NAVSEA STANDARD ITEM

FY-14

ITEM NO: 009-40
DATE: 29 JUL 2011

CATEGORY: I

1. SCOPE:

1.1 Title: Requirements for Contractor Cranes, Multi-Purpose Machines and Material Handling Equipment 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 NAVFAC P-307, Management of Weight Handling Equipment

3. REQUIREMENTS:

- 3.1 Notify the SUPERVISOR 24 hours prior to bringing any cranes, multi-purpose machines, material handling equipment, or construction equipment that may be used in a crane-like application to lift suspended loads onto a Naval facility.
- 3.2 Comply with the requirements of 2.1 through 2.4, and Paragraph 1.7.2 of 2.5, prior to bringing or using any contractor cranes, multi-purpose machines and material handling equipment that may be used in a crane-like application to lift suspended loads 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.
- 3.3 Ensure the handling and rigging gear and below the hook lifting devices and personnel comply with the following requirements:
- 3.3.1 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.
- 3.3.2 Personnel performing rigging shall be familiar with the rigging requirements in 2.1 through 2.4.

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- 3.4 Inspect rigging gear in accordance with 2.1 through 2.4 and Paragraph 1.7.2 of 2.5.
- 3.4.1 Maintain certification records on site available for review during all work.

(V) "INSPECT CRANE"

3.5 Contractor shall:

- 3.5.1 Ensure all inspections are performed in accordance with 2.1 through 2.5 (daily, monthly, quarterly, and yearly), and retain the current documentation of inspections. Documents shall be kept on site.
- 3.5.1.1 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.
- 3.5.2 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.
- 3.5.3 Have an operational anti-two-block device or a two-block damage prevention feature for all points of two-blocking.
- 3.5.4 Have a boom hoist disconnect, shutoff, or hydraulic relief to automatically stop the boom hoist when the boom reaches a predetermined high angle.
- 3.6 Conduct a joint verification with the Government representative to ensure that a legible and indelible completed copy of Appendix P, Figure P-1 of 2.5 is maintained on the crane, multi-purpose and material handling equipment used in a crane-like application to lift suspended loads. The following certification and testing documentation shall be on site prior to entry and use on any Naval facility:
- 3.6.1 Crane, multi-purpose and material handling equipment used in a crane-like application to lift suspended loads certification
 - 3.6.2 Load testing
 - 3.6.3 Yearly, monthly, and daily inspection logs
 - 3.6.4 Rope/sling certifications
 - 3.6.5 Operator certifications/designations
 - 3.6.6 Designation of person performing log inspections
- 3.6.7 Cranes that are permanently located on a Naval facility shall have a quarterly joint verification.

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- 3.7 Develop and maintain on site a critical lift plan in accordance with Paragraph 1.7.2 of 2.5.
 - 3.7.1 Complete and maintain a copy of Attachment A for each lift.
- 3.8 Report verbally each accident to the SUPERVISOR as soon as management becomes aware but not later than 4 hours of such an event.
- $3.8.1\,$ Secure the accident site and preserve the scene until released by the SUPERVISOR.
- 3.8.1.1 Conduct an accident investigation to establish root cause(s) of any accident.
- 3.8.2 Withhold further crane, multi-purpose and material handling equipment operations until the cause is determined and corrective actions are implemented and approved by the SUPERVISOR.
- 3.8.3 A crane and rigging gear accident is when any of the following occurs during crane, multi-purpose and material handling equipment operations:
 - 3.8.3.1 Personnel injury or death
 - 3.8.3.2 Material or equipment damage
 - 3.8.3.3 Dropped load
 - 3.8.3.4 Derailment
 - 3.8.3.5 Two-blocking
 - 3.8.3.6 Overload
- 3.8.3.7 Collision, including unplanned contact between the load, crane, multi-purpose, material handling equipment and/or other objects
- $3.8.4\,$ Provide a formal written report of the event to the SUPERVISOR within 24 hours of each accident.
- 3.8.5 Submit one legible copy, in approved transferrable media, of the accident report consisting of a summary of circumstances, and explanation of cause(s), and corrective actions taken, using Attachment B, to the SUPERVISOR within 15 working days of each accident.

