is finished before driving to the berth.
  - b. When removing the lines from a bollard, ensure the lines are completely slack before pulling on the lines.
  - c. **WARNING:** Before pulling the line from the bollard, pull ONLY at the open part of the eye and NEVER place hands between the line and the bollard.

- d. Contact the Sailing Pilot via Marine Radio and inform them that line handlers are in position. [Moran 65 or 80 // McAlister 9, 10, or 77 // Ship-to-Ship 13]
- e. Once the Mooring lines are slackened, the line handlers remove each line from the bollard in the order slackened by the vessel crew.

➤ **Rail Operations for Locomotives/Trackmobiles**

1. General

- a. The Operator is ultimately responsible for clearance from other objects when moving. Visual search is the #1 priority to prevent striking people or objects.
- b. A supervisor pre-shift safety talk are required with on-dock rail employees at the beginning of each shift. This must include the layout of the yard for those not familiar, expected rail activity, and equipment/vehicle operator responsibilities for controlling speed and maintaining a safe distance from on-dock rail operations.
  - i. NIT: The AOM will provide the Header with a plan of action for OUTBOUND trains. The Header must ensure the outbound trains are properly positioned in location at the times designated by the AOM.
  - ii. NIT: The Header will ensure that there are tracks available at the main gate and back gate to receive INBOUND trains for the times specified by the AOM. Inbound trains will be spotted/placed in the Central Rail Yard (CRY).
- c. No use of cell phones or personal electronic devices, to include wearing a headset/blue-tooth/ear buds while OPERATING a MOVING vehicle/equipment. According to federal law, these distractions must be stowed out of sight of the operator or anyone with safety related duties.
- d. Expect movement on any track, in any direction, at any time.
- e. Persons may not touch or climb on locomotives, trackmobiles, or rail cars unless it is required to accomplish their official rail duties.
- f. Do not crawl beneath rail cars or attempt to mount/dismount moving rail cars.
- g. Do not stand on the track in front of an approaching engine or rail car.

2. Header Responsibilities

- a. The Header supervises the overall tasking for the train movement. All persons employed on the train must obey the Headers instructions, unless the instructions will result in an unsafe operation or violate POV Operational Standards.
- b. Ensure that the POV Operational Standards are followed and have personnel re-trained when there is a non-conformance.
- c. Supervise the Groundman with respect to setting rail switches for the movement.
- d. Place bad order cars on TTX tracks, unless directed to a different location by the AOM.
- e. Ensure that personnel are certified to perform the requirements of the Locomotive/Trackmobile Operator, Groundman, and Flag Person.
- f. Authorize employees to take breaks, when needed.

3. Locomotive Operator ("Engineer") Responsibilities

- a. Prior to Operations
  - i. Complete an Exterior Inspection. Report any visible leaks and ensure that the locomotive steps, railing, lights, and windows are in good condition.



- ii. Complete an Interior Inspection. Ensure that the seat, horn, windows/wipers, and lights are in good working condition.
  - iii. If any of these items are not working, inform maintenance and the AOM and do not accept the equipment until the safety item is addressed. Wipers are not required unless it is actively raining.
- b. Engine start
  - i. Climb the engine steps with 3-points of contact and enter the cab. Secure the door.
  - ii. Ensure the MU-2A valve (at ankle height) is set to "LEAD or DEAD" position. If set to "TRAIL", the brakes will not work.
- c. Moving the locomotive
  - i. Ensure the locomotive is clear in front and back and that no one is working on or near the locomotive.
- d. Engine shutdown
  - i. Complete the shut down procedure, exit the cab and secure the door.
  - ii. Descend the stairs while facing the steps and maintain 3-points of contact.
- e. Emergency Stop
  - i. When operating the Locomotive, if the "Dynamite" command is received, immediately move the top handle from the far left position to far right position.
  - ii. The brake pressure should rapidly drop to 0 PSI.
  - iii. If the pressure does not drop, ensure the MU-2A valve (at ankle height) is set to "LEAD or DEAD" position. If set to "TRAIL", the brakes will not work.
  - iv. If the pressure does not drop, apply the emergency hand brake. Use the button for electronic application or use the hand crank for manual application. Use caution when walking to the emergency hand brake as a collision may occur during a "run-away".
- 4. Groundman ("Conductor") Responsibilities
  - a. The Groundman must be in position to provide visual protection of equipment being moved and may not engage in unrelated tasks.
  - b. The Groundman is responsible for the safe movement of the Locomotive or Trackmobile. The Operator will follow the instructions of the Groundman.
  - c. Prior to movement, ensure the track is clear of equipment, people, debris, and conflicting movements.
  - d. **WARNING:** Ensure all switches and derails/flags/lights are properly set and verify that traffic is stopped at all intersections before informing the Locomotive Operator to proceed.
  - e. Proceed 25-50 feet in front of the Locomotive/Trackmobile and ensure the track remains clear to the location where movement will be stopped. When physically prevented from riding ahead of the moving train, ride on the train and pre-position an additional Groundman/Header at the other end of the track to ensure clearance.
  - f. Accomplish the countdown so that cars stop at the appropriate point. Generally, this will be 50 feet from the end of the track. An absolute minimum of 5 feet of clearance between the lead rail car and the rail stop barrier may be used. Make calls at intervals prior to the stopping point that include "5 wells, 3 wells, 1 well, 10 feet, 5 feet, 3 feet, STOP." Each call must receive an acknowledgement from the Locomotive/Trackmobile operator.
  - g. Once stopped, set the rail car handbrake on the lead car of the train by turning the wheel clockwise.

- i. If the railcars have been disconnected from air, the Groundman must also conduct a visual brake test to ensure the rail cars do not move more than three inches in a 60 second period. If the train remains connected to air, a visual brake test is not required.
  - ii. If the railcars move more than three inches in a 60 second period, a second brake must be applied.
  - iii. Air brakes alone may not be depended upon to hold unattended standing equipment.
  - h. The Groundman must use the flashers on the roof, 4-way flashers, or strobe lights on the vehicle in the CRY/Rail Yard at all times. In addition, headlights will be used in inclement weather.
5. Train Movement
  - a. The Locomotive Operator and the Groundman protecting the movement will conduct a briefing concerning protection of the move.
  - b. Locomotive operators must check to ensure that brake air compressors are operable, and connected. The Groundman shall assist in this task. Never pull a “stick” of cars without having air brakes connected and charged.
  - c. Before moving railcars to/from the CRY/Rail Yard, the Reach-Stacker/RTG/Top-Loader operators must cease operations and have the spreader bar clear of containers. In addition, RTG operators will not operate up and over a moving train.
  - d. The maximum speed is 7 MPH, either loaded or empty.
  - e. A Locomotive may not proceed past any blue lights or flags on a track.
  - f. Moving a rail car that is not connected to the Locomotive/Track Mobile, is prohibited.
6. Communications
  - a. All communications will be transmitted by radio between the Groundman and Locomotive Operator.
  - b. Radios are for official business only and proper radio procedures will be used.
  - c. Radio communication for shoving movements must specify the direction and distance/destination and must be acknowledged.
  - d. When communicating with the Locomotive Operator, the Groundman will state the Operator’s name prior to movement.
  - e. POV employees who work in the rail operation and receive a transmission must repeat it to the person transmitting the message.
  - f. POV employees who work in the rail operation and do not understand a radio communication must not act and must treat it as if it were not sent. STOP movement until the communication is understood.
  - g. The locomotive may not enter the CRY/Rail Yard until the Rail AOM authorizes entry.
7. Signals



- a. The Locomotive Operator must sound the horn/bell before moving, when approaching men/equipment on or near the track, and when entering an intersection on terminal, even if it is occupied by rail personnel.
- b. When approaching public crossings with the engine in front, such as crossing Hampton Blvd, the Locomotive Operator must sound the horn and/or bell 15-20 seconds prior to the crossing in the pattern of 2-long/1-short/1-long. Be prepared to stop.
8. Road Crossings
  - a. For crossings WITHOUT gates or flashing lights, an employee must be on the ground at the crossing to provide warning until the crossing is occupied.
  - b. The Groundman/Flagman must ensure that all traffic has stopped before allowing rail cars to enter an intersection, without standing in the direct path of oncoming vehicles.
  - c. The Groundman shall park the pickup truck at the intersection, out of the path of the train, and use a reflective stop sign to assist in signaling, day and night.
  - d. When practical, a train movement must not block a public crossing longer than 10 minutes.
9. Hazardous Container Placarding
  - a. All hazardous containers routed for rail departure will be placed on a Rail Hold.
  - b. The hazardous declaration or waybill must be obtained via the railroad website or via email from the railroad/shipline.
  - c. Placards are then physically verified to match the hazardous information provided.
  - d. If placards are incorrect or absent, the container must be referred for placard removal (if necessary) by the appropriate M&R vendor and corrected by a Local 1624 rail checker/clerk.
  - e. Once hazardous documents are in hand and the placards have been physically verified as correct, the hazardous container can be released from Rail Hold and prepared for loading.

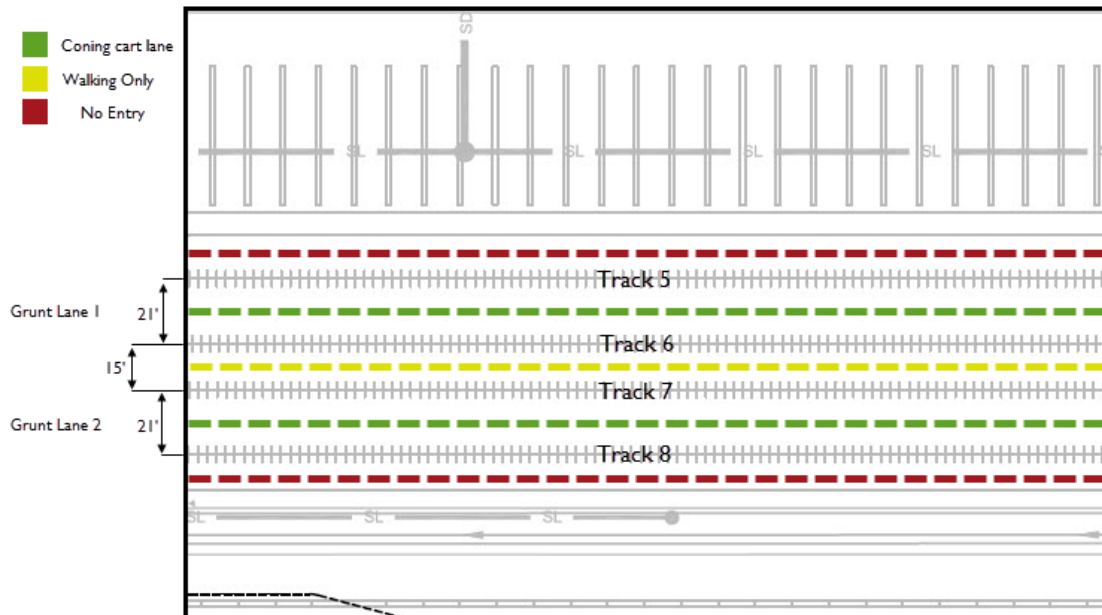
➤ **Landbridge**

- I. General
  - a. PPE is ANSI-2 Vest, hard hat, gloves, safety shoes, and reflective pants.
  - b. Both Landbridge workers will have a radio to communicate with equipment operators.
  - c. Before crossing an unprotected track, stop and look both ways. All rail crossings are to be considered as “live”.
  - d. Do not stand on the track in front of an approaching engine, car, or other moving equipment.
  - e. Protecting workers on tracks. According to 29 CFR 1917, when employees are working in, on, or under a railcar, positive means shall be taken to protect them from exposure to impact from moving railcars. Also, 49 CFR 218.29 requires that when workers are on, under, or between rolling equipment on any track, access to the track must be restricted.
    - i. A blue light (during night or day) OR blue flag (during the day only) must be deployed at least 50 feet (for speeds 5 pm or less) from the nearest rail car.
    - ii. A derailer with an effective locking device must be used with the blue light/blue flag. If the derailer is already locked by another group (TTX), apply an additional lock to ensure that the derailer is not removed while work is still in progress.
    - iii. Derailers/blue light/flag may only be removed by the Landbridge worker who placed them. If this individual is not available, the AOM may authorize the

removal after ensuring that all personnel are clear of the rail cars that were being protected.

- iv. If there is a lock from a another company such as TTX preventing removal of the derailer/light/flag, then remove your lock and leave the derailer/light/flag alone.
  - f. Maintain communications with your partner and only work one set of tracks at a time. No employees may remain on or in railcars after work is concluded.
  - g. Walk between the three-foot wide safety zone provided along the side of each track and the edge of the concrete next to the track.
  - h. When mounting/dismounting railcars, use the ladder and proper 3-point climbing technique. Rail cars have ladders with different lengths, widths, and rung spacing. Watch your step.
  - i. Use caution to avoid falling inside of the railcar well. The area can also be slippery from water, snow, oil, or grease.
  - j. If a railcar catwalk or ladder is found to be damaged, report this to the supervisor who will report it to TTX for repair. In this case, continue to work with caution.
  - k. WARNING: Shimming along the side of rail cars, is prohibited.
  - l. Using the coupling between two wells as a walking surface, is prohibited.
  - m. Immediately report any leaking container or tank to the supervisor and **stay away** until it is determined to be safe.
  - n. If a reefer is found with a GENSET that is not running, promptly report it to the AOM.
2. Ramping/Deramping
- a. During load-back/ramping, visually inspect all railcars to ensure that each container is seated properly and locked before notifying the AOM that a string of cars is ready to be pulled.
  - b. Workers who are on the train OR on the ground must remain a full rail well away from cargo handling equipment when it is moving. Only approach inside the length of one rail well to work tasks such as a stuck pin when the equipment is stopped.
  - c. If a container is on the rail car and has a stuck pin, it is the Landbridge workers responsibility to remove it.
  - d. If a container has been removed from a rail car and has a stuck pin, either the Groundman or the Landbridge worker may remove the pin.
  - e. Railcar flippers must be in the closed position. If not, the containers can slide inside the well during transit, possibly damaging the freight and/or the railcar.
  - f. If a twist-lock/pin is dropped, please pick it up and place it in the proper location. These pins can cause injury or equipment damage if they are run over.
  - g. When loading bulkhead cars, ensure that container guides are positioned correctly.
3. VIG Rail "GRUNT" Operations
- a. A Landbridge certification is required to use the Grunt.
  - b. Inspect all machines before use. Ensure that the following items are in good working condition: tires, gates, lights, horn, and steering.
  - c. Turn on all 4 light switches, during both day and night.
  - d. Only one worker may be on the Grunt, unless there is an instructor.
  - e. WARNING: Only use the Grunt paths between rail tracks. Do not drive in Hustler traffic lanes.

- f. The Pinning/De-Pinning work flow starts at the landside and goes to the waterside.
- g. The Pinning/De-Pinning process consists of four distinct phases. Unlock pins, Remove Pins, Install Pins, and Lock Pins. At the completion of each phase, the Landbridgemen will inform the rail clerk with the sequence of rail wells that are complete. For example, "Spots 5 through 18 are complete with Pin Removal."
- h. Remain at least 4 rail wells away from an operating CRMG and if it ever comes within 4 rail wells of the Grunt, call the operator.
- i. **WARNING:** Be less than 1 foot from a rail car before stepping across to the platform.
- j. **WARNING:** When finished at the waterside, return to the Landside end of the tracks (Green Lanes 1 and 2 in the below diagram). Do not drive outside the bundle and do not cross under the spreader bar/container when passing under the CRMG.
- k. Containers with stuck pins will be moved to the SRB/NRB Transfer Zone for Landbridgemen access.
  - i. If there is a stuck pin, drive the Grunt to the parking area and take a pickup truck to the container with a stuck pin.
  - ii. Landbridgemen will verify that the operator has E-Stopped the CRMG prior to removing the stuck pin.
- l. Once work is completed, the Grunt will be parked in its parking area and shutdown.



