



DEPARTMENT OF THE NAVY  
JOINT BASE PEARL HARBOR-HICKAM  
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PEARL HARBOR HI 96860-5102

JBPHHINST 11262.1

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07 JAN 2013

JOINT BASE PEARL HARBOR-HICKAM INSTRUCTION 11262.1

From: Commander, Joint Base Pearl Harbor-Hickam

Subj: MANAGEMENT OF WEIGHT HANDLING EQUIPMENT (WHE) PROGRAM

Ref: (a) NAVFAC P-307 Management of Weight Handling Equipment  
(b) SECNAVINST 11260.2A Navy Weight Handling Program for Shore Activities  
(c) NAVFACINST 11200.33D Weight Handling Equipment Audits, Validations and Third Party Certification  
(d) NAVFACINST 11450.1A Acquisition and Management of Weight Handling Equipment  
(e) COMNAVREGHIINST 11260.1A Management of Weight Handling Equipment (WHE) Program  
(f) PWCPEARLINST 11450.1 Management of Weight Handling Equipment Program

Encl: (1) Investigation and Reporting of Crane AND Rigging Gear Accidents and Near Misses  
(2) WHE Lock Out/Tag Out Procedures and Record Sheet  
(3) Procedures for Reporting Deficiencies on Category 3 Cranes  
(4) Procedures for Bypassing Safety Devices on Cranes  
(5) Operating Procedures for Crane Lifts of Undetermined Weight and Complex Lifts  
(6) Procedures for Adverse Operating Conditions  
(7) Navy Knowledge Online Courses for WHE  
(8) Crane Data Sheet  
(9) RIC Daily Checklist

1. Purpose. To implement Joint Base wide procedures for Weight Handling Equipment (WHE) Program Manager and to assign clear responsibilities for completing WHE functions as prescribed by reference (a). Supervisors shall ensure that anyone associated with the WHE Program receives a copy of this instruction with it's enclosures.

2. Background. Reference (a) requires the implementation of local procedures for the management of WHE. This instruction shall be used to identify proper practices and procedures and to

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provide guidelines for the management of WHE as delineated in reference (a).

a. Activities of this Region conduct lifts of light to medium weight on a routine basis. Safe conduct of these operations is of paramount importance. In addition, proper maintenance of WHE is essential to the continued operational availability of these high cost assets.

b. References (a) through (c) provide requirements for training and the management, operation, testing and certification of cranes, trackage, and rigging.

3. Cancellation. This instruction is revised and must be reviewed in its entirety.

4. Scope. This instruction applies to Category 1, Category 2 and Category 3 WHE operated at activities, and includes Commander, Joint Base Pearl Harbor-Hickam (JBPHH) government and contractor equipment and operators.

5. Policy. JBPHH WHE must be managed in accordance with this instruction and its references.

6. Definitions

a. WHE: Includes any crane or hoist that meets the definitions and capacities of Category 1, Category 2 and Category 3 cranes and all rigging gear, as set forth below:

(1) Category 1 Cranes: Includes cranes designated as portal (gas, diesel), hammerhead, locomotive, truck, cruiser, crawler, stiff leg, aircraft crash, derrick, floating, tower and container.

(2) Category 2 Cranes: Includes cranes with a rated capacity of 20,000 pounds or over, designated as overhead traveling (bridge), gantry (electric), cantilever gantry, semi-gantry, pillar jib, jib, pillar, monorail, fixed hoist and structure are excluded.

(3) Category 3 Cranes: Includes cranes with a rated capacity of less than 20,000 pounds, designated as overhead traveling (bridge), gantry (electric), cantilever gantry, semi-gantry, pillar jib, jib, pillar, monorail, fixed hoist, fixed chain falls, and wall cranes. Also includes pedestal and mounted commercial boom assemblies (fixed length, telescoping

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and articulating types) attached to stake trucks, trailers, flatbeds, railcars, etc., with rated capacities of less than 2,000 pounds. Chain falls and hoists not permanently fixed to a structure are excluded and shall be maintained as rigging gear.

(4) Category 4 Cranes: Includes commercial truck mounted cranes, articulating boom cranes, including ammunition handling truck/cranes with equipment category code 0704, pedestal mounted commercial boom assemblies (fixed length and telescoping types) attached to stake trucks, trailers, flatbeds, or rail cars, or stationary mounted to piers, etc., with certified capacities of 2,000 pounds or greater.

b. Rigging Gear: Includes the following equipment used in crane and rigging operations:

(1) Slings and associated attachments and connectors: Slings, chain, wire rope, metal mesh, synthetic rope, synthetic webbing, synthetic round slings, shackles, eyebolts, swivel hoist rings, links and rings, turnbuckles, etc.

(2) Portable load indicators: Dynamometers, load cells, crane scales, etc.

(3) Portable falls and hoists: Chain falls, ratchet hoists, come-alongs, block and tackle, electric or pneumatic hoists, etc.

(4) Shackles, links, rings, eyebolts, turnbuckles, and swivel hoist rings.

(5) Other portable lifting devices: Portable gantries, a-frames, floor cranes, strong backs, spreader bars, or devices that directly support larger equipment.

c. Load Bearing Parts: Those parts of the WHE, which support the load and upon failure could result in dropping, uncontrolled shifting or uncontrolled movement of the load.

d. Load Controlling Parts: Those parts which position, restrain, or control the movement of the load (e.g. rotate and travel brakes and clutches, switches, etc.), a malfunction of which could cause dropping, uncontrolled shifting or uncontrolled movement of the load. Crane mounted diesel engines, generators, electrical power distribution systems, and electrical control circuits associated with the movement of the load shall be treated as load controlling parts.

e. Safety Devices

(1) Operational Safety Devices: Safety devices which affect the safe load lifting and handling capability of the equipment, such as interlocks, limit switches, overload indicators with shutdown capability, emergency stop switches, radius indicating devices and locking devices.

(2) General Safety Devices: Safety devices such as bells, horns, warning lights, and bumpers, which provide protection for operation and maintenance personnel and equipment on or in the operating path of the cranes.

f. Crane Trackage

(1) Ground Level Crane Trackage: Ground level crane trackage applies to tracks for all weight handling equipment that operate on the major working level of an activity. This includes, but is not limited to, trackage systems for portal, gantry, tower and the ground level rail for semi-gantry cranes. Track systems for portal and floating dry dock cranes are also included in this group.

(2) Elevated Crane Trackage: Elevated crane trackage applies to all trackage systems attached or suspended from side wall column buildings, roofs or separate superstructures. This includes trackage of overhead or bridge cranes, wall cranes and semi-gantry cranes.

7. Action. Concerns for safety, including WHE safety training, of employees and others cannot be separated from planning, management and operations. All personnel with WHE responsibilities must be thoroughly familiar and comply with references (a) through (c), this instruction, and the guidance provided in enclosures (1) through (9). While Commanding Officers may delegate the administration of the WHE program to others within their command, primary responsibility for safety and WHE training rests with the Commanding Officer of the personnel planning, managing and operating the equipment.

a. Activity Commanding Officer/Officer in Charge shall:

(1) Designate in writing the activity WHE Program Manager.

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(2) Designate in writing the Certifying Official for WHE and Crane Trackage. The Naval Facilities Engineering Command, Hawaii (FEC Hawaii) Transportation Director may be designated as the Activity Certifying Official.

(3) Oversee WHE and Crane Trackage Programs for their activity, and ensure that they comply with references (a) through (c).

(4) Develop activity-level WHE Standard Operating Procedures to support specific mission requirements.

## 8. Responsibilities

a. The Joint Base Commander (JBC) will designate in writing, the Joint Base Pearl Harbor-Hickam WHE Program Manager and the Assistant WHE Program Manager. WHE Program Manager shall:

(1) Ensure compliance with this instruction and references (a) through (c).

