

WELCOME



Navy Shore Weight Handling Program

Safety-Driven
Supporting Fleet Readiness
Missioned by SECNAV

CONTRACTOR WEIGHT HANDLING AWARENESS WORKSHOP

Navy Crane Center



People Helping People Put Ships To Sea
Through Weight Handling Safety



**Supporting Fleet Readiness
With a Strong Sense of Urgency**



- Establish and maintain a safe and effective weight handling program at all Navy shore activities worldwide
- Assigns responsibility for direction and oversight through NAVFAC's Navy Crane Center; NCC Director reports directly to Commander, NAVFAC, with direct access to CNO and ASN (I&E)
 - Policy
 - Training
 - Compliance/Safety
 - Audit all Navy shore activities worldwide
 - Direct corrective action; including suspension of operations where required
 - Investigate crane accidents
 - Communicate lessons learned
 - In-Service technical support
 - Acquisition

SECNAV PERSPECTIVE



“Safe and reliable weight handling is critical to the operation of the Navy. Each day, the Navy applies its extensive inventory of weight handling equipment to lift ordnance, naval nuclear propulsion plant components and equipment, new and spent nuclear fuels, electronic equipment, hot metals, components of ships and submarines, supplies, construction materials, and hazardous material items needed to support the Navy’s world-wide commitments. Safe conduct of these operations is key to precluding damage to equipment or personnel injury.”

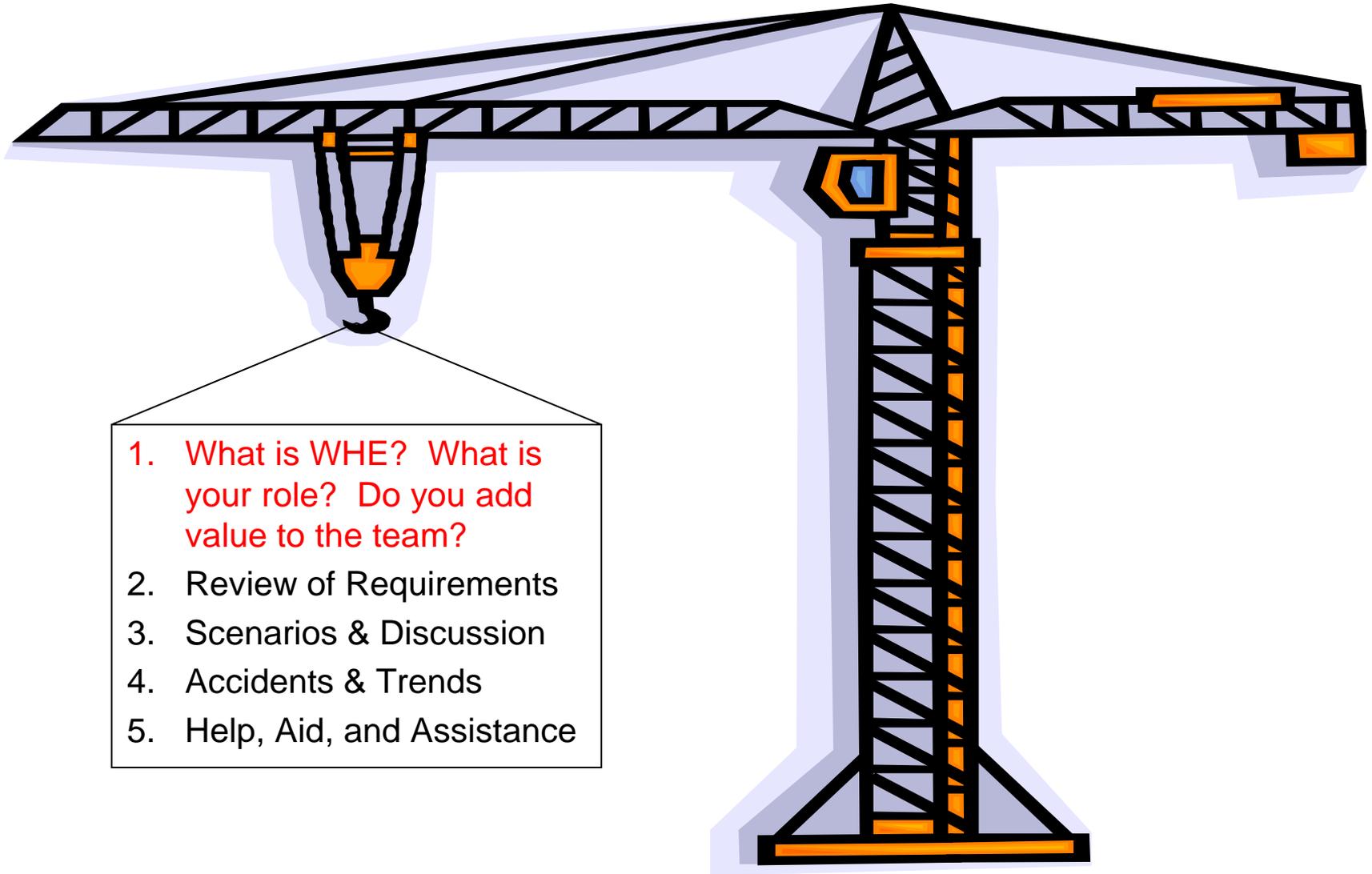
REFERENCE: SECNAVINST 11260.2

Contract Weight Handling Awareness Workshop Overview



1. What is WHE? What is your role? Do you add value to the team?
2. Review of Requirements
3. Scenarios & Discussion
4. Accidents & Trends
5. Help, Aid, and Assistance

Contract Weight Handling Awareness Workshop

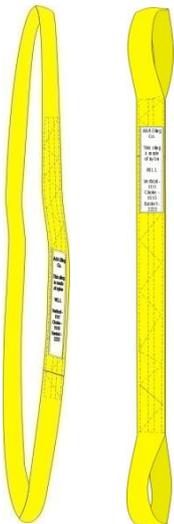
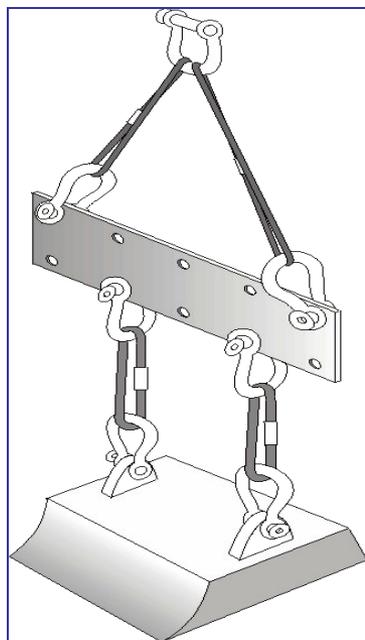


1. What is WHE? What is your role? Do you add value to the team?
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5. Help, Aid, and Assistance

What is “weight handling equipment”?



What is “weight handling equipment”?



MULTI PURPOSE MACHINES?



MULTI PURPOSE MACHINES?



Lesson Learned



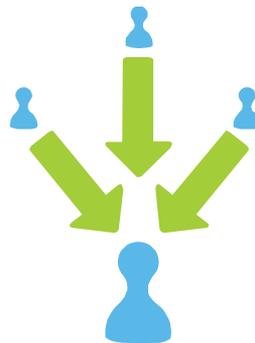
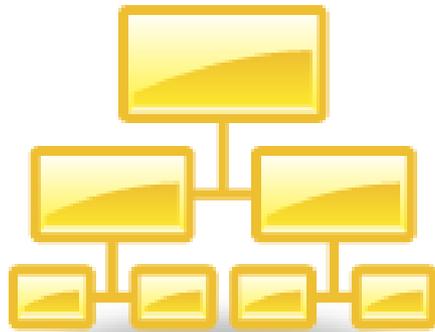
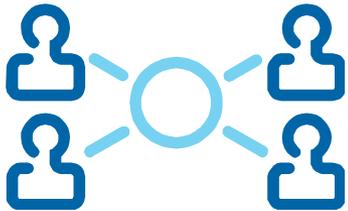
Recently, oversight teams reviewing activity contractor crane oversight programs identified significant deficiencies and process weaknesses including:

- contractor cranes being allowed entry onto the activity without any checks
- contracting officers and activity security personnel not following the requirements of the activity contractor crane instruction
- inadequate oversight by contracting officers for cranes operating on the activity for extended periods
- general weakness in the knowledge and understanding of NAVFAC P-307 contractor crane requirements
- Host activities with little to no knowledge of their role in a safe WHE program

In most cases, activities acknowledged that contractor crane surveillances were not being conducted and that contractor cranes routinely enter the activity to perform operations with little or no oversight by Navy personnel. [They further noted that weaknesses in this area should be corrected by assigning this responsibility to a new crane program manager and crane surveillance team.]

Lesson Learned: Although instructions generally assign responsibility for the oversight of contractor cranes to the contracting officer, regional and local WHE authorities should take more aggressive actions to mitigate weakness in the oversight of contractor cranes.

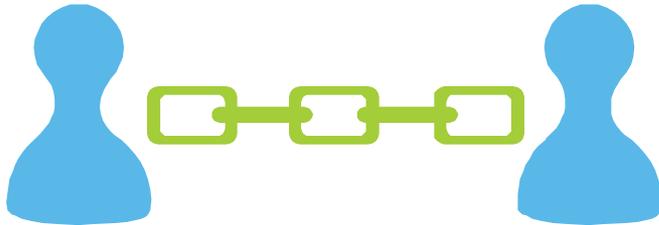
Role



- Contracting Officer
- Contract Specialist
- CO Representative
- ROICC, SUPSHIP
- Project Manager
- WHE Manager
- Oversight
 - ET
 - Safety
 - Host activity