## I. NNMT

- a. When unloading/loading boxcars, an approved ramp must be used to bridge the gap between dock and boxcar.
- b. The area must be secured with cones/barrier to identify active forklift work zones.

## 2. TTX Operations

- a. Notify the rail AOM before entering and leaving the rail yard.
- b. Stay at least 1 well away from operating equipment that is loading/unloading containers.
- c. Parked vehicles must use the flashers on the roof, 4-way flashers, or strobe lights on the vehicle in the CRY/Rail Yard at all times.

➤ **Reach-Stacker/Top-Loader/Side-Loader**

1. Complete an Exterior Inspection before use. Inform maintenance if there is damage or leaks. Check for leaks and that the tires are in good condition. If there is a problem, have it evaluated by maintenance.
2. Complete an Interior Inspection before use. Ensure that the following items are in good working condition: seatbelt, horn, brakes, wipers, and lights. Also raise the bar and look at the rotation and condition of the lifting belts and chains. With a heat index above 90, if external dust is a factor at the PPCY, an air conditioner is required. Wipers are not required unless it is actively raining or in hot and dry conditions when dust will be a factor. Lights are not required for daytime operations. If these items are not working, inform maintenance and do not accept the equipment until the safety item is corrected.



3. Only instructors may act as passengers.
4. The Operator is ultimately responsible for clearance from other objects when moving.
  - a. Visual search is the number one priority to prevent striking people or objects.
  - b. Before moving in reverse, look left AND right AND behind.
5. **WARNING:** Do not allow pedestrians to walk under a suspended load, in an area where the load may fall or roll, or between the machine and its load. Pedestrians must stand on the ends of the load, well clear of any direction it could roll if the slings fail.
6. In the event of a tip over, do not attempt to jump from the machine. Remain in the cab with the seat belt fastened.
7. Please note that the machine must be moving before starting a turn. Turning at zero speed will damage the steering system.
8. **WARNING:** The transport position is with the bottom of the container level to the operators line of sight with the mast tilted backward.

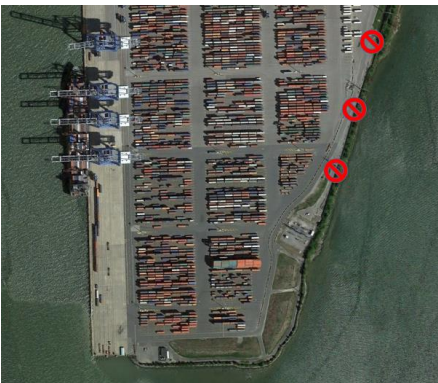


9. **WARNING:** Risk of tipping over! The spreader-bar, with or without load, may only be lifted higher than the transport position when stacking.
10. **WARNING:** When traveling, place an empty bar in the 20 foot position unless remaining in the immediate area, within plus/minus three container stacks.
11. **WARNING:** When moving with a 40 foot container, use caution for obstacles in the surrounding area.
12. Approach container stacks straight-on from a 90 degree angle.
13. When containers are stacked, ensure each corner is on top of corner casting below. Do not stack 20' containers on top of 40' containers, as the structural supports will not align. When stacking 40' containers on top of 45' containers, each end of the 40' container must rest squarely on a corner casting below.
14. **WARNING:** When creating an empty container stow, ensure the back side of the stack is groomed in a tiered/stair-stepped 2-3-4-5 condition and remove any chimney stacks.
15. **WARNING:** When transporting a container TO the stack, keep the container in the travel position until close to the stack. Then stop, hoist, and move slowly forward to place the container in the stack. While stacking, the brakes must be applied gently and carefully.
16. The operator is responsible to communicate with the OTR or hustler driver using horn signals. The Groundman is responsible for the final accurate positioning of the driver.
  - a. 1 blast to indicate the OTR stop. 2 blasts to indicate the OTR reverse.
  - b. A final blast at the completion of the move will indicate to the OTR driver that they are clear to depart. The equipment operator must verify they are completely clear of the driver's chassis/bombcart prior to releasing the driver.
17. When a 20' tank is being loaded onto a bombcart, ensure the 20' tank is centered forward so that all four corners of the tank frame are resting on the steel surface of the bombcart within the side rails. Loading a 20' tank onto the forward or aft end could result in a corner of the tank frame not being supported, thereby allowing the tank to roll off.



18. When removing a container from a chassis, raise the rear slowly to ensure the pins are unlocked, slide the container off of the pins and the gooseneck, and then continue to hoist.
19. When loading a container onto a chassis, cassette, or bomb cart, unlock and then raise the bar slowly to ensure it is clear of the container.
20. At the end of each shift, park the equipment in an approved parking space, set the parking brake, tilt the mast slightly forward, retract the bar, idle for 30-60 seconds and turn ignition switch to off. Loads may not be left suspended if the equipment is left unattended.
21. **PPCY: WARNING:** When removing a container from the stack, be sure to tilt the mast **forward**, otherwise, an overhanging container may be pulled down from above and behind when the lower container is removed from the stack. Once a container is clear of the stack, tilt mast back and then lower the container.

- a. **WARNING:** If an overhung container has started to move or has become unstable, **STOP**. Ensure that no personnel/vehicles enter the area where the container could fall.
  - b. Get another container and use it to gently push the overhung container into its correct position, squarely on the corner castings and off of the container that will be removed from the stack.
  - c. Ask the AOM for visual assistance to help determine exactly where the container is hung up **BEFORE** it is moved further. If spacing allows, utilize a second Sideloader/Toploader/Reachstacker to assist with holding the container in place to prevent it from falling.
22. **PPCY:** Side Loader Operators may only discharge/remove containers to/from a motor carrier from outside the Jersey Walls that mark the edge of the main road.
  23. **PPCY:** Equipment operators may not discharge or load a container unless the OTR driver is wearing an ANSI-2 vest and hard hat and is accounted for by either sitting in the cab of their vehicle or standing next to the cab on the same side as the side-loader.
  24. **RAIL:** When de-ramping, ensure the boom is all the way **IN** so that the machine and cab will remain on the ground.
  25. **RAIL:** Do not reach over one container to pick-up another container.
  26. **RAIL:** When de-ramping a 2-high car, lift containers slowly and ensure that all pins are unlocked. If a pin is stuck, set the container back down and call Landbridge.
  27. **RAIL:** If a container is on the rail car and has a stuck pin, it is the Landbridge workers responsibility to remove it. If a container has been removed from a rail car and has a stuck pin, either the Groundman or the Landbridge worker may remove the pin.
  28. **RAIL:** When a 40 foot container is being loaded on top of two 20 foot containers, if the 20s are not properly seated in the rail car, remove the top container and re-adjust the 20s.
  29. **OOG CARGO:** When lifting cargo, ensure spotters and any other employees stand on the ends of the load, well clear of any direction a load may fall or roll if the slings fail.
  30. **OOG CARGO:** **WARNING:** Perform a test lift of 6 inches on all cargo to verify stability.
  31. **OOG CARGO:** Ensure the Groundman is present before handling freight. Always have either visual or verbal communication with the Groundman.



32. **WARNING:** Side-Loaders/Top-Loaders/Reach-Stackers/Shuttle Trucks are prohibited from using the South End of Railroad Avenue as high voltage power lines make this path unusable.



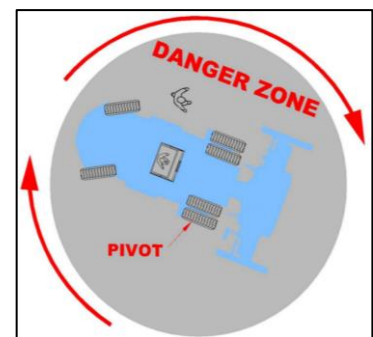
33. WARNING: There are power lines in the area marked with the “do not enter” symbol.



34. WARNING: The route pictured above is to be used for RS/TL/SL transit from the PPCY to the RSA. There are power lines in the area marked with the “do not enter” symbol.

35. Groundman procedures

- a. Be in a position in the pickup truck to assist the operator. If a Groundman is not present, the operator may not load/unload containers.
- b. Carry a radio and maintain communications with the operator.
- c. Groundmen are responsible to ensure the area behind operators remains clear and to inform them if pedestrian or vehicle traffic enters the area.
- d. Ensure that the Hustler/UTR is spotted in the correct position to allow loading/unloading.
- e. Verify Hustler/UTR pins are in the proper position and when they are not, dismount from the pickup truck and flip the pins to the proper position.
- f. WARNING: When outside of the pickup truck, exercise extreme vigilance for equipment and vehicle movement. Do not stand or work in the turning radius of a Reach-Stacker/Top-Loader/Side-Loader as this is the Danger Zone.
- g. WARNING: Pedestrians shall make eye contact with the operator of container handling equipment before entering the Danger Zone.
- h. When moving from one operational area to another, operators will ensure a Groundman in a vehicle provides escort, or they may not move. The Groundman will maintain radio contact with the operator and drive within 100 feet of the machine and assist in identifying obstacles. Be particularly cautious for power line and overhead obstacle clearance.
- i. No use of cell phones or personal electronic devices, to include wearing a headset/blue-tooth/ear buds while OPERATING a MOVING vehicle/equipment. In addition, this



restriction is further applied to the Groundman at all times when the container handling equipment is operating.

- j. PPCY and RMT have no requirement for a Groundman.

➤ **Rail Mounted Gantry - Remote Operator Station**

1. Log-in with port number.
2. Inspect the Console Station before use. Ensure that the following items are in good working condition: chair, monitors, cameras, lights, spreader bar operation, and faults. If these items are not working, inform the AOM/maintenance and do not accept the equipment until the safety item is corrected.
3. Use the cameras to monitor every lift. For example, use the cameras when loading a container into the transfer zone to ensure a 20' container is not being placed on top of the motor carrier cab. For example, use the cameras during container lifts from the transfer zone to ensure there is no GENSET still mounted on the container or that the cassette/chassis is not lifted with the container due to a stuck twist-lock.
4. Be aware of the "video game effect"...the forces being commanded cannot be felt.
5. WARNING: Be aware of anyone moving around containers/chassis. If something doesn't look right, STOP and notify the AOM.
6. WARNING: OTR drivers may not enter an adjacent lane for any reason. If this occurs, ROS operators must STOP and are authorized to cancel the move.
7. WARNING: Under no circumstances will any person place their hands between a chassis and a container. If this is witnessed, STOP and notify the Health and Safety Department immediately.
8. If there is an E-stop by the driver, contact the landside supervisor for assistance.
9. When lifting a container off of a chassis, raise the rear slowly to ensure the pins are unlocked, slide the container off of the pins and the gooseneck, and then continue to hoist. Accomplish this "Lift and Shift" every time and monitor cameras throughout the move to prevent an inadvertent lift.
10. When the container becomes stuck on a pin OR does not release from the chassis, typically due to tunnel rail damage, contact the outside Groundman for assistance.
11. Be aware of the Pendulum effect. If the bar is connected to a container and the ROS operator trolleys at all, the bar will swing after release from the container.
12. When delivering containers, gently place containers onto the motor carrier chassis.
13. Fault clearance procedures – Operators will follow the on-screen instructions as prompted by on-screen Fault notifications. If the Operator is unable to clear the fault, notify the Remote Crane Technician. If the operator is unable to contact the Crane Technician, if the move is not reassigned in a timely manner, or if same fault repeats, then notify the OCC AOM. If in doubt, STOP and notify the OCC AOM.
14. RMG ROS Groundman
  - a. Only proceed to a stack/lane if instructed by the equipment operator or AOM.
  - b. Upon arrival at a lane to service an OTR, park in a position to block the truck in the lane and notify the Exception Clerk or the operator by radio.
  - c. For adjustments, the Groundman will stand next to the mat and require the OTR driver to remain on the mat. WARNING:

- d. Then, the ROS Operator will ensure the container is lifted **less than two feet** above the chassis. The Groundman will have the OTR driver step off the mat to ensure the RMG cannot operate while the OTR driver adjusts the pin lever. The OTR driver may not place their hands between the chassis and the container at any time.
- e. Once the Groundman is finished with the task and clear of the operating space, have the OTR driver step back on the mat and notify the operator.
- f. The only time the Groundman is permitted to stand on the mat is when the OTR driver has departed without canceling the transaction. This will permit the ROS Operator to cancel the transaction.

➤ **Cantilever Rail Mounted Gantry (CRMG) - Remote Operator Station**

1. Log-in with port number.
2. No food is allowed at the operating console.
3. Inspect the Console Station and ensure that the following items are in good working condition: chair, monitors, cameras, lights, CRMG track position, spreader bar operation, and faults. If these items are not working, inform the AOM/maintenance and do not accept the equipment until the safety item is corrected.
4. Be aware of the “video game effect”...the forces being commanded cannot be felt.
5. WARNING: Be aware of anyone moving around containers/cassettes. If something doesn’t look right, STOP and notify the AOM.
6. WARNING: Under no circumstances will any person place their hands between a cassette and a container. If this is witnessed, STOP and notify the Health and Safety Department immediately.
7. Gantry Operations
  - a. The operator is responsible to monitor the gantry screens and ensure track clearance during every gantry move.
  - b. Check the Transfer Zone prior to entering to ensure the path is clear of people, equipment, and containers.
  - c. Ensure the spreader bar is at a safe height during any gantry movement.
  - d. As the CRMG gantries, an audible and visual alarm will be activated. There is also a horn and a loudspeaker that the operator may use to alert personnel in the area.
  - e. The CRMG will go into “slow down” mode when transiting crossroads.
8. Cantilever Slewing Operations
  - a. Slewing 90 degrees may only be accomplished if the spreader bar is at a “safe height” of 8 meters off the ground, which is above a 2-high stack mounted on a rail car.
  - b. Slewing can be accomplished either clockwise or counter-clockwise to allow for door direction preference.
  - c. The spreader bar is also capable of trolleying over the transfer zone without slewing 90 degrees.
9. Container Lifting/Loading Operations
  - a. Use the cameras to verify that no personnel are walking in the loading area and to ensure that each move makes sense. Blind lifts are prohibited.
  - b. When working a train on one track and the train on an adjacent track is being moved, “up and over” operations across the moving train are prohibited.



- c. Accomplish the “Lift and Shift” every time. Monitor cameras throughout the duration of the move.
- d. Use the cameras to monitor every lift. For example, use the cameras during container lifts from the transfer zone to ensure that the cassette/chassis is not lifted with the container due to a stuck twist-lock.
- e. When de-ramping a 2-high container, lift slowly to ensure that all pins are unlocked.
- f. If a pin is stuck, set the container back down, call the Landbridgemen.
- g. Be aware of the Pendulum effect. If the bar is connected to a container and the operator trolleys at all, the bar will swing after released from the container.
- h. When de-ramping a bulkhead car, hoist slowly until the container clears the car completely to prevent snagging container guides and damaging the railcar.
- i. When de-ramping reefers, lift slowly to verify that the Genset cable is not snagged.
- j. After loading a container, unlock and then raise the bar slowly to ensure it is clear of the container. If the pins are sticking, the container may be lifted and then fall.
- k. 45 foot containers may only be loaded as top-tier loads. When moving a 45’ container, use the 40 foot bar position to allow for accurate pin alignment.
- l. 20 foot Reefers with GENSETS must be loaded onto the front of a cassette in order for vendors to gain access.

#### 10. Maintenance Considerations

- a. If the system detects a fault, the CRMG will stop. Follow the on-screen instructions to clear it. If the fault will not clear, call Maintenance and inform the AOM.
- b. Use caution during a “slack rope” alarm. Hoist up slowly to recover the slack.
- c. If for any reason the CRMG controls are not responding, STOP, depress the red E-Stop button on the left console, and notify the AOM.
- d. Maintenance can lock-out the CRMG by turning a switch at the base of the crane’s ladder/stairs or at the maintenance cab, to “Local”. Maintenance can unlock the CRMG by selecting “Remote”.