(2) Ensure operators and riggers as well as personnel involved in maintenance, inspection and testing of WHE are technically competent to perform their assigned duties. A variety of training courses are available through the Navy Crane Center's (NAVCRANECEN) approved training sites.

(3) Ensure all operators are properly trained and licensed as required by the WHE licensing authority for JBPHH. Maintain a list of all trained and/or licensed operators.

(4) Ensure all work center supervisors maintain an accurate inventory of all rigging gear, to include newly purchased rigging gear. All rigging gear must be certified and inspected prior to use.

(5) Coordinate responses to all WHE audit findings for their activity and ensure that program management findings and corrective actions from the Audit of Management of Weight Equipment are closed and/or implemented.

(6) Upon notification of an accident or incident concerning WHE under their activity's cognizance, conduct an immediate investigation into the circumstances in accordance with enclosure (1). If the WHE is activity owned, prepare the report. If owned by another activity, notify the owner of the

WHE, prepare the report, and offer assistance as the subject matter expert in the investigation.

(7) Coordinate responses and track the completion and/or implementation of NAVCRANCEN Crane Safety Advisories (CSA) and Equipment Deficiency Memoranda (EMD). Any necessary responses to a CSA/EDM shall be provided to NAVCRANECEN within 30 days of the CSA/EDM. Proper records shall be maintained and shall include:

(a) A copy of each CSA/EDM that pertains to the activities crane inventory.

(b) Verification of the applicability of the SCA/EDM to the site.

(c) Final verification that CS/EDM was implemented and any supporting documentation, and copies of any provided to NAVCRANECEN.

(8) Provide an accurate WHE and crane trackage inventory to the designated Certifying Official. An updated inventory list must be provided annually and whenever additions or deletions are made to the activity inventory.

(9) Ensure that Operator Daily Check Lists (ODCLs) are being used, and that completed ODCLs are being forwarded to the Test Director for record keeping.

(10) Ensure all cranes Lock Out/Tag Out (LO/TO) procedures are performed by NAVFAC HI. In accordance with enclosure (2), any deficiencies that could cause injury to personnel or certification expiration, the crane shall be secured and reported to NAVFAC HI immediately.

(11) Ensure all shop supervisors/POCs conduct a monthly inspection and training on WHE and maintain records. Conduct a quarterly audit with shop supervisors/POCs. Verify all operators are qualified, per enclosure (8).

(a) WHE Program Manager Assistant will assist the WHE Program Manager and, in the absence of the Program Manager, carry out those responsibilities assigned to the Program Manager.

(b) Certifying Official shall be designated in writing.

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(c) Activity Safety Office and Regional Safety Department.

1. Coordinate the physical qualification examination and a language ability assessment for operators.

2. Ensure compliance with enclosure (1) so that addresses know how WHE users will report accidents/incidents to the Safety Department and how investigation action items will be tracked to completion.

3. Review and audit the implementation and use of the crane LO/TO Program in accordance with reference (a).

4. Provide a representative, as requested by the Crane Certifying Official or Test Director, to participate in crane and rigging gear accident investigations.

b. Activity Work Center Supervisors that Utilize Category 1, Category 2 and Category 3 Cranes.

(1) Be responsible for all crane and rigging operations performed using WHE and rigging gear assigned to their work centers. Supervisors will facilitate annual refresher safety training in pre-use inspections, basic rigging, and equipment operations. All personnel shall complete all required NKO courses per enclosure (8). Maintain a cranes inventory in work area per enclosure (9).

(2) Ensure safe crane and rigging practices are being used, and correct any deficiencies noted by the Certifying Official or his representative.

(3) Review daily the operator's daily checklists for Category 1, Category 2 and Category 3 cab operated and cranes and monthly checklists for gantry, wall and bridge Category 3 type cranes for accuracy, per enclosure (9). Forward the checklists to the Test Director, annotating any minor or major deficiencies discovered. Immediately notify the Test Director or Certifying Official if a major deficiency is discovered. The crane shall be immediately secured upon identification of a major deficiency.

(4) Ensure all Category 1, Category 2 and Category 3 cab operated crane operators have valid licenses for the individual cranes being operated.

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(5) Ensure all operators have adequate knowledge of the areas identified in Section 10 of reference (a) including demonstration of operation of each specific type of equipment, although licensing is not required for Category 3 cranes.

(6) Ensure all personnel operating Category 3 cranes or performing rigging tasks are properly trained for the tasks they are performing in accordance with reference (a) and are properly performing pre-use inspections of rigging gear in accordance with Chapter 14 of reference (a). If an operator detects a deficiency that is determined to be a Load-Bearing, Load-Controlling, or Operational Safety Devices deficiency, immediately secure the crane and notify the WHE Inspector in accordance with enclosure (3).

(7) If an accident occurs, notify the Test Director or Certifying Official, the Activity, and/or Regional Safety department immediately so that appropriate action may be taken, per enclosure (1).

(8) Ensure all new rigging gear has appropriate certification paperwork. Prior to putting a new piece of rigging gear into service, perform an initial load test, an initial visual inspection, label each item to clearly show the certification status, rated load, and ID number, and then enter the information into the activity rigging gear database.

(9) Establish and maintain procedures to perform periodic visual inspections or testing on applicable rigging gear at the proper intervals. Maintain complete and accurate records of these inspections or tests. Be familiar with inspection, rejection, and use criteria of each piece of rigging gear per reference (a). Remove from service any piece of rigging gear that does not pass visual inspection.

(10) Maintain an accurate inventory of all rigging gear within their work center. Inventory shall be made available to the WHE Inspector for proper periodic inspections.

(11) Ensure all pieces of rigging gear are properly tagged with readable ID number, rated load, and next inspection date tag or marking. Note: The expiration date for the inspection tag is the last day of the calendar month stated on the tag. Ensure no piece of gear is used that is out of certification or does not have the proper tag affixed. If any

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gear is found in the above condition, the gear shall be removed from service and the WHE Inspector notified immediately.

(12) Coordinate proper disposal of all rigging gear that is beyond repair or is otherwise deemed no longer viable for useful service. Remove destroyed pieces of gear from inventory records.

(13) Ensure rigging gear is properly stowed after use.

(14) Per enclosure (2), ensure any crane that has been locked out and tagged is not used. If any tagged crane is used, notify the Certifying Official, Test Director, or Activity/Regional Safety department immediately.

(15) Ensure no alterations or disassembly of any aspect or part of the crane or the hook assembly is performed. If any alteration or disassembly is suspected or confirmed, the crane shall be placed out of service and the Certifying Official or Test Director shall be notified immediately.

(16) Perform all crane and rigging operations in a safe and proper manner.

(17) Facilitate initial training to new Category 3 crane operators and riggers at their respective activities. Curriculum shall include NAVCRANECEN approved training courses for the Category 3 cranes, and provide the user with basic rigging principles, and a short practical exam for usage of the Category 3 cranes and rigging gear.

(18) Ensure strict compliance with enclosure (5) when making complex lifts.

(19) Per enclosure (6), ensure operators follow strict guidelines when operating a crane during adverse conditions. Keep a copy of adverse weather standard operation conditions with wind speed charts in each mobile crane.

c. Operators of Category 1, Category 2, and Category 3 cranes shall:

(1) Be responsible for crane and rigging operations they are participating in or observing that are performed using WHE and rigging gear within their work centers. Operators shall ensure safe crane and rigging practices are being used and correct any deficiencies noted by the supervisor.

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(2) Perform visual pre-use inspections, per reference (a), prior to use of rigging gear. Notify the work center supervisor when rigging gear is found that does not pass pre-use inspections so that the gear may be destroyed and removed from the master database.

