



Heavy Equipment

Cranes Not Included

# References

- ◆ EM385 Sections 16.A,B, L-M
- ◆ OSHA 29CFR1926.600 Subpart 'O'
- ◆ OSHA 29CFR1926.1000 Subpart 'W'
- ◆ Various ANSI & ASME Standards

# Safe Operating Condition

- ◆ Competent Person: Inspect, Test, Certify
  - Inspections & Tests IAW Manufacturer
  - Documented, Available, at Site, in Project File
- ◆ Competent Person Inspection Daily (in Use)
  - Each Shift: Brakes, Systems, Safety Devices
  - Use Prohibited if Deficiency Found
  - Tag or Lockout Until Repair, Rtn to Service

# Safe Operations

- ◆ Operated by Designated Qualified Persons
  - IAW Mfr's Instructions & Recommendations
  - Safe Speeds & Loads Not to be Exceeded
  - Getting On/Off While in Motion Prohibited
- ◆ Use of Headphones Prohibited
- ◆ Mfr. Recommendations Supercede Standards
- ◆ Inspection for Clearances, Loads in Advance

# Equipment & Maintenance

- ◆ Seats or Equal for Anyone Riding
- ◆ Service/Parking Brake-Hold Full Load on Grade
- ◆ Maintenance IAW Mfr. Documented
- ◆ Blades, Buckets, Dumps Lowered or Blocked
- ◆ Ventilate Engine Operations in Enclosed Areas
- ◆ Wheels Chocked for Park on Incline
- ◆ Lights, Reflectors, if Unattended at Night

# Safe Operation

- ◆ No Modifications W/out Mfr. Approval
  - If Made, Change Labels to Show New Capacity
  - No Reduction of Safety Factors Allowed
- ◆ Capacity Posted on Lift Trucks
- ◆ Controls Not to be Operated from Ground
- ◆ No Work Under or Riding Booms/Buckets
- ◆ Minimum 5-B:C Fire Extinguisher

# Fatal Incident

A 28 year old dump truck driver was crushed when pinned between the dump body and frame. The victim elevated the empty body and tried to lower it, but it had stuck in the elevated position. He left the cab leaned over the truck frame to look at the control valve. The dump body suddenly lowered pinning him. He was found the next day by the companies owner who also happen to be his father.

