Casualty Lessons Learned
Two Case Studies

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Case Study One : Hazmat Incident Ports America Outer Harbor Terminal

- **The Event: February 27th, 2014 M/V Victoria Bridge**

While discharging Forty foot containers below deck the crane operator locked onto two twin twenty containers thinking it was one Forty foot Container. Locked in only the four outside corners of the 20s.

Upon reaching the Top of the cell guides the two Twin Twenty Containers broke free of the cargo spreader – falling back into the cargo hold.

One twenty foot container weighting 18 tons was a Class 8 Hazmat Container with 64 plastic drums of Potassium Hydroxide Solution- UN 1814

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Hazmat Incident
Ports America Outer Harbor Terminal

- **The After Action**:

Crane operator stated she thought she was lifting a 40' import rather than the twin 20's therefore she had the bridle in the 40' position. She believed it was a crane malfunction that allowed her to get a locking light and pickup twin 20's while in the 40' position. She states the previous containers she discharged at that Bay were 40's and that she was not informed the containers on this hoist were twin 20's.

Crane Walking Boss stated he did not know how the containers fell from the crane.

The Crane Walking Boss states he instructed the Crane operator to discharge all 40' containers first and then discharge the 20' pairs. Management did not get any further comments from the Crane Boss because he stated he wished not to speak further and left the terminal.

RSA was conducted both crane driver & walking boss

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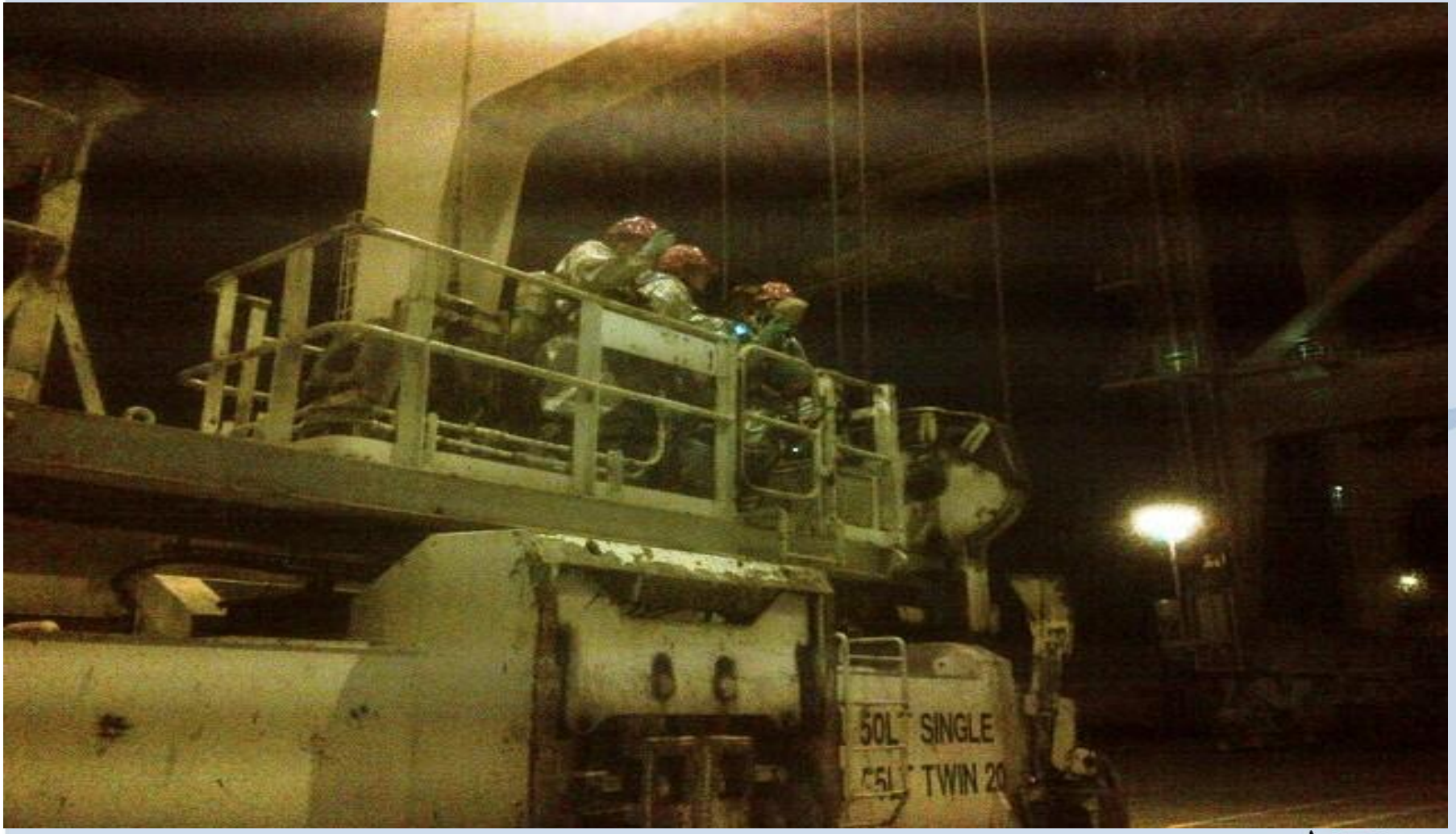
Oakland Fire Dept. on crane spreader going into the hatch for an Assessment which they passed off to the NRC team



