

NAVY PUBLIC WORKS CENTER  
TRANSPORTATION DEPARTMENT  
SAN DIEGO, CA 92136-5294

11262  
Procedure TD #01-2  
9 Aug 01

TRANSPORTATION DEPARTMENT STANDARD OPERATING PROCEDURE #01-2

From: Transportation Department Head

Subj: CONTRACTOR CRANE OVERSIGHT PLAN

Ref: (a) NAVFAC P-307, Management of Weight Handling Equipment  
(b) COMNAVREG SW San Diego MSG R 260001Z Sep 00

Encl: (1) Contractor Crane Compliance Review Form  
(2) Contractor Rigging Oversight Guidelines  
(3) Certificate of Compliance  
(4) Crane Operating Permit Naval Base San Diego  
(5) Crane Operating Permit Naval Base Coronado  
(6) Crane Operating Permit Naval Base Point Loma  
(7) Contractor Crane Operation Checklist  
(8) Contractor Crane Temporary Access Form  
(9) Contractor Crane Non-Operation Permit  
(10) Contractor Crane Discrepancy Form  
(11) Contractor Crane Discrepancy Response Form

1. Purpose. To establish a contractor crane oversight plan in accordance with references (a) and (b) to minimize the potential for damage to government property and injury to government personnel by contractors operating weight handling equipment on Naval Base property. This contractor crane oversight plan is intended only to improve the internal management of Naval Base San Diego (NBSD), Naval Base Point Loma (NBPL), and Naval Base Coronado (NBC), and is not intended to, and does not, create any right, or benefit, or trust responsibility, substantive or procedural, enforceable against the United States, its agencies or instrumentalities, or its officers or employees.

2. Scope. This oversight plan relates directly to the use of non-Navy-owned cranes operated by contractor personnel, conducting business on Navy property. These cranes, often from a variety of sources, are incidental to construction contracts, ship repair contracts, demolition contracts, maintenance and other service contracts, deliveries of supplies and equipment, etc. Numerous organizations, including tenant activities,

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ships, supply departments, Resident Officer-in Charge of Construction, etc., have contracting authority which often involves the use of non-Navy-owned and operated cranes.

3. General Requirements

a. The Navy Region Southwest Program Manager for Transportation (N447) is responsible for the oversight of all contractor cranes on Naval Base property in the San Diego Metropolitan area, with the exception of contracts under the cognizance of the Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP). The SUPSHIP Safety and Environmental Office is responsible for oversight of all contractor cranes on contracts under the cognizance of SUPSHIP.

b. Contractor crane oversight services provided by the Navy Region Southwest Program Manager for Transportation will be funded by the Navy Region Southwest.

c. Contracting officers <sup>Art</sup> shall notify <sup>Joe</sup> the contractor crane oversight office at 556-7156 or 556-7593 in advance, whenever a contractor crane is scheduled to enter Naval Base property within the San Diego metropolitan area.

d. Contractor crane surveillance team personnel shall review contractor cranes and associated rigging gear for compliance with reference (a). Contractor Crane Compliance Review Form (enclosure (1)), and Contractor Rigging Oversight Guidelines (enclosure (2)), shall be used as a guide to ensure compliance with applicable requirements. If the crane is determined to be in compliance, and all required documentation has been verified, the person conducting the review shall issue a Crane Operating Permit (enclosure (4), (5) or (6)), depending upon which Naval Base the contractor will operate. The Crane Operating Permit shall be valid for the duration of the contract, but not to exceed 30 days. For contracts with durations of more than 30 days, a complete review of the crane and documentation will be required. If determined to be in compliance, a new Crane Operating Permit will be issued.

e. Commercial service vehicles and other commercial vendors often enter Navy property with category 4 cranes that they do not intend to operate. For those instances, and in lieu of a compliance review, the contractor may elect to complete a Contractor Crane Non-Operation Permit (enclosure (9)) certifying that the crane will not be operated on Navy property. The

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permit must be posted in a conspicuous location on the crane or in the cab. A Non-Operation Permit may be obtained from the contracting officer, the contractor crane oversight office, or at the gate.

f. Contractor crane access to NBSD property shall be restricted to the gates listed below.

- (1) Bay side - Gate 9
- (2) Dry side - Gate 43
- (3) Broadway Complex - Gate 19
- (4) Navy Medical Center - Gate 20
- (5) Navy Exchange Complex - Unguarded
- (6) Navy Recreational Center, Mission Gorge - Unguarded

g. Contractor crane access to NBPL property shall be restricted to the gates listed below.

(1) Naval Submarine Base (SUBASE)- Main gate Rosecrans, Post 116

(2) Space and Naval Warfare Systems Command (SPAWAR) - Main Gate, SUBASE

(3) Fleet Anti Submarine Warfare Center (FLEASWTRACEN)- Gate 1, Post 3

(4) Fleet Intelligence Training Center (FITCPAC)- Main Gate

(5) Old Town Complex (OTC) - Gate 23, Post 16

(6) Taylor Street Complex - Main gate

(7) Fleet Combat Training Center Pacific (FCTCPAC) - Electron Drive gate

h. Contractor crane access to NBC property shall be restricted to the gates listed below.

(1) Naval Air Station, North Island - Gate 2

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(2) Naval Amphibious Base (dry side) - Main Gate

(3) Naval Amphibious Base (surfside) - Main Gate

(4) Imperial Beach - Main Gate

(5) San Clemente Island - Cranes destined for San Clemente Island shall enter NBSD bay side through Gate 9

i. Base security personnel shall stop all contractor cranes without a valid Crane Operating Permit posted in the front windshield or a Contractor Crane Non-Operation Permit posted on the crane or in the vehicle cab.

j. During normal working hours (0700 - 1530), security personnel shall contact the Navy Public Works Center (PWC) Contractor Crane Oversight office at 556-7156 and direct contractor cranes without a valid Crane Operating Permit or Non-Operation Permit to the corresponding inspection location listed below.

(1) Naval Base San Diego

(a) Bay side - Gate 9. Parking lot adjacent to the gate on the right.

(b) Dry side, Gate 43. Parking lot adjacent to gate on the right.

(c) Broadway Complex - Gate 19. Parking lot adjacent to gate on the left.

(d) Navy Medical Center - Gate 20. Inspect at the job site.

(e) Navy Exchange Complex - either gate. Inspect at the job site.

(f) Navy Recreational Center, Mission Gorge. Inspect at the job site.

(2) Naval Base Coronado

(a) Naval Air Station North Island - Gate 2 truck inspection area.

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(b) Naval Amphibious Base, Dry side - Inspect at job site.

(c) Naval Amphibious Base Surfside - Inspect at job site.

(d) Imperial Beach - Inspect at job site.

(e) San Clemente Island - Cranes destined for the Island, shall be inspected at NBSD prior to loading on the San Clemente Island barge.

(3) Naval Base Point Loma

(a) SUBASE - Parking lot at intersection of Steamplant Road, Rosecrans and McClellan Road.

(b) SPAWAR, Point Loma - SUBASE Parking lot at intersection of Steamplant Road, Rosecrans and McClellan Road.

(c) FLEASWTRACEN - Right lane just inside Gate 1.

(d) FITCPAC & FLEASWTRACEN - Right lane just inside Gate 1.

(e) Old Town Complex - Designated truck inspection area.

(f) Taylor Street Complex - OTC, Designated truck inspection area.

