



## INTERMODAL INSPECTION PROGRAM

J.S. Blake: President  
N. Schuyler: Vice President

# SAFETY



## Recommended PPE:

- Hard Hat
- Enhanced Visibility Workwear
- Safety Glasses
- 6" Lace-up Steel Toe Boots



# OBJECTIVES

Identify Components of Intermodal Equipment

Review Section F Damage

Properly Identifying Damage for Handheld/J1/J2

Coverage for Your Company

# Objective 1

Properly Identifying the  
Components of Intermodal  
Equipment

# Left (L)



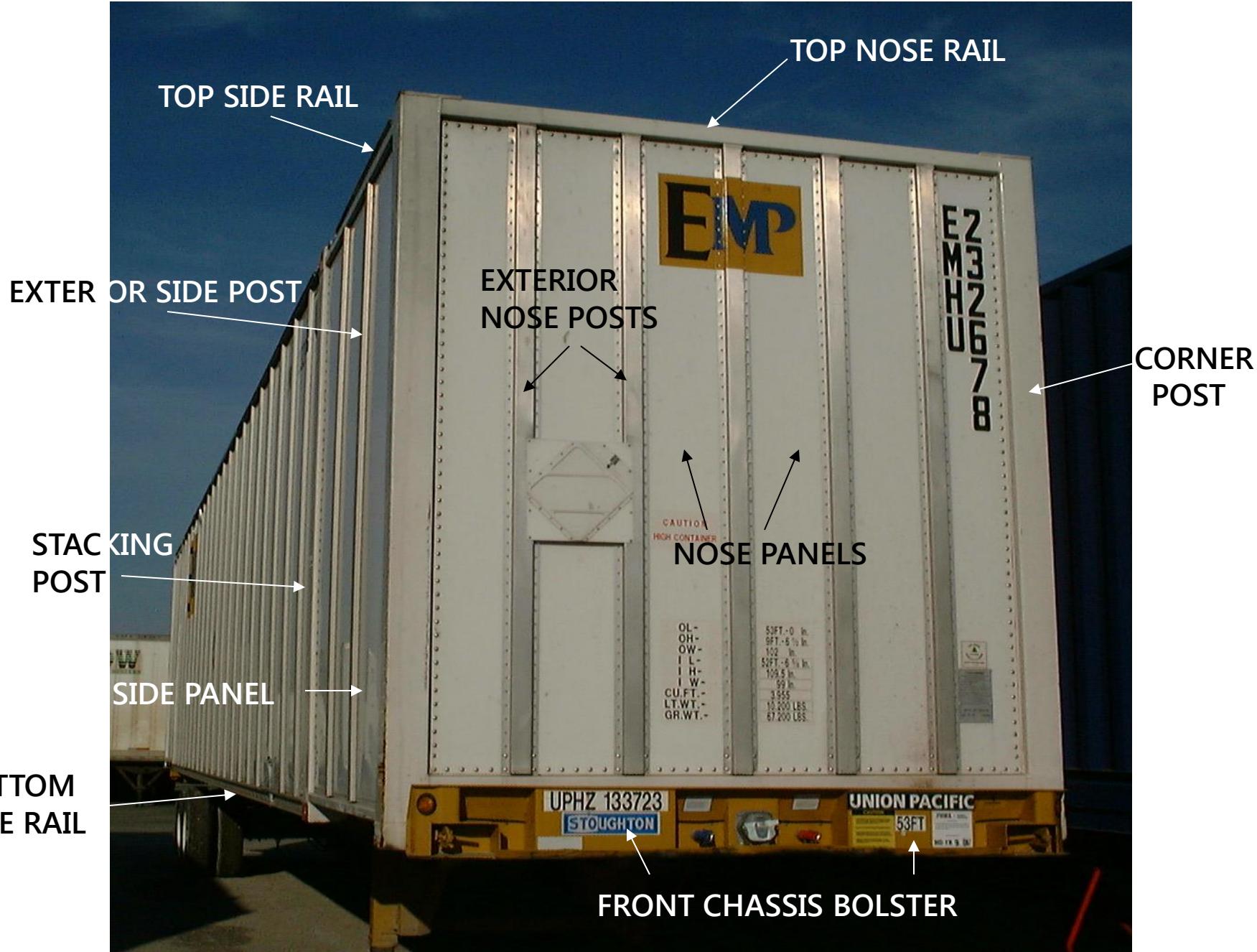
# Right (R)

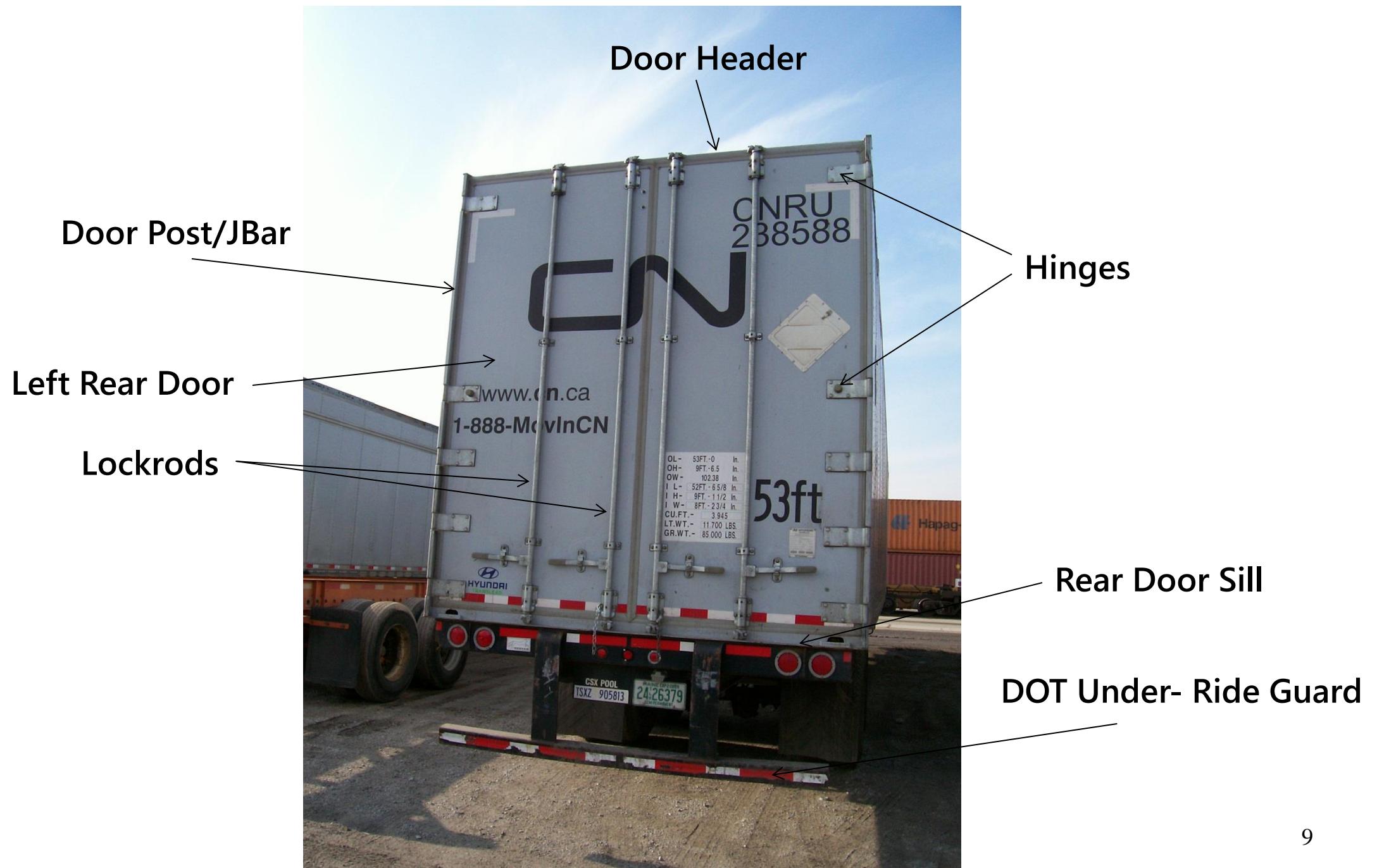
# Right (R)