#### ➤ **UTR/Hustler/Translifter**

- 1. Complete an Exterior Inspection before use. Check for leaks and that the tires are in good condition. Also check the tires on trailer trains, chassis, and MAFIs. If there is a problem, have it evaluated by maintenance. Ensure that the following items are in good working condition: seatbelt, horn, wipers, lights, back-up alarm, and tires. If these items are not working, inform maintenance and do not accept the equipment until the safety item is corrected. Wipers are not required unless it is actively raining, except in hot and dry conditions when dust will be a factor. Lights are not required for daytime operations.
- 2. Personal protective equipment required when outside of the equipment includes ANSI-2 vest, ANSI hard hat, safety shoes, and work gloves.
- 3. When mounting/dismounting the UTR, face inward toward the vehicle steps and use the handrail. Use extra care in wet or icy conditions.
- 4. Check both side mirrors before backing up or moving forward.
- 5. Only enter the maintenance shop if authorized and guided by a maintenance person.
- 6. Upon entry or exit of a warehouse, blow the horn.



7. When entering a warehouse, pier, or interchange lane with an out-of-gauge load, a spotter must be used when a load is within one foot of the top of the entry.
8. A spotter must be used if BACKING out of a warehouse, pier, or interchange lane.
9. Cutting through container parking rows (such as 509/510) is prohibited.
10. Weaving through over-the-road truck traffic is prohibited.
11. Ensure the 5<sup>th</sup> wheel is locked. After engaging a chassis, be sure to hear the “click” when testing to ensure the chassis is secure.
12. When driving with a chassis and making a turn, ensure a wide enough turning radius is achieved so that the rear of the chassis clears all obstructions.
13. Park chassis only in a marked spot or approved location.
14. When parking a chassis, lower the chassis until the legs are resting securely on the ground. Pull out slowly to ensure the load is resting properly, and if there are signs of an unstable load, stop immediately and contact a supervisor.
15. When parking the hustler, place the vehicle in neutral and apply the parking brake by pulling up the airbrake button. Listen for a release of air. If hooked to a chassis/trailer train, also pull the red brake button on the dashboard. Listen for a release of air.
16. Do not pull a chassis with locked brakes unless approved by an AOM as this can cause extensive tire damage. To free up locked brakes, use the following procedure.
  - a. Ensure the chassis pin securely seats into the fifth wheel.
  - b. Connect the hustler airlines to the chassis gladhands
  - c. Disengage the chassis brake and watch the pressure gauge climb up to 100lbs of pressure. The hustler driver can rev the engine to build pressure.
  - d. If the chassis brakes are still locked up and all wheels will not roll, then put the hustler in neutral and rev the engine. This allows air to build up in the chassis.
  - e. Pull the chassis forward to determine if all wheels will roll. If the chassis brakes are still locked, place the hustler in reverse and roll the chassis backwards 3 feet.
  - f. Attempt to pull forward. This back and forth process will usually only work with a chassis that has a container (empty or load) on it.
  - g. If the chassis brakes still remain locked, call an AOM and notify them of the parking slot number and the chassis number.
  - h. The AOM must report the locked chassis to M&R for service.
17. Do not proceed under an RMG spreader bar at any time, active or secured for maintenance. This is considered a suspended load.
18. When an RMG is parked in a Transfer Zone with a suspended container that will not release, the lane directly below and adjacent to the hung container will not be used. (I.e. if the container is suspended above Lane 5, then Lanes 5 and 4 will be closed. If the container is suspended above Lane 3, then Lanes 2, 3, and 4 will be closed.)
19. If the legs on a chassis are bent or broken, do not back under it. If already attached to the chassis, do not lower the 5<sup>th</sup> wheel. Contact a supervisor.
20. WARNING. When hauling a Reefer or OOG cargo, raise the chassis legs, lower the 5<sup>th</sup> wheel as low as possible, and unlock the pins on the chassis. Just taking the risk without lowering the load is when most incidents occur.
21. WARNING. When there is an indication of an unbalanced or leaning load, ask a supervisor...your concern will be appreciated and respected. Mishaps occur because operators take the risk to “get the job done” even when they are concerned that the load

might tip over. This is especially true with loaded reefers and Out-of-Gauge (OOG) cargo, which are often the heaviest loads with the highest center of gravity.

22. Ensure gross weight restrictions for all means of conveyance used during operations are not exceeded.
  - a. All equipment should be marked with applicable gross weight restrictions.
  - b. The following gross weight restrictions apply whenever such restrictions cannot be found on a particular piece of equipment. Chassis – 30 metric tons. Trailertrains – 35 metric tons. Bomb Carts – 40 metric tons.
  - c. When there is any doubt as to the stability of a load, the load will be placed on a low-boy, mafi, or cassette.
  - d. Breakbulk loads with high centers of gravity and/or gross weight > 20 metric tons will be placed on a low-boy, mafi, or cassette.
  - e. When a 20' container is being loaded onto a bombcart or trailertrains, the container will be placed on the aft (rear) end of the unit.
  - f. When a 20' tank is being loaded onto a bombcart, ensure the 20' tank is centered forward/aft so that all four corners of the tank frame are resting on the steel surface of the bombcart within the side rails. Loading a 20' tank onto the forward or aft end could result in a corner of the tank frame not being supported, thereby allowing the tank to roll off.



23. **WARNING:** A distance of at least 20 feet shall be maintained between the first two vehicles in a check-in, check-out, roadability, or vessel loading/discharging line. This distance shall be maintained between any subsequent vehicles behind which employees are required to work.
24. UTRs/Hustlers may not drive under a moving RTG.
25. Translifter: The translifter is more stable than a chassis. Driving the “UTR with translifter” for a period of time and then transitioning to drive a “UTR with chassis” in the same manner can lead to tip overs.
26. Translifter: **WARNING:** The operator must maintain awareness of the position of the rear end of the translifter at all times. Check the mirrors anytime backing up or pulling forward.
27. Translifter: The translifter will straighten out at speeds exceeding 5 mph regardless of the joy stick position. Below 5 mph or in reverse, the translifter will follow the commands of the joy stick.
28. NIT Rail: M&R Empty Container Inspection Process
  - a. The Hustler driver will pull into the empty container inspection area and stop.
  - b. The M&R Inspector will remain clear of the Hustler until it stops, at which point the Inspector will proceed to the container doors and open them.

- c. Once the inspection is complete and the doors are closed, the M&R Inspector will walk away from the container and signal to the waiting hustler driver in their side mirror that they are clear to proceed. The hustler driver may not proceed forward until after receiving the signal to proceed from the inspector.
- 29. NIT Rail: When in the Rail Yard/CRY, use caution for Landbridge workers who are on top of rail cars turning pins or moving from rail cars via the safety lanes to the Landbridge vehicle.
- 30. NIT Rail: Do not stop or remain on the tracks at the landside. Be aware of trains moving in and out of the CRY.

➤ **Out-of-Gauge Cargo Operations**

I. General Rules

- a. An AOM must be present for any lift, to include rigged loads or forklift moves.
- b. PPE: ANSI-2 vest/shirt, ANSI Hard Hat, Safety shoes, and leather gloves when touching freight. Wear a dust mask when dust from cargo is present. Chain saw use requires safety glasses plus full face protection, chaps, and leather gloves.
- c. Any worker has authority to STOP the lift at any time for a safety issue.
- d. WARNING: The manager will designate one person who is responsible for the lift and who has a current POV OOG Cargo certification. This person shall brief the gang on how the lift will be conducted and who will give hand signals to the equipment operator.
- e. WARNING: The Groundman must maintain positive control of the operating equipment. The operator may not move the equipment or the controls unless signaled to do so by the Groundman. During any change of conditions or uncertainty, the operator must "STOP" until directed to resume.
- f. WARNING: When ANY non-regular ("extra") employee is involved in an OOG operation, the supervisor will ensure they are instructed to take NO action, unless directed.
- g. WARNING: Do not approach equipment such as a reach-stacker or forklift on foot from behind or while in motion and do not store items on top of equipment.
- h. WARNING: Do not turn your back on operating equipment.
- i. When working outside of the normal cargo area, designate a safe working area that is marked with safety cones or barrels to restrict access.
- j. WARNING: Workers on foot may NOT stand on the opposite side of a truck or flat rack from a forklift while it is loading or unloading material.
- k. When positioning lifting gear that is slack prior to a lift, as tension is applied, use an open hand to apply pressure to the gear against the load. Do not hold the lifting gear with a closed fist.
- l. Take measures to protect slings from sharp corners that can result in sling failure.
- m. Do not use a forklift to push or pull a piece of freight. If adjustments need to be made, place the forklift blades under the freight and adjust accordingly.
- n. While unlocking binders/dogs, use a bar long enough to obtain leverage and stay clear of the path of the binder.
- o. Any dunnage that is intended for temporary use under a load, must remain partially exposed out from under the load. This will allow for the piece to be adjusted or removed without reaching under a suspended load, which is strictly prohibited.

- Ensure gross weight restrictions for all means of conveyance used during operations are not exceeded.
  1. All equipment should be marked with applicable gross weight restrictions.
  2. The following gross weight restrictions apply whenever such restrictions cannot be found on a particular piece of equipment. Chassis – 30 metric tons. Trailertrains – 35 metric tons. Bomb Carts – 40 metric tons.
  3. When there is any doubt as to the stability of a load, the load will be placed on a low-boy, mafi, or cassette.
  4. Breakbulk loads with high centers of gravity and/or gross weight > 20 metric tons will be placed on a low-boy, mafi, or cassette.
  5. When a 20' container is being loaded onto a bombcart or trailertrains, the container will be placed on the aft (rear) end of the unit.
- 6. Out-of-Gauge Lift - Ten Step Process
  1. Determine weight of the load, distance/height for the movement, and ensure the lifting equipment capacity is adequate to handle the load.
  2. Choose the connector for the load.
  3. Choose the sling for the load.
  4. Inspect all rigging gear (slings, chains, bridles, blocks, hooks, etc.) before each use. Damaged or defective slings shall be immediately removed from service.
  5. Connect rigging, hook, and load. When rigging an over-high load, use a ladder OR a forklift with lifting-basket. Wear fall protection when outside of the lifting-basket.
  6. Ensure the load is balanced based on the Center of Gravity, that the hook is directly above load, and that there is no tip lift.
  7. **WARNING: Stand well clear of the danger zone where the load could fall or roll if the slings fail, which is greater than the area directly beneath the load.**
    - a. Do not enter area between load and the reach stacker.
    - b. Do not walk under an empty spreader bar attachment. This is considered a suspended load.



- c. Do not stand on the opposite side of a flat bed/chassis/flat rack from a forklift during loading/unloading.

- d. Taglines help control the load. If using tag lines, ensure they are long enough to stay out of the danger zone. Do not step in the loop of a tagline or wrap the tagline around your arm or leg. If in danger, release the tagline and move away to a safe distance.
- e. If working in a vessel hold, position yourself in a recessed area such as the stairwell, if able. Beware of being caught between freight and the vessel bulkhead. Leave an escape path.
8. **WARNING: Place tension on the slings “Hand Tight” to verify rigging is secure and accomplish a test lift of six inches to ensure the load is stable.**
9. Lift slow and steady to avoid shock loading.
10. When finished, inspect the rigging gear for damage and return it to the storage area.



7. Loading Rolling Stock
  - a. **WARNING:** For moving rolling-stock onto a flat rack, the Groundman must stand on the ends or at a 45 degree angle from the ends and NOT beside the load while remaining in a position where eye contact with the operator is maintained.
  - b. At least half of the tire or track surface must remain on the flatrack.
  - c. Dunnage is placed under the axel in case a tire goes flat, which will cause the load to be imbalanced in transit.
8. Conveyance gross weight restrictions.
  - a. All equipment should be marked with applicable gross weight restrictions.
  - b. The following gross weight restrictions apply whenever such restrictions cannot be found on a particular piece of equipment. Chassis – 30 metric tons. Trailertrains – 35 metric tons. Bomb Carts – 40 metric tons.
  - c. When there is any doubt as to the stability of a load, the load will be placed on a low-boy, mafi, or cassette.
  - d. Breakbulk loads with high centers of gravity and/or gross weight > 20 metric tons will be placed on a low-boy, mafi, or cassette.
  - e. When a 20' container is being loaded onto a bombcart or trailertrains, the container will be placed on the aft (rear) end of the unit.
9. Recovering Containers/Tanks
  - a. When recovering a loaded container/loaded tank/empty tank that is not resting on its four bottom corner castings due to being dropped or being blown from a container stack, use a Reach-Stacker with wires and plugs to accomplish the move. A forklift may only be



used to flip or erect an empty container as it will tear the sides of a full container or damage tanks full or empty.

10. Lifting gear safe work practices and Inspection Criteria (OSHA 1910.184)

- a. General Requirements and Inspection Criteria for Slings. Whenever any sling is used the following practices shall be observed.
  - i. Slings that are damaged or defective shall not be used.
  - ii. Slings shall not be shortened with knots or bolts or other makeshift devices.
  - iii. Sling legs shall not be kinked.
  - iv. Slings shall not be loaded in excess of their rated capacities.
  - v. Slings used in basket hitch shall have the loads balanced to prevent slippage.
  - vi. Slings shall be securely attached to their loads.
  - vii. Slings shall be padded or protected from the sharp edges of their loads.
  - viii. Suspended loads shall be kept clear of all obstructions.
  - ix. All employees shall be kept clear of loads about to be lifted and of suspended loads.
  - x. Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.
  - xi. Shock loading is prohibited.
  - xii. A sling shall not be pulled from under a load when the load is resting on the sling.
- b. A synthetic web sling shall be removed from service if conditions such as the following are present:
  - i. Missing or illegible sling identification.
  - ii. Acid or caustic burns.
  - iii. Melting or charring of any part of the sling.
  - iv. Holes, tears, cuts, or snags.
  - v. Broken or worn stitching in load bearing splices.
  - vi. Excessive abrasive wear.
  - vii. Knots in any part of the sling.
  - viii. Discoloration and brittle or stiff areas on any part of the sling, which may mean chemical or ultraviolet sunlight damage.
  - ix. Fittings that are pitted, corroded, cracked, bent, twisted, gouged, or broken.
  - x. For hooks, removal criteria as stated in ASME B30.10
  - xi. Other conditions, including visible damage, that would prevent continued use of the sling.
- c. A synthetic round sling shall be removed from service if conditions such as the following are present:
  - i. Missing or illegible sling identification.
  - ii. Acid or caustic burns.
  - iii. Evidence of heat damage.
  - iv. Holes, tears, cuts, abrasive wear, or snags that expose core yarns.
  - v. Broken or damaged core yarns.
  - vi. Discoloration and brittle or stiff areas on any part of the slings, which may mean chemical or ultraviolet sunlight damage.
  - vii. Fittings that are pitted, corroded, cracked, bent, twisted, gouged, or broken.



- viii. For hooks, removal criteria as stated in ASME B30.10
- ix. Other conditions, including visible damage, that would prevent continued use of the sling.
- d. A wire rope sling shall be removed from service if conditions such as the following are present:
  - i. Missing or illegible sling identification.
  - ii. Broken Wires.
  - iii. \*For strand-laid and single-part slings, ten randomly distributed broken wires in on rope lay, or five broken wires in on strand in one rope lay.
  - iv. \*For six-part braided slings, 20 broken wires per braid.
  - v. \*For eight-part braided slings, 40 broken wires per braid.
  - vi. Severe localized abrasion or scraping.
  - vii. Kinking, crushing, bird caging, or any other damage resulting in damage to the rope structure.
  - viii. Evidence of heat damage.
  - ix. End attachments that are cracked, deformed, or worn to the extent that the strength of the sling is substantially affected.
  - x. Severe corrosion of the rope, end attachments, or fittings.
  - xi. For hooks, removal criteria as stated in ASME B30.10.
  - xii. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.
- e. An alloy steel chain sling shall be removed from service if conditions such as the following are present:
  - i. Missing or illegible sling identification.
  - ii. Cracks or breaks.
  - iii. Excessive wear, nicks or gouges.
  - iv. Stretched chain links or components.
  - v. Bent, twisted, or deformed chain links or components.
  - vi. Excessive heat damage.
  - vii. Excessive pitting or corrosion.
  - viii. Lack of ability of chain or components to hinge (articulate) freely.
  - ix. Weld spatter.
  - x. For hooks, removal criteria as stated in ASME B30.10
  - xi. Other conditions, including visible damage, that would prevent continued use of the sling.
- 6. Chain Saw Use
  - a. Leather gloves, safety glasses, full face shield, and leg protection made of cut-resistant material that covers the full length of the thigh to the top of the boots is required.
  - b. Before starting the saw, ensure that the chain brake is engaged. Start the saw at least 10 feet from the fueling area and ensure the saw is on the ground or a stable surface. Do not “drop start” a chain saw.
  - c. During operation, keep a firm grip with both hands on the hand grips.
  - d. Before starting a cut, make certain that footing is secure. Do not operate the saw in a position or at a distance that could cause a loss of balance or loss of grip on the saw. Do not cut directly overhead.