(g) FCTCPAC, Point Loma - Parking lot at intersection of Steamplant Road, Rosecrans and McClellan Road.

k. After normal working hours (1530 - 0700), on weekends, and when contractor crane oversight personnel are unavailable, security personnel shall stop contractor cranes without a valid Crane Operating Permit or Non-Operation Permit at the gate and complete a Contractor Crane Temporary Access Form (enclosure (8)) prior to allowing entry. Contractor crane oversight personnel shall collect completed forms from the security office at the beginning of each workday.

l. Contractor crane oversight personnel shall randomly monitor contractor crane operations on a daily basis, when possible, using the Contractor Crane Operation Checklist,

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(enclosure (7)) as a guide. To ensure contractor compliance, surveillance personnel will check for valid Crane Operating Permits, Certificates of Compliance, and crane operator qualifications. In addition to verifying proper documentation, surveillance personnel shall randomly observe crane operations for safe crane operation, proper set up, adequate pier support and proper rigging practices.

m. Deficiencies noted during crane and documentation review, or while monitoring crane operations shall be documented on the contractor crane oversight discrepancy form (enclosure (10)) and forwarded to the appropriate contracting official for resolution. Contracting officials shall submit a written response to all discrepancies within 10 working days to the PWC Contractor Crane Oversight Office. The contractor crane discrepancy response form (enclosure (11)) shall be used to identify the root cause(s) and any corrective/preventive actions taken to prevent recurrence.

n. Contractor crane oversight personnel shall provide the Base Commanding Officer with a monthly status report of contractor crane operations. The monthly status report shall consist of all documented deficiencies during oversight of contractor cranes, and a brief summary of the overall status of contractor crane compliance on Naval Base property.



M. WURBS

Distribution:

All Tenant Commands NB San Diego

CONTRACTOR CRANE COMPLIANCE REVIEW FORM

|                                 |  |        |                            |                 |
|---------------------------------|--|--------|----------------------------|-----------------|
| Contractor:                     |  | Sub:   |                            | Date:           |
| Crane Mfg.:                     |  | Owner: |                            | Rated Capacity: |
| Year/Model:                     |  |        | Ser #:                     |                 |
| Quadrennial Certification Date: |  |        | Annual Certification Date: |                 |
| Location of Operations:         |  |        | Duration of Contract:      |                 |
| Contracting Officer             |  | Phone: |                            | Contract #:     |

|  | YES | NO | N/A |
|--|-----|----|-----|
| 1. Is the crane certification valid? -- IAW EM 385 16.C.13 & OSHA 1926.550 (a) (6) & OSHA 1919.71(a) - (a) (2)   |     |    |     |
| 2. Is there a certificate of compliance posted on the crane? -- NAVFAC P-307 1.7.2 (b), NAVFAC, P-307 1.7.2 c  |     |    |     |
| 3. Is the operator qualified to operate this specific type crane? IAW - EM 385 16.C.04.a & ASME B30.5, 5-3.1.2(a) & NAVFAC P-307 1.7.2 c   |     |    |     |
| 4. Is there a copy of the OEM operator's manual for the specific make and model crane? -- IAW EM 385 16.C.02.a & ASME B30.5, 5-1.1.3(b)  |     |    |     |
| 5. Is there a load rating chart specific to the make and model of the crane? -- IAW EM 385 16.C.02.b(2), OSHA 1926.550(a) (2), OSHA 1910.180(c) (2), & ASME B30.5, 5-1.1.3 (a) (1) (1992 EM 385 1-1, 16.C.01.b2) |     |    |     |
| 6. Is the hoist reeved according to OEM recommendations? -- IAW EM 385 16.C.02.b(3) & ASME B30.5, 5-1.1.3 (a) (5) & OSHA 1926.550(b) (2),  |     |    |     |
| 7. Are operating limits set for specific weather conditions? -- IAW EM 385 16.C.02.b(4) & ASME B30.5, 5-3.1.3 (e) (8)  |     |    |     |
| 8. Is the crane equipped with a boom angle indicator? -- IAW 385 16.D.01 & ASME B30.5, 5-1.9.1(c)  |     |    |     |

CONTRACTOR CRANE COMPLIANCE REVIEW FORM (continued)

|   | YES | NO | N/A |
|---|-----|----|-----|
| 9. Is the crane equipped with a load indicating device? -- IAW EM 385 16.D.01 & ASME B30.5, 5-1.9.10 & OSHA 1017.46(a) (1)                          |     |    |     |
| 10. Is the device calibrated in accordance with OEM recommendations? -- IAW EM 385-16.D.01  |     |    |     |
| 11. Is the crane equipped with level indicators? - IAW EM 385 16.D.02 & ASME B30.5, 5-1.9.12(d)   |     |    |     |
| 12. Is the crane equipped with drum rotation indicators? (1990 & Later model cranes) - IAW EM 385 16.D.0 & ASME B30.5, 5-1.3.2(a) (5)               |     |    |     |
| 13. Is the crane equipped with anti-two block devices? -- IAW EM 385 16.D.05.e & ASME B30.5, 5-1.9.9  |     |    |     |
| 14. Are operator aids (motion and load limiting devices) and other safety devices functioning properly? -- IAW EM 385 App.H.3 & ASME B30.5, 5-2.1.6 |     |    |     |
| 15. Is the hydraulic system functioning properly (without leaks)? -- IAW EM 385 App.H.5 & ASME B30.5, 5-2.1.2(d) (h)                                |     |    |     |
| 16. Is the electrical system functioning properly? -- IAW EM 385 App H.9 & ASME B30.5, 5-2.1.2(g)   |     |    |     |
| 17. Are hooks and latches inspected for deformation, chemical damage, cracks and wear? -- IAW EM 385 App.H.6 & ASME B30.5, 5-2.1.2(e)               |     |    |     |
| 18. Are audible signal devices (horns and warning devices) functioning? -- IAW ASME B30.5, 5-1.9.12(c)  |     |    |     |
| 19. Are warning signs for electrical lines posted on the crane? -- IAW ASME B30.5, 5-1.9.12(g) & OSHA 1926.550(a) (15)                              |     |    |     |
| 20. Are monthly wire rope inspections conducted? -- IAW ASME B30.5, 5-2.4.2(a) (1) & OSHA 1926.550 (a) (7), OSHA 1910.180(g) (1)                    |     |    |     |
| 21. Is there the minimum of full wraps of wire remaining on hoist drum at all times? -- IAW, EM 385 15.F.08 & ASME B30.5 (Minimum of 2 wraps -ASME) |     |    |     |
| 22. Is the crane used for longshoring? If so is the crane certified? -- OSHA, 1918.66(a) (1) & OSHA 1919.71 & OSHA 1919.72. OSHA 1917.50 (c) (1)    |     |    |     |

|            |       |
|------------|-------|
| SIGNATURE: | Date: |
|------------|-------|

## CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES

### General Industry

OSHA, 1910.180(b)(2) "New and Existing equipment." All new crawler, locomotive, and truck cranes constructed and utilized on or after August 31, 1971, shall meet the design specifications of the American National Standard Safety Code for Crawler, Locomotive, and Truck Cranes, ANSI B30.5-1968, which is incorporated by reference as specified in Sec. 1910.6. Crawler, locomotive, and truck cranes constructed prior to August 31, 1971 should be modified to conform to those design specifications by February 15, 1972, unless it can be shown that the crane cannot feasibly or economically be altered and that the crane substantially complies with the requirements of this section.

### Construction

OSHA, 1926.550(b)(2) All crawler, truck, or locomotive cranes in use shall meet the applicable requirements for design, inspection, construction, testing, maintenance and operation as prescribed in the ANSI B30.5-1968, Safety Code for Crawler, Locomotive, and Truck Cranes. However, the written, dated and signed inspection reports and records of the monthly inspection of critical items prescribed in section 5-2.1.5 of the ANSI B30.5-1958 standard are not required. Instead, the employer shall prepare a certification record which includes the date the crane items were inspected; the signature of the person who inspected the crane items; and a serial number, or other identifier, for the crane inspected. The most recent certification record shall be maintained on file until a new one is prepared.

### ITEM #

1. OSHA, 1926.550(a)(6) A thorough, annual inspection of the hoisting machinery shall be made by a competent person, by a government or private agency recognized by the U.S. Department of Labor. A record of the dates and results of the inspections shall be maintained for each hoisting machine and piece of equipment.

OSHA, 1917.71(a) Unit proof test of cranes shall be carried out at the following times. (a)(1) In the cases of new cranes, before initial use and every 4 years thereafter. (a)(2) In the cases of uncertified cranes which have been in use, at the time of initial certification and every 4 years thereafter.