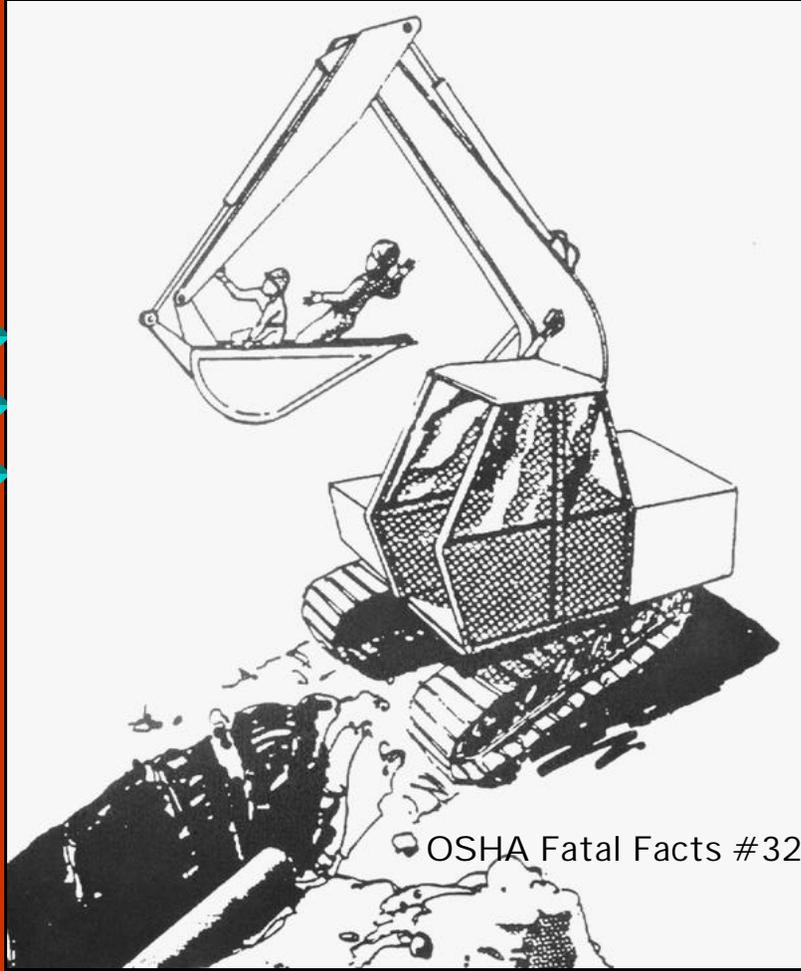
# Safe Operations

- ◆ Back-up Alarm on All Self-Propelled Equip.
  - ▶ Distinctly Heard in Prevailing Conditions
- ◆ Signal Person or Device Where Danger
- ◆ Overhead Protection for Forklift Operator
- ◆ All Guards, Safety Devices in Place

# Safe Operations

- ◆ ROPS + Seat Belts And Anchorages
- ◆ Protection Against Elements
- ◆ Roll-Over Warning Devices:
  - Long Bed End Dump Trailers
  - Where  $> 1-2^{\circ}$  Lateral Slope
  - Material Subjecting to Sticking