(3) Upon observation of any deficiency or unsafe condition, immediately secure the WHE from further operation and notify the supervisor (refer to enclosure (3)). The supervisor shall immediately report the WHE deficiency to the WHE Inspector for diagnosis of the deficiency and initiate corrective repair action, including engineering resolution as necessary. The WHE shall not be returned to service until such deficiencies are evaluated either as satisfactory or corrected and the WHE Inspector approves the corrective repair.

(4) Perform the Category 1, Category 2 and Category 3 cab operated daily or Category 3 bridge cranes (enclosure 9) monthly pre-use check prior to each use of the crane. If any discrepancies are noted, notify the work center supervisor immediately.

(5) Do not alter or disassemble any aspect or part of the crane or the hook assembly.

(6) Do not use any crane that is locked out and tagged, per enclosure (2).

(7) Do not leave any suspended load unattended at any time.

(8) Attend refresher training in accordance with the requirements of the NAVFAC P-307. Complete required courses through NKO, per enclosure (a). New personnel operating Category 3 cranes must complete the Category 3 crane rigger course prior to operating those cranes.

(9) Have valid licenses on their person while operating Category 1, Category 2 and Category 3 cab operated cranes.

(10) Per enclosure (4), obtain permission from their supervisor before bypassing any safety conditions.

(11) Per enclosure (5), ensure strict compliance with procedures for making complex lift.

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(12) Per enclosure (6), follow strict guidelines when operating a crane during adverse conditions. Keep a copy of adverse weather standard operating conditions.

(13) Inform the license examiner, upon license renewal, if the particular type of crane has not been operated during the license period.

(14) Immediately stop all operations upon having a crane accident or seeing evidence of an unreported accident.

(15) Ensure they know the weight of the load, the radius at lay down point, the functions of the load moment indicator, and all safety devices on the crane.

(16) Use tag lines whenever practical.

d. Crane Licensing Authority (Pearl Harbor Naval Shipyard) shall:

(1) Establish and maintain licensing procedures for crane operators (Category 1, Category 2 and Category 3 cab operated cranes), per reference (a). This license shall be specifically for crane operations only and is not intended as a license for other heavy equipment operations.

(2) Maintain accurate License Record Files for all operators in accordance with reference (a).

e. Contracting Officers: Requirements for contractors crane support shall comply with reference (c) and enclosure (7).

  
J. W. JAMES

Distribution:

<https://g2.cnid.navy.mil/tscnrh/JOINTBASEPEARLHARBOR-HICKAMHI/JBPHH%20Instructions/Forms/Instructions.aspx>

**INVESTIGATION AND REPORTING OF CRANE AND RIGGING GEAR ACCIDENTS  
AND NEAR MISSES**

1. General. In addition to the investigation and reporting requirements of OPNAVINST 5102.1 and 5100.23, activities shall investigate and report WHE accidents, as defined below, in accordance with this section. The term "accident" is synonymous with "mishap" as used in the OPNAVINSTs.

2. Definitions. All crane and rigging gear accidents reporting procedures shall:

a. Notify the Navy Crane Center (Code 07) by fax (757-967-3808), phone, or e-mail (nfsh\_ncc\_accident@navy.mil) as soon as practical but not later than 24 hours after an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane, load, or adjacent property.

b. For all other accidents, notify the Navy Crane Center as soon as practical but no later than three working days after the accident.

c. Near Misses and Other Unplanned Occurrences. Near misses and other unplanned occurrences with lessons to be learned that do not fall under the crane and rigging gear accident definitions, shall be reported using figure 1-2 and E-mail (noted above) within 30 days of the occurrence. A near miss is a situation where an accident was avoided by mere chance or where intervention prevented an ongoing sequence of events that would have resulted in an accident.

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CRANE AND RIGGING GEAR ACCIDENT REPORT			
<b>Accident Category:</b> <input type="checkbox"/> Crane Accident <input type="checkbox"/> Rigging Gear Accident			
<b>From:</b>		<b>To: Navy Crane Center</b> Bldg 491 NNSY Portsmouth, VA 23709 Fax (757) 967-3808	
<b>UIC:</b>			<b>Report No:</b>
<b>Activity:</b>			
<b>Crane No:</b>	<b>Category:</b>	<b>Accident Date:</b>	<b>Time: hrs</b>
<b>Category of Service:</b> <input type="checkbox"/> SP8 <input type="checkbox"/> GP8		<b>Crane Type:</b>	<b>Crane Manufacturer:</b>
<b>Was Crane/Rigging Gear Being Used in SP8?</b> Yes _____ No _____		<b>Was Crane/Rigging Gear Being Used in a Complex LIR/Critical non-crane rigging operation?</b> Yes _____ No _____	
<b>Location:</b>		<b>Weather:</b>	
<b>Crane Capacity:</b>		<b>Hook Capacity:</b>	<b>Weight of Load on Hook:</b>
<b>Fatality or Permanent Disability?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>Material/Property Cost Estimate:</b>	
<b>Reported to NAVSAFECEN?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Accident Type:</b> <input type="checkbox"/> Personal Injury <input type="checkbox"/> Overload <input type="checkbox"/> Derrail <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 _____			
<b>Cause of Accident:</b> <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 _____			
<b>Chargeable to:</b> <input type="checkbox"/> Crane Walker <input type="checkbox"/> Rigger <input type="checkbox"/> Operator <input type="checkbox"/> Maintenance <input type="checkbox"/> Management/Supervision <input type="checkbox"/> Other Specify _____			
<b>Crane Function:</b> <input type="checkbox"/> Travel <input type="checkbox"/> Hoist <input type="checkbox"/> Rotate <input type="checkbox"/> Luffing <input type="checkbox"/> Telescoping <input type="checkbox"/> Other <input type="checkbox"/> N/A			
<b>Is this accident indicative of a recurring problem?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>If yes, list Accident Report Nos.:</b> _____			
<b>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.</b>			
<b>Preparer:</b>	<b>Phone and email</b>	<b>Code</b>	<b>Date</b>
<b>Concurrences:</b>			
		<b>Code</b>	<b>Date</b>
		<b>Code</b>	<b>Date</b>
<b>Certifying Official (Crane Accidents Only):</b>		<b>Code</b>	<b>Date</b>

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CRANE AND RIGGING GEAR NEAR MISS REPORT			
Near Miss Category: <input type="checkbox"/> Crane Near Miss <input type="checkbox"/> Rigging Gear Near Miss			
From:		To: Navy Crane Center Bldg 481 NNSY Portsmouth, VA 23709 Fax (757) 567-3806 nfh_ncc_accident@navy.mil	
UIC:			Report No:
Activity:			
Crane/Equipment No:	Category:	Near Miss Date:	Time: hrs
Category of Service: <input type="checkbox"/> SPS <input type="checkbox"/> GPS	Crane/Equipment Type:	Crane/Equipment Manufacturer:	
Location:		Weather:	
Crane/Equipment Capacity:	Hook Capacity:	Weight of Load on Hook:	
Is this near miss indicative of a recurring problem? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, list report numbers: _____			
In the space below, include a brief description of the event and corrective actions taken to prevent recurrence:			
Prepared:	Phone and email	Code	Date

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WHE LOCKOUT/TAGOUT PROCEDURES AND RECORD SHEET

1. General. Lockout/Tag-Out (LO/TO) is the preferred method of isolating cranes and WHE from energy sources. The LO/TO procedure is to protect against accidental or inadvertent operation when such operation could cause injury to personnel and/or property damage. LO/TO is the best way to ensure WHE cannot be operated when safety deficiencies exist.