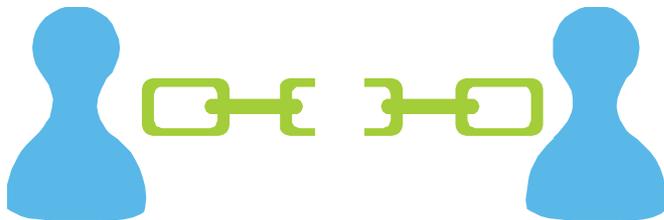


Value



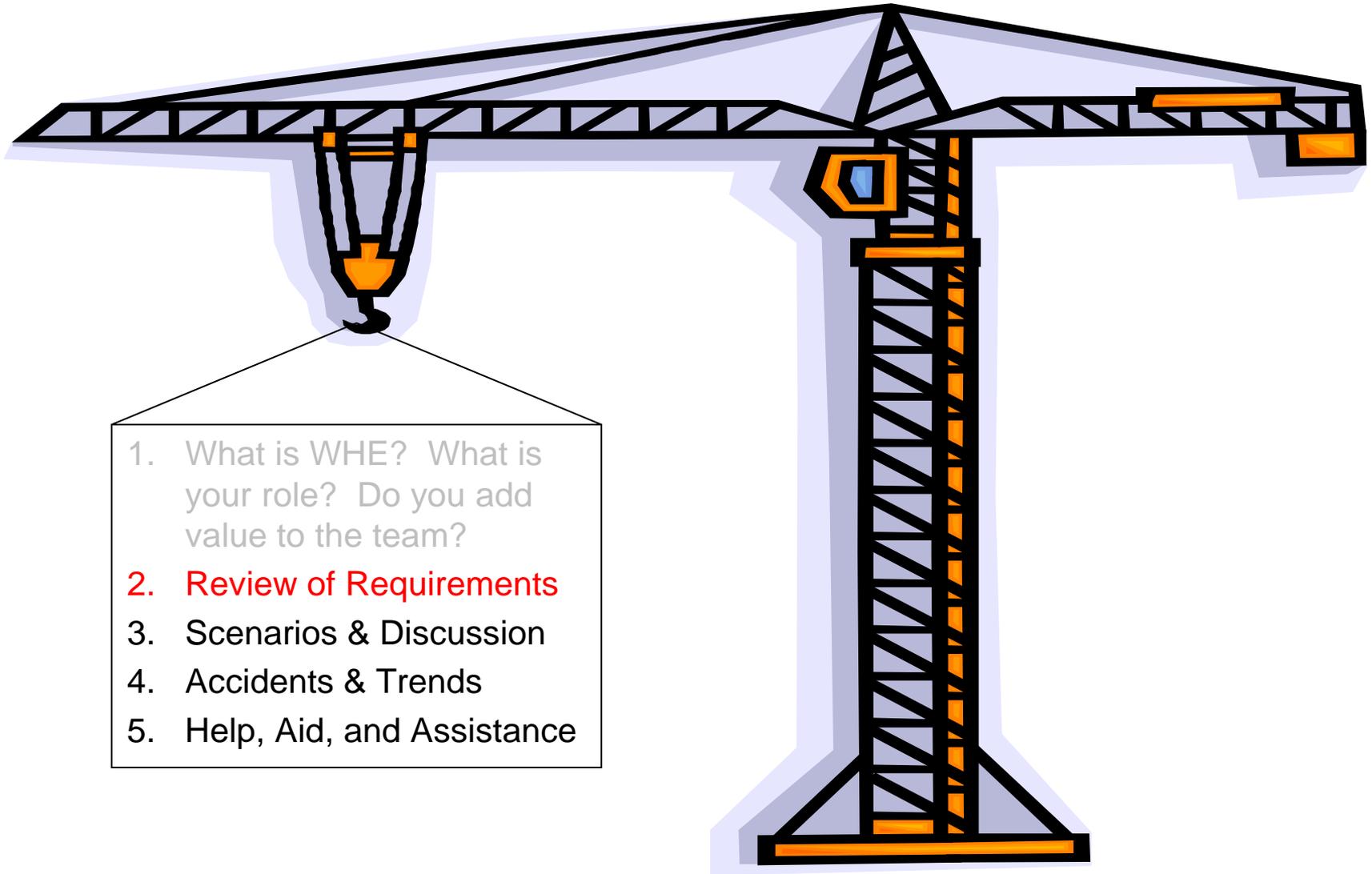
- Are you the link in the chain that keeps things safe and proper?

Or



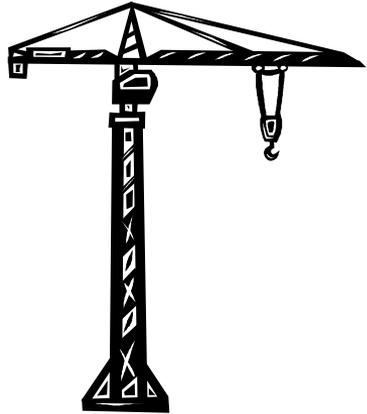
- Are you the weak link that allows poor communication and increased risk?

Contract Weight Handling Awareness Workshop

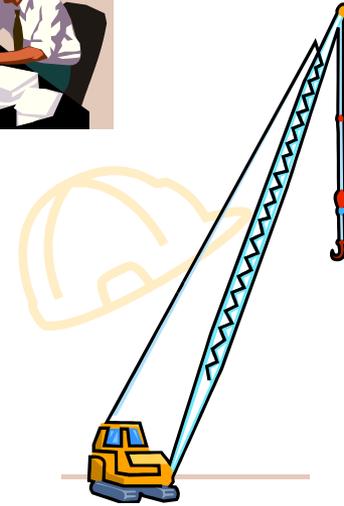


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2. **Review of Requirements**
3. Scenarios & Discussion
4. Accidents & Trends
5. Help, Aid, and Assistance

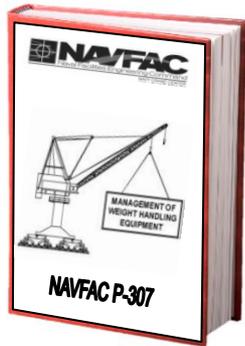
Do You Know...



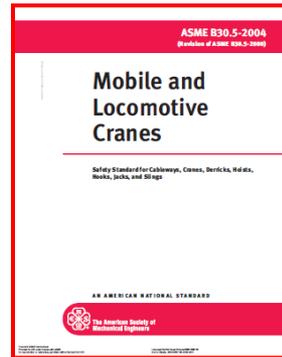
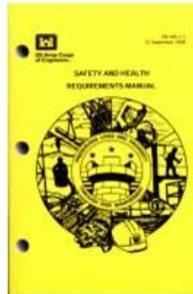
- Requirements
 - Role/job
 - Contract
 - Equipment
 - Application
 - Methodology
 - Enforcement
- Enforcement
- Expectations
- Contacts
- Resources
- Training



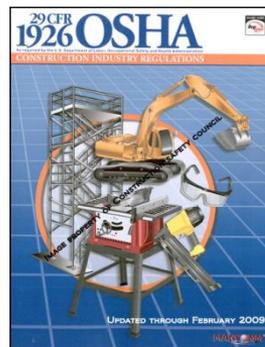
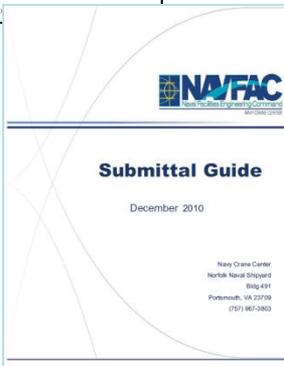
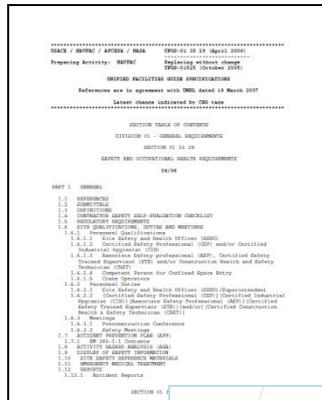
Requirements



What WHE requirements apply?



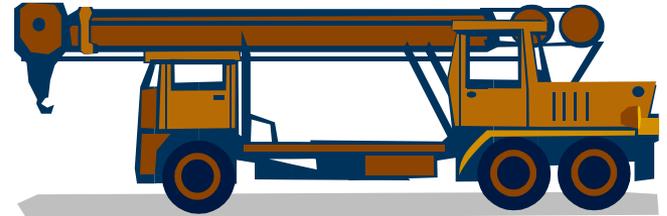
- NAVFAC P-307
- OSHA 29 CFR 1926 (Construction Standard)
- USACE EM-385-1-1
- ASME B30.3 Tower Cranes
- ASME B30.5 Mobile Cranes
- ASME B30.8 Floating Cranes
- ASME B30.22 Articulating Boom Cranes
- ASME B30.9 Slings
- ASME B30.26 Rigging Hardware
- UFGS 01-35-26 Gov't Safety Requirements
- UFGS 00-73-** Overseas
- Host activity instructions
- Submittal Guide



Requirements



NAVFAC P-307 section 1.7 & 1.7.1 (Navy & BOS Equipment)



Applicability

- Non-Navy Owned Cranes and Rigging Equipment at Naval Activities
- Rented or Leased Cranes Operated by Navy or Base Operating Service (BOS) Contractors
- Cranes and Rigging Equipment Owned and Operated by (BOS) Contractors

Requirements

- inspected, load tested, and certified to the requirements of section 3 prior to use
- long term leases (over 4 months) and for BOS contractor owned cranes, the maintenance and inspection requirements of section 2, and Appendix E, hook NDT requirements shall also apply
- equipment history file, section 5, shall be maintained on each rented or leased crane
- these requirements shall be included in applicable contracts

Requirements



NAVFAC P-307 section 1.7 & 1.7.1 (cont.) (Navy & BOS Equipment)

Crane operators shall be licensed per sections
6 through 8 (or equivalent for BOS contractor personnel)

Crane operations per sections 9 through 12

Rigging equipment per section 14



Requirements

Contractor



NAVFAC P-307 section 1.7.2

Applicability

- Contractor Operated Cranes
- **Multi-Purpose Machines**
- **Material Handling Equipment (Forklifts)**
- **Construction Equipment**
- Rigging Equipment in Weight Handling Operations

When Used as
Cranes to Lift
Suspended Loads



- equipment used on Navy property to lift suspended loads
- generally incidental to construction contracts, ship repair contracts, demolition contracts, maintenance and other service contracts, deliveries of supplies and equipment, etc.
- requirements for any contracted work utilizing applicable equipment
- all rigging equipment used in weight handling operations at a naval activity
- requirements do not apply to shipboard cranes or rigging equipment
- host activity CO's shall promulgate the minimum requirements of 1.7.2.a, b, c, d, e, f, g, h, i
 - requirements do not apply to cranes/equipment that enter the activity but are not used for lifting

Requirements

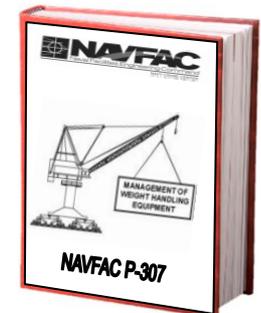
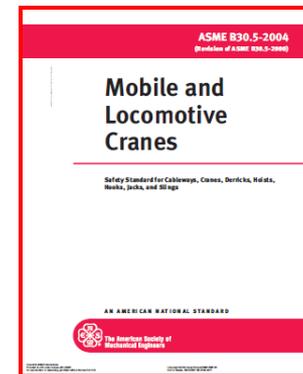
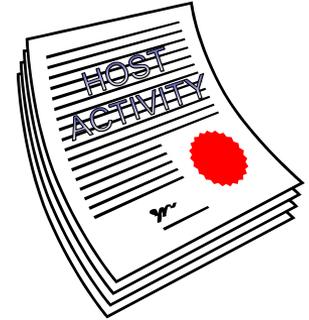
Contractor