# Personnel Riding Equipment

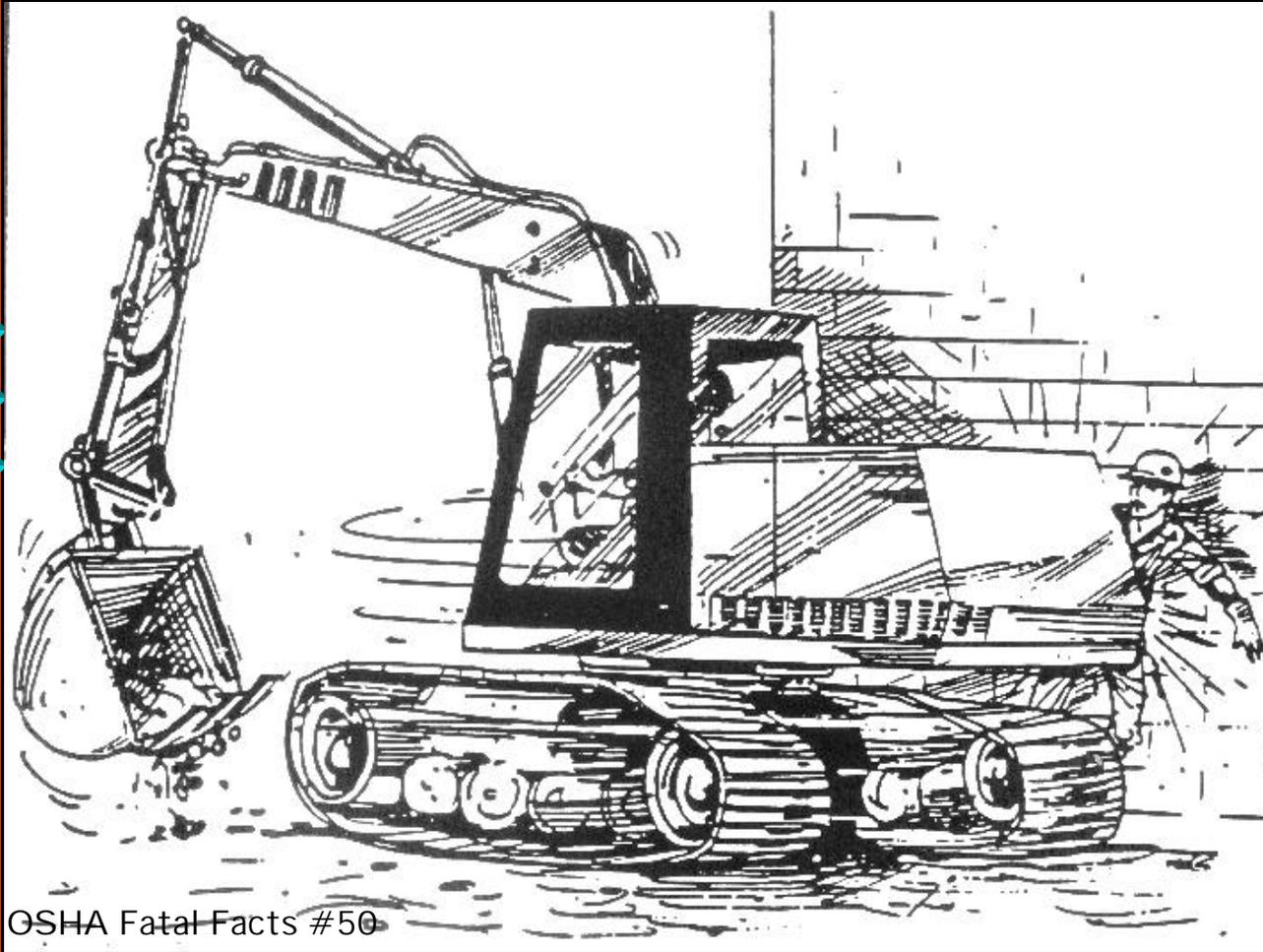


● OSHA Fatal Facts #32

**NO RIDERS!**

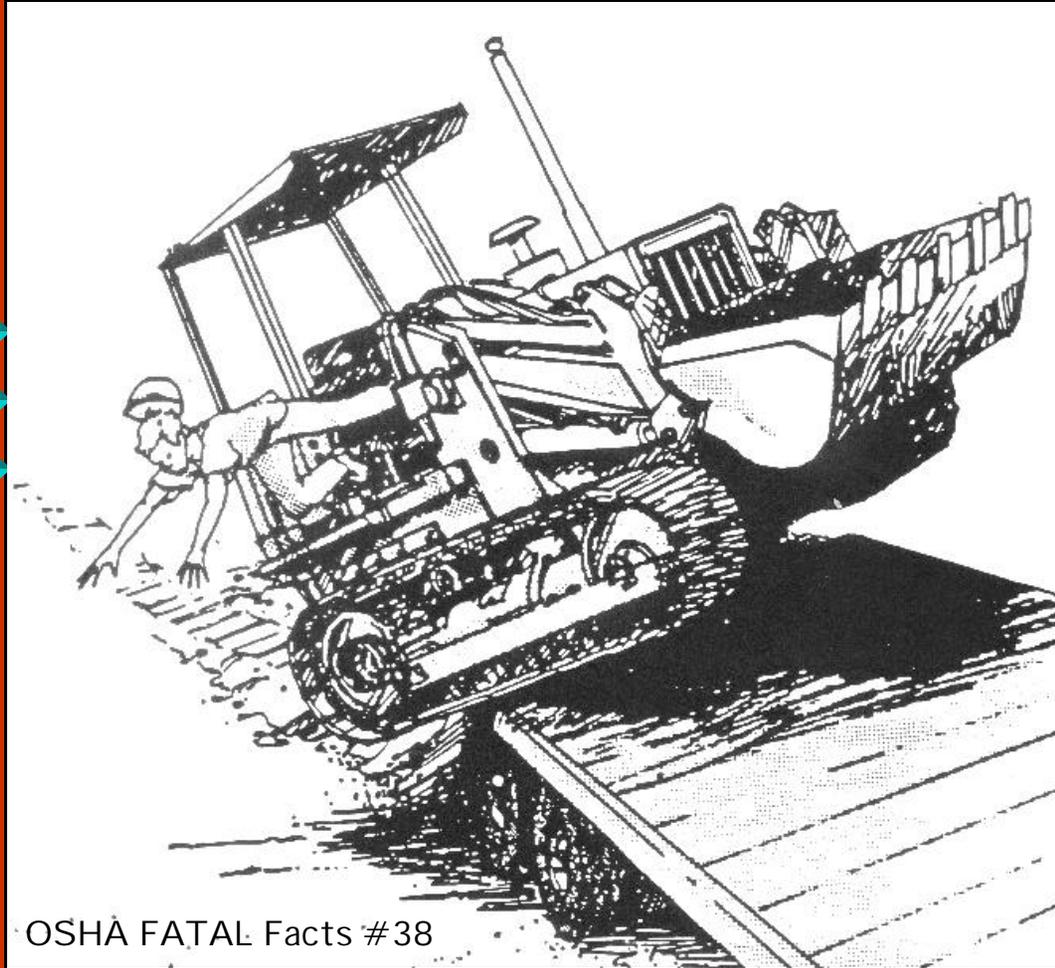
# Equipment Swing Radius

Swing Radius:  
This Area  
Must be  
Barricaded  
Whenever the  
Potential for a  
'Caught  
Between'  
Mishap Exists



OSHA Fatal Facts #50

# Loading & Unloading



OSHA FATAL Facts #38

Another Potentially Hazardous Machine Activity.