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

2. NAVFAC P-307 Require a certificate of compliance from the contractor (appendix P, figure P-1) that the crane and rigging gear meet applicable OSHA regulations with the contractor citing which regulations are applicable, e.g., cranes used in cargo transfer shall comply with CFR 1917; cranes used in construction, demolition, or maintenance shall comply with 29 CFR 1926; cranes used in ship building, ship repair, or ship breaking shall comply with 29 CFR 1915. For cranes at naval activities in foreign countries, the contractor shall certify that the crane and rigging gear conform to the host country safety standards. The contractor shall also certify that all of its crane operators working on the naval activity have been trained not to bypass safety devices (e.g., anti-two block devices) during lifting operations. Require that the certification be posted on the crane.

3. ASME, B30.5-5-3.1.2(a) Operators shall be required to successfully meet the qualifications for the specific type crane that they are operating.

EM 385-1-1, 16.C.04 Cranes and derricks may only be operated by qualified operators. Only those operators qualified to operate a particular type of crane or derrick may operate that type of machinery: Proof of qualification shall be in writing

NAVFAC P-307, 1.7.2 c Effective 1 October 2001, for mobile cranes with OEM rated capacities of 50,000 pounds or greater, require that the crane operator be designated as qualified by a source that qualifies crane operators (i.e. a union, a government agency, or an organization that test and qualifies crane operators). Proof of current qualification shall be provided

ASME B30.5, 5-3.1.2(a) Operators Shall be required to successfully meet the qualifications for the specific type crane which they are operating

4. EM 385-1-1 16.C.02 a A copy of the operating manual developed by the manufacturer for the specific make and model of the crane: a copy of the operating manual for any crane operator aids which the crane is equipped.

ASME, B30.5, 5-1.1.3(b) In addition to the data required on the crane load rating chart, the following information shall be

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

shown on the rating chart or in the operating manual. (1 through 12)

5. ASME, B30.5, 5-1.1.3 A durable rating Chart(s) with legible letters and figures shall be provided with each crane and attached in a location accessible to the operator while at the controls.

OSHA, 1910.180(c)(2) "Load rating chart." A substantial and durable rating chart with clearly legible letters and figures shall be provided with each crane and securely fixed to the crane cab in a location easily visible to the operator while seated at his controls.

OSHA, 1926.550(a)(2) Rated load capacities, and recommended operating speeds, special hazard warnings, or instructions shall be conspicuously posted on all equipment. Instructions or warnings shall be visible to the operator while he is at the controls.

1992, EM 385-1-1, 16.C.01.b2 The load rating chart for the crane shall include: (1) The crane make and model, serial number, and year of manufacture; (2) Load ratings for all crane operating configurations, including optional equipment; (3) recommended reeving for the hoist line; (4) operating limits in windy or cold weather conditions.

6. EM 385-1-1, 16.C.02 Every crane shall have the following documents with the crane at all times they are to be operated.  
(b) (2) Recommended reeving for the hoist line.

ASME, 5-5.1.1.3(5) Recommended reeving for the hoist lines shall be shown.

7. EM 385-1-1, 16.C.02.b(3) Operating limits in windy or cold weather.

ASME, 5-3.1.3(E)(8) When a local weather storm warning exist, considerations shall be given to the recommendations of the manufacture for securing the crane.

8. EM 385-1-1, 16.D.01 All lattice boom and hydraulic mobile cranes (except articulating boom cranes) shall be equipped with a boom angle indicating device, or a load moment indicator. Calibration and testing of the indicators will be performed in accordance with the manufactures recommendations.

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

ASME B30.5, 5-1.9.1(c) A boom angle or radius indicator readable from the operator's station shall be provided.

9. EM 385-1-1, 16.D.01 All lattice boom and hydraulic mobile cranes (except articulating boom cranes) shall be equipped with a boom angle indicating device, or a load moment indicator: calibration and testing of indicators will be performed in accordance with the manufacture's recommendations.

ASME, B30.5, 5-1.9.10 All new cranes with a maximum rated load capacity of 3 tons or more should have a load indicator

OSHA 1917.46 (a)(1) Except as provided in paragraph (a)(1)(viii) of this section, every crane after October 1984 shall be fitted with a load indicating device or alternative device in proper working condition.

10. EM 385-1-1, 16.D.01 Calibration and testing of indicators will be performed in accordance with the manufacturer's recommendations. (When cranes are used in duty cycle operations they are exempt from the requirements for load indicating devices and load indicators).

11. ASME, B30.5, 5-1.9.12(d) Means shall be provided for operator to visually determine the levelness of the crane.

EM 385-1-1, 16.D.02 All lattice boom and hydraulic mobile cranes shall be equipped with a means for the operator visually to determine the levelness of the crane.

12. EM 385-1-1, 16.D.03 On all lattice boom and hydraulic mobile cranes (except articulating boom cranes), drum rotation indicators shall be provided and located to afford sensing by the operator. (Equipment manufactured before 1990 is exempt from this requirement but retrofit is highly recommended).

ASME, B30.5, 5-1.3.2(a)(5) Drum rotation indicators should be provided and located to afford sensing by the operator.

13. ASME, B305, 5-1.9.9(a) Telescopic boom cranes manufactured after February 28, 1992 shall be equipped an anti-two block device or a damage prevention feature for all points of two blocking. Telescopic boom cranes manufactured before February 28, 1992, should be equipped with a two-block warning feature(s), a two-block damage prevention feature, or an anti

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

two-block device for all points of two blocking. (b) Lattice boom cranes manufactured after February 28, 1992, shall be equipped with a two-block warning feature which functions for all points of two-blocking.

Lattice boom cranes manufactured before February 28, 1992 should be equipped with a two-block warning feature for all points of two-blocking

EM 385-1-1, 16.D.05 Anti- two block (upper limit) devices. When required on a crane, anti-two blocking devices are required for all points of contact. a. Lattice boom cranes shall be equipped with an anti-two block device to stop the load hoisting function before the load block or load contacting the boom tip. d. Telescopic boom cranes shall be equipped with an anti-two block device to stop the load hoisting function before the load block contacts the boom tip and to prevent damage to the hoist rope or other machine components when extending the boom.

14. EM 385-1-1, Appendix H.3 Check all operator aids, motion and load limiting devices, and other safety devices for malfunction and inaccuracy of settings.

ASME, B30.5, 5-2.1.6 Load indicating, anti-two block, Two block warning, and Two block Damage Prevention Systems. (1) Prior to daily operation, a check shall be made to ensure that the system is functioning in accordance with the system manufacture's written instructions. (2) The system shall be inspected and tested by a qualified person every 12 months, or more frequently, if specified by the manufacture. If calibration is required, it shall be done by a qualified person.

15. EM 385-1-1, App.H.5 Check all hydraulic and pneumatic systems, with particular emphasis given to those that flex in normal operation of the crane.

ASME, B30.5, 5-2.1.2 Items such as the following shall be inspected by a designated person for defects at the intervals as defined in par. 5-2.1.1(b)(1) or as specifically indicated by the manufacture, including observations during operation for any deficiencies which might appear between regular inspections. Any deficiencies, such as those listed shall be carefully examined and a determination made as to whether they constitute a hazard. (d) All hydraulic hoses, and particularly those which flex in normal operation of crane functions, should be visually inspected once every working day when used. (h) Hydraulic system for proper oil level - daily when used.

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

16. ASME, B30.5, 5-2.1.2(g) Check electrical apparatus for proper functioning and absence of signs of excessive deterioration, dirt, and moisture accumulation.
17. ASME, B30.5, 5-2.1.2(e) Check hooks and latches for deformation, chemical damage, cracks, and wear (refer to ASME B30.10).
18. ASME, B30.5, 5-1.9.12(c) An audible signal device shall be provided. The control of the device shall be within reach of the operator.
19. ASME, B30.5, 5-1.9.12(g) A sign shall be installed, visible from the operator's station, warning that electrocution or serious bodily injury may occur unless a minimum clearance of 10 ft (3 m) is maintained between the crane or load for energized power lines up to 50 kV, and that greater clearances are required for higher voltages.