- e. Carry the chain saw in a manner that will prevent contact with the cutting chain and muffler. When carrying the saw more than 25 feet, the chain saw will be off.

## 7. Steel Coils

### a. General Rules

- i. PPE: Same as OOG Cargo plus Eye protection for anyone cutting bands.
- ii. Be careful when walking on steel coils due to uneven surface.
- iii. WARNING: Slings and shackles can swing and hit workers...never turn your back on the gear.
- iv. If Dunnage disposal is required, place a dumpster with pick points into the hold.

### b. Lifting Steel Coils

- i. Follow the 10 step OOG lifting procedure, with the following special considerations.
- ii. Remove a railcar cover/top only for the railcar that will be worked next.
- iii. WARNING: Ensure that steel coils are chocked while in the hold of the vessel/rail car.
- iv. WARNING: When cutting steel banding, stand in a position CLEAR of the zone where the load could roll.
- v. WARNING: When placing the sling into the center of the steel coil, ensure that sling cover (sleeve) is between the coil and the sling. As tension is applied, STOP if the cover does not remain in place.
- vi. WARNING: Prior to and during the lift, stand at least 20 feet away. Move away from the load BEFORE it is hoisted AND stay clear of the fall zone as it comes to the dock. Always assume that the sling is going to fail.
- vii. WARNING: Only two workers are permitted in the lifting area, plus the foreman/AOM when present.

### c. Landing Steel Coils

- i. For discharge, lay rubber mats in the landing area. Do not get near a suspended load while placing the rubber mats.
- ii. WARNING: Only two workers are permitted in the landing area, plus the foreman/AOM when present.
- iii. Workers on the ground will remain clear of the fall zone as it comes to the ground. Always assume that the sling is going to fail.
- iv. The Groundman/Spotter will ensure that the steel coil is chocked when placed on the ground before slack is let into the slings.

### d. Moving Steel Coils to the warehouse

- i. When bringing the steel coils into the warehouse, if one forklift is dropping off and one forklift is placing the coils for storage, ensure the travel paths do not overlap.
- ii. Ensure there is a Groundman/Spotter when the large forklift with the RAM lifting attachment is placing the steel coil at the final resting point.
- iii. Ensure that steel coils are chocked when placed at the final point of rest.

## 8. Steel Billets

### a. General

- i. PPE: Same as OOG Cargo plus eye protection for anyone cutting bands.

- ii. **WARNING:** When cutting steel bands, stand in a position **CLEAR** of the zone where the load could fall or roll.
- iii. The forklift shall remain under the steel billets with the blades tilted upward to prevent a billet from rolling off and falling.

## 9. Ro-Ro Vessels

### a. General

- i. PPE: ANSI-2 vest/shirt/coverall, ANSI Hard hat, safety shoes, and work gloves. The foreman is responsible to ensure that the vessel mounted carbon monoxide monitor is working.
- ii. Use a spotter when backing vehicles with an obscured view. Use **both** mirrors to look for personnel and obstructions.
- iii. Only authorized persons shall be permitted on deck during loading/discharging and workers shall remain in the designated work area.
- iv. Turn on deck lights and report any improperly lighted areas to the ship's crew. Driving, walking, and working areas shall be illuminated at a minimum of five foot-candles.

### b. Vessel Ramps

- i. **WARNING:** It is critical to control the pedestrian traffic both on the ramps and in the working RO-RO decks.
- ii. OSHA requirements call for the physical separation of pedestrian and vehicle traffic on the ramp, or the placement of a qualified signalman at all times.
- iii. Slow and steady is the rule on the ramps.
- iv. Place a traction rope on the incline of interior vessel ramps when moving equipment with steel tracks to prevent sliding.
- v. Ensure MAFIs have their safety chains attached prior to any movement.

### c. At the Working Level

- i. Once the spotter gives an instruction on the working level, all focus must be on the spotter. No movement is permitted (forward or reverse) without the spotter's direction.
- ii. Lashers may only secure equipment/vehicles with one vehicle between the vehicle being secured and the other vehicles being parked.
- iii. After parking a vehicle inside the vessel, Drivers will proceed to the van to wait. If the van is not there, the foreman will designate a standing location well clear of any moving vehicle, and ALL Drivers will remain together.
- iv. When moving the operation to the next deck, the Foreman is responsible to ensure a spotter is posted so that no vehicle traffic is moving during the move.

### d. Vehicle movement

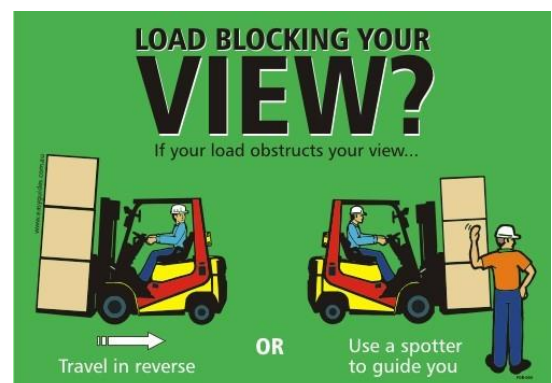
- i. Speed limit is 5 mph max inside a vessel.
- ii. When driving a new vehicle that is being offloaded for sale, do not wear rings, watches, exposed zippers or anything that can scratch vehicles.
- iii. When driving inside the vessel, the radio must be off.
- iv. Drivers will enter the ramp and proceed to the assigned level with a vehicle.
- v. Follow no closer than one length of a 40 foot container.

- vi. With all RORO Hustlers, it is imperative that the drivers keep the hustlers in low gear only, while in the ship. If they leave the gear shift in “Drive”, then the hustler may shift from first into second gear while pulling a load and the front tires can leave the ground. When the hustler “stands up” like that, the driver can easily lose control of the hustler and trailer.

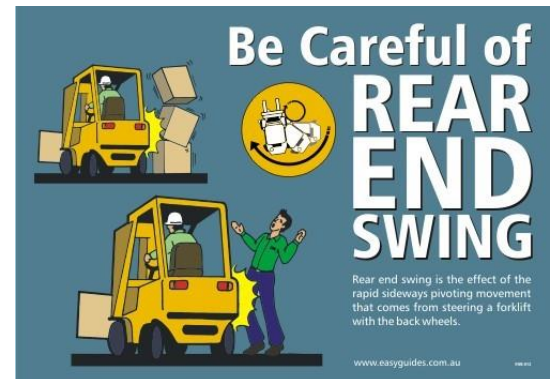
## ➤ Large and Small Forklift

### I. General Rules

- a. Complete a pre-use inspection. Check for leaks and that the tires are in good condition. If there is a problem, have it evaluated by maintenance. Ensure that the following items are in good working condition: seatbelt, horn, brakes, wipers, back-up alarm, beacon/lights, and elevated flag if used on dock. If these items are not working, inform maintenance and do not accept the equipment until the safety item is corrected. Wipers are not required unless it is actively raining, except in hot and dry conditions when dust is a factor. Lights are not required for daytime operations.
- b. Always use the seat belt while moving.
- c. Always look before backing up and use a spotter when visibility is limited.
- d. Always make sure dock plates are secure before driving over them.
- e. Avoid sharp turns to prevent tipping over.
- f. Cross railroad tracks on a diagonal to prevent damage to wheels and to keep the load from slipping.
- g. Keep arms, legs, head, and feet inside the forklift when driving.
- h. Keep the forks low. Do not travel with the forks higher than a foot from the ground and do not travel or turn with the forks in an elevated position.
- i. Never use the forklift to push other vehicles.
- j. Never pass a forklift going in the same direction, especially at blind spots, intersections, or other dangerous areas.
- k. When traveling with a load, keep it just below axle height. For stability, keep freight close to the ground until it is time to load.
- l. Loads must be carried so that the operator has an unobstructed view of the drive path. If unable, carry it trailing or get a spotter.
- m. When driving with a load on an incline, travel with the load pointing uphill.
- n. If the load blocks your view, drive in reverse (except uphill), in which case a spotter must be used.
- o. Turn headlights on from sunset until sunrise.
- p. Never assume that the forklift is seen by operators of other equipment.
- q. Passengers are prohibited.
- r. Maintain a safe speed for the task. When near or under the STS Crane or in an OOG working area, the maximum speed for a forklift is a walking pace. Drive up and down inclines slowly. Travel slowly when turning as forklifts can tip over even at slow speeds.



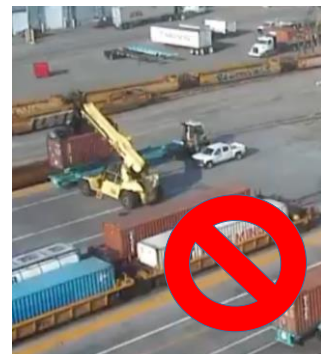
- s. If the stability of a load is in question, STOP! Contact a supervisor so that the load may be re-adjusted or transferred to a more stable platform such as a MAFI.
  - t. In the event of a tip over, do not attempt to jump from the machine. Remain in the cab with the seat belt fastened.
  - u. After parking, tilt the blades down, lower the mast, and set the parking brake. When parking on an incline, a chock must be used.
  - v. Ensure roll-up doors are completely open before driving through.
2. Lifting Basket
- a. General
    - i. Inspect the basket, securing chains, and gate before use.
    - ii. The work area must be level, free of potholes, and free of overhead obstacles.
    - iii. Place the blades of the forklift into the pockets of the lifting basket until the back of the basket is against the carriage AND attach each chain (or ratchet strap) around the backrest to secure the basket to the forklift. Both chains must be connected.
    - iv. The gate must be closed and secured before lifting.
    - v. Keep hands away from pinch points between the basket and back rest.
    - vi. Upon lifting, once the user signals to stop at the desired height, the operator must set the parking brake and REMAIN at the controls when the basket is elevated with a person inside.
    - vii. Transporting a person in the basket is prohibited, except for minor adjustments. A minor adjustment is defined as adjusting position on a given corner of the container, not between the ends or sides of the container or between separate containers.
  - b. OOG Cargo
    - i. Employees rigging an over-high load or installing plugs in a container may use a ladder OR a forklift with a lifting-basket. Wear a fall protection harness if outside of the lifting-basket.
  - c. Barge operations
    - i. When working around an STS Crane or other mobile equipment, the forklift operator must notify the Slinger/individual controlling traffic of the forklift operation.
  - d. OTRs Tarping a Load
    - i. OTR drivers may use the lifting-basket.
    - ii. If proceeding outside the confines of the lifting-basket, OTR drivers must wear a fall protection harness.
3. Out-of-Gauge Cargo Forklift
- a. During the loading/unloading of crates from a flatbed or flat-rack or other surface, when forklift blades are being placed under one pallet, they can go all the way through to the other side and hit a separate piece of freight that is stored next to the crate being lifted.



- b. Ensure the Groundman is present before handling freight. Always have either visual or verbal communication with Groundman. Do not work more than one operation at a time splitting up the operator from Groundman.
- c. **WARNING:** When lifting cargo, spotters and any other employees must stand on the ends of the load, clear of any direction a load may fall or roll.
- d. **WARNING:** The Groundman must maintain positive control of the operating equipment. The operator may not move the equipment or the controls unless signaled to do so by the Groundman. During any change of conditions or uncertainty, the operator must “STOP” until directed to resume.
- e. When loading/unloading freight from a loading dock, ensure the ramp and trailer are secured and stable before entry with a forklift.
- 4. Vessel Forklift
  - a. Forklifts must have a flashing amber beacon and a mounted flag for day and night operations when on the dock.
  - b. Driving vehicles/equipment requires unobstructed visibility or a spotter. Forklifts may carry multiple pin-bins, **but only one-high**. When a forklift is left unattended (defined by greater than 25 feet away), lifting blades must be fully lowered, controls neutralized, brakes set, and power turned off. Loads may not be left suspended if the equipment is unattended.
  - c. Forklift operators may only pick up pin-bins when the rack is at its final point of rest and disconnected from the Hustler. Picking up pin-bins under the crane is prohibited.
  - d. The pin-bin rack may be placed hard offshore as a final point of rest.
  - e. Forklifts will move along the dock on the Berth Highway.

➤ **Vessel Checker/DEC/Interchange/PPCY Grader Operations**

- 1. Pickup Trucks
  - a. Inspect pickup trucks before use. Ensure there is no damage and that the following items are in good working condition: seatbelt, horn, wipers (if raining), head lights (if between sunset and sunrise), tires, brakes, and steering system. If these items are not working, inform maintenance and do not accept the equipment until the safety item is corrected.
- 2. Parking in the North NIT Container Stacks
  - a. Park within the safety lines by the light pole.
  - b. Use flashers or beacon.
  - c. The radio will be turned off and the windows lowered.
- 3. Parking in the NIT Central Rail Yard
  - a. When working at the land-side end of the track in the CRY, the Checker shall park either in the gravel area OR on the waterside of the working equipment to allow for passing traffic to proceed on the North/South roadway.
- 4. Vessel Checkers
  - a. The Dock Foreman/Checker may park on the off-shore crane track at least 10 feet from the leg of the crane OR in Lane #1 on the opposite side from the Shuttle Truck traffic entering/exiting under the crane OR on the inshore crane leg.
  - b. **Do not park on the STS Panzer Belt (rubber covering).**





- c. Do not park on the off shore crane track below Lashers who are unlash containers.
- d. As a technique, park on the leg of the adjacent crane and look at a diagonal underneath of the crane to which you are assigned.
- 5. Planning Clerks
  - a. When stowing a vessel, the #1 hazard for having containers wedged in a cell and causing damage is having an empty 20 foot container matched up next to a heavy 20 foot container.
- 6. PPCY Interchange
  - a. Only walk in designated crosswalks when walking from booth-to-booth or lane-to-lane.
  - b. Keep the inspection lanes and walkways free of debris.
- 7. PPCY Checkers/Container Graders
  - a. The minimum distance from the Side-Loader is 25 feet. If proceeding inside 25 feet, a radio call will be made to warn the operator and receive either a verbal or visual acknowledgement.
  - b. Do not drive in the center two lanes against the flow of motor carrier traffic. Travel outside the jersey walls if moving against the flow of traffic.
  - c. Checkers may not “turn pins”. If pins are required to be turned, work with the side-loader operator to determine which pins are locked and advise the driver of the issue.

➤ **Foreman/Hatch Boss/Dock Header Responsibilities**

- 1. Leadership Responsibilities
  - a. Ensure that all working conditions are safe and that gear is in apparent safe working condition before and during the operation.
  - b. Project the image of a boss. Be confident, capable and knowledgeable.
  - c. Model a solid work ethic for safe and productive operations.
  - d. Lead by example. Take care of your team. Be reliable, be on time, and assist when there are new people...especially in bad weather.
  - e. Do the right thing at all times...do not raise your voice...always mean business...the gang will listen. How you handle your friends will determine if the gang respects you.
  - f. Correct unsafe behavior. If a gang member is not following the POV Operational Standards, make the correction and if needed, call the Header, Hatch Boss, or AOM.
  - g. The AOM/Superintendent OR Hatch Boss can hire and fire.
- 2. Vessel Foreman Operational Responsibilities
  - a. Ensure compliance with the POV Operational Standards.
  - b. **WARNING:** When entering a vessel hold in which there is any question of a toxic atmosphere or insufficient oxygen, AOMs/superintendents are required to have the atmosphere tested. The vessel crew may accomplish this, but the stevedore representative is responsible to ensure it is satisfactory. Anytime the hold includes decomposing organic materials such as logs, steel that could be rusting, hazardous tank containers with gas, or any material that can have an adverse impact on the breathable air, the atmosphere must be tested.
  - c. When Foremen and/or Deckmen are on the vessel, stay outside the 20 feet from where the nearest lasher is working. Do not walk underneath a lashing operation.