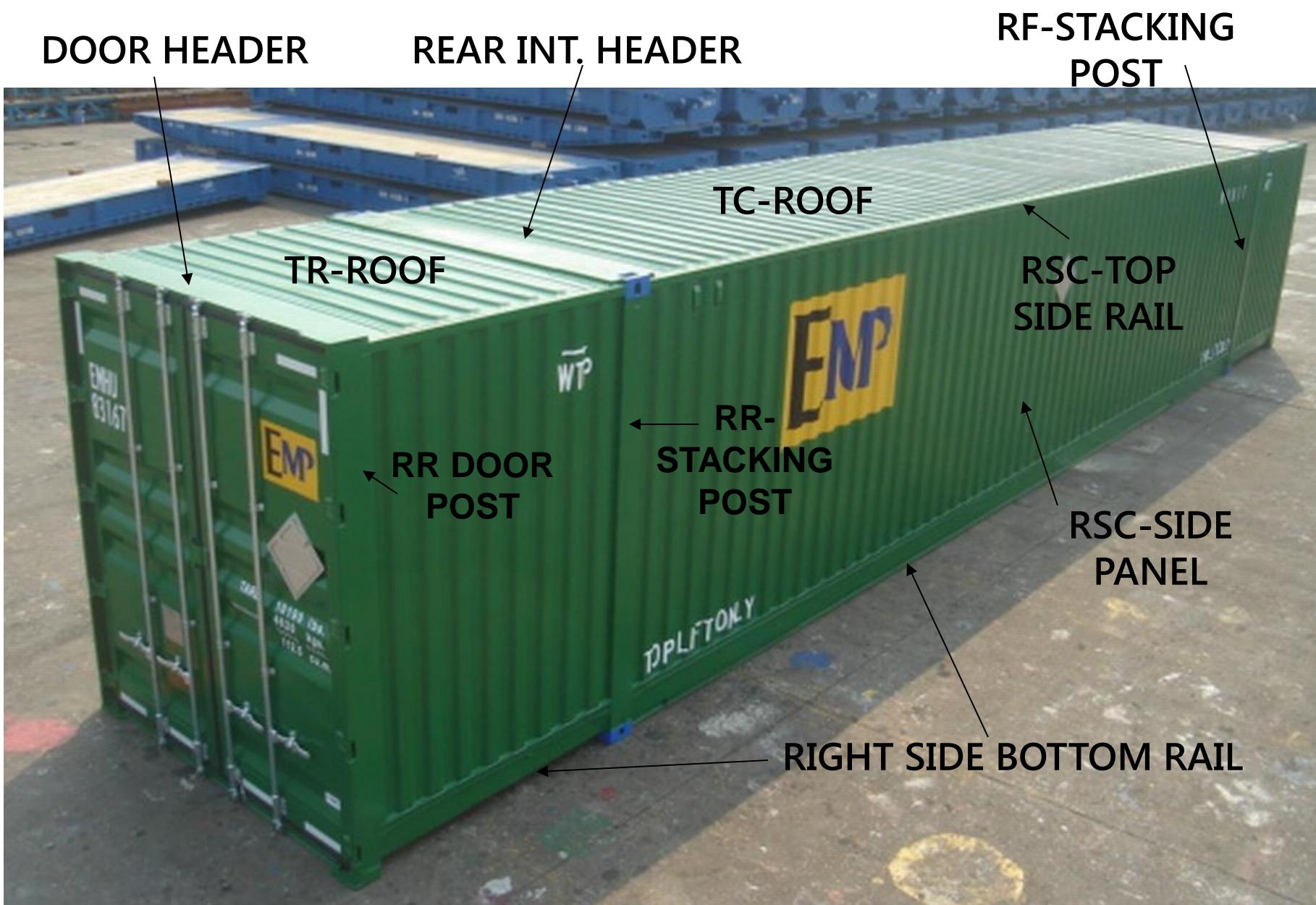
# Left (L)