2. Definitions

a. Lockout: The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

b. Lockout Devices: A lock, block, or chain that keeps a switch, valve, or lever in the "off" position installed in such a manner as to isolate and render the crane equipment inoperable. The lockout device shall prevent the unexpected energizing, startup, or release of stored energy.

c. Tag-out: Tag-out is a safety procedure consisting of placing a clearly marked tag on an energy-isolating device of the crane or equipment. Tag-out shall only be utilized to control the energy isolating devices when equipment cannot be locked.

d. Tag: An authorized tag shall always be used with a lockout device. The tag shall state the crane and equipment identification number, the nature of deficiency, the date tagged-out, and the person to contact before removing the tag or operating the tagged equipment and for any questions related to the tag. Only authorized tags shall be used when LO/TO devices are applied.

3. Action

a. WHE Mechanics shall apply LO/TO devices according to established procedures when performing maintenance, servicing, repairing, or making modifications to machinery, equipment or electrical systems, whenever equipment deficiencies that may adversely affect safe operation are noted and when equipment is out of certification.

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b. Crane operators shall notify his/her supervisor whenever a crane or equipment deficiency is identified.

#### 4. Procedures

a. Whenever personnel are performing maintenance, servicing, repairing, and/or making modifications to machinery, equipment, or electrical systems, lockout devices shall be applied. Tags shall be used with all lockout devices.

b. Lockout devices shall be placed in such a manner as to isolate and render the machine or equipment inoperable. The lockout device shall prevent the unexpected energizing, start-up, or release of stored energy. Lockout procedures in OPNAVINST 5100.23 series and organizational instructions shall also be followed.

c. Never use another crane inspection team member's lock and never lend yours. This will protect you and your fellow workers. All locks shall be subsequently identified. No duplicates or master keys will be utilized. Two (2) keys will be issued, with one key going to the WHE inspection certification supervisor and the other to the crane inspection team member. A list shall be established as to the assignment of lock(s), to each crane inspection team member. A copy of the list will be submitted to the activity Program Manager.

d. WHE LO/TO sheet will be placed in the equipment history file (EHF) for the duration that the tag is on the crane (sample below). Duplicate sheets should be maintained in a LO/TO Logbook for quick reference covering all LO/TO actions.

(1) Applying LO/TO Devices: When working on any electrical or mechanical equipment or systems which are capable of being operated or energized, the following procedures shall be followed to apply lockout and tag-out devices:

(a) Crane operators shall be notified that a lockout or tag-out system is going to be utilized and the reason therefore.

(b) Prior to beginning work, all sources of energy shall be terminated, locked-out, and checked to ensure that the lockout is, in fact, effective.

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(c) Return operating control(s) to "neutral" or "off" position after testing the machine to ensure the lockout is effective.

(d) The lockout tag shall bear the crane and equipment identification number, the nature of deficiency, the date tagged-out, and the person to contact if there are any questions.

(e) If one or more employees are working on the equipment, each employee shall have his/her own lock and tag in place.

(2) Removing LO/TO Devices: Prior to placing any crane that has been locked-out and tagged back into service, the WHE Inspector shall be contacted to ensure the crane is in full compliance with NAVFAC P-307 requirements for operation.

(a) Locks and tags shall remain on the equipment until the job is finished, after which the employee whose name appears on the tag shall remove it. In the event that a crane inspection team member leaves the job for emergency reasons or is incapacitated, the cognizant supervisor is the only person authorized to remove that employee's tags and lockout. That supervisor shall remove these tags and locks only after a thorough investigation determines that all workers are clear of the equipment, and that no equipment damage will result from this action. Upon returning to work, the crane inspection team member will inquire from the supervisor, the status of the job with his/her LO/TO.

(b) When it becomes necessary for an employee (first employee) to transfer the job to another employee (second employee), the first employee shall brief the second employee of the status of the equipment, remove his/her lock and tag, and ensure the second employee shall control the equipment with his/her lock and tag from this point on. The supervisor(s) shall assume the responsibility in cases where the second employee does not show up for work due to tardiness, illness or emergency. During a change of supervision, the outgoing supervisor will pass on to the incoming supervisor all information regarding the LO/TO status of equipment/machinery. The outgoing supervisor expedites the transfer of locks/tags, and ensures all information has been passed on. NOTE: A log

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will be kept of all LO/TO incidents. The log can be in the form of a ledger, with dates occurrences, supervisor's name, time, and a summary of all action taken.

(c) Under no circumstances shall an employee test or operate the equipment until all tags and locks have been removed.

(d) The crane supervisor shall notify all personnel affected by the LO/TO.

(e) Before energy is restored to the equipment, the authorized employee(s) who installed the lock(s) will make a visual inspection of the equipment work area and where items were removed and ensure that all components are operationally intact, and that all personnel are in the clear.

(f) Only the individual who applied the device shall remove each LO/TO device from each energy-isolating device, with an exception as described in 4d(2)(a).

5. Special LO/TO Considerations. In situations where the energy isolating device is locked/tagged and there is a need for testing or positioning of the equipment, crane inspection team member shall use the following sequence for testing:

- a. Clear equipment of tools and materials.
- b. Clear personnel.
- c. Ensure the equipment status is such that testing or repositioning is safe.
- d. Clear the control of locks/tags according to established procedure.
- e. Proceed with test, etc.

6. Procedure Involving More Than One Person. If more than one person is required to lockout equipment, each crane inspection team member shall place his/her own personal lock on the energy isolating device(s).



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PROCEDURES FOR REPORTING DEFICIENCIES ON CATEGORY 3 CRANES

1. General. Deficiencies of Load Bearing, Load Controlling, or Operational Safety devices render a crane unsafe for use. The crane shall not be returned to service until such deficiencies are either evaluated as satisfactory or corrected and the crane inspector approves the corrective repair. Recertification may be required for Load Bearing, Load Controlling or Operational Safety device deficiencies if a load test is required to prove satisfactory repairs.

2. Definitions

a. Load Bearing Parts and Load Controlling Parts: Those parts which support of control WHE as stated in section 1 of reference (a).

b. Operational Safety Devices and General Safety Devices are referenced in section 1 of reference (a).

3. Action

a. Crane Operator:

(1) The crane operators shall have the responsibility for the pre-use check and safe operation of their assigned cranes and for reporting problems to the crane inspection division.

(2) When a crane operator detects a deficiency he or she shall immediately notify their supervisor of the extent of the problem.

(3) The operator shall note all deficiencies on the ODCL.

b. Work Center Supervisors:

(1) If the supervisor determines the problem to be a Load Bearing, Load Controlling, or Operational Safety device deficiency, he or she shall immediately secure the crane and notify the inspector for action.

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(2) If the problem is a minor deficiency, such as a burnt out light bulb in the controller, the supervisor may authorize the crane operator to use the crane but he or she must notify the crane inspector at the earliest possible time. Notification will occur no later than the end of the shift.

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PROCEDURES FOR BYPASSING SAFETY DEVICES ON CRANES

1. General. NAVFAC P-307, Section 10 requires that all activities that own or operate cranes with safety devices develop procedures for controlling the bypassing of these devices.

2. Action

a. The work center supervisor shall control use of keys for safety device bypassing. Keys shall be removed from the crane where practical. Where this is not practical or where safety devices may be bypassed by other means, permission for bypassing/defeating safety devices (except for performance of the operator's pre-operation check) shall be obtained from the operator supervisor.

b. The work center supervisor will remove the safety bypass key from all cranes that do not require a key to lower the boom into the boom rest for traveling. On cranes that need to have the key left in it, a sign shall be in view of the crane operators informing them that the bypass key will only be used for securing the boom into the boom rest.

c. If the safety device has to be bypassed for any other reason other than the pre-operational check, permission must be obtained from the work center supervisor.

d. If the crane is in the shop for maintenance, the maintenance supervisor will have the responsibility for bypassing of the safety devices.

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OPERATING PROCEDURES FOR CRANE LIFTS OF UNDETERMINED WEIGHT AND  
COMPLEX LIFTS

1. General. These safe operating procedures are for personnel involved in crane lifts that are deemed "complex lifts". They are intended to promote crane safety, teamwork, and team responsibility for making final decisions by consensus before crane lifts are started.

