

NAVSEA
STANDARD ITEM

FY-11

ITEM NO: 009-40
DATE: 24 JUL 2009
CATEGORY: I

1. SCOPE:

1.1 Title: Requirements for Contractor Cranes at Naval Facilities;
accomplish

2. REFERENCES:

- 2.1 29 CFR Part 1910, Occupational Safety and Health Standards
- 2.2 29 CFR Part 1915, Occupational Safety and Health Standards for Shipyard Employment
- 2.3 29 CFR Part 1917, Marine Terminals
- 2.4 29 CFR Part 1926, Safety and Health Regulations for Construction
- 2.5 ASME B30.5, Mobile and Locomotive Cranes
- 2.6 ASME B30.8, Floating Cranes
- 2.7 ASME B30.22, Articulating Boom Cranes
- 2.8 NAVFAC P-307, Management of Weight Handling Equipment

3. REQUIREMENTS:

3.1 Notify the SUPERVISOR 24 hours prior to bringing any crane onto a Naval facility.

3.2 Comply with the requirements of 2.1 through 2.7, and Paragraph 1.7.2 of 2.8, prior to bringing or using any contractor cranes on Naval facilities.

3.2.1 Maintain written documentation of the last weight test of the crane and all related weight handling equipment on site.

3.2.2 Provide a completed and signed Certificate of Compliance, Attachment A, for each crane brought onto a Naval facility.

3.2.2.1 Post a copy of Attachment A in cab of crane.

3.3 Designate in writing the trained and qualified operators and post the designations in the crane at all times.

3.3.1 Provide certification that operators for mobile cranes with gross capacities of 50,000 pounds or greater are designated as qualified by a crane operator qualification source.

3.3.2 Provide certification that the operator is qualified to operate the crane to be used.

3.3.3 Ensure the designated operators comply with the following requirements:

3.3.3.1 Have understanding of all signs, notices, and operating instructions, and the applicable hand signals prescribed by the ASME B30 standard for the type of crane in use. Post an illustration of the signals on the crane.

3.3.3.2 Not have uncorrected defective eyesight or hearing.

3.3.3.3 Not be known to suffer from heart disease, epilepsy, or similar ailments that suddenly could incapacitate him/her.

3.3.3.4 Be at least 18 years of age.

3.4 Ensure the handling and rigging gear and below the hook lifting devices and personnel comply with the following requirements:

3.4.1 Personnel performing rigging shall have an understanding of all signs, notices, and operating instructions, and be familiar with the applicable hand signals prescribed by the ASME B30 standard for the type of crane in use.

3.4.2 Personnel performing rigging shall be familiar with the rigging requirements in 2.1 through 2.4.

3.5 Inspect rigging gear in accordance with 2.1 through 2.4.

3.5.1 Maintain certification records on site available for review during all work.

3.5.2 All current certification records must include at a minimum the date of the inspection and signature of the inspector noting the expiration date of each certification.

(V) "INSPECT CRANE"

3.6 Contractor shall:

3.6.1 Ensure all inspections are performed in accordance with 2.1 through 2.4 (daily, monthly, quarterly, and yearly), and retain the current documentation of inspections. Documents shall be kept on site.

3.6.1.1 Perform daily pre-use inspections and testing on all load hoisting and lowering mechanisms, boom hoisting and lowering mechanisms, swinging mechanisms, traveling mechanisms (if to be used that day), and safety devices.

3.6.2 Cranes that have to be re-rated shall be in accordance with SAE Recommended Practice, Crane Load Stability Test Code J765 and documentation maintained on site.

3.6.3 Post a completed copy of Attachment A in the cab of vehicle.

3.6.4 Have an operational anti-two-block device or a two-block damage prevention feature for all points of two-blocking.

3.6.5 Have a boom hoist disconnect, shutoff, or hydraulic relief to automatically stop the boom hoist when the boom reaches a predetermined high angle.

(V)(G) "INSPECT CERTIFICATION AND TESTING DOCUMENTATION"

3.7 Conduct a joint verification with the Government representative to ensure that a legible and indelible completed copy of Attachment A is maintained on the crane and the following certification and testing documentation is on site prior to entry and use on any Naval facility:

3.7.1 Crane certification

3.7.2 Load testing

3.7.3 Yearly, monthly, and daily inspection logs

3.7.4 Rope/sling certifications

3.7.5 Operator certifications/designations

3.7.6 Designation of person performing log inspections

3.7.7 Cranes that are permanently located on a Naval facility shall have a quarterly joint verification.

3.8 Develop and maintain on site a critical lift plan as follows:

3.8.1 Critical lifts are:

3.8.1.1 Lifts over 75 percent of the capacity of the crane or hoist (lifts over 50 percent capacity of a barge-mounted mobile crane's hoist) at any radius

- 3.8.1.2 Lifts involving more than one crane or hoist
- 3.8.1.3 Lifts of personnel
- 3.8.1.4 Lifts involving non-routine rigging or operation
- 3.8.1.5 Lifts involving sensitive equipment
- 3.8.1.6 Lifts with unusual safety risks

3.8.2 Specify the size and weight of the load to be lifted, including crane and rigging components that add to the weight. The OEM's maximum load capacities for the entire range of the lift shall also be provided.