NAVFAC P-307 section 1.7.2.a

Require the contractor to

- comply with specific activity regulations
- notify the contracting officer, in advance, of any equipment entering the activity that may be used in a crane-like application to lift suspended loads
- comply with applicable ANSI or ASME standards
- comply with the appropriate host country safety standards
- For barge mounted mobile cranes
 - have third party certification from an federal or state accredited organization, as applicable
 - have a load indicating device, a wind indicating device, and a marine type list and trim indicator readable in one-half degree increments



Requirements

Contractor



APPENDIX P – CONTRACTOR CRANE (OR ALTERNATE MACHINE USED TO LIFT SUSPENDED LOAD) AND RIGGING GEAR REQUIREMENTS

CERTIFICATE OF COMPLIANCE	
This certificate shall be signed by an official of the company that provides cranes (or multi-purpose machines, material handling equipment, or construction equipment used to lift loads suspended by rigging gear) or rigging gear for any application under this contract. Post a completed certificate on each crane or alternate machine (or in the contractor's on-site office for rigging operations) brought onto Navy property.	
CONTRACTING OFFICER'S POINT OF CONTACT (Government Representative)	PHONE
PRIME CONTRACTOR/PHONE	CONTRACT NUMBER
CRANE OR ALTERNATE MACHINE SUPPLIER/PHONE (if different from prime contractor)	CRANE OR ALTERNATE MACHINE NUMBER (i.e., ID number)
CRANE OR ALTERNATE MACHINE MANUFACTURER/TYPE/CAPACITY	
CRANE OR ALTERNATE MACHINE OPERATOR'S NAME(S)	
<p>I certify that</p> <ol style="list-style-type: none"> 1. The above noted crane or alternate machine and all rigging gear conform to applicable OSHA regulations (host country regulations for naval activities in foreign countries) and applicable ASME B30 standards. The following OSHA regulations and ASME standards apply: _____ 2. The operators noted above have been trained and are qualified for the operation of the above noted crane(s) or alternate machine(s). 3. The operators noted above have been trained not to bypass safety devices during lifting operations. 4. The operators, riggers and company officials are aware of the actions required in the event of an accident as specified in the contract. 	
COMPANY OFFICIAL SIGNATURE	DATE
COMPANY OFFICIAL NAME/TITLE	
<p>POST ON CRANE (OR ALTERNATE MACHINE) (IN CAB OR VEHICLE) (or in the contractor's on-site office for rigging operations)</p>	

NAVFAC P-307 section 1.7.2.b

Require the contractor to

- have a certificate of compliance (appendix P, figure P-1)
- certify that the crane (or other machine) and the rigging equipment conform to the appropriate host country safety standards
- certify that all of its crane (or other machine) operators working on the naval activity have been trained not to bypass safety devices
- post the certifications on the crane.

Requirements

Contractor



NAVFAC P-307 section 1.7.2.c, d, & e

Require the contractor to

- designate the crane operator as qualified by a source that qualifies crane operators
- proof of current qualification shall be provided
- certify the operator is qualified and trained for the operation of the crane or machine to be used
- For multi-purpose machines, material handling equipment, and construction equipment used to lift loads suspended by rigging equipment:
 - provide proof or authorization from the machine OEM that the machine is capable of making lifts of loads suspended by rigging equipment
 - demonstrate that the equipment is properly configured to make such lifts and is equipped with a load chart



Requirements

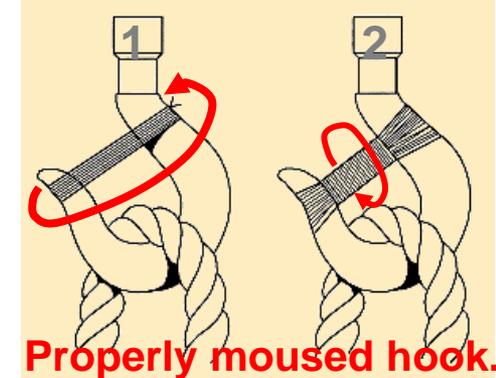
Contractor



NAVFAC P-307 section 1.7.2.f

Require the contractor to

- have self-closing latches on all hooks, or
- have throat openings "moused" in lieu of latching
- approve the following exceptions via the contractor's technical organization
 - items where the hook throat is fully obstructed and not available for manual securing
 - lifts where securing the hook throat increases the danger to personnel such as forge shop, dip tank, or underwater work



Damaged
Latch



Requirements

Contractor



NAVFAC P-307 section 1.7.2.g.1 & 2

Require the contractor to

- provide a critical lift plan for:
 - lifts over 75 percent of the capacity (lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists)
 - lifts involving more than one crane, hoist, or other machine
 - lifts of personnel
 - lifts made in the vicinity of overhead power lines
 - erection of cranes
 - lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks
- include the following as applicable:
 - size and weight of the load
 - OEM's maximum load capacities
 - lift geometry

ACCIDENT PREVENTION PLAN
300 C MOBILE BOAT HOIST

REVISION <0>: 3/12/09

14. CRITICAL LIFT PLAN

- 14.1 Critical (complex) lifts which require the load to be lifted, swung, or placed out of the operator's view; lifts of bridge crane structures where there is only a few inches of clearance between the load being lifted and the building roof beams, joists, purlins, and/or elevated building equipment; lifts made with more than one crane; lifts involving technically difficult rigging arrangement; hoisting personnel with a crane or derrick; any lifts exceeding 75% of the rated capacity of the crane(s); or any lift which the crane operator believes should be considered critical.
- 14.2 A site specific Critical Lift Plan will be provided prior to any lift meeting the above requirements. The Critical Lift Plan will include, but not be limited to, the following:
- A. Specify the exact size and weight of the load to be lifted and all crane and rigging components which add to the weight.
 - B. Specify the manufacturer's maximum load limits for the entire range of the lift as listed in the load charts.
 - C. Specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.
 - D. Designate the crane operator, lift supervisor and rigger and state their qualifications.
 - E. Include a rigging plan, which shows the lift points and describes rigging procedures and hardware requirements.
 - F. Describe the ground condition and outrigger or crawler track requirements (and, if necessary, the design of mats) needed to achieve a level, stable foundation of sufficient bearing capacity for the lift.
 - G. For floating cranes or derricks describe the operating base (platform) condition (for mobile cranes mounted on barges) and any potential list.
 - H. List of environmental conditions under which lift operations are to be stopped.
 - I. Specify coordination and communication requirements for the lift operation.
 - J. For tandem or tailing crane lifts, specify the make and model of the cranes, the line, boom, and swing speeds, and the requirements for an equalizer beam.
 - K. For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.550(g).

Requirements

Contractor



NAVFAC P-307 section 1.7.2.g.3, 4, 5, 6, & 7

Require the contractor to

ACCIDENT PREVENTION PLAN
300 C MOBILE BOAT HOIST

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 - B. Specify the manufacturer's maximum load limits for the entire range of the lift as listed in the load charts.
 - C. Specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.
 - D. Designate the crane operator, lift supervisor and rigger and state their qualifications.
 - E. Include a rigging plan, which shows the lift points and describes rigging procedures and hardware requirements.
 - F. Describe the ground condition and outrigger or crawler track requirements (and, if necessary, the design of mats) needed to achieve a level, stable foundation of sufficient bearing capacity for the lift.
 - G. For floating cranes or derricks describe the operating base (platform) condition (for mobile cranes mounted on barges) and any potential list.
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 - I. Specify coordination and communication requirements for the lift operation.
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 - K. For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.550(g).

- have a rigging plan
- detail the environmental conditions under which lift operations are to be stopped
- demonstrate compliance with the requirements of 29 CFR 1926.1431 for personnel lifts
- provide barge stability calculations
- the amount of list and trim shall be within the crane manufacturer's requirements
- demonstrate compliance to 29 CFR 1926.1407-1411 (as applicable) for work in the vicinity of overhead power lines

Requirements

Contractor



NAVFAC P-307 section 1.7.2.h and i

Require the contractor to

- notify the contracting officer as soon as practical, but not later than four hours, after any WHE accident
 - secure the accident site and protect evidence until released by the contracting officer
 - conduct an accident investigation to establish the root cause(s) of any WHE accident
 - cease crane operations until cause is determined and corrective actions have been implemented
-
- to provide the contracting officer within 30 days of any accident a Crane and Rigging Gear Accident Report



Requirements

Host Activity



NAVFAC P-307 section 1.7.2, Host Activity

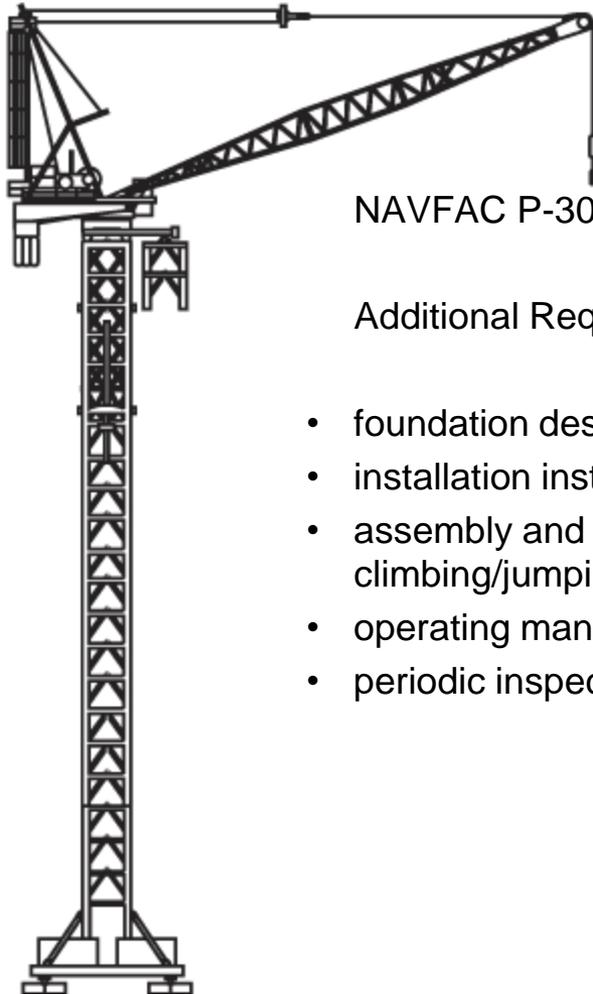


- The host activity shall ensure
 - contracts contain the above requirements
 - concur with the contracting officer's oversight plan
 - ensure that the oversight plan is being carried out
 - provide oversight of the contractor accident investigations and corrective actions



Requirements

Tower Cranes



NAVFAC P-307 section 1.7.2.1

Additional Requirements For Tower Cranes

- foundation design and requirements
- installation instructions
- assembly and disassembly instructions including climbing/jumping instructions if applicable
- operating manual, limitations, and precautions
- periodic inspection and maintenance requirements