2. Definitions

a. Complex Lift: Are defined in Section 10 of reference (a).

b. Estimated Load: Any load, which the actual weight cannot be confirmed by; shipping documents (as may be attached to a shipping container) stenciled weight (if marked "shipping weight" or "curb weight"). Estimated weight shall be identified IAW Section 10 of reference (a).

3. Procedures

a. Prior to making a complex lift, a complex lift plan shall be prepared by the crane operator with the assistance of the rigger/riggers (the lift supervisor will participate if available). The plan shall be documented (Figure 5-1) and a copy provided to the work center supervisor. The plan shall be reviewed and signed by all personnel involved prior to the lift. A rigging supervisor, operations supervisor, or a work leader (classified as WL) shall review on-site conditions for complex lifts and shall perform a pre-job briefing before each complex lift to ensure all crane team personnel understand the required procedures for the lift. A rigging supervisor, operator supervisor or a rigging or crane operator work leader (classified as W/L) shall personally supervise lifts exceeding 80 percent of the certified capacity of the crane's hoist used for the lift. If the lifts are repetitive in nature, the work center supervisor shall be present during the first evolution of the lift with each rigging crew. Subsequent identical lifts by the same crew may be done under the guidance of the rigger-in-charge.

b. Additional directions are stated in Section 10 of reference (a).

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c. Load Limits on Piers and Wharf areas: All crane operators shall have their own copies of all applicable parts of engineering studies which imposed load limitations on pier and wharf areas. The load limit information packages shall contain detailed information as would be necessary to determine a cranes safe lifting capacity and proper crane set-ups.

d. Operators Manuals: Every crane shall have a copy of the operating manual developed by the manufacturer for the specific make and model of the crane and a copy of the operating manual for any crane operator aids with which the crane is equipped.

#### 4. Complex Personnel Lift

a. All complex personnel lifts shall be made IAW Section 10 of reference (a). This is a complex lift as defined above. The written procedures shall conform with figure 5-2.

b. Cranes, rigging gear, and personnel platform shall conform to OSHA (29CFR1926.550g) requirements.

c. A body harness and shock absorbing lanyard shall be worn and attached to the lower load block or to a structural member within the personnel platform capable of supporting the impact from a fall. The harness and the anchorage system shall conform to OSHA requirements.

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**COMPLEX LIFT PLAN CHECKLIST**

Per reference: (a) NAVFAC P-307 Management of Weight Handling Equipment, Dec 09  
(b) COMNAVREGHIINST 11260.1B

1. Definition. Complex lifts are those lifts with a moderate to high level of risk involving:

a. Hazardous volatile substances, etc. This does not include materials such as oxygen, acetylene, propane, or gasoline in bottles, cans or tanks that are properly secured in racks or stands designed for lifting and transporting by crane.

b. Large and complex geometric shapes.

c. Lifts of personnel (use enclosure (5), Figure 3-2, Complex Lift Plan Checklist For Personnel Handling).

d. Lifts exceeding 80% of the capacity of the crane hoist (e.g.; main hoist, whip hoist) planned for use. For variable rated cranes, this shall be at the maximum anticipated radius planned for use (Lifts with jib cranes, pillar jib cranes, fixed overhead hoists, and monorails are excluded. Lifts of test weights during maintenance when directed by a qualified load test director are excluded).

**NOTE:** For all lifts exceeding 80% of the capacity of the crane, a rigger supervisor, operator supervisor, or working leader shall be present.

e. Lifts of submerged or partially submerged objects. The following lifts are not considered complex: Removal of valves, rotors, pipes, etc., from dip tanks for cleaning or coating purposes. Lifting boats of known weight from the water if the boats are of open design with bilge compartments accessible for visual inspection; the boats have label plates indicating weights; and the boats have pre-determined lifting points established by the Owners Equipment Manual (OEM) or the activity engineering organization. Lifting submerged or partially submerged objects that meet the following criteria: the object is verified to not contain fluid

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in pockets and/or voids that is unaccounted for in the weight of the object; the object is verified or known to not be stuck by suction or adhesion by corrosion, marine growth, excessive surface tension, mud, etc.; and the object is verified to be clear of obstructions such as other objects in the water, underwater cables, etc.

f. Multiple cranes or multiple hooks lifts on the same crane, except for bridge or gantry cranes with hooks coupled together and specifically designed for simultaneous lifting such as jet engine test stand lifting cranes.

**NOTE: FOR ALL MULTIPLE CRANE LIFTS OVER 50% OF CRANE'S CAPACITY SHALL HAVE A CRANE OPERATOR SUPERVISOR ON SITE. MULTIPLE CRANE LIFTS OVER 75% OF CRANE'S CAPACITY WILL BE REVIEWED BY A CRANE OPERATOR SUPERVISOR AND APPROVED ON A CASE-BY-CASE BASIS.**

g. Lifts of unusually expensive or one-of-a-kind equipment or components.

h. Lifts of constrained or potentially constrained loads (binding condition).

i. Other lifts involving non-routine operations, difficult operations, and sensitive equipment, or unusual safety risks.

2. Circle the type of complex lift (paragraphs 1.a through 1.d above and complete the following information:

a. Crane USN \_\_\_\_\_

b. What type of communication is being used to signal the crane operator; i.e., hand signals, radio, etc.?  
\_\_\_\_\_

c. Provide a complete description of rigging equipment involved and object to be lifted.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

d. Hook to be used (check all that apply):

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MAIN \_\_\_\_\_ AUX \_\_\_\_\_  
e. WEIGHT OF OBJECT: \_\_\_\_\_

Method used to determine estimated weight.  
\_\_\_\_\_

f. Estimated height, width and length of object.  
\_\_\_\_\_

g. Total weight of all rigging gear.  
\_\_\_\_\_

h. Total combined weight of load to be lifted, including rigging gear.  
\_\_\_\_\_

i. Crane configuration:

(1) Number of parts of wire \_\_\_\_\_

(2) Boom length \_\_\_\_\_

(3) Boom angle \_\_\_\_\_

(4) Outriggers fully extended Yes \_\_\_\_\_ No \_\_\_\_\_

j. Crane deduction (as identified on the crane's weight reductions for load handling devices or load chart).

(1) Main \_\_\_\_\_

(2) Aux \_\_\_\_\_

(3) Aux Boom Head \_\_\_\_\_

(4) Boom Extension/Jib \_\_\_\_\_

(5) Misc. \_\_\_\_\_

k. Total weight of load to be lifted, including rigging gear, object, and all crane deductions:  
\_\_\_\_\_

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- l. Planned Radius \_\_\_\_\_
- m. Working Load Limit of crane at planned radius.  
\_\_\_\_\_
- n. Maximum operating radius allowed.  
\_\_\_\_\_
- o. Page of load chart used to determine capacity (if applicable) \_\_\_\_\_
- p. Crane certified (tested) capacity.  
\_\_\_\_\_
- q. Weather condition; i.e., cloudy, rain, lighting, etc.  
\_\_\_\_\_
- r. Ground support; i.e., asphalt, concrete, gravel, etc.  
\_\_\_\_\_
- s. Does this lift require dunnage under outriggers?  
Yes \_\_\_ No \_\_\_
- t. If yes, has dunnage been provided?  
Yes \_\_\_ No \_\_\_
- u. Is the crane configuration identified above sufficient to perform the lift?  
Yes \_\_\_ No \_\_\_

**NOTE: ALL CRANE CAPACITIES WILL BE BASED ON 360-DEGREE LOAD CHART.**

3. Identify all special conditions that the crane team should be aware of when performing the lift.

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4. Crane Operator. The crane operator has reviewed the complex lift plan and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