OSHA, 1926.550(a)(15) Except where electrical distribution and trans-mission lines have been de-energized and visibly grounded at point of work where insulating barriers, not a part of or an attachment to the equipment or machinery, have been erected to prevent physical contact with the lines, equipment or machines shall be operated proximate to power lines only in accordance with the following: For lines rated 50kV of below, minimum clearance between the lines and any part of the crane or load be 10 feet.

20. OSHA 1926.550 Wire rope shall be taken out of service when any of the following exist:

(1) In running ropes, six randomly distributed broken wires in one lay or three broken wires in one strand in one lay

(2) Wear of one-third the original diameter of outside individual wires, kinking, crushing, bird caging, or any other damage resulting in distortion of the rope structure.

(2) Evidence of heat damage from any cause.

(4) Reductions from nominal diameter of more than 1/16 inch, 1/32 inch for diameters 3/8 inch to and including 3/4 inch, 1/16 inch for diameters 7/8 inch to 1 1/8 inch inclusive, 3/32 inch for diameters 1 1/4 to 1 1/2 inches inclusive.

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

(5) In standing rope, more than two broken wires in one lay in sections beyond end connections or more than one broken wire at an end connection.

1910.180 (g) "Running ropes." A through inspection of all ropes shall be made at least once a month and a certification record which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the ropes shall be prepared and kept on file where readily available. All inspections shall be performed by an appointed or authorized person. Any deterioration, resulting in appreciable loss of original strength shall be carefully observed and determination made as to whether further use of the rope would constitute a safety hazard. Some conditions that could result in an appreciable loss of strength are as follows:

(g)(1)(i) reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires. (g)(1)(ii) A number of broken outside wires and the degree of distribution or concentration of such broken wires. (g)(1)(iii) Worn outside wires. (g)(1)(iv) Corroded or broken wires at the end connection. (g)(1)(v) Corroded, cracked, bent, worn, or improperly applied connections. (g)(1)(vi) Severe kinking, crushing, cutting, or unstranding.

21. EM 385-1-1, 15.F.08 At least three full wraps (not layers) of rope shall remain on the drum at all times.

OSHA, No less than two full wraps of rope shall remain on the drum when the hook is in the extreme low position.

22. OSHA, 1917.50 (c)(1) Each crane and derrick shall be tested as a unit quadrennially, and shall be examined annually. Certificates of test and examination shall be made readily available for inspection

OSHA, 1918.66(a)(1) Certification. Cranes shall be certified in accordance with part 1919 of this chapter.

OSHA, 1919.71(a) Unit proof test of cranes shall be carried out at the following times: (a)(1) In the case of new cranes, before initial use and every 4 years thereafter. (a)(2) In the cases of uncertified cranes which have been in use, at the time of initial certification and every 4 years thereafter. (a)(3) After important alterations and renewals and after repairs due to failure or damage to major components. (b) Unit proof load test of cranes shall be carried out where applicable with

CONTRACTOR CRANE COMPLIANCE REVIEW FORM REFERENCES (continued)

the boom in the least stable direction relative to the mounting, based on the manufacture's specifications.

1919.72(a) In any year in which no quadrennial unit proof test is required, an examination shall be carried out by an accredited person or his authorized representative. Such examination shall be made not later than the anniversary date of the quadrennial certification and shall conform with the requirements of 1919.71(d)

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES

|                      |  |      |                     |       |             |
|----------------------|--|------|---------------------|-------|-------------|
| Contractor:          |  | Sub: |                     | Date: |             |
| Crane Mfg.:          |  |      | Ser.#:              |       |             |
| Location:            |  |      | Rigging Gear Owner: |       |             |
| Contracting Officer: |  |      | Phone:              |       | Contract #: |

|   | YES | NO | N/A |
|---|-----|----|-----|
| 1. Is rigging gear inspected prior to use? -- IAW EM 385 15.A.01.a & OSHA 1926.251 (a) (1)  |     |    |     |
| 2. Is defective rigging removed from service? -- IAW EM 385 15.A.01.b & OSHA 1926.251 (a) (3)   |     |    |     |
| 3. Is the rigging used in accordance with its working load limit? -- IAW EM 385 15.A.01 c & OSHA 1926.251 (a) (2) & ASME B30.5, 5-3.2.1.2(b)  |     |    |     |
| 4. Are positive latching devices on hooks used to secure the load and rigging? -- IAW, EM 385 15. A.05 & OSHA 1017.45 (longshoring)   |     |    |     |
| 5. Are hooks, shackles, rings, padeyes inspected for damage and is defective gear removed from service? -- IAW, EM 385 15.A.06 & OSHA 1926.251 (a) (1) & 1926.251 (a) (4)                                       |     |    |     |
| 6. Are custom designed grabs, hooks, clamps, or other lifting accessories marked to indicate the working load limit? -- IAW EM 385 15.A.07 & OSHA 1926.251 (a) (4)  |     |    |     |
| 7. Are wire rope clips used correctly? -- IAW EM 385 15.B.03 & OSHA 1926.251 (c) (5) & ASME B30.5, 5-1.7.3 (b) & B30.9, 9-2.7.4.3   |     |    |     |
| 8. Is wire rope used for hoisting, one continuous piece without knots or splices? (Exception - eye splices in the ends of wire rope pendants and endless slings) -- IAW, EM 385 15.B.06 & 1926.251 (c) (4) (ii) |     |    |     |
| 9. Are the eyes in wire rope slings properly fabricated without the use of clips or knots? -- IAW, EM 385 15.B.07 & OSHA 1926.251 (c) (4) (i)   |     |    |     |

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES (continued)

|   | YES | NO | N/A |
|---|-----|----|-----|
| 10. Are slings protected from sharp edges by the use of chaffing gear?<br>-- IAW EM 385 15.E.02 & OSHA 1926.251(c) (9)  |     |    |     |
| 11. Is the minimum length of wire maintained between the splices, sleeves or end fittings? -- IAW OSHA 1926.251 (c) (13) (i) & EM 385-1-1 15-E.04                                   |     |    |     |
| 12. Is the minimum circumferential length maintained for wire rope endless slings? -- IAW OSHA 1926.251(c) (13) (i)-(iii) ASME B30.9, 9-2.1.2 (a)-(c)                               |     |    |     |
| 13. Are synthetic web slings marked with manufacture's name, type of material, and rated capacity for all three configurations? -- IAW EM 385 15.E.06.a.b.c & OSHA 1926.251 (e) (1) |     |    |     |
| 14. Is the removal criteria for synthetic slings followed? -- IAW OSHA 1926.251 (e) (8) & OSHA 1910.184 (i) (9)   |     |    |     |
| 15. Is the removal criteria for wire rope slings followed? -- IAW ASME B30.9 9-2.8.3 & OSHA 1910.184 (f) (5)  |     |    |     |
| 16. Are eyebolts used correctly? -- IAW, EM 385 15.F.10   |     |    |     |

|            |       |
|------------|-------|
| SIGNATURE: | Date: |
|------------|-------|

## CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES REFERENCES

### Item #

1. OSHA, 1926.251 (a)(1) Rigging equipment for Material handling shall be inspected prior to use on each shift and as necessary during its use to ensure that it is safe. Defective rigging equipment shall be removed from service.

EM 385-1-1 15.A.01 a Rigging equipment for material handling shall be inspected as specified by the manufacture, by a qualified person before use on each shift and as necessary during its use to ensure that it is safe. (b) Defective rigging equipment shall be removed from service.

2. OSHA, 1926.251 (a)(1) Rigging equipment for Material handling shall be inspected prior to use on each shift and as necessary during its use to ensure that it is safe. Defective rigging equipment shall be removed from service.

EM 385-1-1, 15.A.01 b Defective rigging shall be removed from service.

3. OSHA, 1926.251 (a)(2) Rigging equipment shall not be loaded in excess of its recommended safe working load, as prescribed in Tables H-1 through H-20 in this section, following 1926.252(e) for the specific equipment.