Requirements

Contracting Officer



NAVFAC P-307 section 1.7.2.2

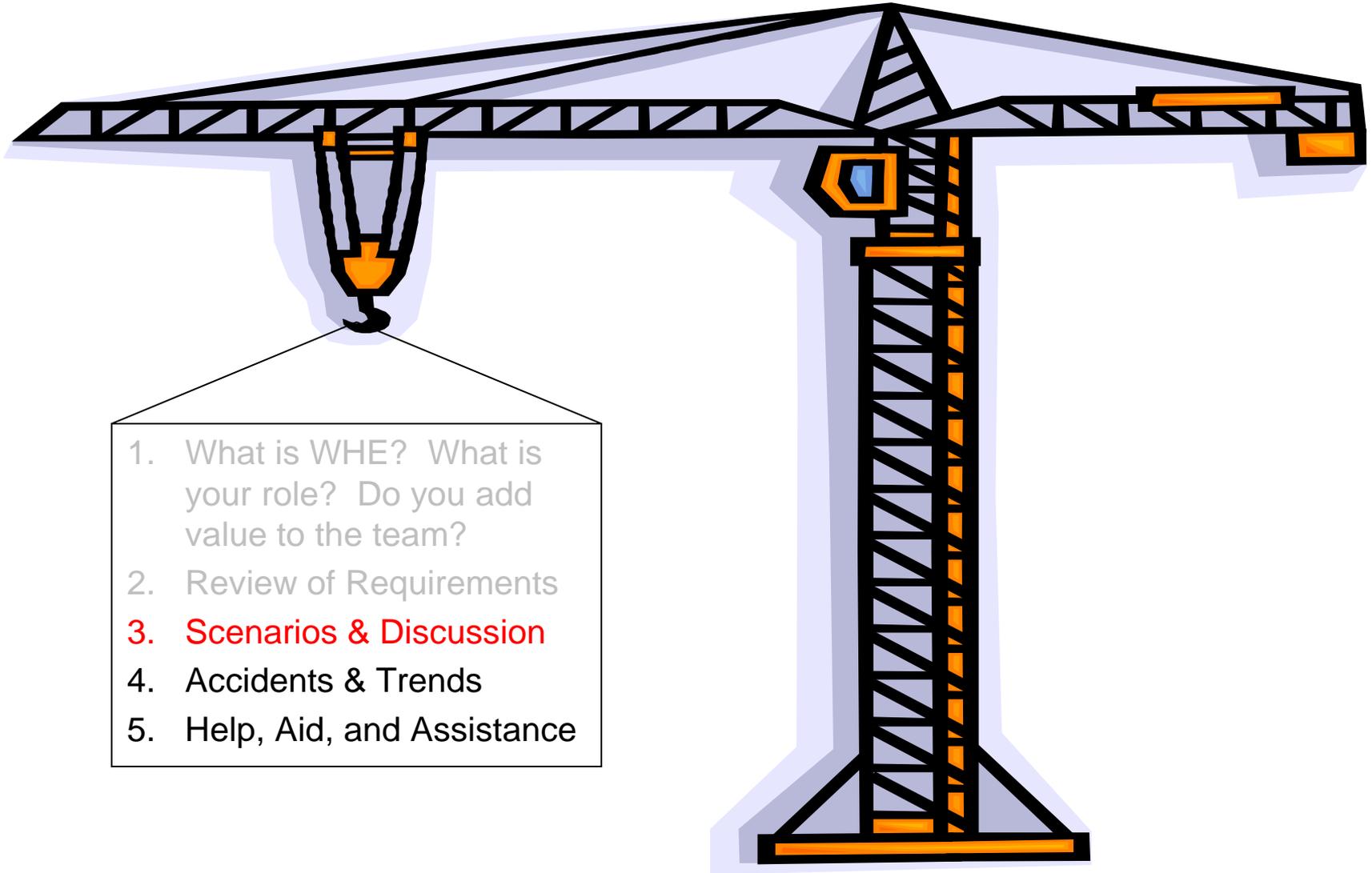
The **contracting officer** shall:



- include the minimum requirements of paragraph 1.7.2 and 1.7.2.1 for contractor cranes in contracts
- ensure compliance with contract requirements
- provide oversight of contractor crane and rigging operations (P2)
- provide oversight of contractor accident investigations and corrective actions
- notify the host activity of any WHE accident upon notification by the contractor
- notify the Navy Crane Center of an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane or adjacent property as soon as possible, preferably within 24 hours of notification by the contractor
- For all other accidents, notify the Navy Crane Center as soon as practical but no later than three working days after the accident.
- provide the Navy Crane Center and host activity a copy of every accident report
- designate a local representative to ensure compliance with the above noted requirements, as applicable

CONTRACTOR CRANE OR RIGGING OPERATION CHECKLIST		YES	NO
1	Is the Certificate of Compliance, P-1, in the operator's cab (or in the contractor's on-site office for rigging operations) with the current operator's name listed?		
2	Is the crane/machine transferred to and from the job site correctly? Are the OEM instructions for travel being followed?		
3	Does the operator know the weight of the load to be lifted?		
4	Is the load to be lifted within the crane/machine manufacturer's rated capacity in its present configuration?		
5	Are outriggers or stabilizers required?		
6	If outriggers are required, are outriggers fully extended and down, and the crane load off the wheels?		
7	Is the crane/machine level and on firm ground, if the ground is not firm is the crane/machine blocked?		
8	If blocking is required, is the entire surface of the outrigger pad supported and is the blocking material of sufficient strength to safely support the loaded outrigger pad?		
9	If outriggers are not used, is the crane/machine rated for on-rubber lifts by the manufacturer's load chart? If stabilizers are used and not outriggers and the wheels are not off the ground is this the correct setup in accordance with the OEM?		
10	Is the swing radius of the crane counterweight clear of people and obstructions and accessible areas within the swing area barricaded to prevent injury or damage?		
11	Has the hook been centered over the load in such a manner to minimize swing?		
12	Is the load well secured and balanced in the sling or lifting device before it is lifted more than a few inches?		
13	Is the lift and swing path clear of obstructions?		
14	If rotation of the load being lifted is hazardous, is a tag or restraint line being used?		
15	Are personnel prevented from standing or passing under a suspended load?		
16	Is the operator's attention diverted?		
17	Are proper signals being used at all times? Is the operator responding properly to the signals? Are radios used for blind lifts?		
18	Is the load lifted a few inches to ensure it is secure and balanced?		
19	Are empty hooks lashed or otherwise secured during travel to prevent swinging?		
20	Does the operator remain at the controls while the load is suspended?		
21	Do the operations ensure that side loading is prohibited?		
22	Are personnel prevented from riding on a load?		
23	Are start and stop motions in a smooth fluid motion (no sudden acceleration or deceleration)?		
24	If operating near electric power lines, are the rules and guidelines understood and adhered to?		
25	Is the lift a critical lift?		
26	If so, are all regulations understood and check-off sheets initiated and signed off?		
27	Are any overhead power lines in the vicinity?		
28	If so, are complex lift rules and 1926.1407-1411 being followed?		
29	If pick and carry operations are allowed and performed, are OEM directions followed (e.g. rotation lock engaged, boom centered over front or rear, etc.)?		
30	When the crane/machine is left unattended, is it in a safe condition?		
31	Is rigging gear undamaged and acceptable for the application?		
32	Does rigging gear meet applicable ASME or host country standards (e.g. ASME B30.9 for shackles, B30.10 for hooks, B30.26 for hardware such as shackles, safety hoist rings, eyebolts, etc. B30.20 for below the hook lifting devices, etc.)?		
33	Is the rigging gear inspected prior to use?		
34	Is chafing gear used to protect slings (especially synthetic slings) and equipment from damage due to sharp corners and edges?		
35	Is the rigging gear used in accordance with its working load limit? Is the load limit visible?		
36	Are positive latching devices used on crane and rigging hooks, or are the hooks "moused"?		
Contractor:		Subcontractor:	
Location:		Date:	
Notes:			
Signature of Contracting Officer's Representative:			

Contract Weight Handling Awareness Workshop



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Is this acceptable?
How could you have been proactive in preventing or mitigating this event?



Is this acceptable?
How could you have been proactive in preventing or mitigating this event?



Is this acceptable?
How could you be proactive in preventing or mitigating this event?



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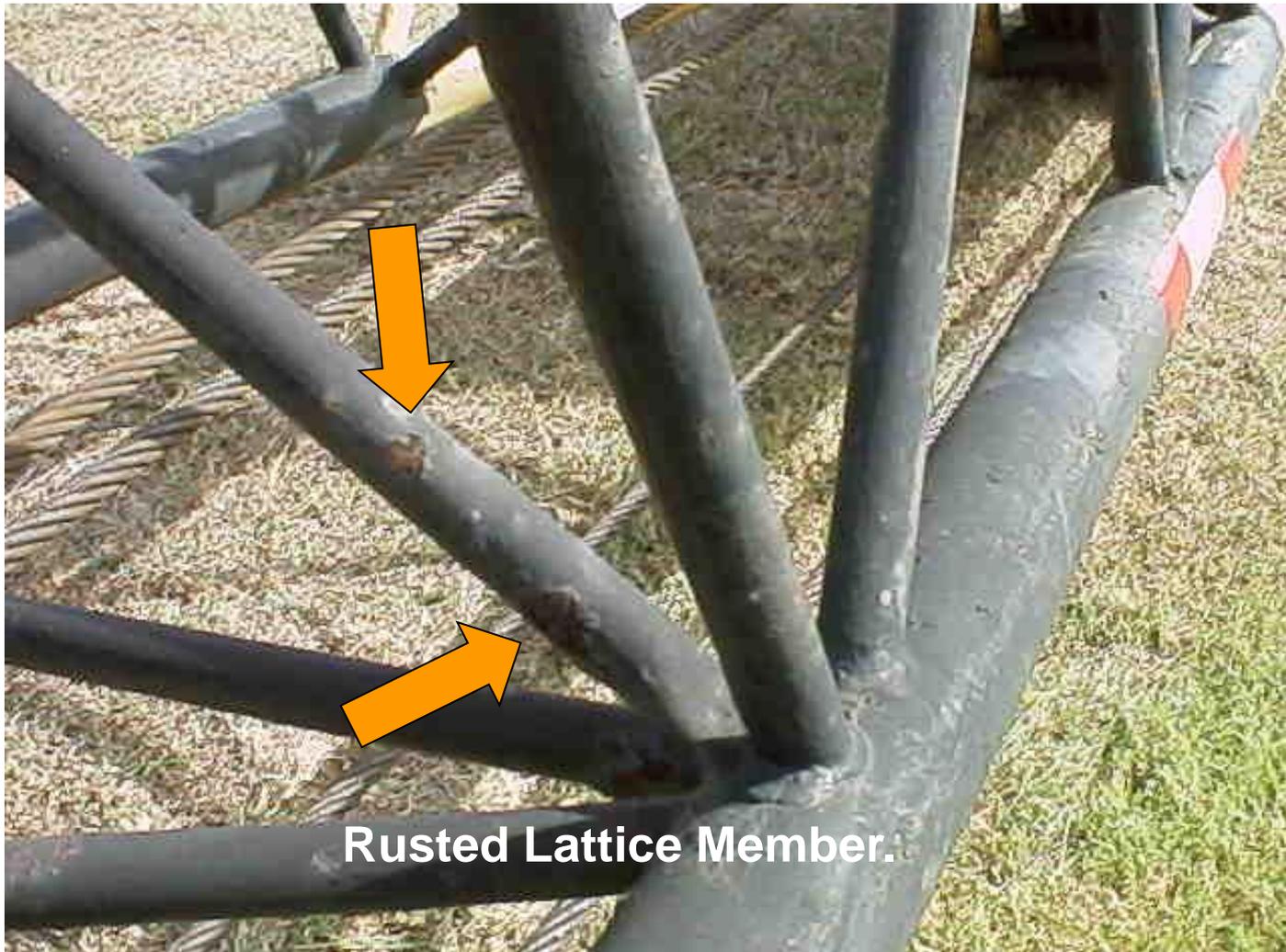
Is this acceptable?