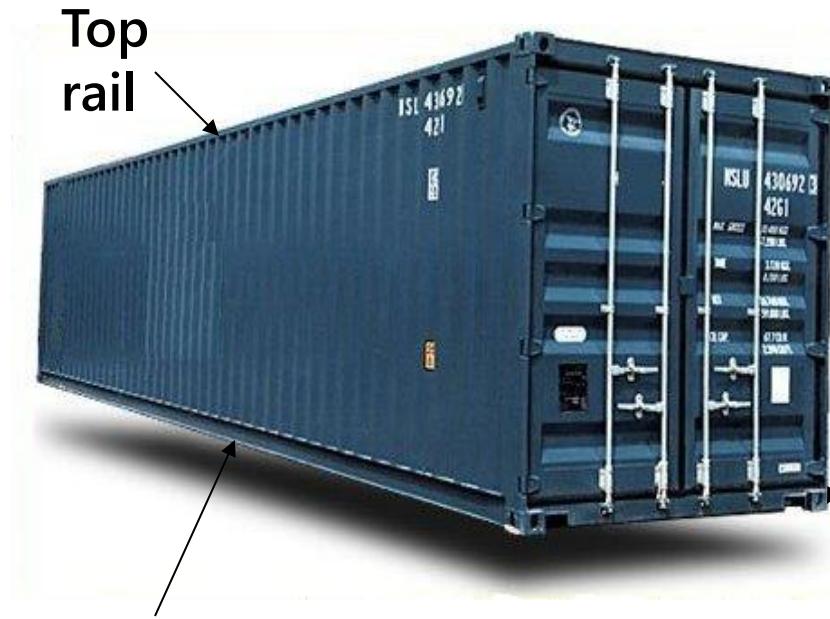
# Aluminum Container





# Steel Container





Top rail

Bottom rail

Corrugated panels

Steel boxes 40ft. and under have corner castings

Steel boxes 45ft. and over have stacking posts

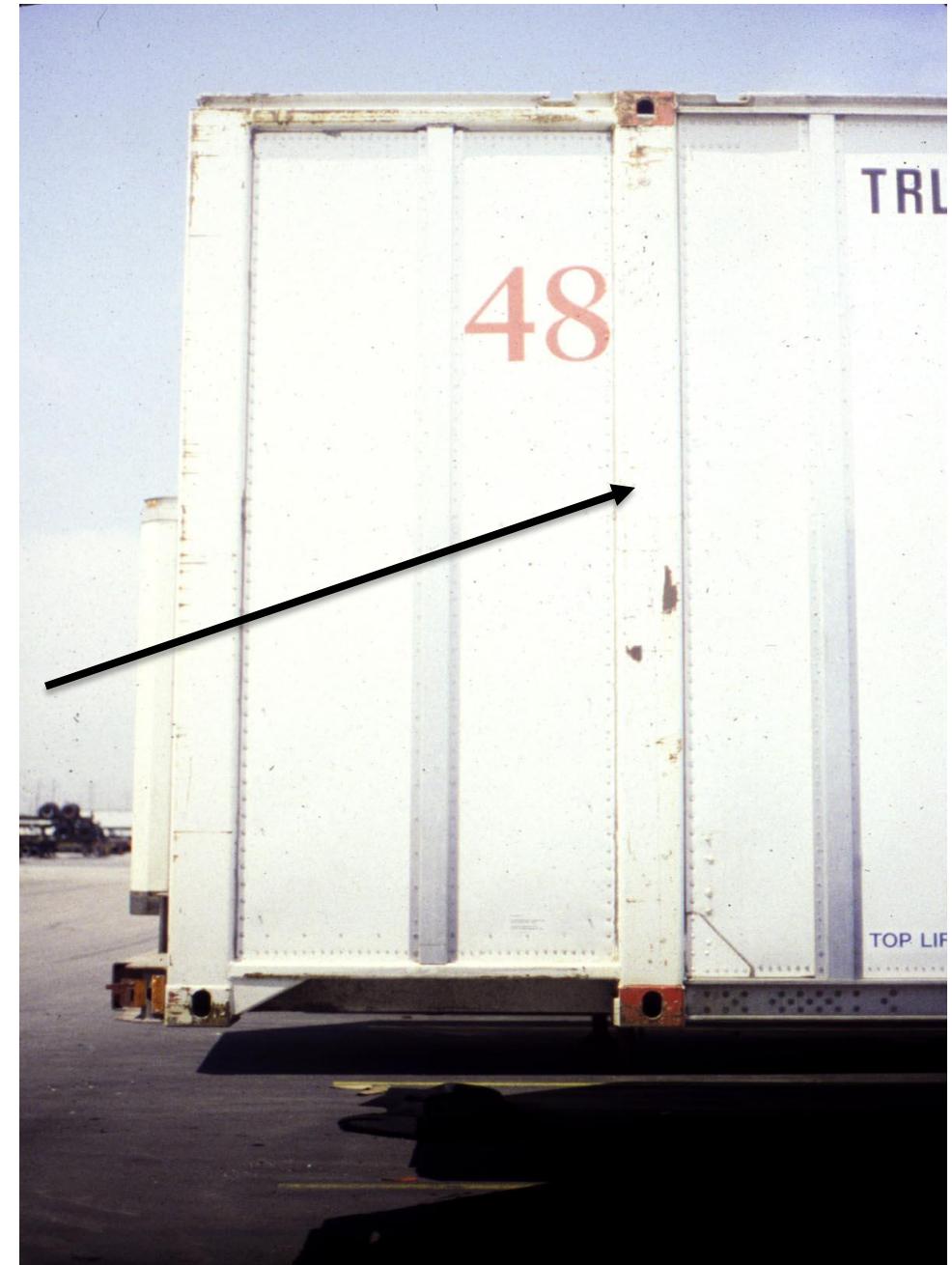




Stacking Post

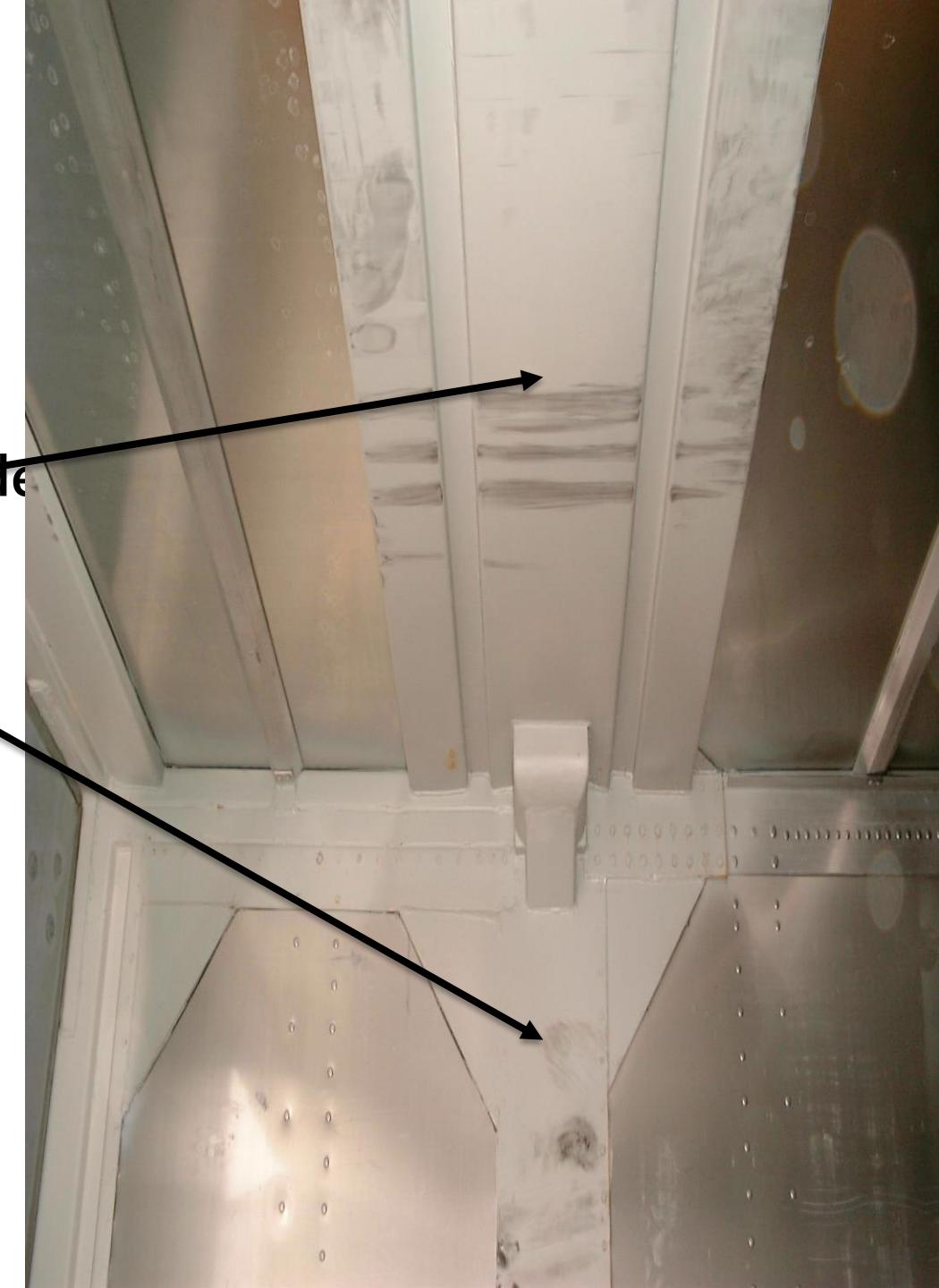
Steel Cont.

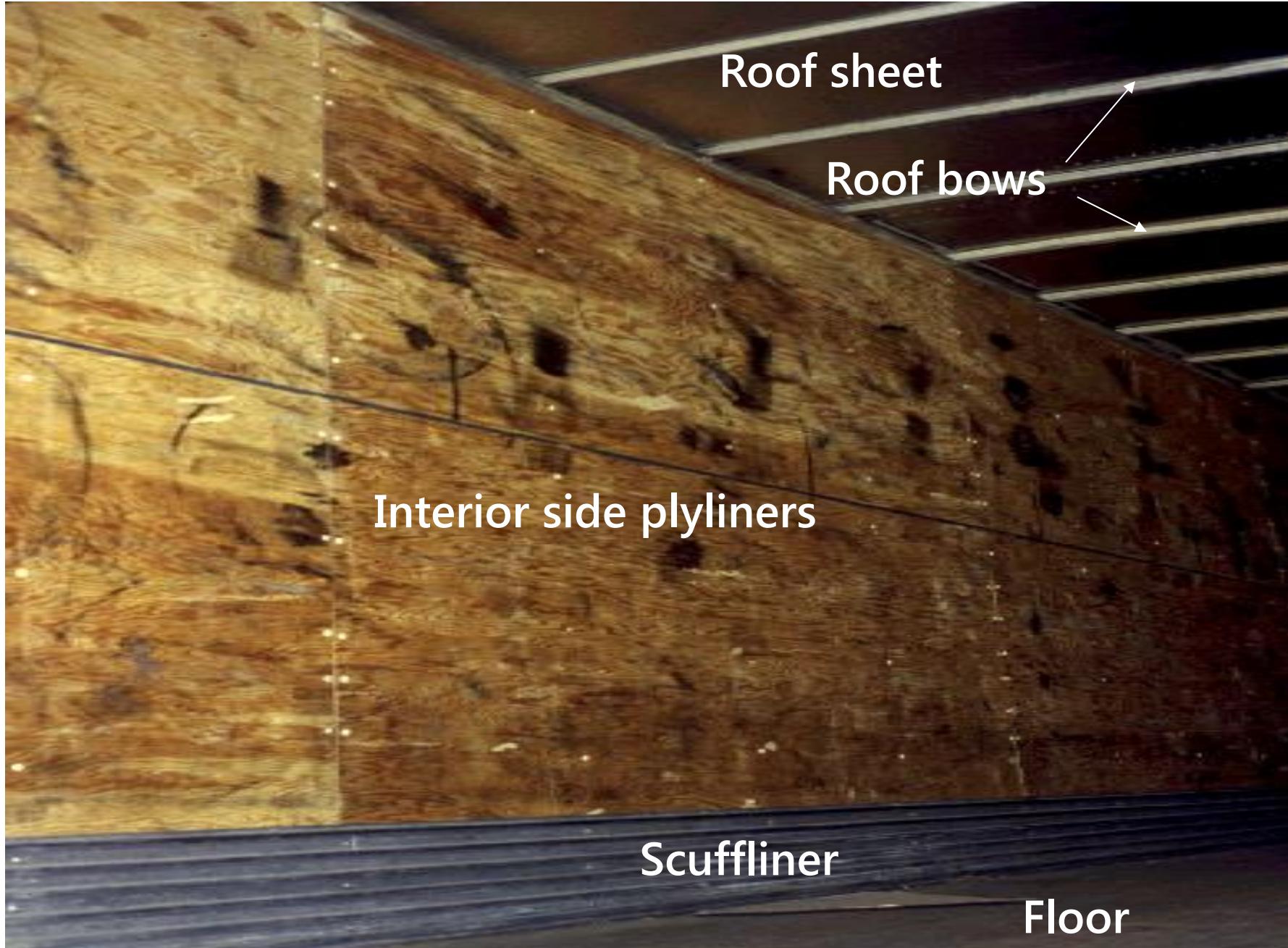
Aluminum Cont.