Note ROPS,  
But No Seat Belt-  
Operator Killed by  
ROPS After Leaving  
the Seat

# Rough-Terrain Forklift

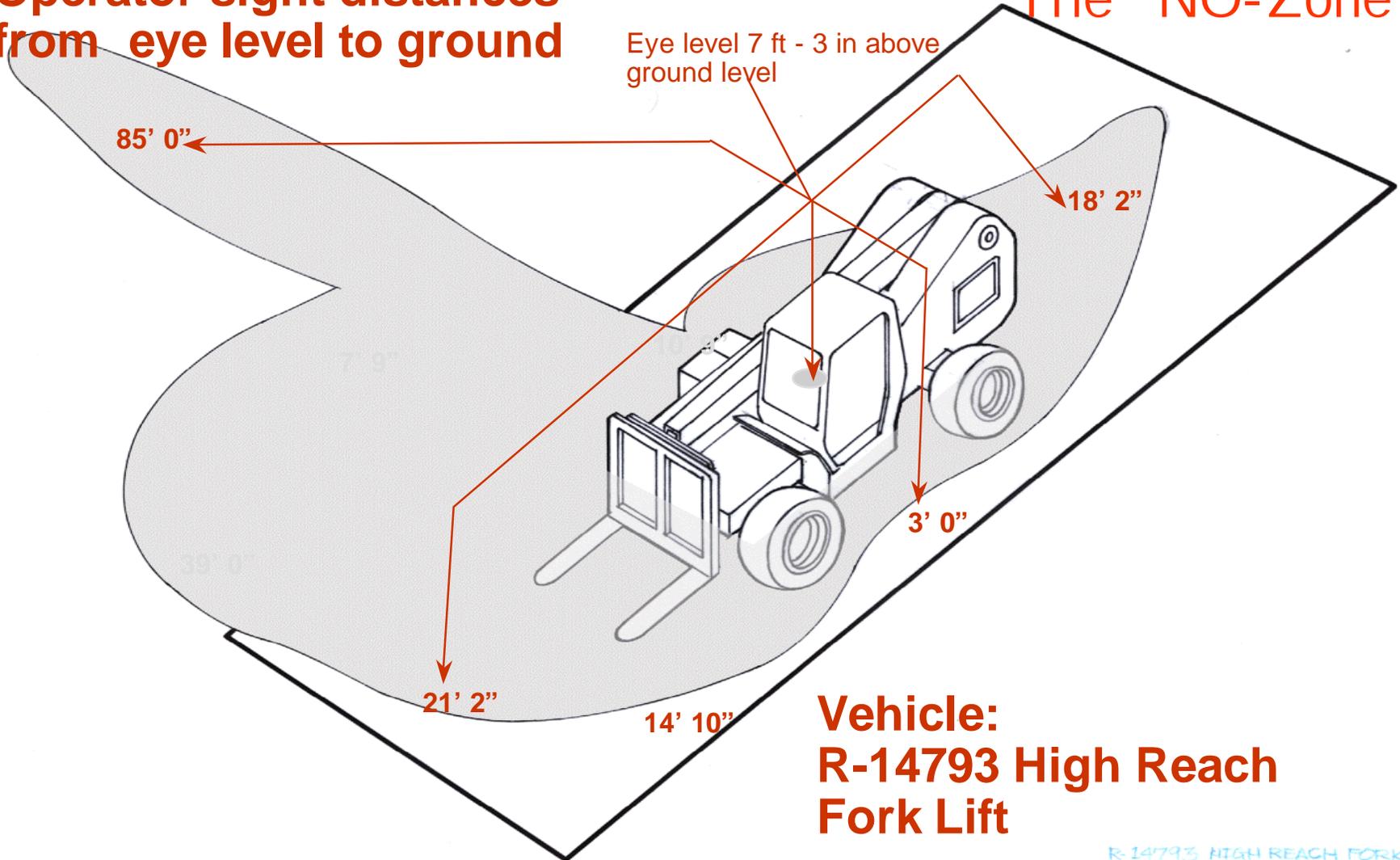


Not approved  
by  
Manufacturer!

# Operator sight distances from eye level to ground

# The "NO-Zone"

Eye level 7 ft - 3 in above ground level



**Vehicle:  
R-14793 High Reach  
Fork Lift**

R-14793 HIGH REACH FORK LIFT

# Unapproved Use of Equipment



What would you suspect about this company's safety program and training?