5. Rigger-in-Charge (RIC). The RIC has reviewed the complex lift plan and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

6. Name of other team members involved in the lifts.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

7. Crane Operator Supervisor or Designated Work Leader. The crane operator supervisor or designated work leader on site has reviewed the complex lift plan in it's entirety and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

8. All personnel involved with complex lift are wearing the proper personnel protective equipment (PPE).  
Yes \_\_\_\_\_ No \_\_\_\_\_

9. Pre-Lift Briefing was performed by (Check one and sign below):

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\_\_\_ Crane Operator \_\_\_\_\_

\_\_\_ Rigger-in-Charge \_\_\_\_\_

\_\_\_ Designated Work Leader \_\_\_\_\_

\_\_\_ Crane Operator Supervisor \_\_\_\_\_

10. Remarks/Feedback/ Lessons learned from this lift.

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**COMPLEX LIFT PLAN CHECKLIST FOR PERSONNEL HANDLING**

Per reference: (a) NAVFAC P-307 Management of Weight Handling Equipment, Dec 09  
 (b) COMNAVREGHIINST 11260.1B

1. Complete the following information:

a. Crane USN \_\_\_\_\_

b. What type of communication is being used to signal the crane operator; i.e., hand signals, radio, etc.? \_\_\_\_\_

c. Hook to be used    MAIN \_\_\_\_\_    AUX \_\_\_\_\_

d. Crane configuration:

(1) Number of parts of Wire \_\_\_\_\_

(2) Boom length \_\_\_\_\_

(3) Boom angle \_\_\_\_\_

(4) Outriggers fully extended. Yes \_\_\_\_\_ No \_\_\_\_\_

e. Weather condition; i.e., cloudy, rain, lighting, etc.  
 \_\_\_\_\_

f. Ground support; i.e., asphalt, concrete, gravel, etc.  
 \_\_\_\_\_

g. Does this lift require dunnage under outriggers?  
 Yes \_\_\_\_\_ No \_\_\_\_\_

h. If yes has dunnage been provided?    Yes \_\_\_\_\_ No \_\_\_\_\_

**ALL CRANE CAPACITIES WILL BE BASED ON 360 LOAD CHART**

i. Crane deduction (as identified on the crane's weight reductions for load handling devices and/or load chart).

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- (1) Main \_\_\_\_\_
  - (2) Aux \_\_\_\_\_
  - (3) Aux Boom Head \_\_\_\_\_
  - (4) Boom Extension/Jib (if applicable) \_\_\_\_\_
  - (5) Misc. \_\_\_\_\_
- i total \_\_\_\_\_

j. Trial Lift/Proof Test.

- (1) Weight of personnel basket: (j) \_\_\_\_\_  
(with test weight)

TOTAL WEIGHT OF LOAD TO BE LIFTED

(Crane Deductions) i total \_\_\_\_\_

(Below the hook weight/trial lift) j total \_\_\_\_\_

Total Weight of i and j: (\*Net Wt) \_\_\_\_\_

k. Weight of basket, personnel, materials and tools.

- (1) Weight of personnel basket (without test weight):  
\_\_\_\_\_
- (2) Personnel weight: \_\_\_\_\_
- (3) Weight of equipment, materials and tools. \_\_\_\_\_

Total Wt. (k) \_\_\_\_\_

(Total weight above (k) shall not exceed personnel basket weight with test weight, j.)

l. Planned Radius \_\_\_\_\_

m. \*Rated capacity of crane at planned radius.

\_\_\_\_\_

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n. Page of load chart used to determine rated capacity (if applicable). \_\_\_\_\_

o. Crane certified (tested) capacity.  
Main \_\_\_\_\_ Aux \_\_\_\_\_

p. After calculation of \*net wt (i and j) and \*rated capacity of crane at planned radius (m). Is the entire crane configuration identified above sufficient to perform the lift at 50% or less of crane's hoist rated capacity at maximum trial lift radius.

Yes \_\_\_\_\_ No \_\_\_\_\_

q. Are all personnel's involved wearing proper protective equipment (PPE)?

Yes \_\_\_\_\_ No \_\_\_\_\_

2. **Crane Operator**. The crane operator has reviewed the complex lift plan and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

3. **RIC**. The RIC has reviewed the complex lift plan and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

4. Name of other team members involved in the lifts.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

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5. Crane Operator Supervisor or Work Leader. The crane operator supervisor or work leader on site has reviewed the complex lift plan in its entirety and concurs with the completed information and confirms that all documented information is accurate and complete.

\_\_\_\_\_  
(Print Name) (Sign Name) Date

6. Pre-Lift Briefing was performed by (Check one and sign below):

Crane Operator  
\_\_\_\_\_

Rigger-in-Charge  
\_\_\_\_\_

Work Leader  
\_\_\_\_\_

Crane Operator Supervisor  
\_\_\_\_\_

7. Remarks/Feedback/Lesson learned from this lift.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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PROCEDURES FOR ADVERSE OPERATING CONDITIONS

1. General: Crane operators and riggers must follow strict guidelines in determining reduced capacities and other operational restrictions while operating mobile cranes under adverse conditions as required by Section 10 of reference (a).
2. Discussion: The following procedures and requirements will not only assist the operators and riggers; it will satisfy the requirements of Section 10 of reference (a).
3. Definition: Adverse Operating Conditions- An adverse operating condition may result from climatic conditions (snow, ice, wind, rain and lightning); inadequate support conditions (loose soil, outrigger/stabilizer bearing on manhole, etc.); congestion or obstructions; improper or unusual rigging procedures; or any other situation which the crane operator feels could result in uncontrolled movement or otherwise render the operation unsafe.
4. Procedures
  - a. When a crane operator observes an adverse operating condition, he/she will suspend operations and notify the work center supervisor for resolution.
  - b. Specified wind speeds for reduced allowable loads and for curtailing operations shall be based on control of the load and OEM recommendations for stability of the equipment during high winds.
  - c. Crane operators will reduce crane capacities by 50% whenever operating in sustained winds in excess of 20 mph. For wind speeds in excess of 30 mph cease all crane operations, lower and retract boom. Activities shall have adequate means of monitoring local weather conditions.
  - d. Making a lift during an adverse condition may result in a complex lift. For such lifts, enclosure (5) must be followed and a complex lift plan completed.
  - e. Securing of WHE during Adverse Weather Conditions. When severe adverse weather conditions (wind, rain, lightning, etc.) have the potential to develop, actions shall be taken to

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preclude damage to WHE. Securing of equipment shall be based on OEM recommendations and local technical instructions. For all outdoor rail mounted crane, activities shall determine the wind forces that will cause the crane to move with the brakes set, and ensure the crane is adequately secured against movement from anticipated wind forces. Materials required to secure WHE, should be identified and readily available.

NAVY KNOWLEDGE ONLINE COURSES FOR WHE

NAVCRANECEN ONLINE TRAINING, SPONSORSHIP, AND NKO/NEL/ILE  
INFORMATION NAVCRANECEN: NAVY CRANE CENTER - NKO: NAVY  
KNOWLEDGE ONLINE - NEL: NAVY E-LEARNING - ILE: INTEGRATED  
LEARNING ENVIRONMENT

WEB BASED COURSES. THE FOLLOWING NAVY CRANE COURSES ARE  
AVAILABLE VIA NAVY E-LEARNING ON NAVY KNOWLEDGE ONLINE.