3.8.3 Specify lift geometry, including the crane position, boom length and angle, height of lift, and radius for the entire range of the lift, and shall apply to both single and multiple crane lifts.

3.8.4 Specify a rigging plan showing the lift points, rigging gear, and rigging procedures.

3.8.5 Specify environmental conditions under which lift operations are to be stopped.

3.8.6 Demonstrate compliance with the requirements of Section 1926.550(g) of 2.4 for lifts of personnel.

3.8.7 Provide data that is needed to establish facility ground loading restrictions/conditions to the SUPERVISOR.

3.8.8 Complete and maintain a copy of Attachment B for each lift.

3.8.9 For barge-mounted mobile crane critical lifts, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. Amount of list and trim shall be within manufacturer's requirements.

3.9 Report verbally each accident to the SUPERVISOR as soon as management becomes aware but not later than 4 hours of such an event.

3.9.1 Secure the accident site and ***preserve the scene*** until released by the SUPERVISOR.

3.9.1.1 Conduct an accident investigation to establish root cause(s) of any accident.

3.9.2 Withhold further crane operations until the cause is determined and corrective actions are implemented and approved by the SUPERVISOR.

3.9.3 A crane accident is when any of the following occurs during crane operations:

3.9.3.1 Personnel injury or death

3.9.3.2 Material or equipment damage

3.9.3.3 Dropped load

3.9.3.4 Derailment

3.9.3.5 Two-blocking

3.9.3.6 Overload

3.9.3.7 Collision, including unplanned contact between the load, crane, and/or other objects

3.9.4 Provide a formal written report of the event to the SUPERVISOR within 24 hours of each accident.

3.9.5 Submit one legible copy, in electronic media, of the accident report consisting of a summary of circumstances, and explanation of cause(s), and corrective actions taken, using Attachment C, to the SUPERVISOR ***within 15 working days of each accident.***

4. NOTES:

4.1 None.

ATTACHMENT A

CERTIFICATE OF COMPLIANCE			
Contractor shall complete this form and submit one copy to the Contracting Officer at least 24 hours prior to bringing any crane on Navy property. This certificate shall be signed by an official of the company that provides cranes for any application under this contract. This certificate is only valid for the contract specified. Cranes will not be allowed on any Naval activity without a signed copy of this certificate posted in cab. All operations are subject to periodic surveillance.			
LOCATION: (Include sketch if necessary)		DATE(S) OF CRANE OPERATION:	
DESCRIPTION OF WORK:		CONTRACTOR OFFICE:	
CONTRACTOR OFFICER/PHONE:		CONTRACT NUMBER:	
PRIME CONTRACTOR:		POINT OF CONTACT/PHONE:	
CRANE SUPPLIER/PHONE: (If different from prime contractor)		POINT OF CONTACT/PHONE:	
CRANE MANUFACTURER:	MODEL:	CAPACITY:	CRANE ID #:
GROSS VEHICLE WEIGHT: TRAVEL: OPERATING:	MAXIMUM LIFT DURING OPERATION:	MAX OUTRIGGER LOAD DURING OPERATION:	
CRANE OPERATOR'S NAME(S):			
<p>I certify that</p> <p>1) The above noted crane and associated 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: _____</p> <p>2) The operators noted above have been trained and are qualified for the operation of the above noted crane.</p> <p>3) The operators noted above have been trained not to bypass safety devices during lifting operations.</p>			
CONTRACTOR OFFICIAL PRINTED NAME/TITLE:		DATE:	
(Signature)			
POST ON CRANE (IN CAB OF VEHICLE)			

ATTACHMENT B

CONTRACTOR CRANE OPERATION CHECKLIST		YES	NO
1	Does the operator know the weight of the load to be lifted?		
2	Is the load to be lifted within the crane manufacturer's rated capacity in its present configuration?		
3	Is the crane level and on firm ground?		
4	Are outriggers required?		
5	If so, are outriggers fully extended and down, and the crane load off the wheels?		
6	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?		
7	If outriggers are not used, is the crane rated for on-rubber lifts by the manufacturer's load chart?		
8	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?		
9	Has the hook been centered over the load in such a manner to minimize swing?		
10	Is the load well secured and balanced in the sling or lifting device before it is lifted more than a few inches?		
11	Is the lift and swing path clear of obstructions?		
12	If rotation of the load being lifted is hazardous, is a tag or restraint line being used?		
13	Are personnel prevented from standing or passing under a suspended load?		
14	Is the crane operator's attention diverted?		
15	Are proper signals being used at all times?		
16	Do the operations ensure that side loading is prohibited?		
17	Are personnel prevented from riding on a load?		
18	Are start and stop motions in a smooth fluid motion (no sudden acceleration or deceleration)?		
19	If operating near electric power lines, are the rules and guidelines understood and adhered to?		
20	Is the lift a critical lift?		
21	If so, are critical lift regulations understood, check-off sheets initialed and signed off, and was there an interactive brief conducted with associated personnel?		
22	Is Attachment A current, filled out completely, and posted in the crane?		
Contractor:		Subcontractor:	
Location:		Date:	