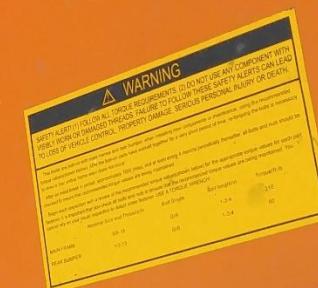
**Interior View of  
Intermediate Header  
Stacking Post**





Floor

Crossmembers



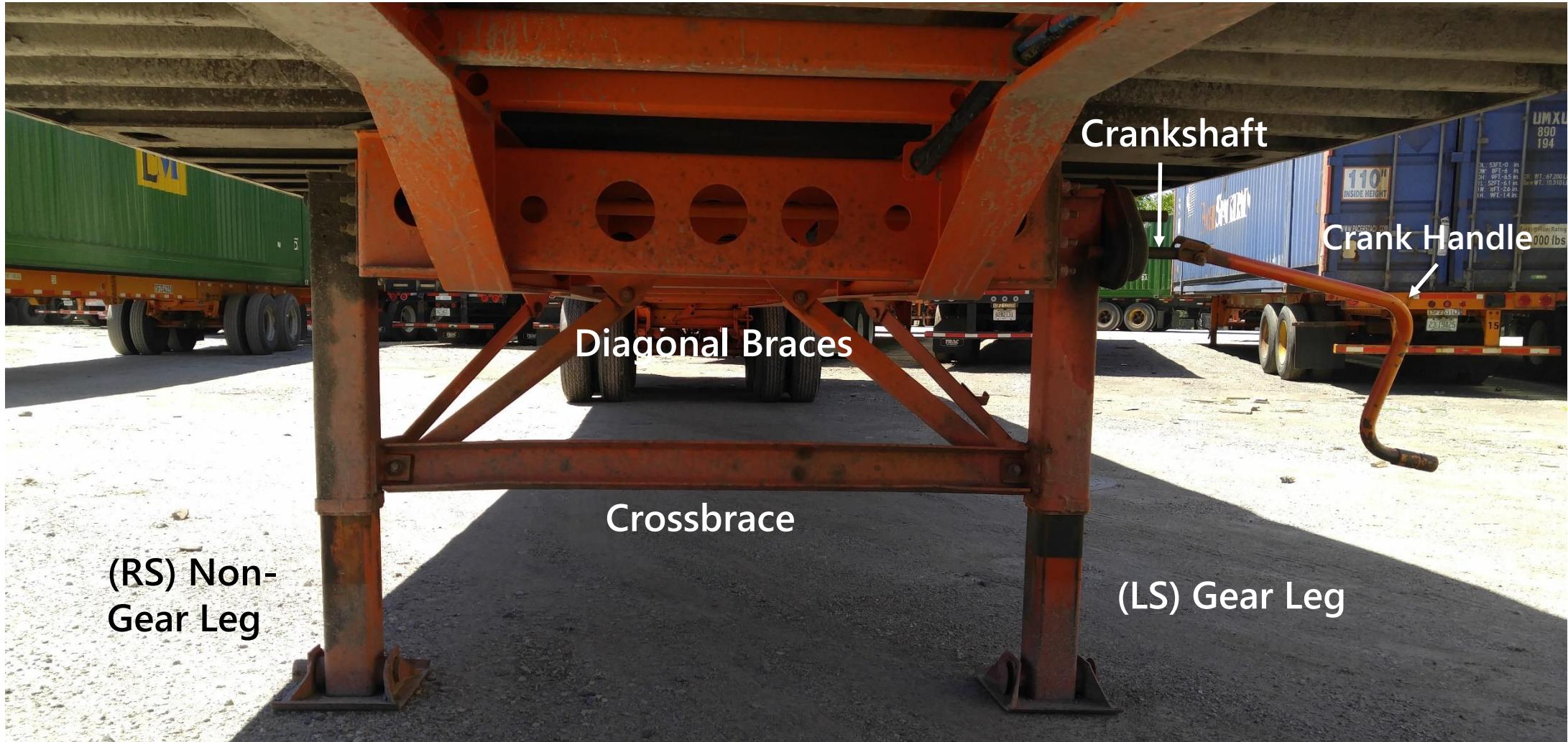
TARE WT. 7,400 LBS.

53'