- GENERAL CRANE SAFETY (NCC-GCS-02)
- GENERAL CRANE SAFETY REFRESHER (NCC-GCSR-03)
- CATEGORY 2 AND COB-OPERATED CATEGORY 3 CRANE SAFETY (NCC-C2CS-01)
- CATEGORY 2 CRANE SAFETY REFRESHER (NCC-C2CSR-02)
- CATEGORY 3 (NON CAB) CRANE SAFETY (NCC-C3CS-01)
- CATEGORY 4 CRANE SAFETY (NCC-C4CS-01)
- CRANE RIGGER (NCC-CR-03)
- RIGGING GEAR INSPECTION (NCC-RGI-02)
- LOAD TEST DIRECTOR (NCC-LTD-01)
- CERTIFYING OFFICIAL (NCC-CO-01)
- CRANE ELECTRICIAN (NCC-CE-01)
- ELECTRICAL CRANE INSPECTOR (NCC-ECI-01)
- CONTRACTOR CRANE AWARENESS (NCC-CCA-02)
- CRANE MECHANIC (NCC-CM-01)
- MOBILE CRANE MECHANIC (NCC-MCM-01)
- MECHANICAL CRANE INSPECTOR (NCC-MCI-01)

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**PURPOSE AND SCOPE**

NAVFAC P-307 training courses provide basic, fundamental, trade related information for the operation, rigging, maintenance, inspection, and testing of weight handling equipment (WHE) at navy shore activities. These courses will acquaint personnel with navy requirements to safely perform WHE related tasks. By design, these courses reinforce and enhance existing knowledge and provide a base upon which to develop experienced, competent personnel through on-the-job training. Completing a NAVFAC P-307 training course will not, in itself, produce a professional, knowledgeable, safe worker from someone who is inexperienced or lacks familiarity or skill with the subject. NAVFAC P-307 courses do not provide hands-on training nor will they qualify personnel to perform a specific function, task or assignment. It is therefore incumbent on the command, activity or organization to provide additional training to develop safe, competent personnel. NAVFAC P-307 supports this goal by providing section 13 training courses and appendix N knowledge and competency requirements. Above all, safety comes first. The goal is safe performance of WHE operations with zero accidents and injuries. *Organizations must ensure Operational Risk Management is employed in every weight handling decision including the selection of competent, knowledgeable personnel for training billet nominations and WHE duties.*

\*Category 1, 2, and 4 crane operators must satisfy NAVFAC P-307 Sections 6, 7, 8 and Appendixes G-L, as applicable.

**ACCESSING NKO-NEL****General**

The individual seeking access to Navy Crane Training via NKO/NEL must have his/her own email account to apply for a NKO/NEL account.

Non-CAC individuals seeking access to Navy Crane Training via NKO/NEL must request and be approved for a NKO account as a "guest user" prior to request/approval for a NEL account and subsequent access to Navy Crane Training.

CAC personnel seeking access to Navy Crane Training via NKO/NEL must request and be approved for a NKO account as a "new user". Subsequent access to NEL is granted along with the NKO account access.

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**Option 1:** Obtain CAC for contractors (or other non-CAC personnel). Personnel may obtain software PKI certificates from

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a DoD Trusted Vendor through the Interim External Certificate Authority (IECA/ECA) Program <http://iase.disa.mil/pki/eca/>. With a CAC/PKI certificate, personnel may register for NKO/NEL accounts.

#### Option 2: Sponsorship

METHOD I On-site sponsorship. DON military or civilian personnel at the command (government personnel with a CAC) can become a sponsor through NKO and sponsor non-CAC personnel. Sponsors shall ensure that *Operational Risk Management is employed in every weight handling decision including the selection of competent, knowledgeable personnel for training billet nominations and WHE duties.*

METHOD II NAVCRANECEN sponsorship. Only BOS/long term contractors or non-CAC DOD personnel will be sponsored. Individuals who cannot be validated will not be granted access. It is incumbent upon parent organization's management to ensure that *Operational Risk Management is employed in every weight handling decision including the selection of competent, knowledgeable personnel for training billet nominations and WHE duties.* NAVFAC P-307 online training, sponsorship, and NKO/NEL/ILE information

#### **NKO-NEL REGISTRATION AND USE**

Access to Navy Knowledge Online (NKO) is restricted to Navy, Marine Corps, and Coast Guard (Active and Reserve), Retired, Retired Reserve, and Dependents, DON Civil Service and Contractors, Delayed Entry Personnel, and Naval Academy Midshipmen. Users who fall into these categories can apply for NKO accounts and will be validated against the DEERS database. Once new users are validated successfully by the system, they can freely access the wide variety of resources within NKO. Since the collaboration tools provided by NKO are used to share information across many functions in the Department of Navy, it is sometimes necessary for users who do not fall in the approved categories to gain access. Commercial contractors, members of other military services, and those not present in the approved categories can gain access to NKO by applying for guest user access.

**REVIEW ALL NKO REGISTRATION INFORMATION VIA THE NKO USER  
REGISTRATION TUTORIAL!**

**CONFIGURE YOUR BROWSER SETTINGS FOR USE WITH THE NKO ENVIRONMENT**

**NKO REGISTRATION**

- IF YOU HAVE A CAC AND ARE IN AN APPROVED CATEGORY (Navy, Marine Corps, and Coast Guard (Active and Reserve), Retired, Retired Reserve, and Dependents, DON Civil Service, Contractors, Delayed Entry Personnel)

1. GO TO NKO
2. REGISTER AS A "NEW USER". UPON APPROVAL, PERSONNEL WILL HAVE ACCESS TO NKO/NEL

- IF YOU HAVE A CAC AND ARE NOT IN AN APPROVED CATEGORY (Army, Air Force, ACOE, associated contractors)

1. GO TO NKO
2. REGISTER AS A NEW "GUEST USER". UPON APPROVAL, PERSONNEL WILL HAVE ACCESS TO NKO/NEL

- IF YOU DO NOT HAVE A CAC OBTAIN SPONSORSHIP/APPROVAL (see Methods I or II above and follow directions).

1. GO TO NKO
2. REGISTER AS A NEW "GUEST USER"
3. GUESTS WILL RECEIVE AN EMAIL WHEN GUEST ACCOUNT IS APPROVED

**After you obtain an NKO account, you will need to register for a Navy eLearning (NeL/ILE) account**

4. When the NKO username is received, GO TO [https://ile-help.nko.navy.mil/ile/support/EULA\\_learner.aspx](https://ile-help.nko.navy.mil/ile/support/EULA_learner.aspx)
5. FOLLOW INSTRUCTIONS
6. ENSURE YOU HAVE CORRECT REQUESTOR AND SPONSOR EMAIL ADDRESSES
7. LIST THE JOB CODE NCC WHE IN THE NOTES SECTION SO THE CRANE CONTENT MAY BE ADDED TO YOUR LEARNING PLAN
8. GUESTS WILL RECEIVE AN EMAIL STATING THAT THEIR ACCOUNT HAS BEEN ESTABLISHED

**TO TAKE A NAVFAC P-307 COURSE**

- IF YOU HAVE NAVY AS YOUR SERVICE AGENCY ON YOUR CAC CARD -

1. LOG INTO NKO

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## TO TAKE A NAVFAC P-307 COURSE

- IF YOU HAVE NAVY AS YOUR SERVICE AGENCY ON YOUR CAC CARD -

1. LOG INTO NKO
2. CLICK THE NAVY e-LEARNING>ONLINE COURSES LINK UNDER THE LEARNING TAB (FOURTH FROM LEFT)
3. A NAVY e-LEARNING AUTO LOGON SCREEN WILL OPEN (NO ACTION REQUIRED - WAIT FOR NEXT SCREEN)
4. AFTER THE "WELCOME TO NAVY eLEARNING" SCREEN OPENS CLICK BROWSE CATEGORIES UNDER CONTENT (SCREEN LOWER LEFT)
5. CLICK US DEPARTMENT OF NAVY (DON) TRAINING UNDER SELECT A CATEGORY TO BROWSE
6. CLICK SUBCATEGORY NAVY CRANE TRAINING
7. CLICK THE COURSE TITLE YOU WISH TO TAKE
8. CLICK ENROLL
9. CLICK LAUNCH
10. CLICK AND HIGHLIGHT THE DESIRED COURSE LESSON THEN CLICK TO LAUNCH LESSON.
11. CLOSE EACH MODULE WHEN FINISHED.
12. WHEN YOU CLOSE A MODULE, THE COURSE VIEWER WILL GRADE YOUR QUIZ.
13. FINISH ALL THE MODULES AND THE FINAL EXAM WITH A SCORE OF AT LEAST 70%.