EM 385-1-1, 15.A.01 c The use and maintenance of rigging equipment shall be in accordance with recommendations of the rigging manufacture and the equipment manufacture: rigging equipment shall not be loaded in excess of its recommended safe working load.

4. EM 385-1-1, 15.A.05 When hoisting loads, a positive latching device shall be used to secure the load and rigging.

OSHA, 1917.45 (Longshoring) Crane hooks shall be latched or otherwise secured to prevent accidental load disengagement.

5. EM 385-1-1, 15.B.03 Hooks, shackles, rings, pad eyes, and other fittings that show excessive wear or that have been bent, twisted, or otherwise damaged shall be removed from service

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES REFERENCES  
(continued)

6. OSHA, 1926.251 Special custom design grabs, hooks, clamps, or other lifting accessories, for such units as modular panels, prefabricated structures and similar materials, shall be marked to indicate the safe working loads and shall be proof-tested prior to use to 125 percent of their rated load.

7. OSHA, 1926.251(c)(5) When used for eye splices, the u-bolt shall be applied so that the "U" section is in contact with the dead end of the rope. The clip nuts shall be retighten immediately after initial load carrying use and at frequent intervals thereafter.

ASME, B30.9, 9-2.7.4.3 (Slings) & B30.5, 5-1.7.3(b) Wire rope clips shall be drop forged steel of the single saddle (U-bolt) or double saddle type clip. Malleable cast iron clips shall not be used. For spacing, number of clips, and torque values, refer to the clip manufacture's recommendation. Wire rope clips attached with u-bolts over the dead end of the rope and the live rope resting in the clip saddle. Clips shall be tightened evenly to the recommended torque. After the initial load is applied to the rope, the clip nuts shall be retightened to the recommended torque to compensate for any decrease in rope diameter caused by the load.

EM 385 1-1, 15.B.03 Wire rope clips attached with u-bolts shall have the u-bolts on the dead end or short end of the rope: the clip nuts shall be retightened immediately after initial load carrying use and at frequent intervals thereafter.

8. EM 385-1-1, 15.B.06 Except for eye splices in the ends of wires and for endless wire rope slings, wire rope used in hoisting, lowering, or pulling, shall consist of one continuous piece without knot or splice.

OSHA 1926.251 (c)(4)(ii) Except for eye splices in the ends of wires and for endless slings, each wire rope used in hoisting or lowering, or pulling loads, shall consist of one continuous piece without knot or splice.

9. OSHA 1926.251(c)(4)(i) An eye splice made in any wire rope shall have not less than five full tucks (three full tucks, OSHA) (this requirement shall preclude the use of another form of splice or connection, which can be shown to be as efficient, and which is not otherwise prohibited).

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES REFERENCES  
(continued)

OSHA 1926.251 (c) (3) Wire rope shall not be secured by knots except on haul back lines on scrapers.

OSHA 1926.251 (c) (4) (iii) Eyes in wire rope bridles, slings, or bull wires shall not be formed by wire rope clips.

EM 385 1-1, 15.B.07 Eyes in wire rope bridles, slings, or bull wires shall not be formed by wire rope clips or knots.

10. OSHA 1926.251(c) (9) Slings shall be padded or protected from the sharp edged of their loads.

OSHA 1915.116(f) Slings shall be padded by means of wood blocks or other suitable material where they pass over sharp edges or corners of loads so as to prevent cutting or kinking.

EM 385-1-1, 15.E.02 Protection shall be provided between the sling and sharp underlying surfaces of the load to be lifted.

11. OSHA, 1926.251(c) (4) (iii) Cable laid and 6 x 19 and 6 x 37 slings shall have a minimum clear length of wire rope 10 times the component rope diameter between splices, sleeves or end fittings.

EM 385 1-1, 15.E.04 a Wire rope slings shall have a minimum of length of clear wire rope equal to ten times the rope diameter between each end fitting or eye splice.

12. OSHA, 1926.251(c) (13) (i) Cable laid grommets, strand laid grommets and endless slings shall have a minimum circumferential length of 96 times their body diameter.

OSHA, 1926.251(c) (13) (ii) Braided slings shall have a minimum clear length of wire rope 10 times the component rope diameter between the loops or end fittings.

OSHA, 1926.251(c) (13) (iii) Cable laid grommets, strand laid grommets and endless slings shall have a minimum circumferential length of 96 times their body diameter.

13. OSHA, 1926.251(e) (i) The employer shall have each synthetic web sling marked or coded to show: (e) (ii) name and trade mark of manufacture. (e) (iii) Rated capacities for the type of hitch. (e) (iiii) Type of material.

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES REFERENCES  
(continued)

ASME B30.9, 9-6.5.1 Each sling shall be marked to show:

(a) name or trademark of manufacture (b) Manufacture's code or stock number (c) Rated load for types of hitches, and the angle upon which it is based: (d) Core material (e) Cover material, if different from core material.

14. OSHA, 1926.251 (e)(8) "Removal from service." Synthetic web slings shall be immediately removed from service if any of the following conditions are present: (i) Acid or caustic burns, (ii) Melting or charring of any part of the sling surface, (iii) Snags, punctures, tears or cuts (iv) Broken or worn stitching, (v) distortion of fittings.

15. ASME, B30.9, 9-2.8.3 Removal criteria for sling replacement shall be as follows: (1) Missing or illegible sling identification (2) for strand laid and single part slings ten randomly distributed broken wires in one rope lay, or five broken wires in one strand in one rope lay, (3) severe localized abrasion or scraping, (4) kinking, crushing, bird caging, or any other damage resulting in distortion of the rope structure, (5) evidence of heat damage, (6) end attachments that are cracked, deformed, or worn to the extent that the strength of the sling is substantially affected, (7) hooks shall be inspected in accordance with ASME B30.10, (8) severe corrosion of the rope or end fittings, (9) multipart removal criteria for cable laid braided slings. Sling body less than 8-part braid; allowable Broken Wires per lay 20 allowable broken strands per sling length 1. Cable laid; allowable Broken Wires per lay 20 allowable broken strands per sling length. Eight or more part: Wires per lay 40 allowable broken strands per lay, allowable broken strands per sling length. 1.

OSHA, 1918.184(f)(5) Remove from service. Wire rope slings shall be removed from service if any of the following conditions are present. (f)(5)(i) Ten randomly distributed broken wires in one rope lay, or five broken wires in one strand in one lay. (f)(5)(ii) Wear or scraping of one third the original diameter of the outside individual wires. (f)(5)(iii) Kinking, crushing, bird caging or any other damage resulting in distortion of the wire rope structure. (f)(5)(v) Evidence of heat damage. (f)(5)(vi) End attachments that are cracked, deformed or worn. (f)(5)(vii) Hooks that have been opened more than 15 percent of the normal throat opening measured at the narrowest point or twisted more than ten degrees from the plane of the unbent hook.

CONTRACTOR RIGGING GEAR OVERSIGHT GUIDELINES REFERENCES

(continued)

16. EM 385-1-1, 15.F.10 (a) Shoulderless eyebolts shall not be loaded at an angle. (b) Eye bolts shall not be loaded at angles of less than 45 degrees to the horizontal.