- d. Do not hop across from hatch cover to hatch cover. Stepping across a gap of less than one foot is permitted.
  - e. Do not come within three feet of the edge of a hatch cover, even if the fall distance is less than 8 feet.
  - f. If assisting with unlocking a hatch cover, it must be accomplished from below and not by stepping on the ledge from above.
  - g. Do not accept standby time. If there is an issue, consult with the Head Clerk to start another task until the problem is solved. Coordinate with the Dock Foreman to ensure a safe transition so that the STS can continue loading/discharging. Notify the AOM.
  - h. Stay one hatch ahead of your team to ensure a seamless crane flow.
  - i. Ensure the gang follows the game plan. Report variations in the plan to the Head Clerk, AOM/Superintendent, and Hatch Boss.
  - j. Record a log of all standby time and communicate ANY item that impedes production to the AOM/Superintendent.
3. Vessel Foreman Pre-Operations
- a. The clerk's name and phone number should be on the cover sheet.
  - b. Promptly find the pin-bins and coordinate for crane operator discharge.
  - c. Determine Reefer loading direction with the Chief Mate to ensure adequate plugs.
  - d. Provide the overall game plan to the Deckman and include the "coversheet."
  - e. Determine if operational restows will be required to prevent "up and over" work, or working near "chimney stacks", which could jeopardize safety or slow production. Relay information of any operational restows to the AOM/Superintendent and Vessel Clerk.
4. Vessel Foreman Loading/Discharging
- a. Vessel Foreman must be mindful of the stowage plan.
  - b. The Deckman and Slinger must be present to discharge or load containers.
  - c. Check the cell guides before and after the load/discharge.
  - d. Ensure the Deckman gives instructions to the crane operator as soon as they swap out.
  - e. Check the first hatch that is about to be worked.
    - i. Look for hazards above deck such as spills, loose gear, and leaking tanks.
    - ii. Ensure that the hatch cover does not have loose or unsecured gear. If gear is found, notify the ship's crew to coordinate removal.
    - iii. Ensure that the hatch is unlashed or is being unlashed.
  - f. Once loading and discharging has started, Foreman should stand on the side of the hatch/walkway with the Deckman. Personal chairs are not permitted on vessels.
  - g. Record a log of all standby time and communicate any item that impedes production to the AOM/Superintendent.
  - h. When the STS Crane is working over the gangway, the Vessel Foreman will alert the Dock Foreman/VC Checker and Slinger if personnel are departing the vessel. Do not allow personnel to walk underneath a suspended load.
  - i. Monitor the loading plan with emphasis on Hazardous containers, Reefers, length of containers, container weight balance, and port of destination.
  - j. Monitor the location of containers and if in conflict with the stowage plan, verify the plan and fix it in coordination with the clerk. Stay one hatch ahead so conflicts are known before getting there.

- k. Ensure Clerks call the Foreman with any change in the load plan ASAP to ensure all planned containers are discharged from each cell, before load-back. This will prevent delays caused by covering containers that should have been discharged.
  - l. Instruct the Deckman early so the crane operator's flow is not interrupted. Changes in cell destination or in which lane to load require prompt communication to feed the crane operator.
  - m. Vessel Foremen and Dock Foremen/NIT VC Checker must promptly communicate lane use decisions to the Dock Gang.
  - n. To protect the operator, do not chimney stack containers more than two-high on the hard inshore side. Remove containers and let the clerk know the restow plan.
  - o. Be aware of any 20s against the house of the vessel or ship's gear to ensure the crane can accommodate the move.
  - p. Check-off hatches as they are finished.
  - q. Ensure the ship remains tight to the pier. Check this periodically throughout the job.
  - r. **WARNING:** When sending workers aloft or into the hold, the landing area must be at least three containers wide. Do not step out onto a chimney stack.
  - s. The manual Over-Height bar may be used above or below deck, without restriction. Inspect the wire ropes before use.
  - t. When discharging from the STS Crane to an OTR, drivers will be escorted to the dock as directed by the Hatch boss/Slinger and OTR drivers will remain in the cab.
5. Dock Foreman Operational Responsibilities
- a. Do not accept standby time...if there is an issue, start another task until the problem is solved.
  - b. Communicate ahead of time with the Foremen on other cranes regarding changes in traffic patterns to maintain a safe work flow.
  - c. Record a log of all standby time and communicate any item that impedes production to the AOM.
  - d. Ensure gross weight restrictions for all means of conveyance used during vessel operations are not exceeded.
    - i. All equipment should be marked with applicable gross weight restrictions.
    - ii. The following gross weight restrictions apply whenever such restrictions cannot be found on a particular piece of equipment. Chassis – 30 metric tons. Trailertrains – 35 metric tons. Bomb Carts – 40 metric tons.
    - iii. When there is any doubt as to the stability of a load, the load will be placed on a low-boy, mafi, or cassette.
    - iv. Breakbulk loads with high centers of gravity and/or gross weight > 20 metric tons will be placed on a low-boy, mafi, or cassette.
    - v. When a 20' container is being loaded onto a bombcart or trailertrains, the container will be placed on the aft (rear) end of the unit.
6. Dock Foreman Pre-Operations
- a. Obtain the grounding plan from the AOM.
  - b. Ensure any new drivers have terminal maps. Obtain these from the Dock Header/AOM.
  - c. Inform the AOM of any UTR/Shuttle Truck shortages.
  - d. Notify the clerk and AOM of any containers left on bomb carts, containers parked to wheels, or anything out of place.

- e. Obtain information on USCBP operations from the AOM.
  - f. Ensure container staging, re-stow placement, and wheeled containers do not block the entry/exit to the STS Crane as this causes an obstacle for Shuttle Trucks, causes blind corners for vehicles and equipment, and slows down production.
7. Dock Foreman Loading/Discharging
- a. Maintain awareness of the placement of loads, re-stows, pre-staging, and cuts/adds.
  - b. Vessel Foremen and Dock foremen/NIT VC Checker must communicate which lanes they are using and keep the Dock Gang informed.
  - c. Stand in a position or park in a position to give instructions to the UTR before they come under the crane. When parked on off-shore track, park half-way down a hatch and not under an aisle where the lashers are working.
  - d. Do not instruct UTR drivers while a container is being loaded/discharged or while the UTR is moving.
  - e. When working Out-of-Gauge or wire moves, work only one move at a time under that crane. Ensure the gang stands on the ends of the load, clear of any area the load may fall or roll during a lift.
  - f. Notify Slingers when you step out of the vehicle to walk under the crane, so they are not surprised by your presence.
  - g. Working Lane 5 & 6
    - i. AOM/Superintendent shall speak with hatch boss to provide a briefing for all involved to include the dock foreman, checker, slinger and ST operators.
    - ii. When 3 or more cranes are tight, the middle crane(s) may use Lanes 5 and 6.
    - iii. The middle crane(s) may place hatch covers in between the STS Crane legs.
    - iv. Park vehicles on the leg of the adjacent crane with 3 vehicles maximum or at the stern of the vessel. The checker may park across the berth highway slightly offset from the entry gate to the RMG stacks and back as close to the fenceline as possible so as to not create a hazard for Shuttle Trucks departing the VWSBA.
  - h. Dock Foreman/VC Checkers will acknowledge radio calls from Terminal Transportation and direct when and how to make their approaches to the gangway to safely pick up or drop off passengers/vendors.
  - i. When the STS Crane is working over the gangway, the Dock Foreman/VC Checker will notify the Slinger if Terminal Transportation is making their approach to the gangway area. Do not allow personnel to walk underneath a suspended load.
  - j. The Dock Foreman/Checker may park on the off-shore crane track OR in Lane #1 opposite the Shuttle Truck traffic entering/exiting under the crane OR on the inshore crane leg. Do NOT park/drive offshore of the crane track as this causes damage to the STS Panzer Belt (rubber covering). Do not park on the off shore crane track while Lashers are working above the parking location.
8. Barge Foreman Additional Responsibilities
- a. All persons must use the walking bridge or spreader bar cage to mount/dismount the barge.
  - b. All persons working on a barge must wear personal flotation devices.

- c. **WARNING:** The Deckman is the only person who may speak with the crane operator under normal circumstances. The foreman may not give directions to the crane operator.
- 9. **Hatch Boss Responsibilities**
  - a. Ensure overall gang safety and compliance with the POV Operational Standards.
  - b. Obtain radios for the Slinger and Deckman.
  - c. Responsible for gangway placement and ensuring that the net is properly rigged.
    - i. Ensure the area surrounding gangway is properly lit.
    - ii. When the upper end of the gangway rests on or is flush with the top of the bull rail, steps with adequate guard-rails are required.
    - iii. The gangway net must be completely secured before anyone boards the vessel.
    - iv. The gangway net should extend far enough on either side of the gangway to provide protection from falling between the ship and the deck. Five feet is a best practice.
    - v. Proper, sturdy handrails must be in place.
    - vi. No obstructions may be laid on or across the gangway.
    - vii. Handrails and walking surfaces shall be maintained in a safe condition.
    - viii. Overhead obstructions 6'5" or lower should be marked with high-visibility color.
    - ix. Suspended loads may NOT pass over the gangway when it is occupied..
- 10. **Dock Header Responsibilities**
  - a. Assigns work positions and requests additional/replacement gang members, as needed.
  - b. Inform the Hatch Boss of equipment that will be required, such as pins, lashing rods, emergency gear, and break-bulk wires.
  - c. Drive the forklift to/from the vessel.
  - d. Collect pin bins and place them under the STS according to the POV Operational Standards and replace empty pin bins. Park the forklift on the in-shore crane leg when not in use and ensure the parking brake is set.
  - e. Obtain over-high gear or forklift man-basket when required.
  - f. Supervise gang members throughout the shift and ensure compliance and adherence to the POV Operational Standards. Coach as needed.

➤ **Maintenance - General**

- 1. When working outside/away from the maintenance facility, technicians are required to be in communication with their partner.
- 2. **Force and Bypass**
  - a. Only the GM of maintenance at the respective terminal (or representative designated in writing) may apply a Force. These are password protected in the PLC.
  - b. Only ACMs are authorized to place or remove a bypass.
- 3. Maintenance will ensure all employees are clear of equipment prior to releasing control back to the equipment operator.
- 4. Lifting an object that weighs more than 50 pounds requires a two-person lift or use mechanical means.
- 5. **Lock-out/Tag-out Procedure**
  - 1. Identify energy sources, potential hazards, and control devices.
  - 2. Notify affected employees.

3. Turn-off operating controls.
4. Move the energy isolating device (circuit breaker, disconnect etc.) to the energy safe position. Isolate energy sources by blocking, bleeding, and venting stored energy as found in electrical, mechanical, hydraulic, and pneumatic systems. If at any time an authorized person cannot assure that the equipment or system is properly isolated - STOP.
5. Place a lock and tag with technician name/phone number/company on switches and energy isolating devices in the 'OFF' or 'SAFE' position.
6. Verify the absence of residual energy. In systems where potentially hazardous stored or residual energy exists, verify that the stored energy is released, disconnected, restrained or otherwise rendered safe and then verified as not present before working on that system or component.
7. Verification of Isolation. Place controls in the 'ON' position to verify that equipment is de-energized and then return operating controls to the 'OFF' position.
8. Perform the required maintenance task.
9. Notify. Prior to removal of a LOTO, the person responsible for the LOTO will inform all affected personnel in the immediate area that the LOTO is being removed and that the equipment will be operational.
10. Restore the equipment to service.
6. Aerial Lift - General
  - a. When moving the aerial lift in any location where it is exposed to vehicle traffic, an escort vehicle will be used with strobes or 4-ways flashers illuminated.
  - b. When the aerial lift is in position and operating, either cones/traffic barrels or the escort vehicle will be placed to ensure that there is no impact risk to the aerial lift.
  - c. Do not exceed the load-capacity limits. Take the combined weight of the worker(s), tools and materials into account when calculating the load.
  - d. Aerial lifts must be used according to the manufacturer's written specifications.
7. Grinding
  - a. Wear safety glasses, goggles, or a face shield and leather gloves.
  - b. Do not wear loose fitting clothing.
  - c. Use a cutting disc for cutting and a grinding disc for grinding.
  - d. The RPM rating of the disc/blade must be higher than that of the grinder.
  - e. Before use, inspect wheels for cracks, defects and wear. Replace worn discs. Perform a "ring test", as appropriate.
  - f. Ensure the grinder is equipped with a guard and a handle that are properly attached.
  - g. Adjust guards to deflect flying particles away from operator with a 180° guard between the operator and wheel.
  - h. For a fixed grinding wheel, the tool rest must be within 1/8<sup>th</sup> inch of the grinding wheel.
  - i. Allow the grinder to come to full speed and warm up before use and to come to a complete stop after use.
  - j. When cutting wire rope, secure both sides of the rope before cutting to prevent the strands from separating.
  - k. Do not grind on the side of the wheel or use liquid coolants.
  - l. Always use two hands. Keep hands away from the rotating wheel.
  - m. Do not carry a grinder with a finger on the switch.



## 8. Machines/ Power Tools

### a. Rotating Machinery

- i. Wear protective eyewear. Do not wear loose clothing, or long hair that can become entangled and pulled into the machine.

### b. Lathe

- i. Do not touch scrap material/cuttings/shavings while the lathe is still turning.
- ii. Stop the lathe completely and clear the scrap material/cutting/shavings with plyers or a gloved hand.

### c. Drill Press

- i. Ensure the protective guard/shield is in place before applying pressure to the drill bit.
- ii. Stock must be properly secured with a vise or clamps prior to a machining process.
- iii. Feed the bit smoothly into the work. If the hole being drilled is deep, withdraw the bit frequently to remove shaving on the bit.

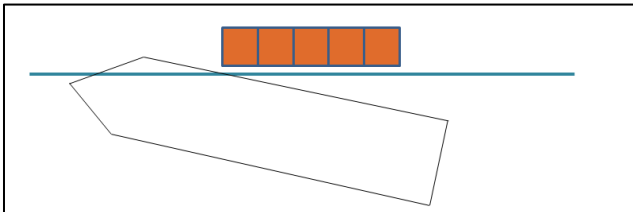
### d. Hydraulic Presses/Clamping Machinery

- i. Wear protective eyewear.
- ii. Ensure guards are in place and in proper working order before applying pressure.
- iii. Do not hold the material being pressed with a hand in between the pinch point.

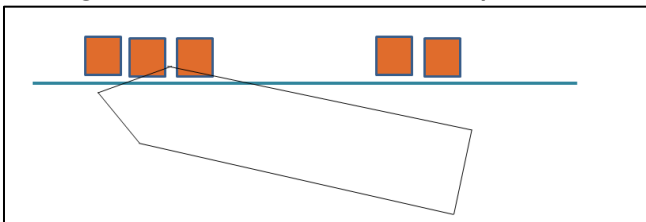
## ➤ Crane Maintenance

### I. STS Crane Positioning for Vessel arrival/departure

- a. Prior to vessel arrival, STS cranes shall be located at the amidships section of the vessel OR staged at a distance of more than 100 feet from the planned location of the bow/stern. If an STS crane is within 100 feet of the docking area, the STS must be boomed up and may not be gantried when a vessel is berthing.



- b. This figure above indicates the SAFE position of cranes for docking/undocking.