# Skid Steer Loader

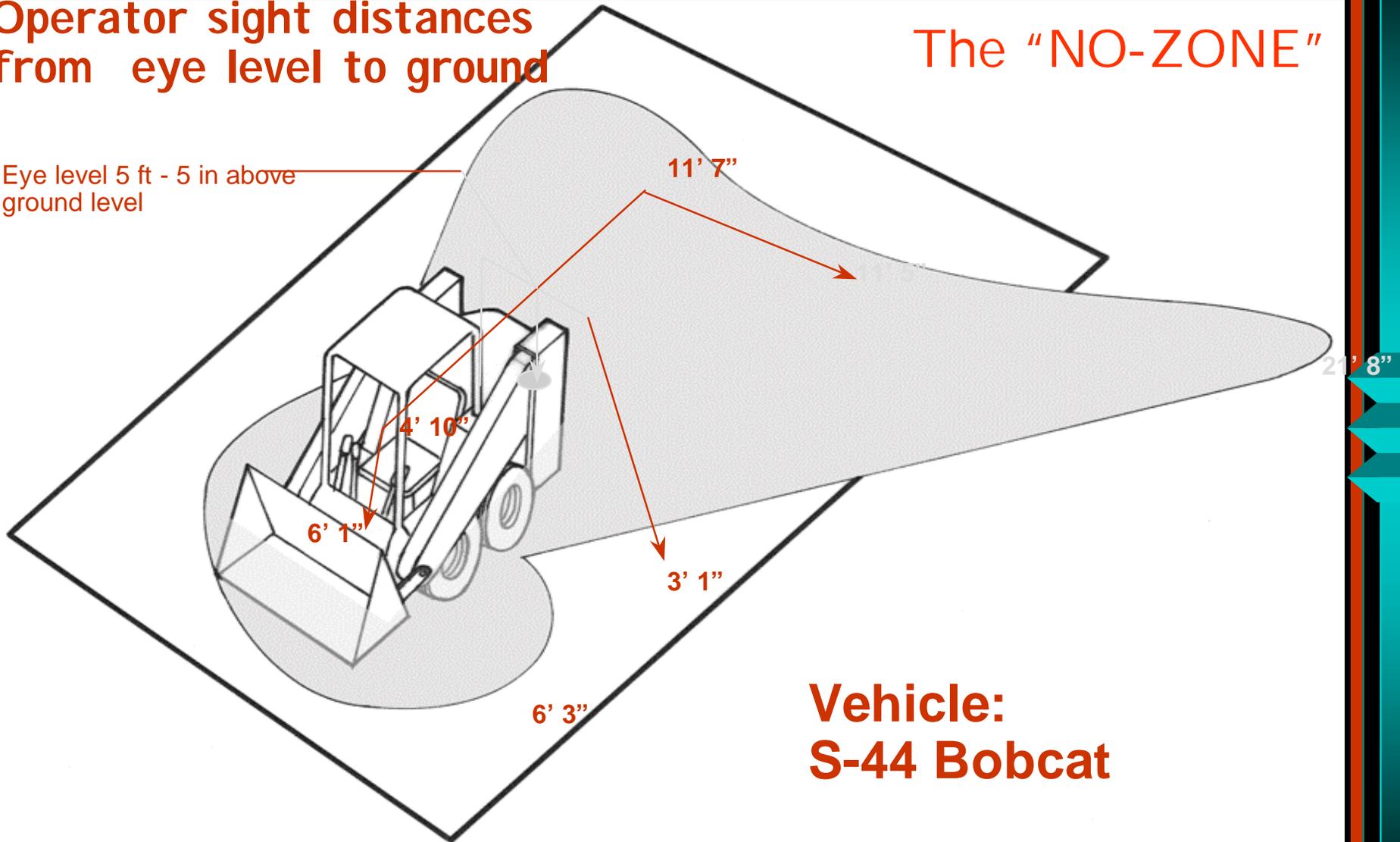


What Do We  
Need to Know  
About This  
Operator?

# Operator sight distances from eye level to ground

The "NO-ZONE"

Eye level 5 ft - 5 in above  
ground level



**Vehicle:  
S-44 Bobcat**

# Modified Equipment



Must be Approved by  
Manufacturer, or PE  
& Tested @ 125%  
of Load...