## POST ON CRANE

### CERTIFICATE OF COMPLIANCE

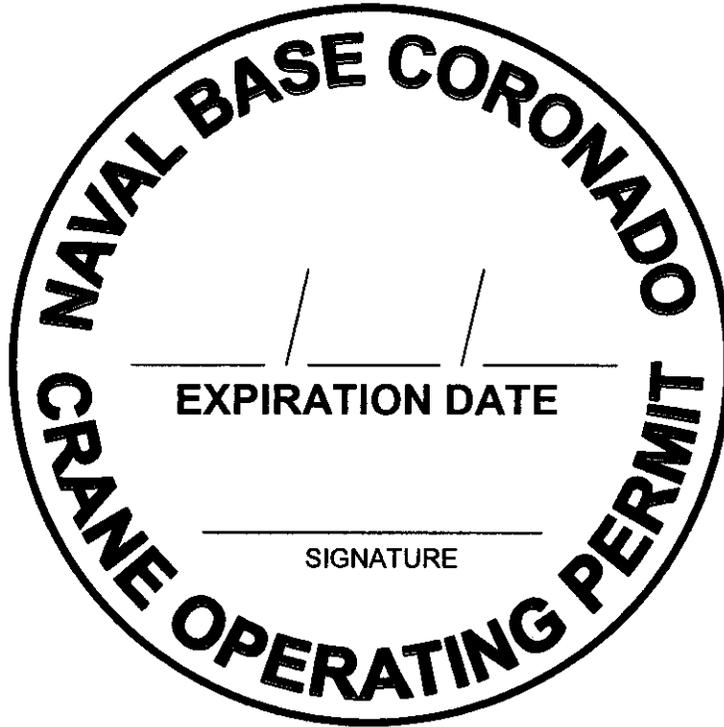
This certificate shall be signed by an official of the company that provides cranes for any application under this contract. Post a completed certificate on each crane brought onto Navy property.

|  |                                   |
|--|-----------------------------------|
| CONTRACTING OFFICER'S POINT OF CONTACT   | PHONE                             |
| CONTRACTING OFFICIAL   | PHONE                             |
| PRIME CONTRACTOR/PHONE   | CONTRACT NUMBER                   |
| CRANE SUPPLIER/PHONE<br>(if different from prime contractor)   | CRANE NUMBER<br>(i.e., ID number) |
| SUB CONTRACTOR/PHONE   |                                   |
| CRANE MANUFACTURER/TYPE/CAPACITY   |                                   |
| CRANE OPERATOR'S NAME(S)   |                                   |
| <p>I certify that</p> <ol style="list-style-type: none"><li>1. The above noted crane and associated rigging gear conform to applicable OSHA regulations (host country regulations for naval activities in foreign countries). The following regulations apply: _____</li><li>2. The operators noted above have been trained and are qualified for the operation of the above noted crane.</li><li>3. The operators noted above have been trained not to bypass safety devices during lifting operations.</li></ol> |                                   |
| COMPANY OFFICIAL SIGNATURE   | DATE                              |
| COMPANY OFFICIAL NAME/TITLE  |                                   |
| <b>POST ON CRANE</b><br>(IN CAB OR VEHICLE)  |                                   |

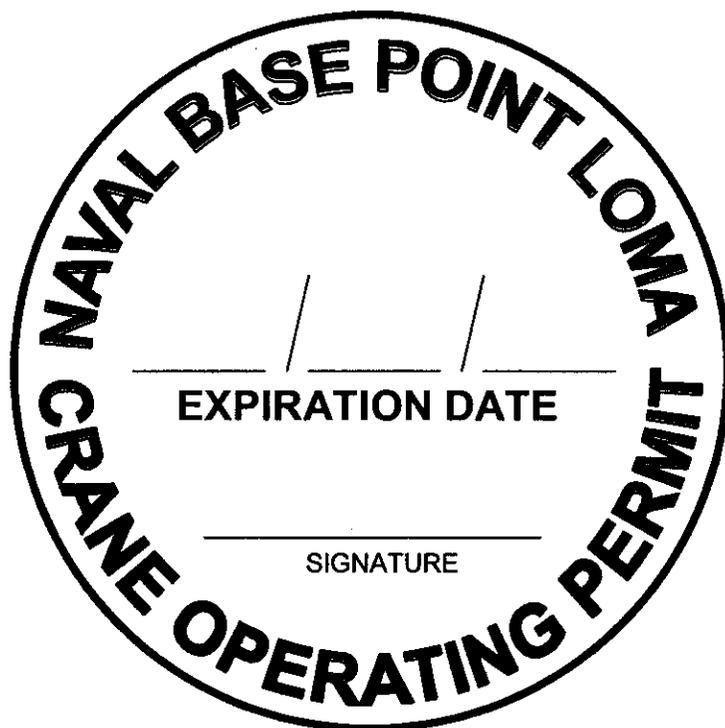
CRANE OPERATING PERMIT - SAN DIEGO



CRANE OPERATING PERMIT - CORONADO



CRANE OPERATING PERMIT - POINT LOMA



CONTRACTOR CRANE OPERATION CHECKLIST

|                                 |  |        |                            |                 |
|---------------------------------|--|--------|----------------------------|-----------------|
| Contractor:                     |  | Sub:   |                            | Date:           |
| Crane Mfg.:                     |  | Owner: |                            | Rated Capacity: |
| Year/Model:                     |  |        | Ser #                      |                 |
| Quadrennial Certification Date: |  |        | Annual Certification Date: |                 |
| Location of Operations:         |  |        | Duration of Contract:      |                 |
| Contracting Officer             |  | Phone: |                            | Contract #:     |

|  | YES | NO | N/A |
|--|-----|----|-----|
| 1. Does the operator know the weight of the load? -- IAW ASME B30.5, 5-3.2.1.1 (c)   |     |    |     |
| 2. Are outriggers required? -- IAW, EM 385 16.D.09, ASME B30.5, 5-3.2.1.4(h), & OSHA 1910.180 (h) (3) (ix)   |     |    |     |
| 3. If outriggers are required, are they extended fully and are the wheels off of the ground? - IAW ASME B30.5, 5-3.2.1.4(h)  |     |    |     |
| 4. Is the crane level and blocked? -- IAW EM 385 16.C.03.d(1), ASME B30.5, 5-3.2.1.4(a) (1), & OSHA 1910.180, (h) (3) (i) (a)  |     |    |     |
| 5. If blocking is required, is the entire surface of the outrigger pad supported and the blocking material of sufficient strength to support the outrigger pad? -- IAW OSHA 1910.180 (h) (3) (i) (a), (b), (c) |     |    |     |
| 6. Is the crane configuration good for the intended load? -- IAW ASME B30.5, 5-3.2.1(b) & OSHA, 1910.180, (h) (1) (i)  |     |    |     |
| 7. Are personnel kept clear of the swing radius of the counter weight? -- IAW EM 385 16.C.03.d. (4), & 16.C.09.c, ASME B30.5, 5-3.2.1.4(a) (4)   |     |    |     |
| 8. Are adequate clearances maintained between moving and rotating structures of the crane and fixed objects (min. 16 inches)? -- IAW EM 385 16.C.09b & OSHA 1926.550 (b) (2)                                   |     |    |     |
| 9. Is the hook centered over load to minimize swing? -- IAW ASME B30.5, 5-3.2.1.4(b) (3)   |     |    |     |

CONTRACTOR CRANE OPERATION CHECKLIST (continued)

|   | YES   | NO | N/A |
|---|-------|----|-----|
| 10. Are the lift & swing paths clear of obstructions? -- IAW EM 385 16.C.03.d(3) & ASME B30.5, 5-3.2.1.4(a)(3) & OSHA 1910.180 (h)(3)(iii)(b)                           |       |    |     |
| 11. Are personnel kept from standing or passing under the load? -- IAW ASME B30.5, 5-3.2.1.3(b)   |       |    |     |
| 12. Is the operator responding properly to signals? -- IAW EM 385 16.C.03.b, OSHA 1926.550 (a)(4), & ASME B30.5, 5.3.1.3 (c)  |       |    |     |
| 13. Are radios used for blind lifts? -- IAW EM 385 16.C.11.b & ASME B30.5, 5-3.3.1  |       |    |     |
| 14. Is the load lifted a few inches to ensure it is secure and balanced? -- IAW EM 385 16.C.03.d(2) & ASME B30.5, 5-3.2.1.4(a)(2)                                       |       |    |     |
| 15. Are tag lines used to control the load? -- IAW EM 385 16.c.16, ASME B30.5, 5-3.2.1.4(o), & OSHA 1910.180, (h)((3)(xvi)  |       |    |     |
| 16. Does the operator avoid sudden acceleration or deceleration of the load? -- IAW, ASME B30.5, 5-3.2.1.4(c)(1) & OSHA 1910.180(h)(3)(iii)(a)                          |       |    |     |
| 17. Is the operator's attention directed toward load while operating the crane? -<br>- IAW EM 385 16.C.03.a & ASME B30.5, 5-3.1.3(a)                                    |       |    |     |
| 18. Is the operator in control of the crane so as not to allow the load, or other parts of the machine to contact any obstruction? -- IAW, ASME B30.5, 5-3.2.1.4 (c)(2) |       |    |     |
| 19. Are personnel prohibited from riding the load? -- IAW EM 385 16.C.15 & ASME B30.5, 5-3.2.1.4(r)   |       |    |     |
| 20. Are empty hooks lashed during travel to prevent swinging? -- IAW ASME b30.5, 5-3.2.1.4(l)(3) & OSHA 1910.180 (h)(3)(xiii)(c)  |       |    |     |
| 21. Is boom side loading limited to freely suspended loads? -- IAW ASME B30.5, 5-3.2.1.4 (d) & OSHA 1910.180 (h)(3)(iv)   |       |    |     |
| 22. Are the rules for operations near power lines being followed? -- IAW ASME B30.5-53.4.5.1 through B30.5, 5-3.4.5.4   |       |    |     |
| 23. Is there a critical lift plan for lifts over 80% of capacity, personnel lifts, multiple crane lifts, etc.? -- IAW NAVFAC P-307, EM 385                              |       |    |     |
| 24. Does the operator remain at the controls while the load is suspended? -- IAW ASME B30.5, 5-2.1.2.(a) & 1910.180 (h)(4)(i)   |       |    |     |
| 25. Is the crane unattended in a dangerous condition? -- IAW ASME B30.9,5-3.1.3   |       |    |     |
| SIGNATURE:  | Date: |    |     |