- c. This figure above indicates the UNSAFE position of cranes when docking/undocking due to risk of bow flare or stern overhang to strike the crane.

### 2. Moving the STS Crane

- a. **With** a ship along the STS gantry path, use a two person team.
  - x. The crane may be moved from the operators cab OR the ground station.

- xi. Check for clearance of all collision points on the vessel, in-shore and off-shore crane tracks, and gangway. Check for clearance between the ship's structures and boom heel/Igus track.
  - xii. Boom up.
  - xiii. The person activating the controls is solely responsible to ensure clearance.
  - xiv. Ensure the Slinger is clearing the path. Before or after operations, Pier Watch will act as the spotter for the operator.
- b. Without a ship in the STS gantry path, a second person is not required.**
- iv. The person activating the controls is solely responsible to ensure clearance.
  - v. The crane may be moved from the operators cab OR the ground station.
  - vi. Clear the path of travel before moving the crane.
  - vii. Boom up.
- c. At the completion of operations, the crane operator will contact the AOM to determine where to park the crane, then notify maintenance, accomplish the move, and complete the "boom up" sequence. If the crane will not boom up, notify maintenance immediately. The crane operator is responsible to accomplish this process until four minutes after the end of operations. After this time, maintenance is responsible for the move. Operations will notify maintenance if the operator did not complete boom up sequence.
- i. When a crane that is being used for operations prevents the movement of a crane that is finished with operations, these cranes will be moved by maintenance.
- d. Maintenance technicians shall replace tie-down covers after detaching the STS Crane.
- e. When line handlers request that maintenance move a crane to enable a safe working surface prior to vessel arrival, the crane will be promptly moved.
- 3. Pier Watch Entry to WSBA to assist Shuttle Truck**
- a. Call RDS to activate Red Xs
4. Performing Maintenance on the STS
- a. When working on the spreader bar, work between the legs of the crane. Park the truck in a position to provide protection from other vehicles/equipment. Keep the amber beacon on, if equipped. When there is a need to change out the spreader bar in the back-reach, place cones to identify the work zone OR park the vehicle/equipment in a position to use it for protection from other vehicles/equipment.
  - c. If boarding a vessel, park the truck at the gangway in the lane closest to the water. If there is a crane working in the area of the gangway, park on the inshore leg.
  - d. When the Trolley platform is positioned in the backreach of the crane, block the area directly underneath the trolley with barrels or cones.
5. Rail Mounted Gantry
- a. Work to be performed on the E-HOUSE ("drive in" gate) side of the RMG
    - i. The "RDS operator" will coordinate with the OCC regarding the RMG(s) that will be out of service and in which lane the bar will be stowed.
    - ii. After the final container move has been made and there is no container on the bar, initiate the "Auto Stow" command. The RMG may also be parked in the maintenance stowed positioned manually by the RDS operator.
    - iii. Once parked, the RDS Operator will take the RMG "Out of Que" and "Out of Service".

- iv. **The Crane technician on-scene will** Place the crane in “Local Mode”. The E-Stop may be applied at the work location to protect against a control reset that would cause machine movement or electrical power application.
- v. Technicians working on the E-HOUSE side of the RMG, with equipment or personnel more than ½ way across the driving lane, will take both adjacent RMGs out of service.
- vi. **Before returning a stack or RMG to service, verify stack security gates, lanyards and electronic locks are re-secured and functioning correctly. Report discrepancies to [helpdesk@vit.org](mailto:helpdesk@vit.org) to have the electronic lock repaired and [helpdeskfacilities@vit.org](mailto:helpdeskfacilities@vit.org) to have the gate repaired.**
- b. Work to be performed on the HINGE LEG (“walk in” gate) side of the RMG
  - i. **The “RDS operator” will** coordinate with the OCC regarding the RMG(s) that will be out of service and in **which lane the bar will be stowed.**
  - ii. After the final container move has been made and there is no container on the bar, initiate the “Auto Stow” command. **The RMG may also be manually parked in the maintenance stowed positioned by the RDS operator.**
  - iii. The RMG in the next stack will also need to be stowed to provide a safety buffer.
  - iv. Place both RMGs in “Out of Que” and “OOS” at the RDS console.
  - v. Place both cranes in “Local Mode”. The E-Stop may be applied at the work location to protect against a control reset that would cause machine movement or electrical power application.
  - vi. The walk-in (single) gate will remain open if a person is in this area. With the gate open, the ROS Remote Crane Technician will turn on the “Gate Bypass”, allowing the area of the WSBA and LSTZ closest to the stack to be serviced by the other RMG. The “Gate Bypass” will not function unless both adjacent RMGs are in “Local Mode.”
  - vii. **Do not enter through the gate on the E-House side of the RMG and walk around to the hinge leg side of the RMG. The RMG will continue to operate and will not prevent the RMG from entering the WSBA.**
  - viii. Both RMGs must be placed back in “Remote” in order to remove the “Gate Bypass.”
  - ix. **Before returning a stack or RMG to service, verify stack security gates, lanyards, and locks are re-secured and functioning correctly.**
- c. WSBA Lane Closures.
  - i. Place the RMG to be worked on out of service and secure it in the WSBA.
  - ii. Temp block lanes in which maintenance is working PLUS one buffer lane. For example, the bar in lane 1, the aerial lift in lane 2, with lane 3 as a buffer. For example, if the spreader bar is in Lane 1 and there is no aerial lift, then Lanes 1 & 2 will be closed. If the spreader bar is in Lane 2, then Lanes 1, 2 and 3 will need to be closed.
  - iii. WARNING: All lanes of the WSBA will be closed if both horn **and “zone”** lasers are disabled/inoperative.
  - iv. Place jersey barriers in front of the closed lanes. Maintenance vehicles with their hazard lights/rooftop beacons on may also be used as a physical barricade.

- v. WARNING: Remain in the lanes designated for work and do not enter the area between the RMG and the stack (i.e. row 202).
  - vi. If an RMG is parked in the WSBA without a suspended container, but maintenance is not being accomplished, the only lane that is closed is the one with the spreader bar.
  - vii. If an RMG is parked in the WSBA with a suspended container, the lane with the suspended container plus a buffer lane on both sides will be closed. The OCC is responsible to ensure that cones are placed to mark the lane closure.
  - viii. In the Landside Transfer Zone, use the same procedure as the WSBA except disable deliveries to the appropriate lanes by selecting "OFF" at the Remote Crane Management System (RCMS) instead of obtaining a "Temp Block" by the OCC AOM.
6. Remote Display Station (RDS) Technician Procedures
- a. RDS Manual Move to the WSBA
    - i. If a technician needs to move a crane (with or without a container) into the WSBA manually, he must verify the zone is clear by looking at the WSBA camera. There are many reasons for having to move the crane in the waterside manually.
      - 1) RMG will not go into auto mode for some reason and crane needs to be parked.
      - 2) RMG has faulted in the WSBA and the technician takes control of crane to clear the fault.
      - 3) One of the WSBA safety devices (light curtain or laser scanner) has faulted and the crane will not move out into the zone
    - ii. WARNING: Check that the WSBA is clear of equipment and personnel with BOTH a video camera AND by talking directly to another crane technician who has eyes on this area, before manually moving the RMG to deliver a container.
    - iii. WARNING: If there is a RMG parked out of service, verify it is actually in the stow position. The drop pins should be centred over the drop pin pockets.
    - iv. If the WSBA is clear, interface with OCC AOM to be sure the container is being landed in the correct location.
    - v. Return the crane to auto mode.
  - b. Landing a container within the RMG stacks
    - i. Emergency Landing. When an RDS technician calls with an emergency where a container must be set down immediately in its current exact location, the OCC AOM will follow the below steps.
      - 1) Ask "where are you landing the container?"
      - 2) Visually verify the location w/ XPS and RMG cameras and monitor the entirety of the move.
      - 3) If cameras are unavailable and you cannot confirm location, ask the RDS Tech to take both RMGs out of queue until you can confirm the location of the container.
    - ii. Non-Emergency Landing. When an RDS technician requests a position in which to land a container, the OCC AOM will follow the below steps.
      - 1) Confirm RMG number and the size/type of container.

- 2) Search in XPS for a valid position and once a valid position is found, give the position to the RDS technician in the following format: Tier Height, Bay, Cell.
- 3) Avoid giving 5-high positions, if possible. If 5-high is the only position available, the OCC AOM will watch the entirety of the move.

**c. Motor Carrier/OTR steps off the pressure mat during RMG container delivery.**

- i. In the event an OTR driver steps off the pressure mat during a move the ROS operator in control of the RMG will use their desk phone to intercom to the driver and ask them to step back on the mat.
- ii. Notify the inside exceptions clerk that the driver in stack (x), lane (x) has stepped off the mat.
- iii. The inside exceptions clerk will use their radio to notify the ROS ground-man/outside exceptions clerk to drive to the stack to determine why the driver stepped off the mat and to have the driver step back on the mat.
- iv. If the driver does not immediately step back on the mat or has communicated an issue, the ROS Groundman will proceed to the stack and upon arrival, park in a position to block the truck in the lane and notify the Exception Clerk or the operator by radio.
- v. For adjustments, the ROS Groundman will stand next to the mat and require the OTR driver to remain on the mat.
- vi. For locked pins, the Groundman will have the OTR driver step off the mat to ensure the RMG cannot operate while the OTR driver adjusts the pin lever.
- vii. Once the Groundman is finished with the task and clear of the operating space, have the OTR driver step back on the mat and notify the operator.
- viii. The only time the Groundman is permitted to stand on the mat is when the OTR driver has departed without canceling the transaction. This will permit the ROS Operator to cancel the transaction.

**d. Manipulating the RMG while technicians are troubleshooting**

- i. If an RMG is being stowed, notify the OCC AOM and ACM.
- ii. RDS technician will take control of the RMG and place it out of queue.
- iii. RDS technician will remain at the station and stay in control of the RMG while technicians are on site, unless technicians on site take control by selecting local mode or E-stop.
- iv. Establish radio communications on a designated channel, other than the main channel, with technicians that are responding to the trouble call.
- v. Utilize all cameras available to look for safety issues that may arise.
- vi. **WARNING:** Before commanding any crane function movements, even if requested by the technicians on site, you must check that all techs are clear of danger.
- vii. If forces in the PLC are needed, contact the ACM on duty to enter the password for level-3 access.
- viii. Upon completing the job, report all forces or bypasses that were placed during maintenance to the ACM on duty.
- ix. Verify all technicians are out of harm's way before returning the RMG back in queue.

- x. Verify with the ACM on duty before putting an RMG back in service.
- xi. Notify the OCC AOM when the RMG is going back into the queue.

**e. Recovering downed containers**

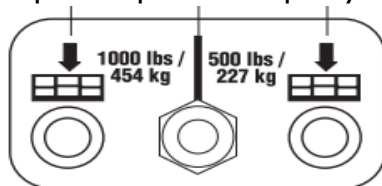
- i. Understand the location of ALL downed containers.
- ii. Note time, date and RMG number if the RMG impacted containers.
- iii. Make sure all automated operations in the stack are suspended – affected stacks RMGs are out of queue.
- iv. RDS techs will be granted sole control of RMG cameras. Other personal will refrain from taking control of RMG camera while maintenance is running a recovery operation.
- v. Ensure that there are no precariously positioned containers that could still fall.
- vi. Ensure the crane rails, gantry cable and cable tray have not been damaged.
- vii. Record the numbers on damaged/downed containers involved in accident.
- viii. Ask the AOM to obtain container weights and contents to ensure the area is safe.
- ix. If torch cutting is necessary, pay attention to tanks and other cargo in the vicinity.
- x. Determine if the containers can be retrieved safely by ILA maintenance crews. If required, contact WO Grubb or another crane rental company to put them on standby.
- xi. Lifting
  - 1) Assemble a recovery team to include an RDS Tech.
  - 2) Communicate the recovery plan with all Techs on the recovery team.
  - 3) Designate one Tech as radioman.
  - 4) The radioman will be the only Tech communicating with the RDS Tech when attempting a lift.
  - 5) The radioman must pay attention to the angle of hoist wires, trolley position, and gantry position before actually picking up a damaged container in order to prevent the wire ropes from jumping sheaves.
  - 6) When possible use a four-point pick.
  - 7) When possible, keep the bar in the 20' position when picking from only one end of the bar.
  - 8) The Radioman is solely responsible to ensure all persons are well clear of the potential container fall zone.
  - 9) Protect the gantry cable and trough with dunnage. Be mindful of preventing damage to the rail ties, rail clips, and pucks.
  - 10) If containers are laying on or against RMG visualize where the container will go when you move the machine, minimize additional damage to the machine, wiring, and motors, and protect machine components where it is feasible. Remove components if possible.
- ix. Container Recovery Notes
  - 1) Recovering damaged, bent or cut open containers can be very hazardous. The structural integrity of the containers will be compromised. Take your time when first attempting a lift. Place slight tension on the load to determine if the rigging will need to be adjusted.



- 2) When bringing a container out of the stack, position a technician with safe line of site to ensure the load will not contact other obstacles. (goal post or other containers)
  - 3) Keep in mind the RDS operator has a limited view from the trolley PTZ camera
  - 4) The TAC I channel is not suitable for this type of operation due to the delay. An STS channel with no delay is needed.
  - 5) The RDS operator will repeat any request to the radioman so everybody is 100% sure of what the RDS is going to do next.
- x. Tools/Equipment that may be needed.
- 1) 11 ton hooks/15 ton shackles/31,000 lb. polyester slings (nylon covered) – Inspect slings.
  - 2) Aerial lift/Ladders /Empty cassettes/UTR/Telehandler/Reach stacker
  - 3) Dunnage 6 x 6/2 x 4/4 x 4/ plywood – Check with out-of-gauge
  - 4) 2 X 8,000 lb. forklifts
  - 5) 20' x 4" x 6" x 1/4 wall rectangular tubing are handy for deflecting a sliding/falling container

7. Aerial Lift use to change an RMG Hoist Wire

- a. Before any employee is permitted to accomplish this task, a review of this written procedure and a practical demonstration will be accomplished under the supervision of a crane maintenance technician.
- b. Only Genie Lifts in the 1,000 pound restricted mode may be used. The RMG hoist wire is 80 feet with a 15 foot lead weighs 171 pounds. The total weight of the technician, equipment, and materials, to include the wire rope, must be subtracted from the maximum platform capacity.
- c. The work area must be marked with two traffic cones or isolated with a jersey barrier.
- d. Conduct a pre-use inspection of the aerial lift.
- e. Lower the spreader bar to the ground and slack all Hoist and ACM wires. (Minimum 1/2 rotation of the drum.)
- f. **WARNING:** Inspect the Grip to ensure the cerations are in good condition and that the safety latch is working.
- g. Attach the grip to the aerial lift basket via wire rope to a fall protection anchor point. Then connect the hoist wire to the grip with a tail of 15 feet extending past the grip.
- h. **WARNING:** Move the platform capacity select switch to the left to select the restricted 1,000 pounds platform capacity.



- i. Move the engine idle select switch to the “turtle” position for foot switch activated low idle. Elevate the lift basket gradually and at the slowest practical speed to prevent the wire from swinging.