How could you be proactive in preventing or mitigating any events that may arise from this condition?



Is this acceptable?

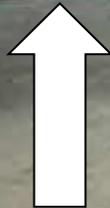
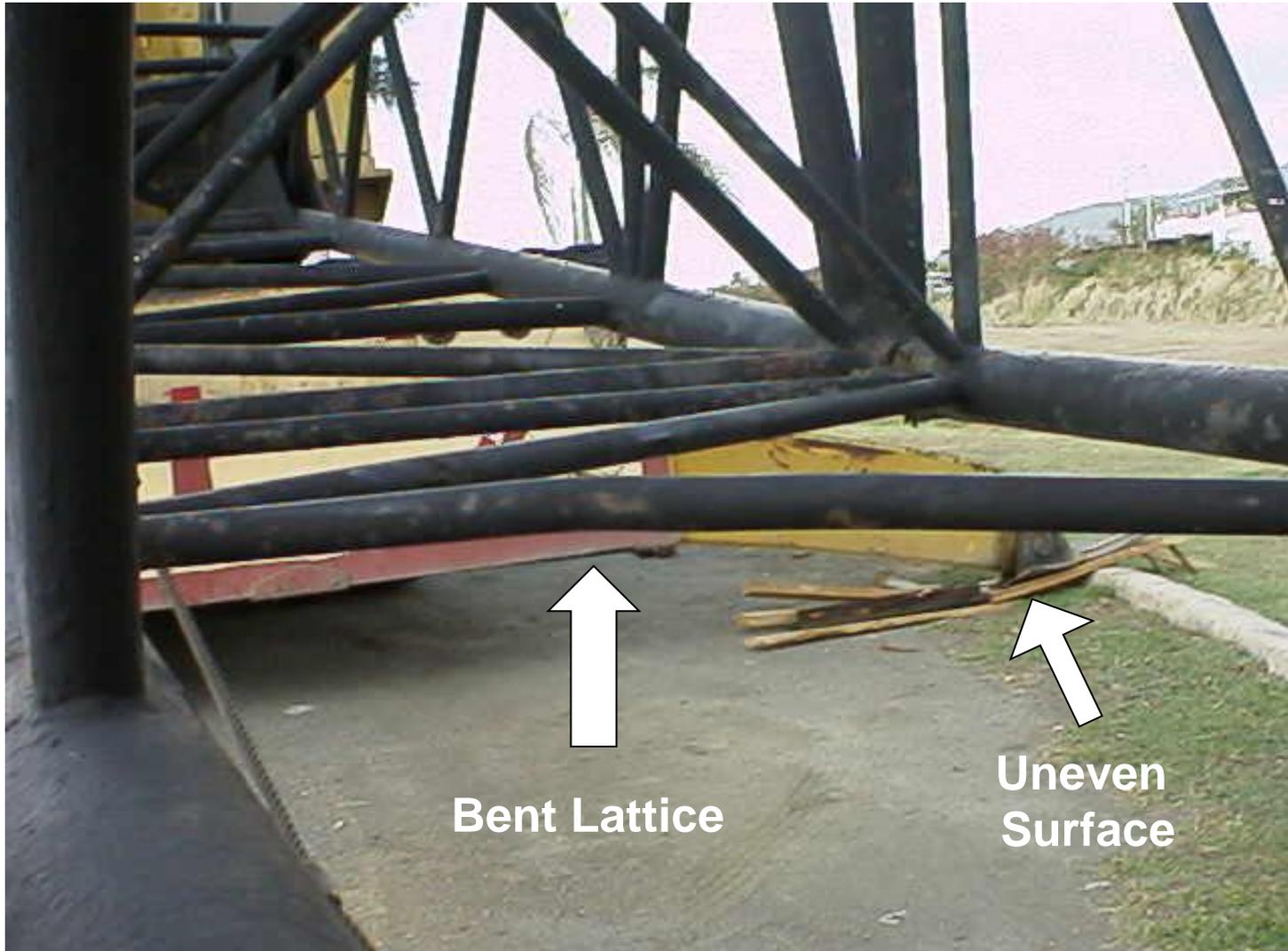
How could you be proactive in preventing or mitigating any events that may arise from this condition?



Rusted Lattice Member.

Is this acceptable?

How could you be proactive in preventing or mitigating any events that may arise from this condition?

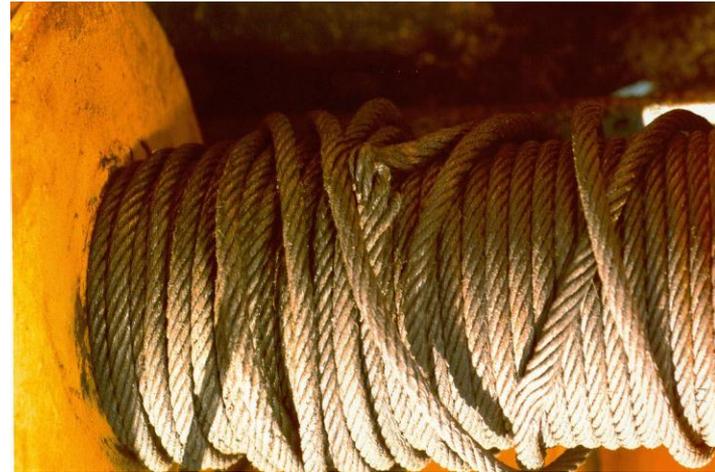


Bent Lattice

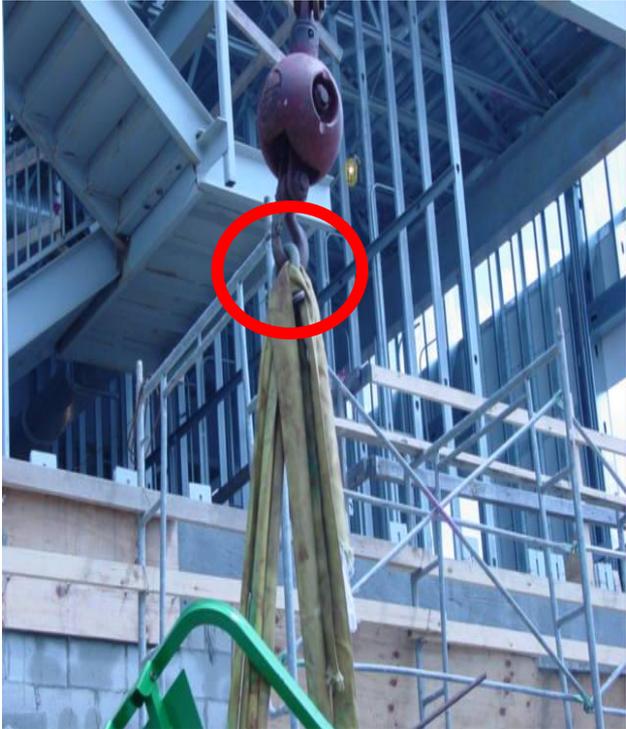


**Uneven
Surface**

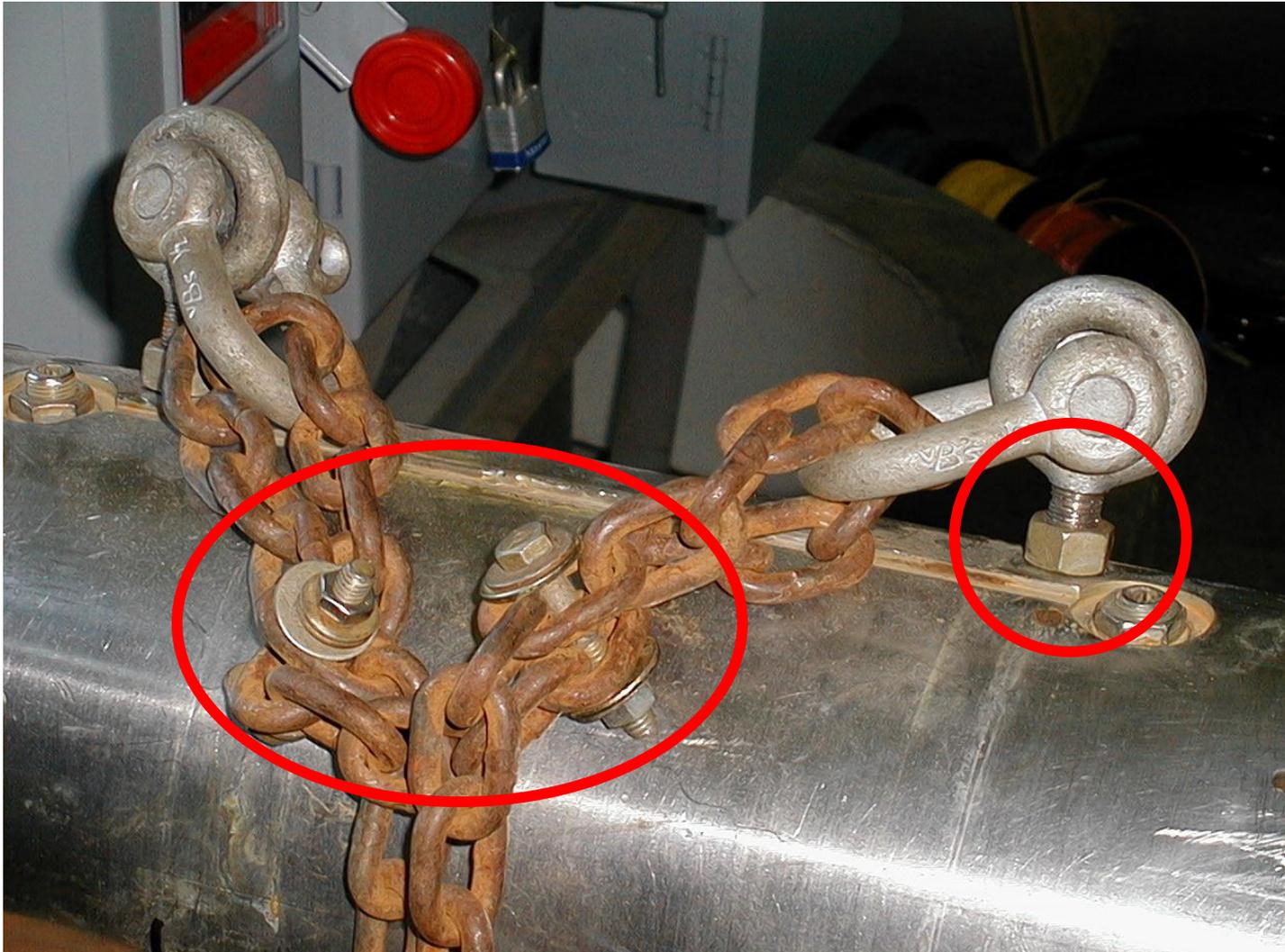
Is this acceptable?
How could you be proactive in preventing or mitigating any events
that may arise from this condition?