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES

Item #

1. ASME, B30.5, 5-3.2.1.1 When loads, which are not accurately known, are to be lifted, the designated person responsible for the job shall ascertain that the weight of the load does not exceed the crane ratings at the maximum radius at which the load is to be handled.

2. EM 385, 16D.09 (A) When the load to be handled and the operating radius require the use of outriggers or any time when outriggers are used, the outriggers shall be fully extended or deployed per load rating chart specifications and set to remove the machine weight from wheels, except for locomotive cranes. (B) When outrigger floats are used, they shall be attached to the outriggers. (C) Blocking under outrigger under outrigger floats, when required, shall: (1) have sufficient strength to prevent crushing, bending, or shear failure; (2) have such thickness, width, and length as to completely support the float, transmit the load to the supporting surface, and prevent shifting, toppling, or excessive settlement under load; (3) use blocking only under the outer bearing surface of the extended outrigger beam.

OSHA, 1910.180(h)(3)(ix) Outriggers shall be used when the load to be handled at that particular radius exceeds the rated load without outriggers as given by the manufacture for that crane. Where floats are used they shall be securely attached to the outriggers. Wood blocks used to support outriggers shall (a) be strong enough to prevent crushing (b) be free from defects (c) be sufficient width and length to prevent shifting or topping under load.

3. ASME, B30.5, 5-3.2.1.4(h) When the load to be handled and the operating radius require the use of outriggers or at any time when outriggers are used, the outriggers shall be fully extended or deployed per load rating chart specifications and set to remove the machine weight from wheels, except for locomotive cranes.

4. ASME, B30.5, 5-3.2.1.4(a)(1) The person directing the lift shall see that: the crane is level and, where necessary, blocked.

EM 385, 16.C.03.d(1) Before a lift, except before a critical lifts when these shall be done by the supervisor, the rigger shall ensure that: the crane is level and where necessary, blocked.

OSHA, 1910.180(h)(3)(i)(a) The crane is level and when necessary blocked.

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES (continued)

5. OSHA 1910.180 (h) (3) (ix) Outriggers shall be used when the load to be handled at that particular radius exceeds the rated load without outriggers as given by the manufacture for that crane. Where floats are used they shall be securely attached to the outriggers. Wood blocks used to support outriggers shall be strong enough to prevent crushing be free from defects, be sufficient width and length to prevent shifting or topping under load. (a) Be strong enough to prevent crushing, (b) Be free from defects, (c) Be of sufficient width and length to prevent shifting or toppling under load.

EM 385, 16.D.09.C Blocking under outrigger under outrigger floats, when required, shall: (1) have sufficient strength to prevent crushing, bending, or shear failure; (2) have such thickness, width, and length as to completely support the float, transmit the load to the supporting surface, and prevent shifting, toppling, or excessive settlement under load; (3) use blocking only under the outer bearing surface of the extended outrigger beam.

6. ASME, B30.5, 5-3.2.1(b) The load to be lifted shall be within the rated capacity of the crane in its existing configuration.

OSHA, 1910.180(h) (1) (i) No crane shall be loaded beyond the rated load except for test purposes.

7. ASME, B30.5, 5-3.2.1.4(a) (4) The person directing the load shall keep all persons clear of the swing radius of the crane counterweight.

EM 385, 16.C.09(c) Accessible areas within the swing radius of the rear of the crane's rotation superstructure, either permanently or temporarily mounted, shall be barricaded to prevent an employee from being struck or crushed by the crane.

8. EM 385, 16.C.09 (b) Adequate clearances shall be maintained between the moving and rotating structures of the crane and fixed objects to allow passage or employees without harm the minimum clearance is 40 cm (16 in).

OSHA, 1926.550(c) (1) Adequate clearances shall be maintained between moving and rotating structures of the crane and fixed objects to allow the passage of employees without harm.

9. ASME, B30.5, 5-3.2.1.4(b) (3) The hook shall be brought over the load in such a manner as to minimize swinging.

10. ASME, B30.5, 5-3.2.1.4(a) (3) The person directing the lift shall see that the lift and swing path is clear of obstructions.

EM 385, 16.C.03.d(3) Before a lift, except before critical lifts, then these shall be done by the lift supervisor, the rigger shall ensure

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES (continued)

that: The lift and swing path is clear of obstructions and adequate clearance is maintained from electrical sources.

OSHA, 1910.180(h)(3)(iii)(b) The load does not contact any obstructions.

11. ASME, B30.5, 5-3.2.1.3(b) No person shall be allowed to stand or pass under a suspended load.

12. OSHA, 1926.550 (a)(4) Hand signals to crane and derrick operators shall be those prescribed by the applicable ANSI standard for the type of crane in use. An illustration of the signals shall be posted at the job site.

ASME, B30.5, 5-3.1.3(c) The operator shall respond to signals from the person who is directing the lift or an appointed signal person. When a signal person or a crane follower is not required as part of the crane operations, the operator is then responsible for the lifts. However, the operator shall obey a stop signal at all times, no matter who gives it.

EM 385, 16.C.03 b The operator shall respond to signals from the person who is directing the lift or an appointed signal person: When a signal person is not used in the crane operation, the operator shall ensure he/she/ has full view of the load and the load travel paths at all times the load is rigged to the crane.

13. ASME, B30.5, 5-3.3.1 Standard signals to the operator shall be in accordance with the standards prescribed in para. 5-3.3.2, unless voice communication equipment (telephone, radio or equivalent) is utilized. Signals shall be discernible or audible at all times. No response shall be made unless signals are clearly understood.

EM 385, 16.C.11.b In situations where the operator cannot see the load, audio (radio) communications shall be used (note that this does not preclude the use of hand signals in addition to audio): in all other operations, audio communication should be used.

14. EM 385, 16.C.03.d(2) Before a lift, except before critical lifts, when these shall be done by the lift supervisor, the rigger shall: Ensure the load is well secured and balanced in the sling device before it is lifted more than a few inches.

ASME, B30.5, 5-3.2.1.4(a)(2) The person directing the lift shall see that: The load is well secured and balanced in the sling device before it is lifted more than a few inches.

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES (continued)

15. EM 385, 16.C.16 When practical and when their use does not create a hazard, tag lines shall be used to control loads.

ASME, B30.5, 5-3.2.1.4(0) The person directing the lift shall see that: When rotating the crane, sudden starts and stops shall be avoided. Rotational speed shall be such that the load does not swing out beyond the radius at which it can be controlled. A tag or restraint line shall be used when rotation of the load is hazardous.