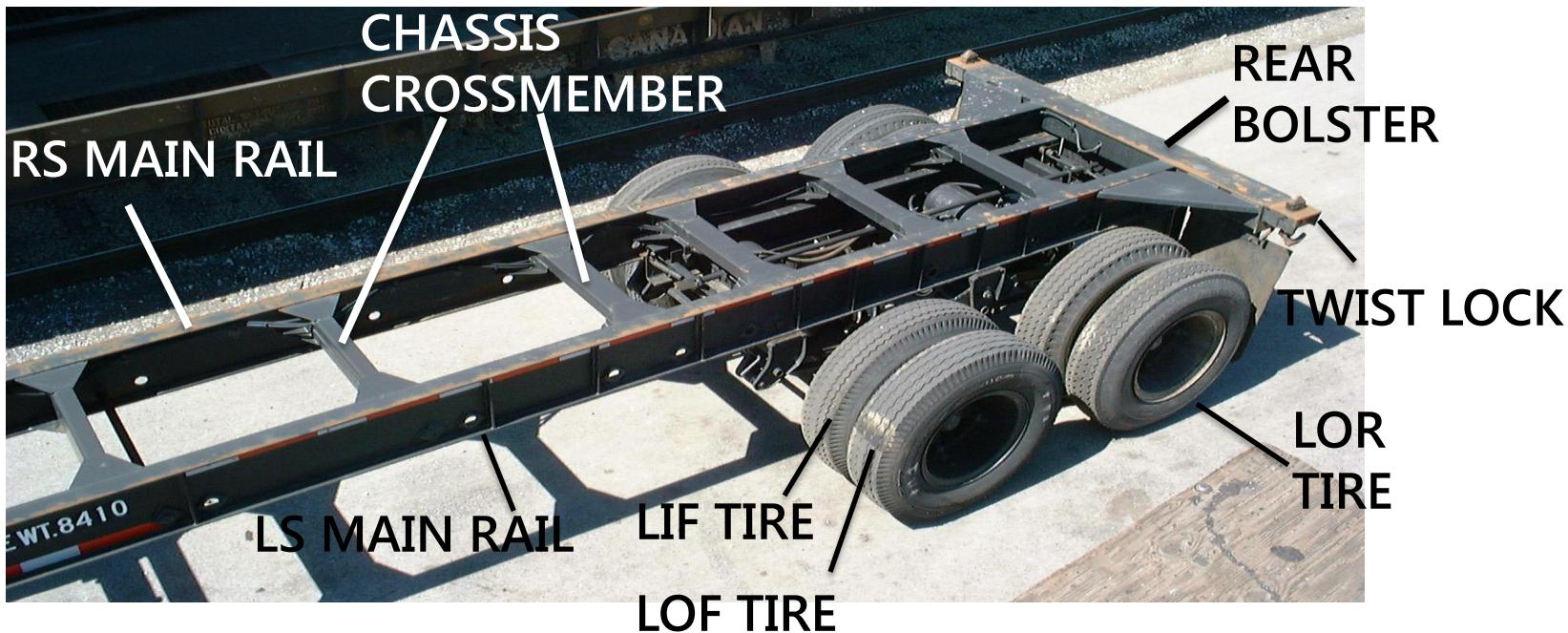
TSFZ 557747

EMP

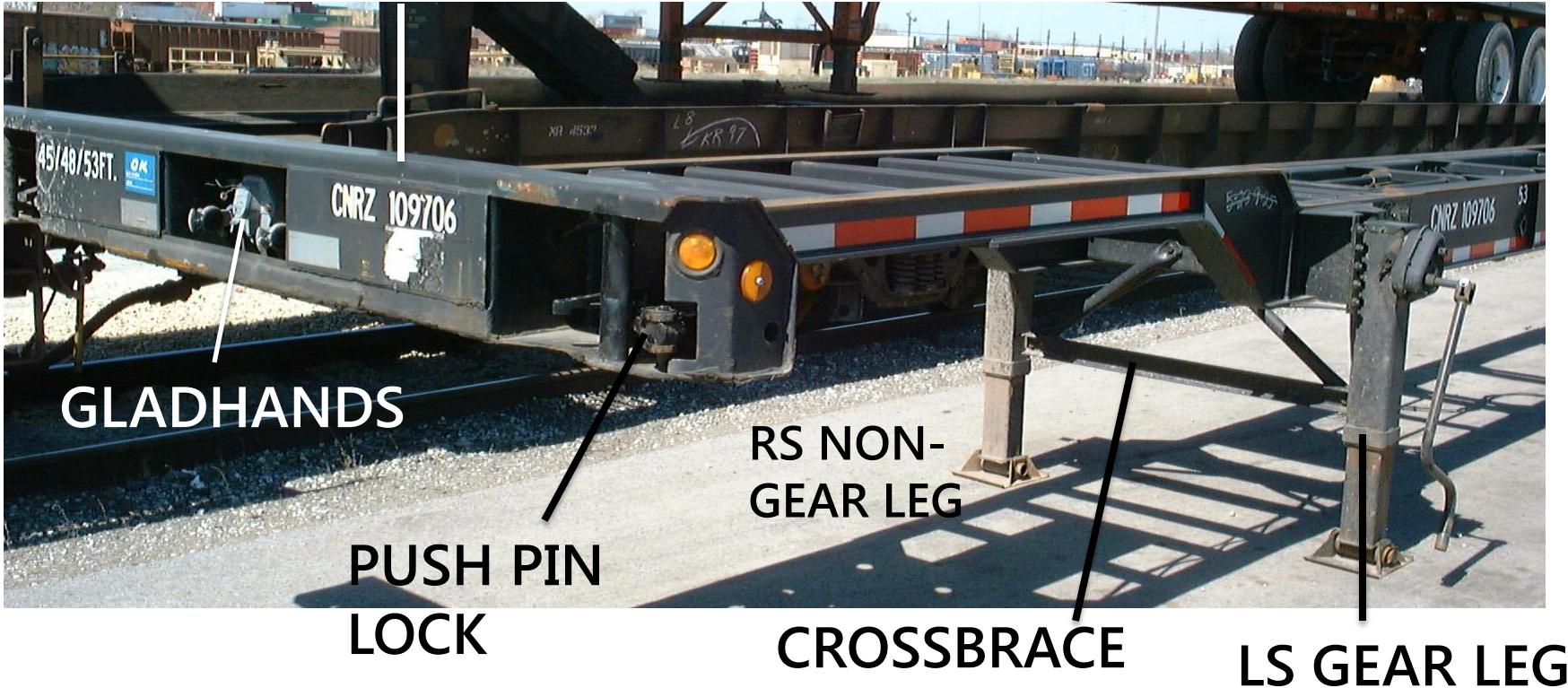




## FRONT BOLSTER



## FRONT BOLSTER



# Objective 2

## Section F Damage

## Section F. Damage

### 82. Damage—Evidential

Handling carriers are responsible for damage as follows:

- a. Metal door, gate, sheet, post, crossmember, brace, or support cut or torn through thickness of metal, including such cuts or tears covered by tape, caulk, and/or tar
- b. Metal door, gate, sheet, post, crossmember, brace, or support bent, where proper operation or function of unit is impaired, except when caused by deterioration due to corrosion or Decay
- c. Clean Interior
- d. DOT Under Ride Guard missing or damaged per Appendix B15



## Section F. Damage (continued)

- e. Tire sidewall cut/punctured, exposing belt material
- f. Tire shoulder and/or tread cut/punctured, exposing belt material, when such injury is larger than 1/4 in. When the tire shoulder and/or tread is punctured through the tire, causing a hole 1/4 in. in diameter or less, the injury must be patched prior to reuse.
- g. Tires Slid Flat
  - (1) Replacement

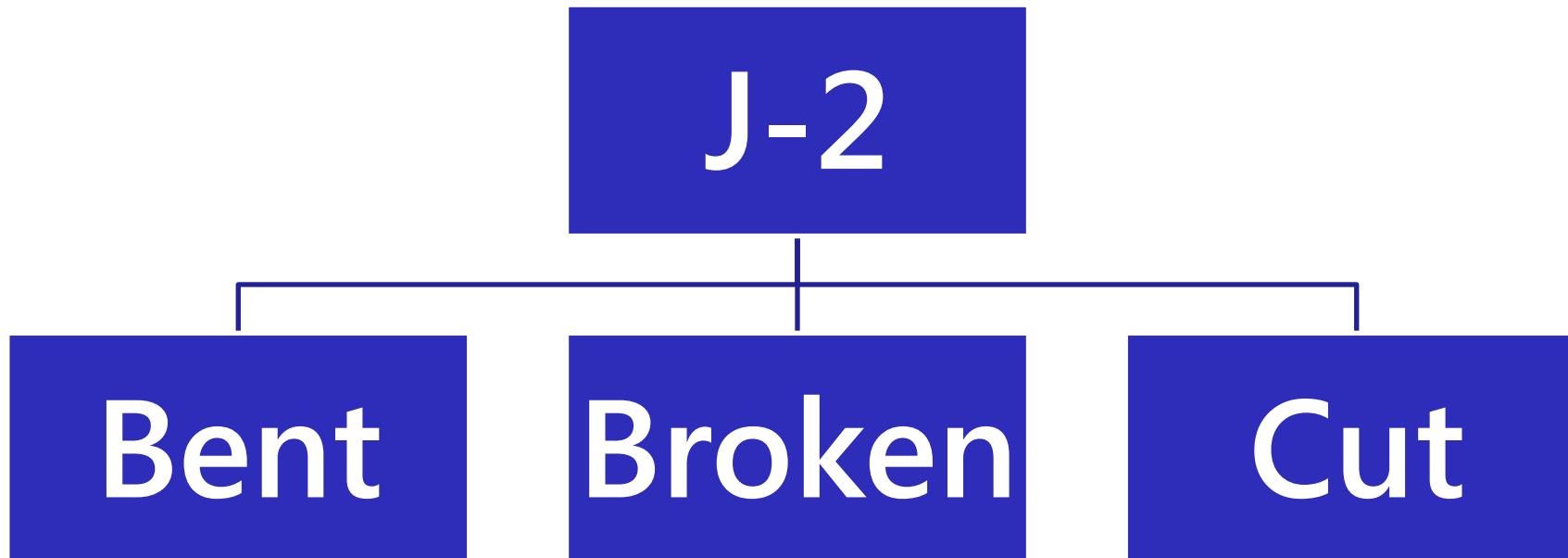
Damage to tires and tubes as a result of being slid flat. Any tire is considered to be "slid flat" if a flat spot occurs and removes tread or rubber to 2/32 in. of remaining tread or less in the affected area (flat spot) while the remaining unaffected tread is more than 4/32 in. It is not necessary for the tire to have a loss of air. Any tire with more than 2/32 in. of tread remaining at all locations does not require replacement.
  - (2) Repair

Tires on the same wheel set that have a flat spot occur that removes 6/32 in. of tread or rubber (when compared to the remaining tread) and do not meet the slid-flat criteria in Rule 82g(1) may be rematched to position the affected areas from 90° to 180° from each other.
- h. Damage to tires and tubes as a result of being run flat, resulting in discoloration, blistering, wrinkling, and/or casing damage being evident. To prevent run-flat damage, tires should be inflated as per Appendix B, Section B14.

# Objective 3

Properly Identifying Damage for  
Handheld/J1/J2

# Three Key Words for Damage



# 4 Steps to Taking Exceptions

## Location

- RSF, RSC, RSR, LSF, LSC, LSR, TF, TC, TR, F, R, INT.

## Item

- RAIL, PANEL, DOOR, POST, ETC.

## Defect

- BENT, BROKEN, CUT

## Dimensions

- ALL DIMENSIONS ARE TO BE SHOWN IN INCHES

# INSPECTION TIPS

- Start and finish at the same location
- View intermodal equipment from all angles
- Verify initials and number of unit
- Check all tires
- Inspect underframe (crossmembers, dolly legs)
- Make sure doors seal properly
- If loaded, verify seal number
- Inspect roof (if empty, open doors; if load, use cameras, mirrors or direct visual inspection)
- Tape and caulk usually cover cuts and should be written on J-1 as a cut
- Denote any defects



**Location: Left Side Rear (LSR)**  
**Item: Steel Side Panel**  
**Defect: Bent**  
**Dimension: 36"**



Location: Right Side Center (RSC)