Is this acceptable?
How could you be proactive in preventing or mitigating these events?



Is this acceptable?
How could you be proactive in preventing or mitigating
this, or any subsequent, causal events?



Is this acceptable?

How could you be proactive in preventing or mitigating this condition?

What might result if we don't take any action?



Is this acceptable?

How could you be proactive in preventing or mitigating this condition?

What might result if we allow this practice to continue unabated?



Is this acceptable?
How could you be proactive in preventing or mitigating any events
that may arise from this condition?



Is this acceptable?
How could you be proactive in preventing or mitigating any events that may arise from this condition?

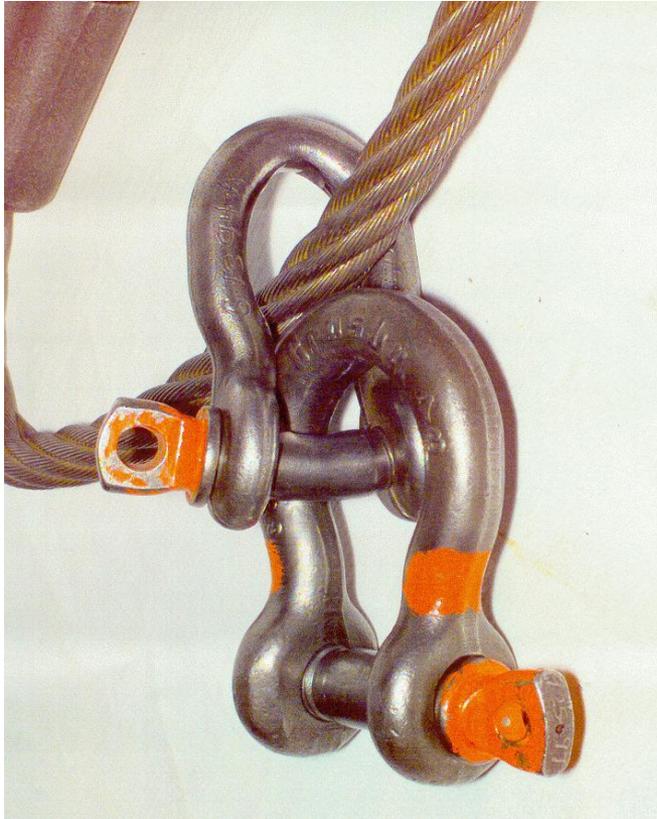


Is this acceptable?
How could you be proactive in preventing or mitigating any events that may arise from this condition?



Is this acceptable?

How could you be proactive in preventing or mitigating any events that may arise from this condition?



Is this acceptable?
How could you have been proactive in preventing or mitigating this event?



Is this acceptable?
How could you have been proactive in preventing or mitigating this event?



Is this acceptable?
How could you have been proactive in preventing or mitigating this event?



Is this acceptable?
How could you have been proactive in preventing or mitigating this event?

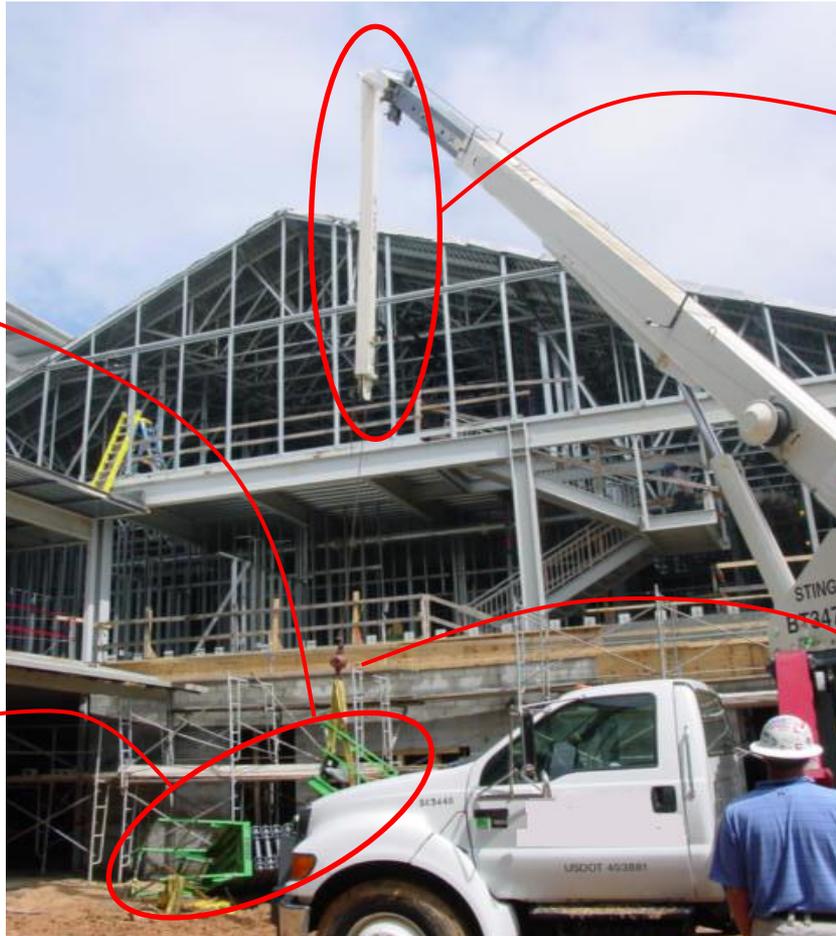


Is this acceptable?

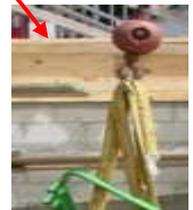
How could you have been proactive in preventing or mitigating this event?



LOAD



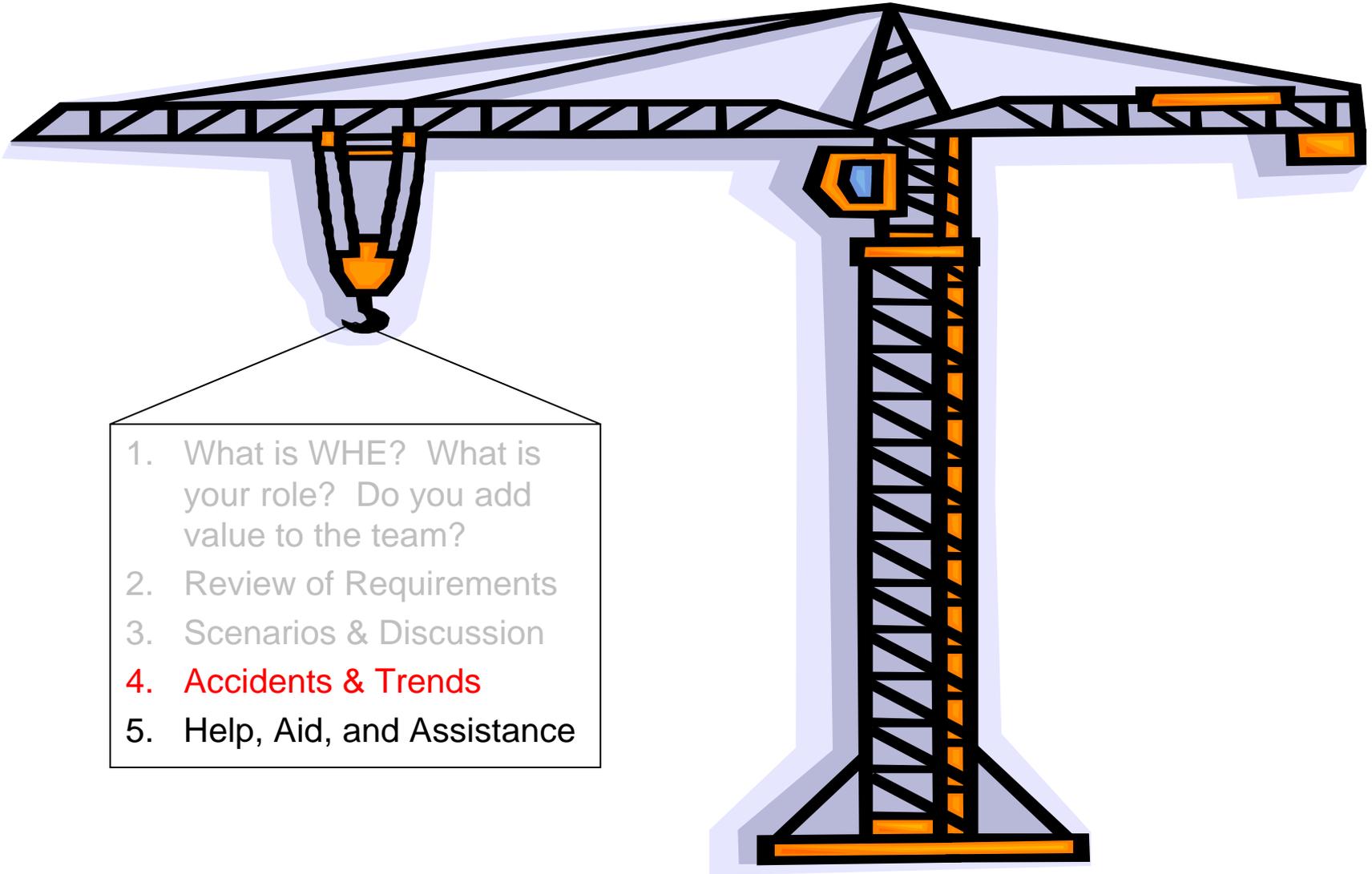
BOOM



HOOK

A truck mounted category 4 crane had a jib failure due to an overload, dropping the load to the ground.