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View of the Starboard side Stow of 20’ Foot Containers

Top view from the Starboard land side

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A View of the Bay 28 looking Forward

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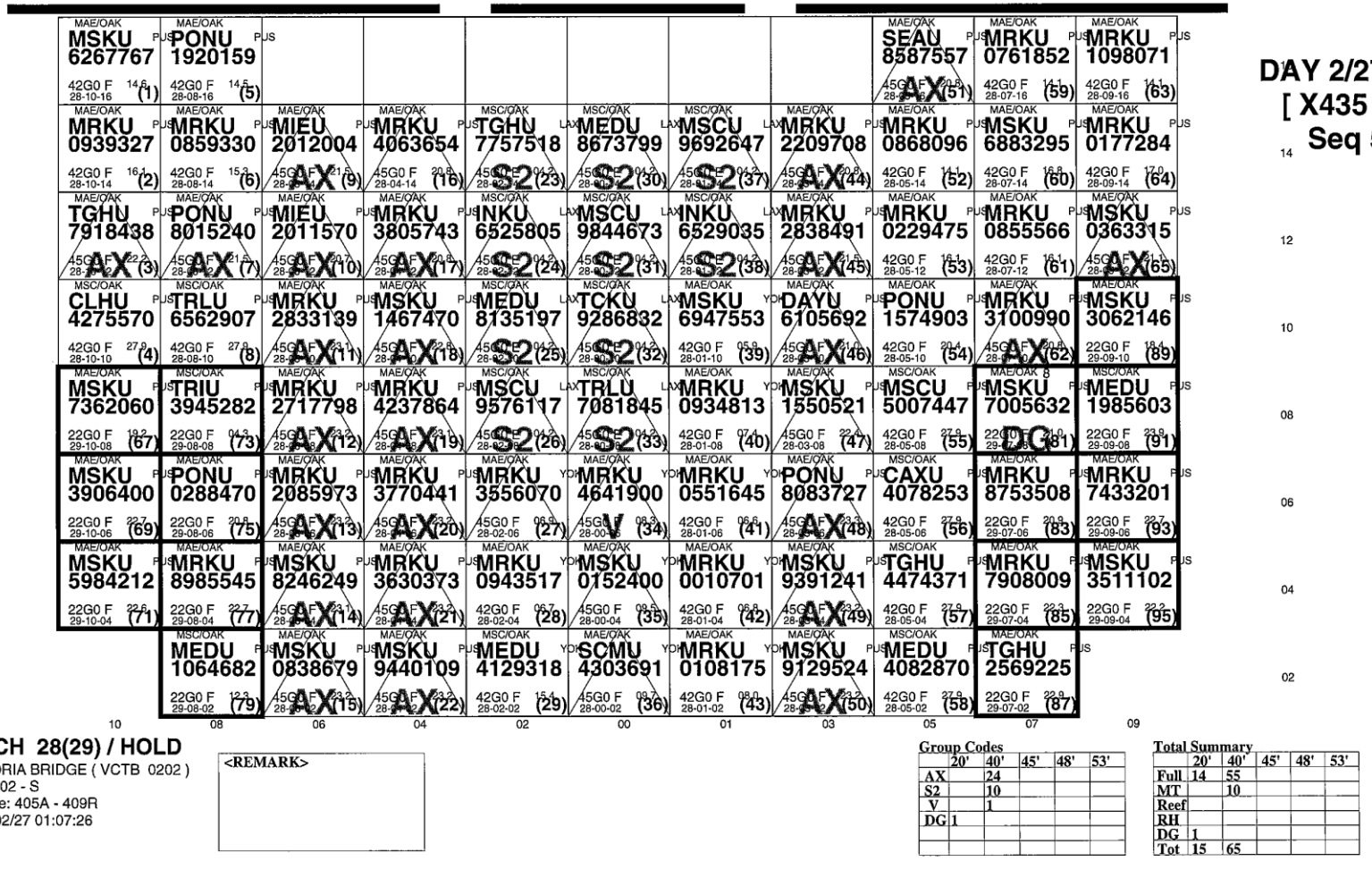
Stow plan marking the off the 20 foot Containers