Item: 2 Side Posts

Defect: Broken

Dimension: N/A

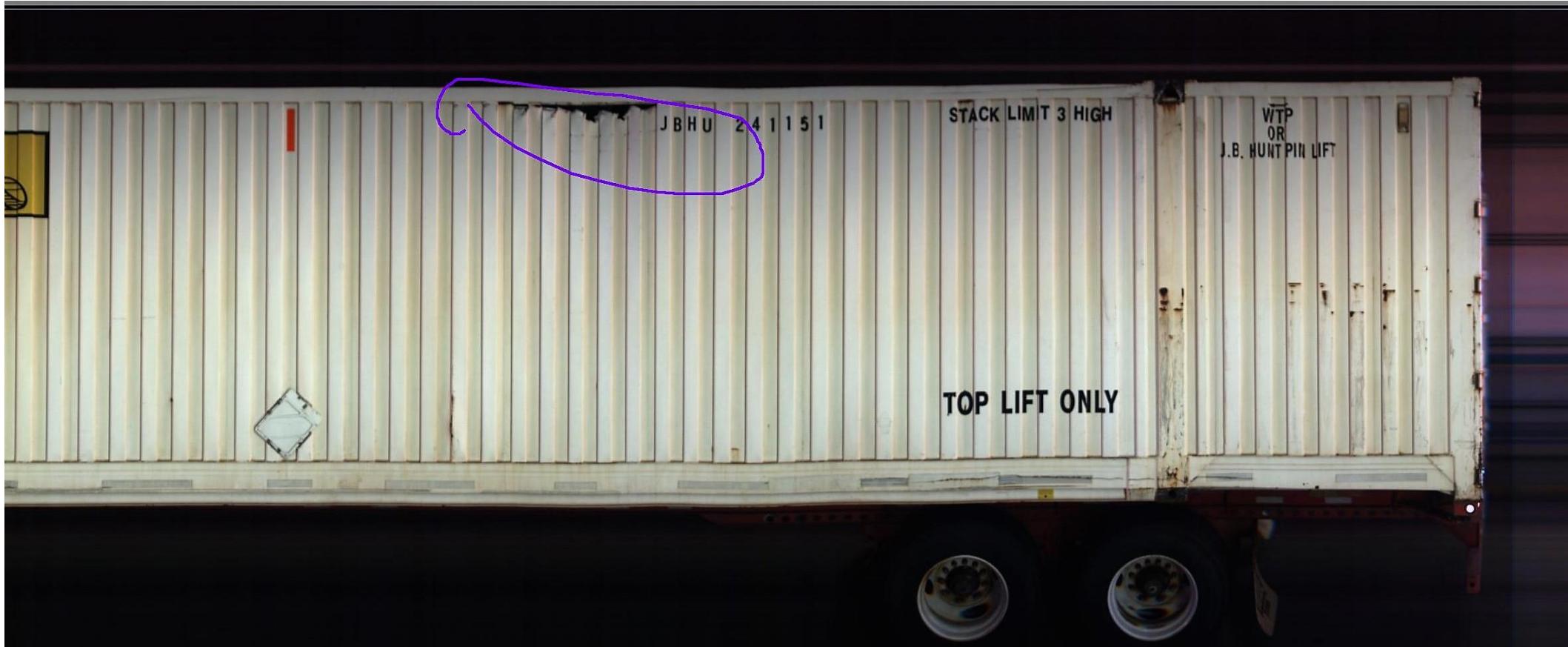
# AGS View

Location: Left Side Center (LSC)

Item: Steel Side Panel

Defect: Cut

Dimension: 36"



Assume a cut if equipment is taped or caulked





Cut shown from inside

Tape painted to cover a cut - Damage





**Left Rear Door Broken**

## DOT UNDER-RIDE GUARD





Greater than 3"  
deflection



Greater than 3" Deflection

## Section F. Damage

### Tire Damage Criteria

- e. Tire sidewall cut/punctured, exposing belt material
- f. Tire shoulder and/or tread cut/punctured, exposing belt material, when such injury is larger than 1/4 in. When the tire shoulder and/or tread is punctured through the tire, causing a hole 1/4 in. in diameter or less, the injury must be patched prior to reuse.
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- h. Damage to tires and tubes as a result of being run flat, resulting in discoloration, blistering, wrinkling, and/or casing damage being evident. To prevent run-flat damage, tires should be inflated as per Appendix B, Section B14.

**Below - Good tire**



Above is an example of a tire with a flat spot at 4/32 and the remaining tread in all other areas at 12/32. This is now a good tire under the new rules. If a tire with the same flat spot is on the same wheel set, the outer tire should be rotated 90 to 180 degrees to purposely misalign the flat spots.

**Below - Bad tire - Worn**



Above are examples of flat spots that are at 0/32 with the remaining tread at 4/32. Under previous AAR rules this would have been considered handling line/damage responsibility. Under the new rule, a tire with a flat spot to 0/32 or through the cords with the remaining unaffected areas at **4/32 or less** is considered a worn tire.

**Below - Bad tire - Damage**

Above is an example of a new tire with a flat spot at 2/32 while the remaining tread is at 12/32. You can see the wear bars (red arrow) have been penetrated. Wear bars are at 2/32 on all DOT tires. This is a slid flat tire and must be replaced.

**Below - Bad tire - Damage**

Above is an example of a flat spot below 2/32 (completely through the wear bars) with remaining area tread at 6/32. This is a slid flat damaged tire and must be replaced.

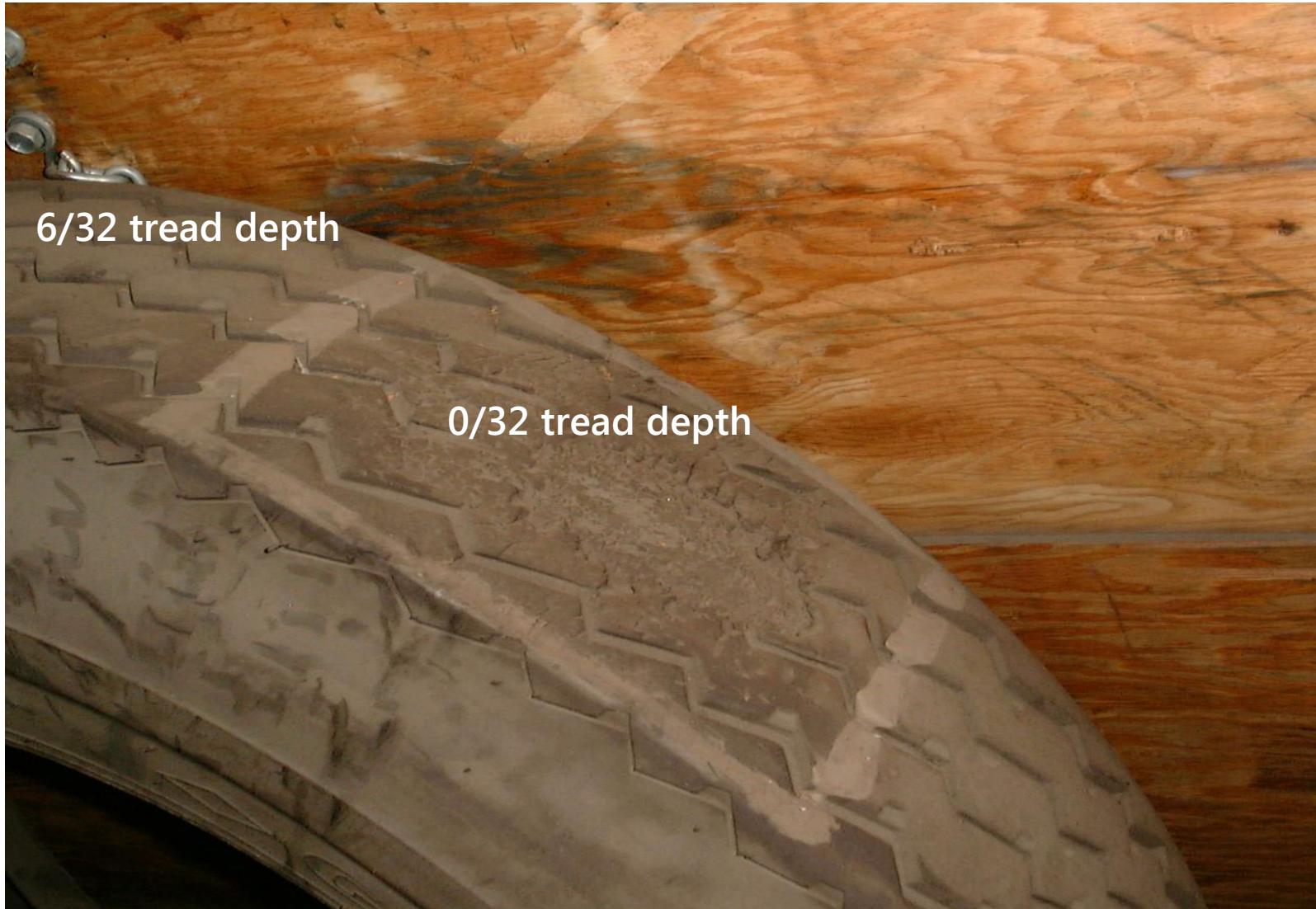
**Below - Bad tire - Damage**



Obviously a bad tire due to slid flat damage to the casing. Remaining area tread is at 8/32.



Tires with matching flat spots on the same wheel set that are above 2/32 with a 6/32 or greater difference between the flat spot and rest of the tire may be rotated 90 to 180 degrees from each other to separate the flat spots. This will provide a better ride and reduce the bouncing effect.