Contract Weight Handling Awareness Workshop



1. What is WHE? What is your role? Do you add value to the team?
2. Review of Requirements
3. Scenarios & Discussion
4. **Accidents & Trends**
5. Help, Aid, and Assistance

Contractor Crane Accident Causal Factors



- Cranes not equipped with requisite safety devices
 - (LMI, A2B, LID, boom length indicator, etc.)
- Safety devices not functioning properly
- Floating mobile cranes not tied down to the barge
- Cranes set up on poor soil/foundation conditions
- Critical/complex lifts not identified as such
- Lift plans and rigging sketches not followed
- Lift plans and rigging sketches changed without approval
- Operators unaware of load weights
- Booms with obvious bent/damaged lacings
- Booms with defective welds or heavy corrosion

Navy Shore Weight Handling Program

STRATEGIC APPROACH TO SAFETY



- Comprehensive accident definition
 - Essentially any unplanned event, whether or not injury/damage occurs.
 - By maintaining such a "wide aperture" perspective and classifying any unplanned event as an accident to be reported & investigated for lessons learned, we capture the "leading indicators" to proactively address the behaviors that can lead to more serious events.

- Periodic compliance review of all Navy shore activities
 - SECNAV-directed authority to direct corrective action, including suspension of operations, to ensure safe weight handling operations.

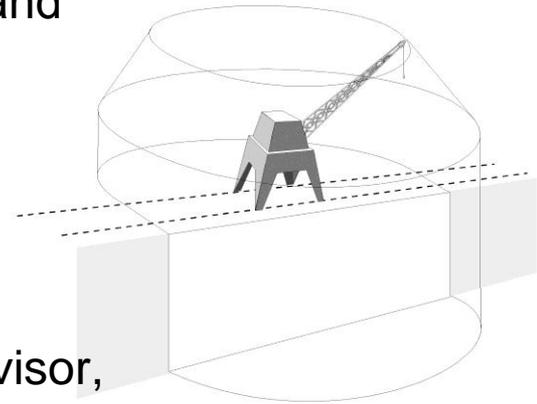
Crane Accident

Operating Envelope



For the purpose of this definition, it is assumed there is an “OPERATING ENVELOPE” around any crane, and inside the envelope are the following elements:

- The crane
- The operator
- The riggers and crane walkers
- Other personnel involved in the operation (supervisor, mechanic, tag line handler, engineer, etc.)
- The rigging gear between the hook and the load
- The load
- The crane’s supporting structure (ground, rail, etc.)
- The lift procedure



Crane Accident

Definition



A crane accident occurs, when any of elements in the crane operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in the following:

- Personnel Injury or Death
- Material or Equipment Damage
- Dropped Load
- Derailment
- Two-Blocking
- Overload
- Collision



The last five items are considered crane accidents even though no material damage or personal injury occurs. A component failure is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components.

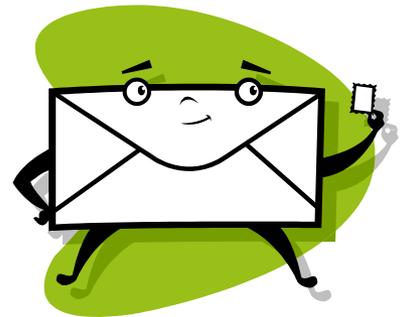
Rigging Gear Accident

Operating Envelope



For the purpose of this definition, it is assumed there is an “OPERATING ENVELOPE” around any weight handling operation, and inside the envelope are the following:

- Rigging gear and miscellaneous equipment covered by section 14
- The user of the gear or equipment
- Other personnel involved in the operation (supervisor, mechanic, tag line handler, etc.)
- The load
- The gear or equipment’s supporting structure
- The load’s rigging path
- The rigging procedure



Rigging Gear Accident

Definition



A rigging accident occurs, when any of elements in operating envelope fails to perform correctly weight handling operations resulting in the following:

- Personnel Injury or Death
- Material or Equipment Damage
- Dropped Load
- Two-Blocking
- Overload

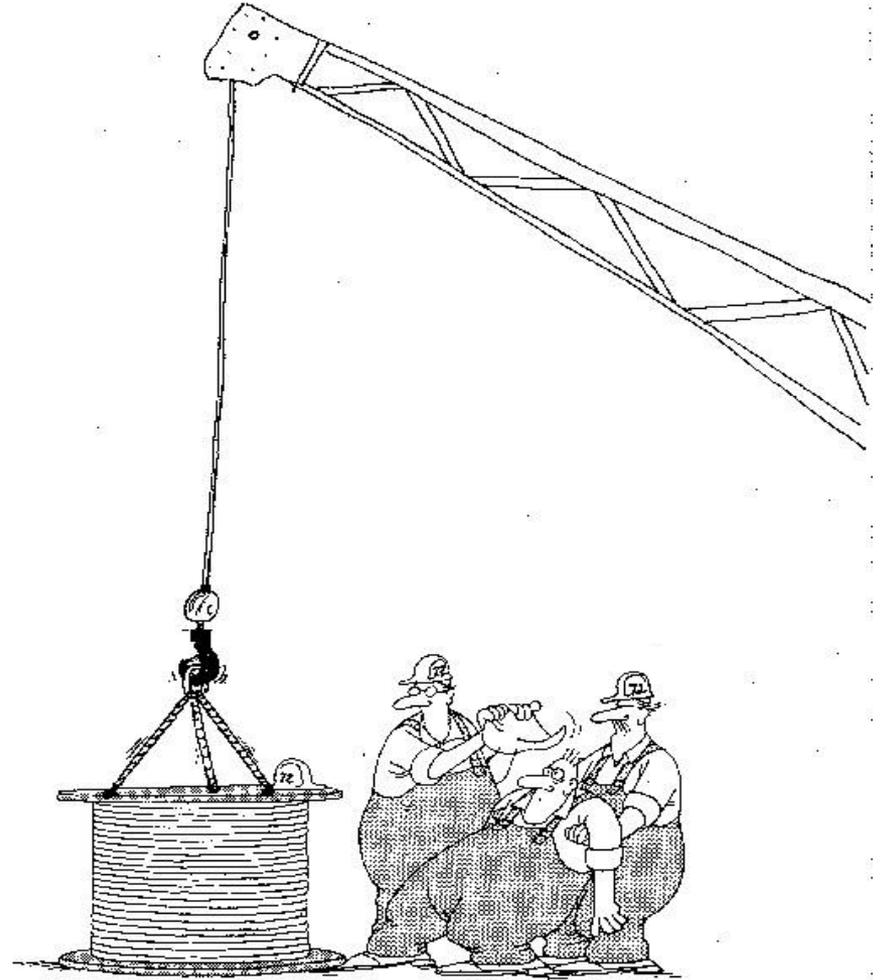


The last three items are considered rigging accidents even though no material damage or personal injury occurs. A component failure is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components.

Accidents

If an accident happens or damage is found, you must:

- Stop Operations
- Secure Crane
- Secure Power
- Notify Supervision
- Preserve Scene



Accident Reporting



- All accidents shall be reported.
- Contractor reports to the Contracting Officer
- Contracting Officer reports to host activity and NCC

NCC contact information for accident reporting:

- **Email: NFSH_NCC_ACCIDENT@navy.mil**
- **Commercial Phone: (757) 967-4042**
- **DSN: 387-4042**
- **Fax: (757) 967-3799**

Accidents

Contractor



The contractor shall:

- notify the contracting officer as soon as practical but no later than four hours after any WHE accident
- secure the accident site and protect evidence until released by the contracting officer
- conduct an accident investigation to establish the root cause(s) of any WHE accident



Crane operations shall not proceed until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. Contractors shall provide to the contracting officer, within 30 days of any accident, a Crane and Rigging Gear Accident Report using the form provided in NAVFAC P-307 Section 12 consisting of a summary of circumstances, an explanation of cause(s), photographs (if available), and corrective actions taken.

Accidents

Contracting Officer



The contracting officer shall:



- notify the host activity of any WHE accident upon notification by the contractor
- Upon **review and concurrence***, provide the Navy Crane Center and the host activity a copy of every accident report, regardless of severity
- notify the Navy Crane Center of any accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane, load, or adjacent property as soon as possible, preferably within 24 hours of notification by the contractor



***i.e., have you read it; do you understand it; do you agree with it; are you satisfied with it; what are your thoughts about it?**

When the contracting office is not in the local area, the contracting officer shall designate a local representative to ensure compliance with the above noted requirements. The above requirements are in addition to those promulgated by OPNAVINST 5100.23 and related local instructions.

Weight Handling Equipment Unplanned Events & Near Misses



To improve data collection and trend analysis contracting officers and contractors are encouraged to report any unplanned occurrences or near misses that may occur on Navy construction sites, yet do not fall within the defined scope of a crane or rigging gear accident, within 30 days of the occurrence. Include appropriate details and any lessons learned.



TRENDS IN NAVY WEIGHT HANDLING CONTRACT WORK



A contractor mobile crane overturned and landed on a surface ship adjacent to the pier. This occurred as a result of the improper set up of the crane prior to a production operation. The crane's outriggers were not fully deployed in accordance with OEM requirements, allowing the crane to become unstable as it was rotated.

A contractor crane overturned as it was being utilized to remove a light tower from a pier. During the removal process, the crane lost control of the light tower, causing the crane to become unstable and overturn.

A contractor crane overturned when the operator was moving the crane with the boom raised and the spud lock (the pin that locks the upper works to the carrier) disengaged. The crane rotated unexpectedly during movement, became unstable, and overturned.



TRENDS IN NAVY WEIGHT HANDLING CONTRACT WORK



A contractor crane operator inadvertently rotated the crane boom into a power line when he became inattentive while sitting in the operator's cab.



A government owned bridge crane was severely overloaded and damaged when it was used by a contractor during demolition work to extract timbers that were embedded in the ground.

A contractor crane attempted to lift a load that weighed nearly 200% of the crane's capacity.



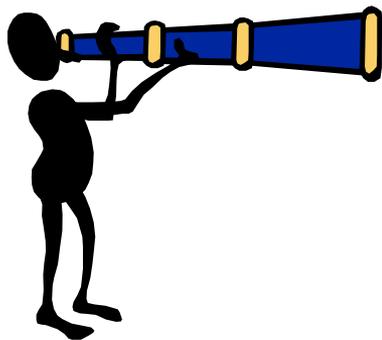
A contractor crane was left idling and unattended with the boom hoist control engaged. The boom was raised through the boom stops and fell backwards onto an occupied construction office trailer.