Cargo Hold Clear of other containers - Final clean

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Damaged container being placed on a forty foot Flat rack for discharge to the dock stringer.

Damaged cargo on Flat racks on the dock

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Best Practices / Lessons Learned

1.Ensure a safe evacuation of your labor force.

2. Designate a safe location and do a head count of labor.

3. Coordinate and interface a notification with all involved or could be involved in the Hazmat incident.

4. Provide and have in hand an MSDS information for Fire Department and First Responders.

5. With locate knowledge interact with Fire and Responders.

6. Do an After Incident Analysis for process improvement and training Elements.

7. Inform the USCG and others involved in the response.

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Case Study Two : Vessel Crane Damage / Near Miss Environmental Fuel Barge Incident

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- On July 31st. 2009 at 1155 hours a dock side crane while gantrying hit the Vessel's Crane.
- This collision between the Dock side crane and the crane aboard the vessel Polynesia. The ship's crane was under repair at the time of this incident and the collision occurred while gantrying the Dock crane to a new hatch just prior to Lunch.
- As a result the vessel crane's jib mountings were broken on the port side as well as the mounting bolts were broken at the heel block area.

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M/V Polynesia with aft # 2 boom low and over the Port side in the proper operational stow.

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Tug and Bunker Barge along the Port side

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Aft ship’s crane boomed up over the std’b side

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Vision of the dock Crane driver blocked by the leg of Crane 435 as he moved to a new Hatch

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Technical problems were occurring with the ship's crane and a shore repair crew was working on the ship's crane at the time of the Incident.

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The Dock crane was in the boomed up position while gantrying aft. Collision sensors on the shore crane are not active in the boomed up position.

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Smaller Vessels when taking Bunkers will cause the work area of the barge to extend in the cargo hatch area.

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Suggested Best Practices When Bunker Barges Are Fueling Container Vessels

- **Bunker barge personnel have experienced objects as lashing bars, cones and recently containers falling onto the barge.**
- **Advance notification should be sent by the carrier representative/agent to the terminal that bunkering is planned for the ship while alongside.**
- **Terminal operators should incorporate the advanced notification information of bunkering into the crane letter of operation.**
- **All parties need to communicate information that would affect the safety of the bunkering operation.**
- **The walking bosses/foremen should include bunkering information into the safety talk to the longshore workforce.**
- **When and where possible, bunker barges should be secured alongside the vessel's accommodation (the house).**

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Summary

- There were No injuries to personnel and No environmental impact as a result of this Collision incident.
- The damage event and repair factors did reach close to $500,000 dollars.

QUESTIONS

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