4. NOTES:

4.1 None.

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ATTACHMENT A

CONTRACTOR CRANE OPERATION CHECKLIST FOR CRITICAL LIFTS			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 Appendix P, Figure P-1 of 2.5 current, filled out completely, and posted in the crane?				
Contractor: Subcontractor:					
Loca	Location: Date:				

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ATTACHMENT B

FOR OFFICIAL USE ONLY

CRANE AND RIGGING GEAR ACCIDENT REPORT							
Accident Category: Crane Accident Rigging Gear Accident							
From:	To: SUPERVISOR						
Activity:	1		Report No:				
Crane No: Category:		Accident Date:		Time: hrs			
Category of Service: SPS GPS C		rane Type: Crane Manufacturer:					
Was Crane/Rigging Gear Being Used	Was Crane/Rigging Gear Being Used in a Complex Lift/Critical non-crane rigging operation?						
Yes No							
Location: Weather:							
Crane Capacity: Hook Capa		We	eight of Load on Hook:	f Load on Hook:			
Fatality or Permanent Disability? Yes No Material/Property Cost Estimate:							
Accident Type: Personal Injury Overload Derail Damaged Rigging Gear							
Load Collision	Load Collision Two Blocked Dropped Load Damaged Crane						
Crane Collision Damaged Load Other Specify							
Cause of Accident: Improper Operation Equipment Failure Inadequate Visibility							
Improper Rigging Switch Alignment Inadequate Communication							
Track Condition Procedural Failure Other Specify							
Chargeable to: Crane Walker Rigger Operator							
Maintenance Management/Supervision Other Specify							
Crane Function: Travel Hoist Rotate Luffing Telescoping Other N/A							
Is this accident indicative of a recurring problem? Yes 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 immediate and long term corrective/preventive actions assigned and respective codes.							
Preparer:	Phone and email		Code	Date			
Concurrences:							
		Code	Date	Date			
		Code	Date	Date			
Certifying Official (Crane Accidents O	Code	Date	Date				

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CRANE AND RIGGING GEAR ACCIDENT REPORT INSTRUCTIONS

Electronic submission will be accepted without signatures but the names of the preparer, concurring personnel, and certifying official (for crane accidents only) must be filled in.

- 1. Accident Category: Indicate either crane accident or rigging gear accident.
- 2. From: The contractor that is responsible for reporting the accident.
- 3. Activity: The naval activity where the accident took place.
- 4. Report No.: The activity assigned accident number (e.g., 95-001).
- 5. Crane No.: The activity assigned crane number (e.g., PC-5), if applicable.
- 6. Category: Identify category of crane (i.e., 1, 2, 3, or 4), if applicable.
- 7. Accident Date: The date the accident occurred.
- 8. Time: The time (24 hour clock) the accident occurred (e.g., 1300).
- 9. Category of Service: Check the applicable service (SPS as defined by NAVSEA 0989-030-7000).
- 10. Crane Type: The type of crane involved in the accident (e.g., mobile, bridge), if applicable.
- 11. Crane Manufacturer: The manufacturer of the crane (e.g., Dravo, Grove, P&H), if applicable.
- 12. SPS: Was the crane or rigging gear being used in an SPS lift?
- 13. Complex lift: Was the crane or rigging gear being used in a complex lift?
- 14. Location: The detailed location where the accident took place (e.g., building 213, dry dock 5).
- 15. Weather: The weather conditions at time of accident (e.g., wind, rain, cold).
- 16. Crane Capacity: The certified capacity of the crane (e.g., 120,000 pounds), if applicable.
- 17. Hook Capacity: The capacity of the hook involved in the accident at the maximum radius of the operation, if applicable.
- 18. Weight of Load on Hook: If applicable, the weight of the load on the hook.
- 19. Fatality or Permanent Disability?: Check yes or no.
- 20. Material/Property Cost Estimate: Estimate total cost of damage resulting from the accident.
- 21. Reported to NAVSAFECEN?: Self-explanatory.
- 22. Accident Type: Check all that apply.
- 23. Cause of Accident: Check all that apply.
- 24. Chargeable to: Check all that apply.
- 25. Crane Function: Check the function(s) in operation at time of accident. Check all that apply. Check N/A if a rigging gear accident.
- 26. Is this a recurring problem?: Check yes or no. Identify any other similar accidents.
- 27. Situation Description/Corrective Actions: Self-explanatory.
- 28. Preparer: Self-explanatory.
- 29. Concurrences: Self-explanatory.
- 30. Certifying Official (Crane Accidents Only): Self-explanatory.

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