TRENDS IN NAVY WEIGHT HANDLING CONTRACT WORK



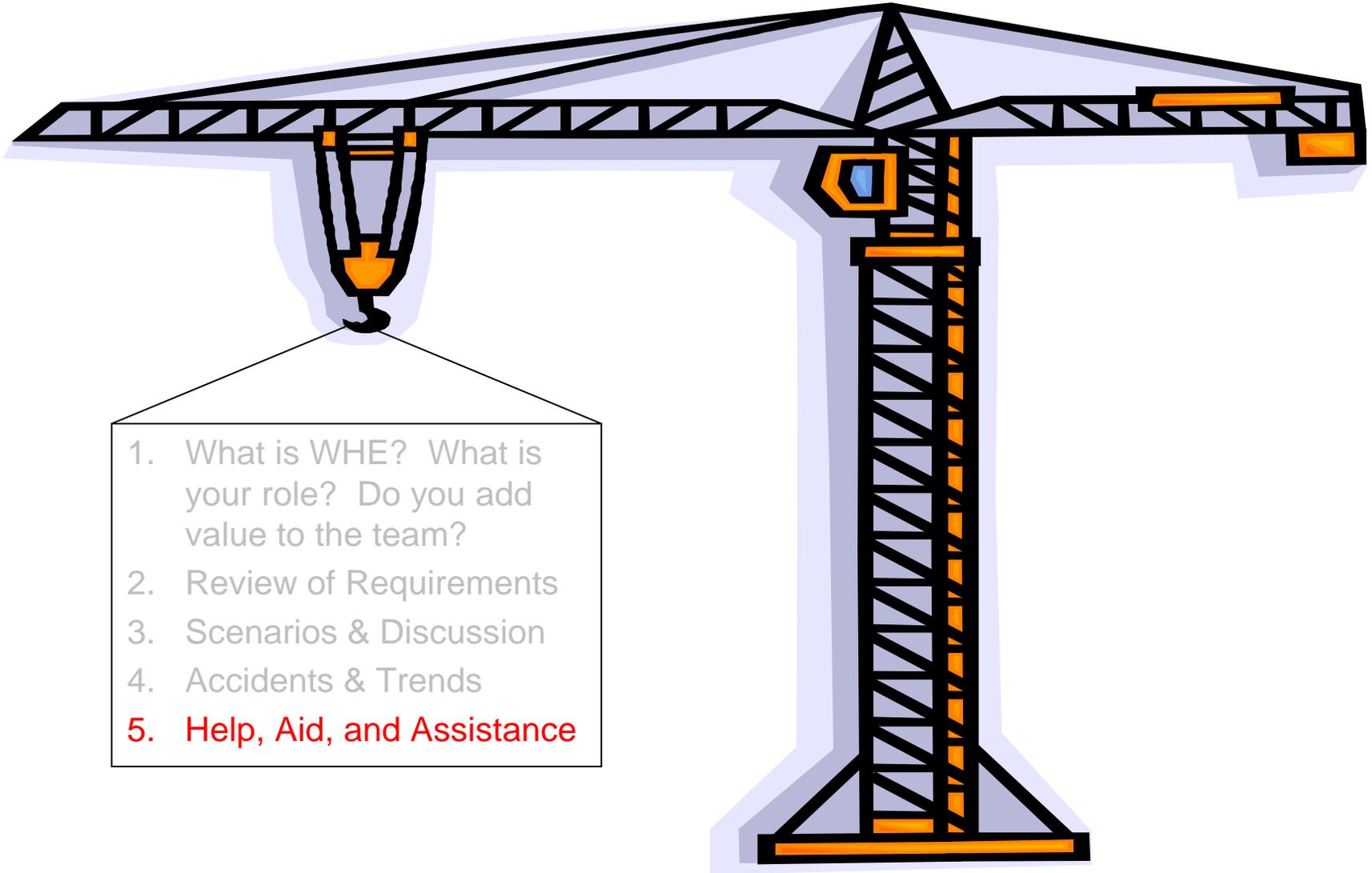
For most of the accidents noted on the previous slides, the cranes were in satisfactory condition and the operators were qualified. The accidents resulted from:

- lapses in attention
- poor team performance
- inadequate oversight



Surveillance and oversight of weight handling operations by experienced personnel is essential in fostering contractor crane accident prevention. During oversight and surveillances, look for warning signs of complacency or taking shortcuts. Reinforce the Navy's expectation for adherence to weight handling requirements and practices. The principles of operational risk management (ORM) should be standard practice for each and every weight handling operations whether it involves contractor or Navy equipment and personnel. Increased safety awareness by all personnel involved in weight handling operations and consistent application of ORM principles will help prevent crane accidents and help to maintain fleet readiness.

Contract Weight Handling Awareness Workshop



1. What is WHE? What is your role? Do you add value to the team?
2. Review of Requirements
3. Scenarios & Discussion
4. Accidents & Trends
5. **Help, Aid, and Assistance**

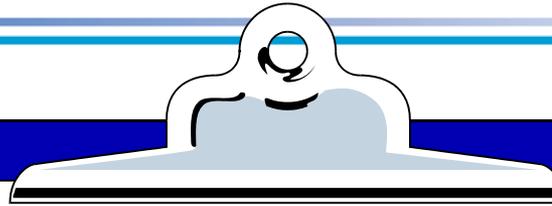
Resources



Emergency Response Plan
Hazard Analysis Plan
Hazard Communication Plan
Hazardous Energy Control Plan
Fire Protection and Prevention Plan
Drug and Alcohol Prevention Plan
Critical Lift Plan
Severe Weather Plan
Fall Protection and Prevention Plan
Work Site Lighting Plan
Site Sanitation Plan
Emergency Lighting Plan
Jacking Operations Plan
Asbestos Hazard Abatement Plan
Material Containing Lead Removal Plan



Resources



MEMO

- NCC Internet Web Site
- Crane Corner, Quarterly
- Naval Messages
- Quarterly Accident Lessons Learned
- Safety Alerts/Briefs
- Crane Safety Advisories (CSA)
- Equipment Deficiency Memorandums (EDM)
- Commanding Officer's Weight Handling Program Video
- Mobile Crane Load Test Video
- Navy-Wide WHE Conference
- Mobile Crane Safety Video
- Cat 3 Video
- Training
- Audit & Support Visits



Resources



- 16 COURSES
 - Operations
 - General Crane Safety
 - General Crane Safety Refresher
 - Category 2 and Cab Operated Category 3 Crane Safety
 - Category 2 Crane Safety Refresher
 - Category 3 Crane Safety Refresher
 - Category 4 Crane Safety
 - Rigging
 - Crane Rigger
 - Rigging Gear Inspection
 - Maintenance
 - Crane Mechanic
 - Mobile Crane Mechanic
 - Mechanical Crane Inspector
 - Crane Electrician
 - Electrical Crane Inspector
 - Load Test Director
 - Program
 - Certifying Official
 - Other
 - **Contractor Crane Awareness**

Resources



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[NAVFAC Six Step Contracting Process \(Pillars\) - To Successful Contractor Safety Performance](#)

Contractor Partners

Your partnership with us is vital to our collective safety success. We share in your concern for assuring products and services are delivered safely maintaining client mission readiness without disruption or endangerment to contractor or military personnel. Safety is a key component of production planning

KNOW SAFETY - NO MISHAPS

Join us by making your company goal "ZERO MISHAPS"



[Contractor Safety Resources](#)

[EM 385-1-1 Safety Checklists](#)

[Mishap Abstract \(categories\)](#)

[Safety Requirements and Training Resources](#)

[EM 385 Safety Awareness Topics](#)

Crane Entry Forms

[Latest P-1 and P-2 2010](#)

[Contractor Entry Package and Forms](#)

[Critical Lift Plan Checklist](#)

[Contractor Crane Start Up Inspection Form](#)

Mishap Reporting Forms

[Fillable CSIR FORM](#)

[Contractor Significant Incident Report \(CSIR-1\)](#)

[Crane Mishap Report](#)

[CSIR Mishap Report Special Questions Guide](#)

EM 385-1-1 and AHA Contractor Resources

[EM 385-1-1 Sep 2008](#)

[Activity Hazard Analysis Example](#)

[Activity Hazard Analysis \(AHA\) Blank Worksheet](#)

[Steps for Ordering EM 385-1-1 Manual](#)

[ORM AHA](#)

[EM 385-1-1 Abbreviated Safety Plan Checklist](#)

[Activity Hazard Analysis Guide](#)

[NEW AHA FORM EXCEL](#)

[EM 385-1-1 Contractor Safety Deficiency Tracking System Form](#)

[AHA and ORM](#)

[EM 385-1-1 Full Plan Review](#)

[Contractor Safety Management Checklist \(CAV\)](#)

EM 385-1-1 2008 Changes

[Changes to Sections 1-5](#)

[Changes to Sections 11-15](#)

[Changes to Sections 21-25](#)

[Changes to Sections 6-10](#)

[Changes to Sections 16-20](#)

[Changes to Sections 31-34](#)

Contractor Resource - Monthly Self Evaluation Checklist

[Monthly Contractor Evaluation Checklist & Scoring](#)



[Unsafe Observations Apr-May 2010](#)

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NCC Web Site

<https://portal.navfac.navy.mil/ncc>



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NAVFAC > NAVFAC Worldwide > Navy Crane Center

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- Showcase
- Contact Us/Visitors
- Resources

- General Information
- Director's Bio

SAFE AND RELIABLE WEIGHT HANDLING PROGRAMS AT NAVY SHORE ACTIVITIES



ESSENTIAL ENABLER FOR FLEET READINESS

- P-307
- CSA / EDM / SAFETY MSGS
- TRAINING
- QA
- CRANEALT
- DOWNLOADS
- CRANE CORNERS / REPORTS
- NCC SAFETY VIDEOS
- WH ACCIDENT PREVENTION INFO

**Navy-Wide Weight Handling Conference
5-7 May 2009**

**CRANE ACCIDENT PREVENTION
SYMPOSIUM 2008**

**2007 Weight Handling Improvement
Conference (WHIC)**

[Navy Ethos](#)

Mission Statement

We lead the Navy's shore activity weight handling program by establishing policy and providing engineering, acquisition, technical support, training and evaluation services. Our goal is to achieve safe and reliable weight handling programs throughout the Navy.

Vision Statement

We are the organization of choice for weight handling program solutions. We are leaders who offer and deliver timely and effective weight handling program solutions.

[NCC Fact Sheet](#)

Navy Crane Center's HQ and Field Offices



Portsmouth, VA
HQ: Com (757) 967-3803 / DSN 387-3803
NCCR Norfolk: Com (757) 396-1771 / DSN 386-1771

Summary



While the Navy's shore based weight handling accident prevention program has improved, we cannot decrease our management and oversight of weight handling operations, especially in the area of contract work. The consequence of any weight handling accident (Navy or contractor) diminishes our ability to support the fleet. A safe and reliable Navy weight handling program is an essential enabler for fleet readiness. Commanding officers of Navy shore activities are strongly encouraged to intensify their efforts to raise the level of safety awareness in their weight handling operations and continue to strive for the goal of zero weight handling accidents.

Bottom Line

Safety First!

Thinking Through The Process

GOAL: **ZERO** ACCIDENTS

Navy Crane Center



Safe and Reliable Weight Handling Programs at Navy Shore Activities



Essential Enabler for Fleet Readiness

FEEDBACK

HELP US HELP YOU



Please provide feedback to the presenter and/or Navy Crane Center on how to improve or better deliver this presentation. Include suggestions such as:

- Current WHE accidents, near misses, trends (with narratives and pictures)
- Content change suggestions (i.e., additions, deletions, modifications)
- Other topics
- Clarifications, corrections
- Delivery methodologies

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