- j. **WARNING:** Prior to elevating the basket, verify that the wire rope is clear of any hazards on which it could become snagged. The groundman must be in position to observe but not be directly under the basket.
  - k. **WARNING:** Only lift vertically; do not pull the wire horizontally as it could cause excessive swinging. Minor lateral adjustments are acceptable once the lift is in position.
  - l. **WARNING:** The aerial lift may not be moved in a manner that places any side-load force on the lifting basket.
8. Shuttle Truck Interface
- a. Direct the Shuttle Truck back to the rack for maintenance, if possible.
  - b. If the Shuttle Truck cannot return to the rack, and must be approached in the open on the dock, park the maintenance vehicle so that the operator is facing you. If there is not enough space, pull into a position behind the operator, not in front the tires or behind the tires. Make either visual or radio contact before touching the ladder and if unable, depress the E-Stop. Switch from the busy Pier Watch frequency to an alternate maintenance frequency for calls that require a discussion with an operator.
  - c. North NIT: If container stack entry is required, first establish radio contact with the operator. If you lose radio contact with the operator, do not enter a row.
    - i. Block the row that you will enter on foot with the service truck and ensure the beacon is on to inform other operators from entering the same row.
    - ii. Before going into a row or a tight spot to assist an operator, ensure the operator knows that you are there with either radio or visual contact and from which way to expect your approach.
    - iii. Do not enter a row in which an audible machine gantry alarm is sounding or visual machine gantry warning light is flashing. Wait until the operator takes the machine out of gear and applies the parking brake.
  - d. When in the Shuttle Truck cab, sit in the seat, when able. This prevents the operator from moving the machine while the technician is troubleshooting.
  - e. When entering or exiting the maintenance facility, use a spotter with bar lowered to the I-high position and ensure the bay doors are all the way up/green light on at NIT.
  - f. When a Shuttle Truck is “down for maintenance” (DFM), exercise appropriate LOTO to prevent use of the equipment.
9. Colony Tire Wheel Change Procedure
- a. Maintenance Management will notify the Colony Tire representative of the equipment# that needs to be serviced and the work location.
  - b. Visually confirm that no operator is in the equipment prior to approaching, turn on vehicle strobe/flashers, place cones to define the work area, remain inside of the

coned area, and depress the “E-Stop” on the ground level to ensure the machine cannot be operated.

- c. During the work, follow all OSHA requirements, deflate tires before removal and do not inflate until mounting/torquing, use the remote control “tire hand” clamp to move tires from a protected position, reset the “E-Stop when complete, and notify maintenance management after departing the work area.

## ➤ **Vehicle Maintenance**

### I. Reach-Stacker/Top-Loader/Side-Loader Maintenance

- a. When moving from one operational area to another, a Groundman will provide escort with two-way radio contact and will drive within 100 feet of the machine to assist the operator in identifying obstacles. At NIT, be particularly cautious for power line and vertical obstacle clearance.
- b. At the end of each shift, park the equipment in an approved parking space, set the parking brake, tilt the mast slightly forward, idle for 30-60 seconds, and turn ignition switch to off.

### 2. Remote Fueling

- a. When remote fueling, two technicians are recommended for the operation. One tech is responsible for driving the vehicle and the other is responsible for the fueling hose. Always park the truck in a position to provide protection from other passing vehicles/equipment. Keep the amber beacon on, if equipped.
- b. Complete a 360-degree walk-around pre-inspection of the vehicle before use and check the following:
  - i. Placards present and in good condition
  - ii. Hoses and piping free from leaks, kinks, and frays
  - iii. Fire extinguisher is full and in good condition and mounted in a bracket
  - iv. E-Stop(s) identified
  - v. Fuel hatch is secured
  - vi. Top-fill area, and ensure it is clean and draining properly
  - vii. EMS book is available
  - viii. HAZMAT cleanup supplies are stocked in accordance with checklist
  - ix. Storm water drain cover on board
- c. Fueling Operations
  - a. When fueling equipment, keep hands on the fuel nozzle at all times when it is out of the storage location.
  - b. When moving the fuel truck, ensure the hose is fully spooled and in the locked position.
  - c. Do not pull the hose by the nozzle handle. Pull the hose itself.
  - d. If any fuel is spilled, follow the POV Response Guide for proper cleanup.
- d. Filling the Fuel Truck
  - i. Engage the parking brake
  - ii. Inspect the fuel island for proper operation
  - iii. Inspect the dispenser for leaks.
  - iv. The ground man will ensure the E-Stop is manned.
  - v. Do not over-fill the posted truck capacity.
  - vi. Return fuel nozzle to storage and inspect for leaks.

- vii. Restock HAZMAT cleanup supplies used during operations.
- viii. Park the vehicle in a contained area and away from drains and engage the parking brake.
- ix. Complete a final walk-around and verify no leaks before departing.
- x. Immediately report any leaks or faulty equipment to the AVM/Supervisor. Log discrepancies on the provided checklist.

### 3. Split Rim Tire Replacement

- a. PPE: ANSI-2 shirt/vest or mechanics uniform, safety shoes, gloves, safety glasses, and hearing protection.
- b. Jack up the rear axle 1-2 feet to get the tires off of the ground.
- c. Inspect the rim to determine if it is a split-rim tire. Look for the following:
  - i. 10:00-20 marking on the tire indicates a split-rim, 11:00-20 indicates that it is not a split rim.
  - ii. If the rim of the tire is flat, then it is a split-rim.
  - iii. If the valve stem is oblong, it is a split-rim.
- d. The tire pressure can range from 90 PSI – 110 PSI. Depressurize the outer tire first by bleeding the air until it stops audibly bleeding air. Approximately 10-15 PSI will remain in the tire.
- e. Repeat this process for the inner tire.
- f. Loosen the lug nuts in a circular pattern approximately  $\frac{3}{4}$  of the way. Do not completely remove the lug nuts.
- g. Tap the wheel wedges with a hammer to loosen all of the wedges.
- h. Back lug nuts off completely and store them.
- i. Remove wheel wedges. Dismount the affected tire. Replace the inner tire.
- j. Place spacer ring in-between tires.
- k. Mount the outer tire.
- l. Install the wheel wedges.
- m. Hand tighten all lug nuts.
- n. Use an impact wrench (torque set to 250 lbs.) to tighten the lug nuts in a star pattern.
- o. Inflate tires to 90 PSI.
- p. Lower jack and remove all tools from work area.

### ➤ Facilities Maintenance

- 1. Line painting
  - a. Notify the appropriate operations manager of the location and time period that lines will be painted.
  - b. If any employees are working on foot, a physical boundary must be established to create a protected area from passing traffic and equipment.
  - c. When painting “long lines”, the line painting truck must have warning lights/flashers illuminated.
  - d. Inform the operations manager when the area is placed back into service.

### 2. Procedure Development

- a. Water Truck Filling procedure
  - b. Changing Reefer Plugs
    - i. Assess damage before approaching – could be energized
    - ii. Individual Plugs
    - iii. Main Feed for all plugs
    - iv. Reefer plug tester (plugs into reefer plug) is PPE Necessary?
  - c. Building Generator Checks (Tony)
  - d. Checking Rail Tracks (Dennis)
    - i. Lubricate rail switches
    - ii. Gauge width
    - iii. Repair switch stand
  - e. Trench Drain replacement
  - f. Aerial lift use for light bulb replacement on high mast poles
  - g. Sign Making
    - i. Shear
    - ii. Break Press
  - h. Aerators in pond removal and cleaning in Summer time
  - i. Portable light tower towing, placement and startup procedure
  - j. Event tent setup breakdown
  - k. CRMG parking blocks and metal guard rail repair/reposition
    - i. Notify CM before entering CRMG Stacks
  - l. Installing/replacing Dock Ladders
  - m. PPE availability at NIT/VIG Fastenal Machines for FM employees
  - n. Elevator LOTO procedure (FM has keys to LOTO)
  - o. RMG Stack Entry procedure
    - i. Call RDS at NIT and VIG before FM techs enter single or double gate RMG Stacks
  - p. Lift station pump removal/replacement/maintenance
  - q. Gate arm wiring/repair/replacement mechanical as well
  - r. Dock Levelers repair and maintenance
  - s. Resetting vaults Fire sprinklers
2. M&R Empty Container Inspection Process
- a. The Hustler driver will pull into the empty container inspection area and stop.
  - b. The M&R Inspector will remain clear of the vehicle until the Hustler driver stops, at which point the Inspector will proceed to the container doors and open them.
  - c. Once the inspection is complete and the doors are closed, the M&R Inspector will walk away from the container and signal to the waiting hustler driver in their side mirror that they are clear to proceed. The hustler driver may not proceed forward until after receiving the signal to proceed from the inspector.

➤ **Parts Room and Inventory Control**

- I. Eye protection and Leather Gloves are required to release straps and banding. Be ready for the load to shift or the band/strap to recoil.

2. When opening containers with a knife, protect hands with leather gloves and cut away from your body. Be careful not to damage product on the other side of the barrier. Do not leave knives open or unsheathed when not in use.
3. Lifting an object that weighs more than 50 pounds requires a two-person lift or use mechanical means.
4. Adjusting shelving requires two people.
5. Do not store items on shelving or in the aisles that extend past the aisle lines. These lines are to indicate a safe path to travel or walk.
6. Store items in their designated locations.
7. Prior to operating a forklift in an aisle, cone off the aisle to prevent pedestrians from entering the area.
8. Prior to raising the forklift mast, verify the overhead space is clear. Watch for lights, piping, or other overhead obstructions.
9. Fully raise bay doors prior to operating a forklift into or out of the space. Do not rely on estimated clearances.

### ➤ Traffic Control Procedures

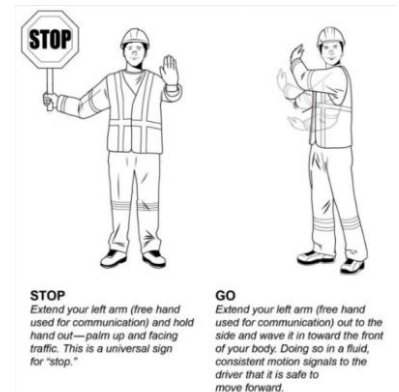
#### 1. General

- a. Position yourself to the side or on the shoulder of the traffic lane. Never stand in a traffic lane or in a position to get struck by moving vehicles or equipment.
- b. Be aware of chassis swing radius.
- c. Make eye contact with approaching vehicle operators.
- d. Have an escape route in case of an erratic approaching vehicle.
- e. At night, ensure the area is illuminated with at least 5 foot-candles of light.

#### 2. OTR drivers

- a. Ensure OTR drivers are stopped and make eye contact with the driver.
- b. Assume that the driver will pull away without notice.
- c. Do not step into the bite.
- d. Be aware of surroundings and other movements in the area.
- e. If the driver needs further assistance, direct them to a designated location out of the traffic zone.
- f. If traffic is too congested, get back in the pickup truck and call the VPA Police for traffic control assistance.

#### 3. Hand signals



### ➤ Tie-Down Procedure for Empty Container Stacks

1. Place the hook end of the strap into the corner casting of the five-high container.
2. Connect the ratcheting hook end of the strap into a new strap to help reach a diagonal I-high towards the opposite end of the stack. While lowering to the ground, keep tension on the strap so it does not come loose from the 5-high corner casting.
3. The depth/length of the stack will determine how many straps have to be connected.
4. To undo the straps, release the tension on the ratchet of the strap on the one-high container and remove the hook from the I-high container. Let the 5-high connected strap



hang until an aerial lift can be used to remove the hook end of the ratchet strap. A side loader can also be used to bring the 5-high container to the ground to remove the hook end.

➤ **Richmond Marine Terminal Barge Operations**

1. Communication
  - a. The Crane Operator, Checker, and Flagger are required to have a radio.
  - b. Only the Crane Operator, Checker, and Flagger may talk on the “Crane 1” channel, under normal circumstances.
  - c. The Checker will have two radios: one on “Crane 1” and one that will flip between “Yard 1” and “Yard 2”.
  - d. Dock personnel will utilize the “Yard 2” channel. Hustler Drivers, Toploader Operators, and the checker will use the “Yard 1” channel.
2. Prior to Operations
  - a. The Checker will ensure the Checker Booth is in place and all discharge paperwork is distributed to the Toploader Operator(s).
3. Moving the Crane
  - a. The crane operator will walk the crane using the remote unit while verifying a clear crane path.
  - b. The crane operator is responsible at all times to ensure the path of the crane is clear during gantry.
  - c. The Flagger must be in position to move the crane.
4. During Operations
  - a. Any person who goes on the other side of the bull rail must wear a life vest. There is an emergency life vest in the life ring cabinet on the pier and in the Barge Checker booth.
  - b. When moving the crane during operations, the Barge Checker will walk in advance of the crane to ensure a clear path while in communication with the crane operator. The Crane Operator is ultimately responsible to ensure that the crane tracks and the path of the boom are clear.
  - c. Dockmen shall not turn their back on a container while it is suspended from the spreader bar at any time.
  - d. Sitting or leaning on Pin Bins that are in operational lanes, is prohibited.
  - e. Containers may not be stacked on top of each other. Containers MAY be placed adjacent to each other on the dock.
  - f. At the completion of operations, remain in the area until released by the AOM.
5. Discharge from Crane to Bomb Cart
  - a. The Hustler driver will pull in next to the crane and the crane operator will use one horn blast for the driver to stop and two blasts to reverse.
  - b. Once the container is landed, Dockmen will remove the pins and place them in the pin-bins. Do not place pins on the ground as this causes a trip hazard.
  - c. As a container is being discharged, the Barge Checker will communicate the “stack number” to the Dockmen who will write it on the end corner of the container.
  - d. **WARNING:** The Lead Dockman will stand forward of the UTR on the driver’s side and **MUST** verify the clearance of all personnel around the bombcart prior to directing the UTR to pull away.

6. Discharge from Crane to Ground to Toploader to Bomb Cart
  - a. The Crane Operator will float the container until the Dockmen remove the pins and the Lead Dockman signals that all personnel are clear. Then the Crane Operator will place the container on the ground.
  - b. The Checker will state the stack number for each container and after it is on the ground, the Dockmen will write the stack number on the side of the corner.
  - c. Once all Dockmen are clear of the area, the Lead Dockmen will signal this to the Toploader Operator, who will pick up the container and back up to allow the Hustler driver to pull adjacent to the container. The Toploader Operator will signal the proper positioning of the bombcart/chassis for loading with one blast to stop and two blasts to reverse.
  - d. When past the Customs Portal, the Hustler Driver will announce the stack location on the "Yard 1" channel.
7. Loadback from Bombcart
  - a. Dockmen will stand in the designated pin area, which will remain a minimum of 25 feet in advance of the crane.
  - b. Hustler Drivers will approach the area following the direction of the Lead Dockman.
  - c. Once the hustler has completely stopped, the Dockmen will approach and pin up the container as it rests in the Bombcart.
  - d. The Dockmen will back away and once clear, the Lead Dockman will signal to the Crane to accomplish the lift and for the Hustler Driver to depart the area.
  - e. Hustler Drivers waiting in line must remain at least 20 feet behind any bomb cart with personnel working around it.
8. Flagger responsibilities on the barge
  - a. Wear a life preserver and use the portable extension ladder to mount the barge. One of the Dockmen must hold the ladder when personnel are climbing up or down the ladder.
  - b. The Flagger is the eyes and ears of the Crane Operator and will assist with the following sensitive tasks:
    - i. To ensure all containers are "down."
    - ii. To monitor the list/trim of the barge.
    - iii. To communicate with the tug crew and Barge Checker of stowage issues.
  - c. If the Flagger directs the Crane Operator to stop at any time, either by radio with "STOP, STOP, STOP", or by the hand signal, the Crane Operator must cease all movement until the Flagger communicates it is safe to resume operations.
  - d. It is the responsibility of the Flagger to communicate the container stowage location to the Crane Operator. The Barge Checker will inform the Flagger of the desired storage location according to the Stowage Plan.
9. Post Operations
  - a. When finished, alert the AOM, park the crane, and complete the "shut down" sequence. When stowing the crane, the Flagger will walk in advance of the crane to ensure a clear path.
  - b. The Lead Dockmen will ensure that the Checker booth is moved to the bulk storage warehouse and all dock pin-bins are placed on the North end of the berth.

- c. Hustler drivers will park their equipment in the parking area behind the Maintenance facility. Equipment must be cleared of trash, windows and doors closed, and parking brakes set. Dismount equipment while facing the stairs.
- d. Top Loader operators will park their equipment in the wash area. Equipment must be cleared of trash, windows and doors closed, parking brakes set, and the power switch turned to the “OFF” position. Dismount equipment while facing the stairs.
- e. The Barge Checker will submit all final paperwork to the AOM.