OSHA, 1910.180(h) (3) (xvi) When rotating a crane, sudden starts and stops shall be avoided. Rotational speed shall be such that the load does not swing out beyond the radii at which it can be controlled. A tag line or restraint line shall be used when rotation of the load is hazardous.

16. ASME, B30.5, 5-3.2.1.4(c) (1) During lifting operations, care shall be taken that: There is no sudden acceleration or deceleration of the moving load.

OSHA, 1910.180, (h) (3) (iii) (a) There is no sudden acceleration or deceleration of the moving load.

17. EM 385, 16.C.01 a The operator shall not engage in any activity, which will divert his/her attention while operating the crane.

ASME, B30.5, 5-3.1.3(a) The operator shall not engage in any practice, which will divert his attention while actually engaged in operating the crane.

18. ASME, B30.5, 5-3.2.1.4(c) (2) During lifting operation, care shall be taken that: The load, boom, or other parts of the machine do not contact any obstruction.

19. EM 385, 16C.15 Riding on loads, hooks, hammers, buckets, material hoist, or other hoisting equipment not meant for personnel handling is prohibited.

ASME, B30.5, 5-4.2.1.4(r) The person directing the lift shall see that: Personnel shall not be permitted to ride the bare hook or a load of material suspended from the hook.

20. ASME, B30.5, 5-3.2.1.4(1) (3) While in transit the following additional precautions shall be exercised. (1) The boom should be carried in line with the direction of motion; (2) The superstructure shall be secured against rotation (or the boom placed in a boom rack mounted on the carrier), except when negotiating turns when there is an operator in the cab or the boom is supported on a dolly; (3) *The empty hook shall be lashed or otherwise restrained so that it cannot swing freely.*

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES (continued)

OSHA, 1910.180(h)(03)(xiii)(c) The hook shall be lashed or otherwise restrained so that it cannot swing freely.

21. ASME, B30.5, 5-3.2.1.4(d) & OSHA, 1918.180(h)(3)(iv) Side loading of booms shall be limited to freely suspended loads. Cranes shall not be used for dragging loads sideways.

22. ASME, B30.5, 5-3.4.5.1 through 5-3.4.5.4 Any overhead wire shall be considered to be an energized line unless and until the person owning such line or electrical utility authorities indicate that it is not an energized line. Crane operations shall not rely on the coverings of wires for their protection. Four conditions to consider when operating a mobile crane near electrical lines are: (1) Power lines de-energized and grounded para 5-3.4.2; (2) Power lines energized, crane operating less than the erected/fully extended boom length away as in para 5-3.4.5.3; (3) Power lines energized; crane within prohibited zone as in para. 5-3.4.5.4; (4) Crane in transit, no load and boom lowered as in para. 5-3.4.5.5.

23. EM 385, Definition A non-routine crane lift required detail planning and additional or unusual safety precautions. Critical lifts include lifts made when the load weight is 75% of the rated capacity of the crane; lifts which require the load will be lifted, swung, or placed out of the operator's view; of lifts made with more than one crane; lifts involving non-routine or technically difficult rigging arrangement; hoisting personnel with a crane or derrick; or any lift which the lift or crane operator believe should be considered critical.

EM 385, 16.C.18 Critical lift plans. Before making a critical lift, a critical lift plan shall be prepared by the crane operator, lift supervisor, and rigger. The plan shall be documented and a copy provided to the designated authority: The plan shall be reviewed and signed by all personnel with the lift.

NAVFAC P-307, 1.7.2 e Require a critical lift plan for each of the following lifts: lifts over 80 percent of the capacity of the crane or hoist (at any radius of lift); lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. The plan shall include the following as applicable:

(1) 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.

CONTRACTOR CRANE OPERATION CHECKLIST REFERENCES (continued)

(2) The lift geometry, including the crane position, boom length and angle, height of lift, and radius for the entire range of the lift. Applies to both single and tandem crane lifts.

(3) A rigging plan, showing the lift points, rigging gear, and rigging procedures.

(4) The environmental conditions under which lift operations are to be stopped.

(5) For lifts of personnel, the plan shall demonstrate compliance with the requirements of 29 CFR 1926.550(g).

24. ASME, 5-3.2.1.2(a) The operator shall not leave the controls while the load is suspended.

OSHA, 1910.180(h)(4)(i) The operator shall not be permitted to leave his position at the controls while the load is suspended.

25. ASME, B30.9, 5-3.1.3 Before leaving the crane unattended, the operator shall: (1) Land any load, bucket, lifting magnet, or other device; (2) Disengage the Master clutch; (3) Set travel, swing, boom brakes, and other locking devices; (4) Put controls in the off or neutral position; (5) Secure the crane against accidental travel; (6) Stop the engine.

CONTRACTOR CRANE TEMPORARY ACCESS FORM

| CONTRACTOR CRANE TEMPORARY ACCESS<br>AFTER HOURS / WEEK END  |                                  |
|--|----------------------------------|
| Prime Contractor:  | Point of Contact: (Name / Phone) |
| Sub Contractor: (If Known)   | Point of Contact: (Name / Phone) |
| Crane Company:   | Point of Contact: (Name / Phone) |
| Contracting Official:  | Phone:                           |
| Contract Number:   |                                  |
| Work Location:   | Date:                            |
| Does the Crane have a certificate of compliance posted? <input type="checkbox"/> YES <input type="checkbox"/> NO |                                  |

CONTRACTOR CRANE NON-OPERATION PERMIT

CONTRACTOR CRANE NON-OPERATION PERMIT

(CATEGORY 4 CRANES)

POST IN A CONSPICUOUS LOCATION ON THE CRANE OR IN THE VEHICLE CAB

|  |                                 |
|--|---------------------------------|
| Company:   | Point of Contact (Name / Phone) |
| Crane Manufacture:   | Vehicle ID / Serial Number:     |
| Contracting Official:  | Phone:                          |
| Work Location:   |                                 |
| I certify that this vehicle will be used for the transportation of personnel and materials only. At no time will the crane be operated while on Navy property. |                                 |
| Company Official / Title: (print)  |                                 |
| Signature:   | Date:                           |

**CONTRACTOR CRANE OVERSIGHT  
DISCREPANCY FORM**

|                                |  |                        |
|--------------------------------|--|------------------------|
| <b>Date:</b>                   | Crane: ____ Rigging: ____ Operations: ____ | <b>Control #</b>       |
| <b>Contractor:</b>             |  | <b>Sub Contractor:</b> |
| <b>Crane Owner:</b>            | <b>Crane Mfg:</b>                          | <b>Model / Ser #</b>   |
| <b>Location Of Operations:</b> |  |                        |
| <b>Contracting Official:</b>   | <b>Phone:</b>                              | <b>Contract #</b>      |

**Note: Contracting Officials shall submit a written response to all discrepancies within 10 working days to the PWC Contractor Crane Oversight Office. Identify the root cause(s) and any corrective / preventive actions taken to prevent recurrence.**

| <b>Item #</b> | <b>Discrepancy</b> |
|---------------|--------------------|
|               |                    |

|   |              |
|---|--------------|
| <b>Oversight Personnel's Signature:</b> | <b>Date:</b> |
|---|--------------|

**CONTRACTOR CRANE DISCREPANCY  
RESPONSE FORM**

|                         |                  |                   |
|-------------------------|------------------|-------------------|
| Date:                   | <u>Control #</u> | Contractor:       |
| Sub Contractor:         |                  | Crane Owner:      |
| Location Of Operations: |                  |                   |
| Contracting Official:   | Phone:           | <u>Contract #</u> |

|  |
|--|
| <b>Root Cause</b>  |
|  |
| <b>Corrective / Preventive Action<br/>Action Taken To Prevent Recurrence</b> |
|  |

|  |       |
|--|-------|
| Contracting Representatives Signature: | Date: |
|--|-------|

**Note: Contracting Officials shall submit a written response to all discrepancies within 10 working days to the PWC Contractor Crane Oversight Office. Identify the root cause(s) and any corrective / preventive actions taken to prevent recurrence.**