Slid Flat Tire – J2 Condition



Tire sidewall cut/punctured, exposing belt material – J2 Condition



#### Run Flat Tire – J2 Condition

Damage to tires and tubes as a result of being run flat, resulting in discoloration, blistering, wrinkling, and/or casing damage being evident



**Separated Cap – Owner's Responsibility**



Weather Checking – Owner's Responsibility



**Worn Out Tire – Owner's Responsibility**



Channel Cracking – Owner's Responsibility

**POP QUIZ!!!!!!**



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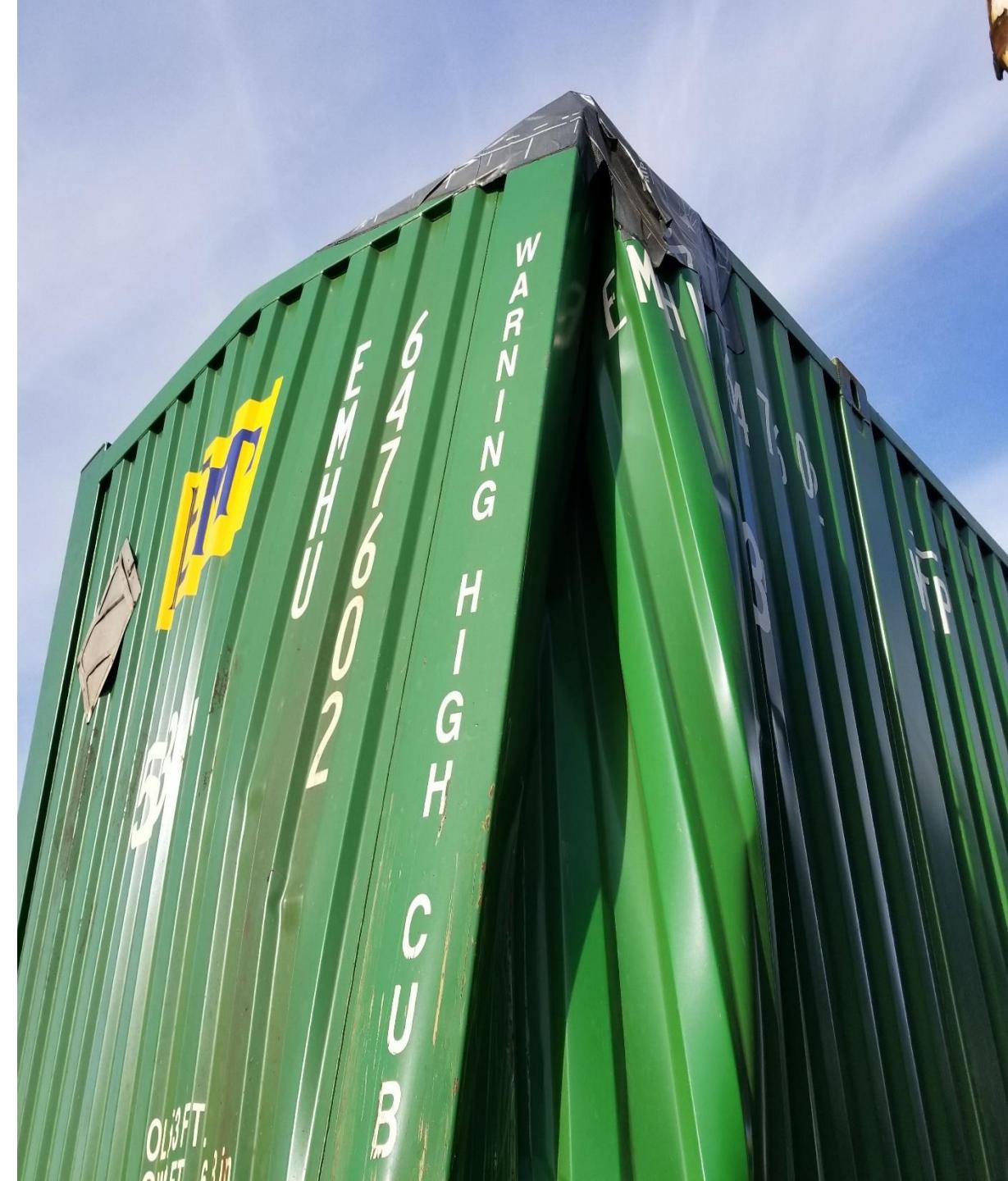
Location(s)  
Item(s)  
Defect(s)  
Dimension(s)

??





**RF- Corner Post Bent 24"**  
**RF- Corner Post Cut 6"**  
**RSF- Side Panel Bent 12"**  
**RSF- Side Panel Cut 6"**





- F- Top Nose Rail Bent 36"
- F- Top Nose Rail Cut 12"
- F- Nose Panel Bent 96"
- LF- Corner Post Bent 96"
- LSF- Side Panel Bent 96"
- LSF- Side Panel Cut 36"
- LSF- Top Rail Bent AND Cut 36" each
- LSF- Bottom Rail Bent 36"