➤ **Richmond Marine Terminal - Scoular Operations**

1. General

- a. All employees must wear proper PPE when not in a vehicle to include safety shoes and ANSI-2 vest.
- b. While in a moving Hustler, all employees must wear a seatbelt.
- c. The Loader shall not stand directly behind the Hustler while it is backing up on the scale.
- d. No smoking in the Hustler or within 50 feet of the loader scale

2. Inspecting the Container

- a. Hustler operator arrives with container and opens the door for FGIS inspector. If operator is waiting on FGIS, operator can start to clean out container.
- b. FGIS inspector uses an A-Frame ladder to get into the container.
- c. Operator closes the door on the FGIS inspector for proper inspection to take place.
- d. FGIS operator notifies Hustler operator if the container is acceptable to use.
- e. FGIS inspector uses A-Frame ladder to climb out of the container.
- i. Hustler Operator opens both doors fully, latching the door open using the hook and the provided loop on the container. If loop is not present on the container door, operator is to use manufactured string and clip system provided to the drivers.
- f. Operator uses an A-Frame ladder to enter the container, cleans out all debris and material, then uses A-Frame ladder to get out of the container.
- g. Operator proceeds to the scale or the scale queue.

3. Backing up on the scale

- a. Operator will pull forward to line up with the Scoular scale.
- b. Operator will wait for clearance to back up from the ground man/loader.
- c. Utilizing the ground man/loader, the operator will proceed to back up on the scale, stopping when signaled by the groundman.
- d. Once operator is in position, the conveyor system will be turned on.
- e. Once loading starts, operator will listen for the horn to sound, signaling them to move forward until the sound stops, continuing this process until the conveyor is turned off.
- f. Once loading is completed, operator will hold in position for FGIS to come and inspect the load.
- g. Once the load is cleared by the inspector, Loader will close the door on the container.
- h. Operator will wait for the loader to advise when they may leave the scale.

4. Loader Responsibility

- a. While Hustler is backing up
  - i. Loader will ensure that the doors on the container are still open before signaling the operator to back up.
  - ii. Loader will be present at the scale to signal the operator when it is safe to back up.

- iii. Loader will inform the operator when to stop backing up
- b. After Hustler has backed up
  - i. Loader will place cardboard and dunnage in the back of the container
  - ii. Loader will notify the checker that the dunnage is in place and they can proceed to open the conveyor to load the container on the scale.
- c. Once container is loaded
  - i. Loader will stand by for FGIS to inspect the load.
    - 1. Once load is inspected, loader will close the door on the container.
    - 2. Loader will remove the rope and clip system that was placed on by the operator, if applicable.
    - 3. FGIS will seal the container
    - 4. Loader will notify the operator that they are clear to leave the scale.

### ➤ **Virginia Inland Port Operations**

- 1. Rail Operations
  - a. Norfolk Southern (NS) pulls in/out for five tracks.
  - b. The Securitas Officer or the Mechanics open or secure the rail gate.
  - c. The Manager, AOM, or Rail Foreman direct NS train placement and spot the train.
  - d. NS sets brakes on the rail car at each traffic break and locks down the train in the position, as directed.
  - e. The NS Utility Crew will set derailleurs on both sides of forked tracks outside of the gate leading to the main line after the train is placed.
    - a. A Groundman inventories the railcar containers in N4.
- 2. Groundman duties
  - a. Have a radio on the “Ops-I” channel.
  - b. The Groundman or Rail Foreman will set the blue light/blue flag prior to individuals working onboard the train to remove/set pins.
  - c. When in an operational area, the work vehicle must have the flashing roof beacon or 4-way flashers on. The truck will come to a complete stop if a SC is approaching in the same lane and may not be in the lane between a working SC on one track and moving railcars on an adjacent track.
  - d. Inspect the railcar ladder prior to use and use 3-points of contact when climbing. Do not shimmy along the side of a rail car, do not jump from a rail car, and do not walk or jump across the knuckle of a rail car.
  - e. When deramping, ensure pins are placed inside of the pin wells.
  - f. When walking next to the rail tracks, use caution for rail car movements in adjacent lanes, uneven pavement surfaces, and debris in the walking/driving area.
- 3. Straddle Carriers
  - a. SC will begin deramping from the exit side of the yard.
  - b. Use caution for work trucks in the rail lanes and OTR traffic in the roadways.
  - c. SCs may work the same section of track at the same time, but from opposite ends and must maintain at least one railcar of separation.
  - d. When unloading a hustler chassis/bomb-cart, the SC operator will hoist the container less than two feet and the hustler driver will pull forward one foot and come to a

complete stop to ensure the container is clear and then, shift to Neutral (N) with the foot brake applied until the SC departs. No radio communication is required unless there is a problem or safety concern.

- e. Containers may only be stacked a maximum of 2 high and in designated and marked locations.
  - f. SCs may only enter a container row from the end, and never through a gap in a row.
4. Hustler Operations
- a. Begin the pinning/depinning process at the exit side of the yard and work towards “the hill”. Work in tandem with the other drivers and in the same direction.
  - b. Do not work in the same lane in the opposite direction of another driver.
  - c. The ONLY reason Hustlers may drive down a track lane is to unlock/lock pins. They may use the hook pole to unlock containers.
  - d. When being loaded by a SC, drivers will remain in the Hustler in Neutral (N) with the seatbelt on.
5. Transfer Zone Operations
- a. The Groundman will receive the OTR Driver paperwork and direct a SC to obtain a container.
  - b. OTR Drivers are responsible for unlocking their pins prior to the arrival of the SC. The Groundman will remain in the work vehicle next to the OTR driver-side door and will visually confirm the driver has unlocked the pins.
  - c. The Groundman and the SC operator must ensure the OTR Driver is in the truck cab whenever the SC is over the chassis.
  - d. The SC Operator will lift up less than two feet and float the container to confirm no stuck pins PRIOR to fully raising and removing the container.
  - e. The Groundman will observe the lift and verify there are no stuck pins. If the chassis is lifted or a problem seen, the Groundman will transmit “STOP, STOP, STOP”.

➤ **Legend**

- 1. WARNING = An operating procedure, which if not carefully followed, could result in loss of life, personal injury, or damage to equipment.
- 2. STS = Ship-to-Shore Crane
- 3. UTR = Utility Tractor, commonly called Hustler
- 4. OTR = Over-the-Road truck or 18-wheel motor carrier
- 5. RMG = Rail Mounted Gantry
- 6. LSTZ = Landside Transfer Zone in RMG Stack
- 7. WSBA = Waterside Buffer Area in RMG Stack
- 8. CRY = Central Rail Yard at NIT
- 9. CRMG = Cantilever Rail Mounted Gantry
- 10. SRB/NRB = South Rail Bundle/North Rail Bundle
- 11. RTG = Rubber Tire Gantry
- 12. “Instructor” is a certified teacher of a functional area.
- 13. AOM = Assistant Operations Manager
- 14. POV = Port of Virginia
- 15. OOG = Out of gauge. Freight, such as a farm combine, that is not shipped via a standard intermodal container.

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Valid Certifier Signatures	Categories	Valid Certifier Signatures	Categories
J. McCarthy/Z. Clark/C. Gaba	All Categories	Peter Cooke/Greg Concepcion	SGC, UTR, Small FL, Lashers - CP&O
J. Windsor/P. Jefferson	All Categories	John Ackerman/Eric Mills	SGC, UTR, Small FL, Lashers - CP&O
Mike Charlem/P. Cusick	All Categories - NNMT	Mark Isenberg/Leo Murphy	SGC, UTR, Small FL, Lashers - CP&O
Drew Parrish/Art Ellermann	All Categories - PPCY/PCY	Ted Gayk/David Roper	SGC, UTR, Small FL, Lashers - CP&O
D. Demers/C. Sipe	All Categories - CM/VM	Zach Walden	UTR, Small FL, Lashers - HRSA
M. Renfrow/T. Swankler	All Categories - FM	E. Maley/Rob Diaz/L. Boles	UTR, Small FL - MRS
C. Saunders	All Categories - RMT	Joe Diaz	UTR, Small FL - ConGlobal
L. Cranford	All Categories - VIP	Andrew Deveau/Al Csicseri	UTR, Small FL, FCA - Cross Globe
R. Babski/C. Mize/C. Green	All Categories - Alternate	Shawn Allen	UTR, Small FL, FCA - Cross Globe
T. Boothe/S. Vecerdea	All Categories - Alternate	Patrick Foley	UTR, Small FL - JAZ
K. Bassham/R. Robinson	All Categories - Alternate		



## Port of Virginia/Hampton Roads Shipping Association Certification/Re-certification Document

Name of Operator \_\_\_\_\_ Port # / Employee # \_\_\_\_\_

Operator E-mail \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Initial Certification / Three-year Recertification

Post-Accident / Near Miss / Operational Standards Non-conformance [Does not update three-year recertification]

Instructor Initials indicate full review of each respective section in the POV Operational Standards.

➤ Ship-to-Shore Crane (SNOP)	Instructor Initials _____
➤ CMI Crane (CMOP)	Instructor Initials _____
➤ Straddle Carrier (Vessel/VCOF)	Instructor Initials _____
➤ Straddle Carrier (Transfer Zone/TZOP)	Instructor Initials _____
➤ Shuttle Truck (STOP)	Instructor Initials _____
➤ Ship Gang Certification (SGC)	Instructor Initials _____
➤ Foreman (FORE)	Instructor Initials _____
➤ Lasher (SSLA)	Instructor Initials _____
➤ Linehandler (SSLH)	Instructor Initials _____
➤ Locomotive (LOOP)	Instructor Initials _____
➤ Trackmobile (TMOP)	Instructor Initials _____
➤ Landbridge with Rail Grunt (LBDR)	Instructor Initials _____
➤ Reach-Stacker (RSOP)	Instructor Initials _____
➤ Top-Loader (TLOP)	Instructor Initials _____
➤ Side-Loader (SLOP)	Instructor Initials _____
➤ NIT Rail Reach-Stacker (RROR)	Instructor Initials _____
➤ Rubber Tire Gantry/Transtainer (TTOP)	Instructor Initials _____
➤ Rubber Tire Gantry/Transtainer –OOG Only (TTOP-OOG)	Instructor Initials _____
➤ Rail Mounted Gantry Remote Operator (ROS)	Instructor Initials _____
➤ Cantilever Rail Mounted Gantry Remote Operator (CRMG)	Instructor Initials _____
➤ Out of Gauge/Container Freight Station (OOGS)	Instructor Initials _____
➤ UTR/Hustler (HD)	Instructor Initials _____
➤ Translifter (TRAN)	Instructor Initials _____
➤ Small Forklift (FL15)	Instructor Initials _____
➤ Large Forklift (FLDR)	Instructor Initials _____
➤ Forklift Clamp Attachment (FCA)	Instructor Initials _____
➤ RMG Remote Crane Technician (MXRT)	Instructor Initials _____
➤ Crane Maintenance Equipment Operations - Part 1 (MXCMA)	Instructor Initials _____
➤ Crane Maintenance Regulatory Skills - Part 2 (MXCMB)	Instructor Initials _____
➤ Vehicle Maintenance Equipment Operations – Part 1 (MXVMA)	Instructor Initials _____
➤ Vehicle Maintenance Regulatory Skills – Part 2 (MXVMB)	Instructor Initials _____
➤ Facilities Maintenance Equipment Operations – Part 1 (MXFMA)	Instructor Initials _____
➤ Facilities Maintenance Regulatory Skills – Part 2 (MXFMB)	Instructor Initials _____
➤ Maintenance Boom Truck (MXBOOM)	Instructor Initials _____
➤ ConGlobal Top Loader (CG-TLOP)	Instructor Initials _____
➤ ConGlobal Side Loader (CG-SLOP)	Instructor Initials _____

By signing this document, the employee acknowledges a commitment to serve in this job function for the duration of the certification for which initial training was provided. This commitment does not apply to recertification training.

Trainee Signature \_\_\_\_\_ Date \_\_\_\_\_

For initial training, I verify that the trainee was instructed in all elements of the formal training syllabus. For recertification training, I verify that the operator was instructed in all relevant sections of the POV Operational Standards and observed to evaluate performance.

Instructor Name \_\_\_\_\_ Instructor Signature \_\_\_\_\_ Date \_\_\_\_\_

The above operator is certified in the following equipment, pursuant to the 29 CFR 1910.178(l), as modified by the maritime industry settlement agreement of July 14, 2000. Signing indicates certifier has reviewed operator's accident history.

Signature of Certifier \_\_\_\_\_ Date \_\_\_\_\_



## Port of Virginia Certification/Re-certification Document RMT/VIP

Name of Operator \_\_\_\_\_ Port ID#/Employee # \_\_\_\_\_

Operator E-mail \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Name of Instructor \_\_\_\_\_

Initial Certification / Three-year Recertification

Post-Accident / Near Miss / Operational Standards Non-conformance [Does not update three-year recertification date]

Instructor Initials indicate full review of each respective section in the POV Operational Standards.

- |  |                           |
|--|---------------------------|
| ➤ RMT Manitowoc Crane                  | Instructor Initials _____ |
| ➤ RMT Liebherr Crane                   | Instructor Initials _____ |
| ➤ RMT Barge Operations                 | Instructor Initials _____ |
| ➤ RMT Top Loader                       | Instructor Initials _____ |
| ➤ RMT Trackmobile                      | Instructor Initials _____ |
| ➤ RMT Hustler                          | Instructor Initials _____ |
| ➤ RMT Large Forklift                   | Instructor Initials _____ |
| ➤ RMT Small Forklift                   | Instructor Initials _____ |
| ➤ RMT Scouler Hustler                  | Instructor Initials _____ |
| ➤ RMT Scouler Loader and Gate Operator | Instructor Initials _____ |
| ➤ RMT Scouler Checker                  | Instructor Initials _____ |
| ➤ VIP Straddle Carrier                 | Instructor Initials _____ |
| ➤ VIP Groundman                        | Instructor Initials _____ |
| ➤ VIP Hustler                          | Instructor Initials _____ |

By signing this document, the employee acknowledges a commitment to serve in this job function for the duration of the certification for which initial training was provided. This commitment does not apply to 3-year recertification training, post-incident re-training, or POV Operational Standards non-conformance re-training.

Signature of Operator \_\_\_\_\_ Date \_\_\_\_\_

For initial training, I verify that the operator was instructed in all elements of the formal training syllabus. For recertification training, I certify that the operator was questioned in relevant sections of the POV Operational Standards and was observed operating the equipment during normal operations.

Signature of Instructor \_\_\_\_\_ Date \_\_\_\_\_

The above operator is certified in the following equipment, pursuant to the 29 CFR 1910.178(l), as modified by the maritime industry settlement agreement of July 14, 2000. Signing indicates certifier has reviewed operator's accident history.

Signature of Certifier \_\_\_\_\_ Date \_\_\_\_\_

➤ **Disclaimer**

These safe work procedures, referred to as the “Port of Virginia Operational Standards”, when used or applied outside the confines of Virginia Port Authority property, do not take the place of professional occupational health and safety advice and are not represented as meeting the requirements of applicable laws, regulations, and rules, including workplace health and safety laws and motor vehicle and traffic laws. The members of the Virginia Port Authority, Virginia International Terminals, and the Hampton Roads Chassis Pool II and their respective employees, officers, directors or agents (collectively the “Port of Virginia”) assume no liability for or responsibility for any loss or damage suffered or incurred by any person arising from or in any way connected with the use of or reliance upon the information contained in this document including, without limitation, any liability for loss or damage arising from the negligence or negligent misrepresentation in any way connected with the information contained in this document. The information provided in this document is provided on an “as is” basis. The Port of Virginia does not guarantee, warrant, or make any representation as to the quality, accuracy, completeness, timeliness, appropriateness, or suitability of any of the information provided, and disclaims all statutory or other warranties, terms, or obligations of any kind arising from the use of or reliance upon the information provided, and assumes no obligation to update the information provided or advise on future developments concerning the topics mentioned.