ATTACHMENT C

WEIGHT HANDLING EQUIPMENT ACCIDENT REPORT					Report Date:	
Accident Category		<input type="checkbox"/> Crane Accident		<input type="checkbox"/> Rigging Gear Accident		
From:				To: SUPERVISOR		
UIC:						
Activity:				Report No:		
Crane No:		Cat:	Accident Date		Time: hrs	
SPS:	GPS:	Crane Type:		Crane Manufacturer:		
Location:			Weather:			
Crane Capacity:		Hook Capacity:		Weight of Load on Hook:		
Fatality/Permanent Total Disability?		YES		NO		
Loss of Work Time Beyond the Day or Shift on Which It Occurred?				YES		
Accident Type: <input type="checkbox"/> Personal Injury <input type="checkbox"/> Overload <input type="checkbox"/> Derail <input type="checkbox"/> Damaged Rigging Gear <input type="checkbox"/> Load Collision <input type="checkbox"/> Two Blocked <input type="checkbox"/> Dropped Load <input type="checkbox"/> Damaged Crane <input type="checkbox"/> Crane Collision <input type="checkbox"/> Damaged Load <input type="checkbox"/> Other (Specify) _____						
Cause of Accident: <input type="checkbox"/> Improper Operation <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Inadequate Visibility <input type="checkbox"/> Improper Rigging <input type="checkbox"/> Switch Alignment <input type="checkbox"/> Inadequate Communication <input type="checkbox"/> Track Condition <input type="checkbox"/> Procedural Failure <input type="checkbox"/> Other (Specify) _____						
Chargeable to: <input type="checkbox"/> Track Walker <input type="checkbox"/> Rigger <input type="checkbox"/> Operator <input type="checkbox"/> Maintenance <input type="checkbox"/> Management/Supervision <input type="checkbox"/> Other (Specify) _____						
Crane Function: <input type="checkbox"/> Travel <input type="checkbox"/> Hoist <input type="checkbox"/> Rotate <input type="checkbox"/> Luffing <input type="checkbox"/> Lower <input type="checkbox"/> Telescoping						
Is this accident indicative of a recurring problem? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, list Accident Report Nos.: _____						
ATTACH COMPLETE AND CONCISE SITUATION DESCRIPTION AND CORRECTIVE/PREVENTIVE ACTIONS TAKEN AS ENCLOSURE (1). Include probable cause and contributing factors. Assess damages and define responsibility. For equipment malfunction or failure include specific description of the component and the resulting effect or problem caused by the malfunction or failure. List corrective/preventive actions assigned and responsible codes.						
Preparer's Signature				Code		Date
CONCURRENCES (Include Signature, Code, and Date)						
CONTRACTOR CERTIFYING OFFICIAL						

WEIGHT HANDLING EQUIPMENT ACCIDENT REPORT INSTRUCTIONS

- 1 - Report Date: The date the accident report is completed.
- 2 - Accident Category: Indicate either crane accident or rigging gear accident.
- 3 - From: The Contractor who owns the crane.
- 4 - Activity: The Naval activity where the accident took place.
- 5 - Report No.: The activity-assigned accident number (e.g., 98-001).
- 6 - Crane No.: The activity-assigned crane number (e.g., PC-5).
- 7 - Category: Identify category of crane (i.e., 1, 2, or 3).
- 8 - Accident Date: The date the accident occurred (month/day/year).
- 9 - Time: The time (24 hour clock) the accident occurred (e.g., 1300).
- 10 - Category of Service: Special purpose service (SPS) or general purpose service (GPS).
- 11 - Crane Type: The type of crane involved in the accident (e.g., mobile, bridge).
- 12 - Crane Manufacturer: The manufacturer of the crane (e.g., Dravo, Grove, P&H).
- 13 - Location: The detailed location where the accident took place (e.g., building 213, dry dock 5)
- 14 - Weather: The weather conditions at time of accident (e.g., wind, rain, cold).
- 15 - Crane Capacity: The certified capacity of the crane (e.g., 60 tons).
- 16 - Hook Capacity: The capacity of the hook involved in the accident at the maximum radius of the operation.
- 17 - Weight of Load on Hook: If applicable, the weight of the load on the hook.
- 18 - Fatality or permanent total disability?: Check yes or no.
- 19 - Material/Property Cost Estimate: Estimate total cost of damage resulting from the accident.
- 20 - Loss of work time beyond the day or shift on which it occurred?: Check yes or no.
- 21 - Accident Type: Check all that apply.
- 22 - Cause of Accident: Check all that apply.
- 23 - Chargeable to: Check all that apply.
- 24 - Crane Function: Check the function(s) in operation at time of accident. Check all that apply.
- 25 - Is this a recurring problem?: Check yes or no. Identify any other similar accidents.
- 26 - Situation Description/Corrective Actions: Self-explanatory.
- 27 - Concurrences: Signatures of activity personnel verifying the accident report.
- 28 - Preparer: Self-explanatory.