**F- Nose Panel Bent 80"**  
**F- Top Nose Rail Bent 36"**  
**F- Top Nose Rail Cut 4"**  
**LF- Corner Post Bent 72"**



**RSR- Side Panel Cut 24"**







**F- Nose Panel Cut 24"**

**LF- Corner Post Cut 18"**

**LSF- Side Panel Bent 48"**

**LSF- Side Panel Cut 24"**

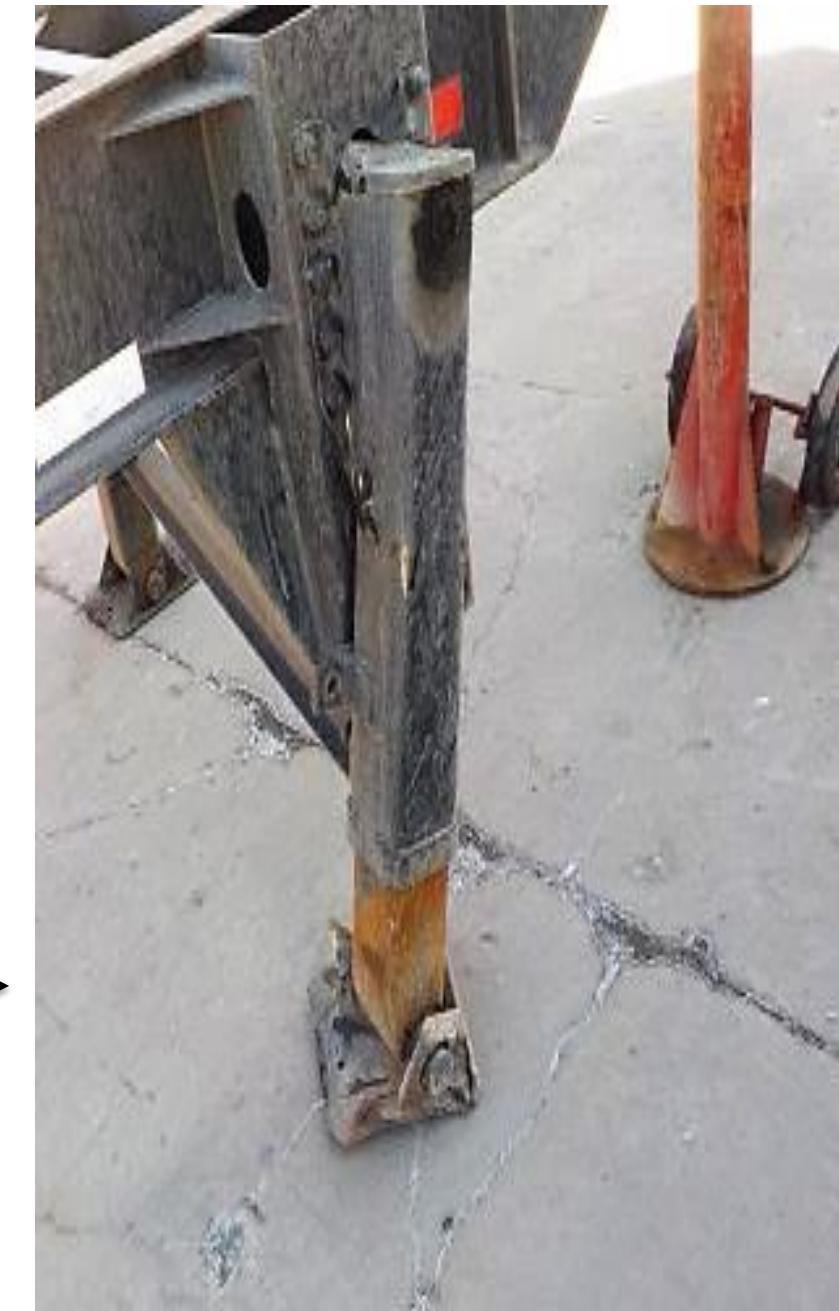
**LSF- Top Rail Cut 24"**

**TF- Roof Panel Cut 72"**

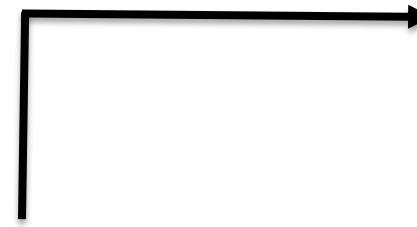


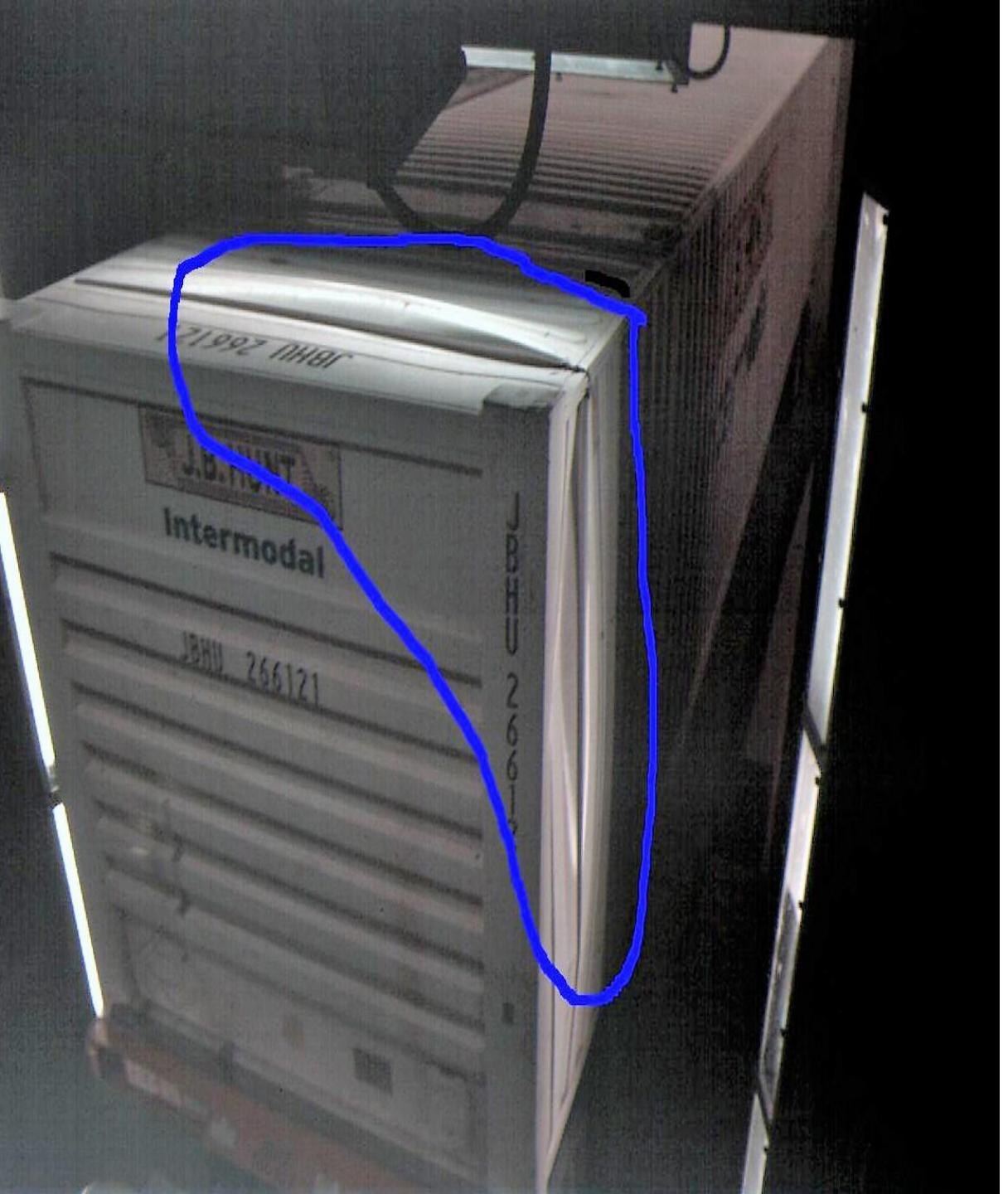


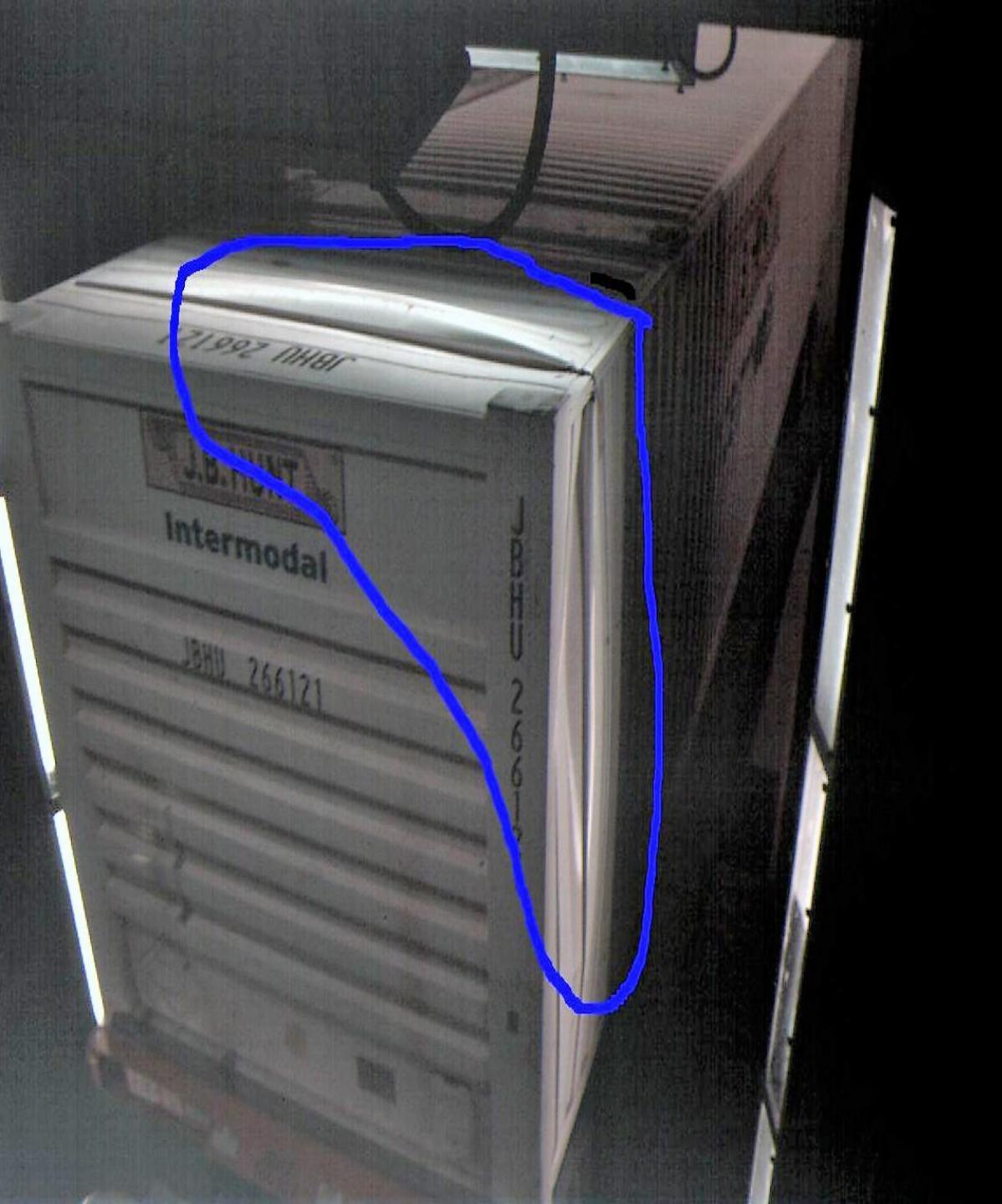
**LS- Gear Leg Bent**



**RS- Non-Gear Leg Bent**







LSF- Steel Side Panel Bent 60"  
LSF- Steel Top Side Rail Bent 12"  
LSF- Steel Top Side Rail Cut 6"  
TF- Steel Roof Panel Bent 36"

**Congratulations!!!**







**Bottom Rail Crack – in gate**



**Bottom Rail Crack – on car**



AGS Ingate Photo



Unit Failure on Car



AGS Ingate



Unit Failure on Car





**Roof Sheet Flex Crack – in gate**



**Roof Sheet Flex Crack – on car**







# Estimate of Repairs

Replace Noserail (Aluminum)	\$629.00
Replace Noserail (Steel)	\$370.00
Section Roof (4'x8' Aluminum)	\$400.00
Replace Roof (Steel)	\$715.00
Replace Side Panel (Aluminum)	\$336.00
Replace Side Panel (Steel)	\$684.00
Replace Top Side Rail (Aluminum)	\$1,811.00
Replace Top Side Rail (Steel)	\$2,085.00
Replace Bottom Side Rail (Aluminum)	\$1,846.00
Replace Bottom Side Rail (Steel)	\$2,085.00
Replace Doors	\$1,114.00
Replace Doors (Steel)	\$1,175.00
Replace Bias Tire	\$165.00
Replace Radial Tire	\$225.00
Replace Exterior Side Post	\$175.00
Replace DOT Under-Ride Guard	\$495.00
Replace Chassis Bolster	\$1,500.00
Replace Dolly Legs	\$953.00

# THE END

The Chicago Car Interchange Bureau  
2018