- IF YOU ARE A GUEST NAVY E-LEARNING USER -

1. LOG INTO NKO
2. CLICK THE NAVY e-LEARNING>ONLINE COURSES LINK UNDER THE LEARNING TAB (FOURTH FROM LEFT)
3. CLICK THE LEARNING PLAN TAB
4. CLICK THE COURSE TITLE YOU WISH TO TAKE
5. CLICK ENROLL (THIS WILL PLACE THE COURSE ON YOUR "MY ENROLLMENTS" TAB
6. CLICK THE LAUNCH BUTTON CORRESPONDING TO THE COURSE YOU'VE SELECTED
7. CLICK AND HIGHLIGHT THE DESIRED COURSE LESSON THEN CLICK HERE TO LAUNCH LESSON.
8. CLOSE EACH MODULE WHEN FINISHED.
9. WHEN YOU CLOSE A MODULE, THE COURSE VIEWER WILL GRADE YOUR QUIZ.
10. FINISH ALL THE MODULES AND THE FINAL EXAM WITH A SCORE OF AT LEAST 70%.

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VIEW THE NKO REGISTRATION TUTORIAL SCREENSHOTS FOR ACCESSING COURSES.

Navy Crane Center has no control over the NKO environment. If you experience problems in the NKO environment:

- TO DOCUMENT SATISFACTORY COURSE COMPLETION -

1. CLICK THE NAVY E-LEARNING LINK ON THE LEARNING TAB (FOURTH FROM THE LEFT)
2. CLICK ON MY TRANSCRIPTS TAB (FOURTH FROM THE LEFT)
3. CLICK THE CERTIFICATE BUTTON NEXT TO THE COMPLETED COURSE
4. CLICK THE PRINT CERTIFICATE BUTTON, VERIFY THE PROPER PRINTER SETTINGS (LANDSCAPE)
5. CLICK PRINT

**TROUBLE SHOOTING**

1. Be patient. It may be an NMCI issue, an NKO issue, a connectivity issue, or a combination of each. It may, at times, take several attempts to access NKO/NEL. Keep trying.
2. Check your browser settings: NKO BROWSER SETTINGS
3. Contact the NKO help personnel (see below contact information).

Log-in: <https://wwwa.nko.navy.mil>

To access NKO and NAVCRANECEN courses log onto NKO. If not registered you will either register as a "new" user, for CAC personnel or a "guest" user for non-CAC personnel. **READ THE "REGISTRATION TUTORIAL" AND CONFIGURE YOUR BROWSER AS INSTRUCTED IN THE "TUTORIAL"**. Users will need an NKO account and a NeL account. Navy CAC personnel who register with NKO will automatically receive a NeL account. Non-CAC personnel will have to register/request for each account and have a sponsor.

Once in NKO click "Navy e-Learning > Online Courses"

It will open (and close quickly), followed (automatically) by the next page (no click required here) (be patient) This page opens automatically. If you don't see it, look under the other windows on your desktop.

Click "Browse Categories" to continue.

Click "Department of the Navy (DON) Training".

Click on "Navy Crane Training".

Click on the desired course title.

Click "Enroll".

Click "Proceed to My Enrollments".

Click "Launch" to begin training.  
Click and highlight the desired course lesson title (on left)  
then "Click here to launch the lesson" (on right).

**CONTACT INFORMATION**

NKO-NEL Contact Information

If you are experiencing issues with self-paced courseware or any other Navy eLearning materials and choose to contact the NETC Enterprise Customer Support Center (ECSC), please notice that the menu options have changed. The NETC ECSC can be reached at the following number Monday-Friday from 0600-2100:

Commercial: (850) 452-1001 option 1, then option 3

DSN: 922-1001 option 1, then option 3

Toll Free: 1-877-253-7122 option 2, then option 1, then option 3

NMCI USERS: Learners may experience difficulties with courses and progress updating due to a conflict with the multiple versions of Java enabled on your NMCI workstation. Please contact the NETC ECSC for assistance.

Navy Crane Center Contact Information

NAVFAC P-307 Training Manager, Navy Crane Center

W: 757.967.3833 DSN: 387, C: 757.284.6833, F: 757.967.3799

Norfolk Naval Shipyard, Bldg. 491, Portsmouth, VA 23709-5000

Email: TRAINING POC

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

07 JAN 2013

Crane Data Sheet Joint Base Pearl Harbor-Hickam				
	Total Inventory	Total Inventory	Total Inventory	Total Inventory
	(1)	(2)	(3)	(4)
<b>Category 1</b>				
Portal				
Floater				
Hammerhead	1	1	0	0
Stiff Leg Derrick				
Mobile				
Locomotive				
<b>Subtotal</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Category 2</b>				
Bridge				
Gantry				
<b>Subtotal</b>				
<b>Category 3</b>				
Bridge	5	2	3	3
Wall				
Jib				
Monorail	7	4	3	3
Fixed				
Other	1	1	0	0
<b>Subtotal</b>	<b>13</b>	<b>7</b>	<b>6</b>	<b>6</b>
<b>Category 4</b>				
Truck mounted				
Articulating				
Pedestal Mount				
<b>Subtotal</b>				
<b>Current Totals</b>	<b>14</b>	<b>8</b>	<b>6</b>	<b>6</b>
<b>Prior Totals</b>				
<p>Note: (1) Total Inventory - Includes all cranes (Deactivated and Active)</p> <p>(2) Total Deactivated - Number of cranes that are deactivated (mothball).</p> <p>(3) Total Active - Number of active cranes.</p> <p>(4) Total Certified - Number of active cranes currently in service.</p> <p>* Note: Air Force cranes not in P-307 at this time (in progress), AF Inventory as follows: Category-2 (2), Category-3 (32) Licensed/Trained (As Applicable) Operators Per Crane</p>				
	CAT 1	CAT2	CAT3	

07 JAN 00

RIC DAILY CHECKLIST

CRANE NO.	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	DATE				
RIC	CRANE OPERATOR	CRANE CREW		INSTRUCTIONS FOR ROUTINE LIFTS/COMPLEX LIFT MUST FILL OUT COMPLEX FORMS					
ATTRIBUTE					1	2	3	4	
1	All personnel (e.g., Rigger-in-Charge, Crane Rigger, Crane Operator, etc.) are present and all have proper PPE worn.								
2	Crane's Operator completed ODCL.								
3	Crane foundation is adequate (where applicable, ground pier loading) as addressed. Dunnage used.								
4	Barriers and/or signs placed to identify the crane's operating envelope (e.g., cones, barricades, caution tapes, etc.)								
5	Rigging equipment within test date and of sufficient capacity to perform lift.								
6	Weight of item, or equipment, discussed.								
7	Obstructions within the crane operating envelope throughout the entire lift identified. New / unforeseen tight clearances noted / precautions taken.								
8	Operational risk management discussed.								
9	Pre-lift briefing outline followed.								
10	Discuss method of communications (e.g., hand signals, hand held radio, phones, sound powered phones, etc.).								
11	Weather conditions. Effects of weather (e.g., wind, rain, clear, overcast, etc.) have been discussed on the job. Check high wind conditions by calling Pearl Harbor Signal Tower at 474-6262.								
12	Permission to commence crane evolution with surface craft ship, submarine, and/or lead trade's assistance.								
Remarks:									