



NATIONAL CRANE PDT

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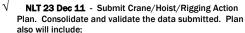
OPORD 2011-82 - UPDATE

In November 2011, a USACE-wide OPORD was issued. The purpose of the OPORD was to provide the requirements and instructions for the Crane/Hoist/Rigging Action Plan needed to bring USACE crane program implementation into compliance.

The intent of the OPORD was, through the use of the USCE Crane/Hoist/Rigging Action Plan surveys, MSC's, District Commands, and managers would evaluate their organization's findings and take necessary corrective actions to improve performance, safety and proficiency. The steps taken ensure compliance with EM 385-1-1 and OSHA regulatory require-

Major milestones associated with the OPORD were identified. They were:

Immediate - Continued immediate reporting of any crane, rigging, or hoist / hoisting equipment related incident or accident.



1) Communication Plan detailing the process and responsibilities for reporting, reviewing, validating and submitting this information.

2) USACE Crane and Hoist Operator Qualifications status for all operators of Cranes / Hoisting equipment (USACE owned)

NLT 6 Jan 12 - Submit a written action plan that will address the remainder of program deficiencies to include:

- 1) Equipment Inventory
- 2) Training Plan
- 3) Inspection Plan

NLT 28 Feb 12 - Enter equipment inventory and inspection data into Facility Equipment Maintenance System (FEM) in order to track data efficiently across USACE.

By-in-large, all MSC's met the suspense dates. Once the data was gathered, the Crane Working Group met and reviewed the data, creating a document to identify; our findings, our questions, and our need for additional information. It has taken awhile to compile this information, however as of this publication, all MSC's should have received an update on their status. Upon receipt of this information. I ask that you pull together your District Command team, as identified in your communication plan, and assess our review and findings. Please consider the following as your review the data and provide information to Ellen Stewart and I to ensure your data is accurate:

Major Actions-in a few cases, the information requires the

District to provided an immediate response to the Crane WG. We recognize the tardiness on our part with providing you with this information, we ask for your forgiveness and please attempt to be respectful and respond to our request(s).

- Update your data for Crane Operators, Riggers, and Signal Persons. The 'snapshot' we took back in December most likely has improved
- If you have your eyes focusing on an In-house "Train-the-Trainer" program, please contact the Crane WG for assistance.

The Crane WG recently met to discuss the "Road Ahead" with respects to identifying and qualifying IN-HOUSE trainers. The process identified looks

In order to ensure training of USACE personnel is consistent and effective the USACE High Hazard Working Group reviews and approves the qualifications for all candidates. To be considered, please submit the following information for review by the Crane High Hazard Working Group:

- 1) A brief resume outlining your qualifications demonstrating experience.
- 2) Copies of current proof of training for Train The Trainer in the following areas you are requesting approval for instructing:
- * Overhead Cranes (will include training in Class II type cranes and hoists
- * Mobile Cranes (will include Floating/Derrick/Truck cranes as applicable)
- * Rigging
- * Signal Person

Upon approval of your request by the Crane Working Group, the designee will transmit (to the Working Group) within 30 days, a copy of your Duty Appointment letter signed by your Commander.

The GOAL of the Working Group is to identify.... Competent, Capable, Articulate instructors who can teach the requirements of EM 385-1-1, Sections 15 and 16, blend in the requirements of the OSHA and ANSI standards and then administer practical examinations on YOUR equip-

The Working Group HAS established the training curriculum that the instructors WILL use as part of our In-House Program. Once identified and approved, training kits will be sent out to the geographical Districts/ Divisions for use by these trainers.

Lastly.....A fragmentation order (FRAGO) will be forthcoming (Summer 2012) where you will be asked to update your status with respects to the original milestone events in the OPORD.

Thank you all for your efforts and commitment to improving the USACE Crane and Rigging program. - Jerry Balcom COUNTERWEIGHT - COUNTERWEIGHT -PG.2

CHANGE 7 -

By way of ensuring that the field is aware and is tracking major changes to our Safety and Health Requirements manual, Changes 5 and 6 were issued in 2011.

Change #5 had an effective date of 1 April 2011, and for all contracts whose date of solicitation is 21 April 2011 or later

Summation of Change—Replaces Section 15, in its entirety, with a revised Section 15 due to substantial changes in rigging requirements.

Change #6 had an effective date of 18 July 2011, and for all contracts whose date of solicitation is 18 July 2011 or later.

Summation of Change—Added new tables to Section 11 for clearance from power lines; replaced Section 16 in its entirety due to substantial changes in cranes/derricks and hoisting equipment requirements; deleted Appendix "I" totally; added Section 18, Appendix S and Q.

Guidance Letter issued to the field by CESO in January 2012, removed Class III designation of certain types of hoisting equipment. Those relevant portions of this designation were brought into the Class II designation with the pertinent requirements applied therein.

Need for Change 7

As Industry and Construction continued to wrap their arms around the substantive changes in the OSHA Regulations (subpart CC to 29 CFR 1926), the Crane WG has been made aware of a need to change salient portions of Sections 15 and 16 to the manual.

Rationale

During a recent meeting, the Working Group considered comments received from the field and made the determination that there were issues within the EM that simply

could not wait for the re-write of the EM (see article on re-write, this edition of counterweight). Change 7 will be issued to the field in the immediate future, however as a heads up, relevant changes to the EM are associated with the following:

- 15.E.01—Only allow chain, Grade 80 or higher, shall be used in rigging.
- 15.H.01—Changes wording with respects to wear and nominal accepted throat openings on a hook.
- 15.H.08(b) Identifies the minimum number of wraps of wire rope that shall be present on drums at all times.
- 16.B.01(b and c) removes the wording, "who have completed all operator qualification requirements."
- 16.B.05—Deletes the 2nd line in this note... "This activity is considered a Critical Lift and as such, requires a physical examination for the operator."
- 16.C.01(a thru c)— Merges Class II I into Class II. Now only Class I and II exist in bulleted format, for ease of identification purposes.
- Table 16-3—Corrects the minimum clearance distance arithmetic errors with respects to the metric conversions on this table.
- 16.H.02—Deletes the note.
- ♦ 16.U.06—Corrects the reference from 16.B.06 to 16.B.05

The effective date of these changes-15 June 2012.

Jerry Balcom

EM 385-1-1 ... RE-WRITE

As the commercial says Here We Go!

Every 5 years, the Corps re-writes the Safety and Health Requirements manual, EM 385-1-1 and we are well underway with the current re-write. With respects to Rigging (Section 15) and Cranes/Hoists (Section 16), the Crane WG has received several comments already and we are in the process of reviewing and addressing those comments. But it's important for you, the reader to know that **ALL** sections of the manual are under review, and CESO (HQ Safety) is seeking YOUR input.

Ellen Stewart is the Project Manager for the re-write of the manual in its entirety.

Each Section of the manual has a group that is compiling the change requests and will be responsible for the section re-write that will be forwarded to CESO. The milestone dates to be aware of are:

♦ 22 June 2012 1st Draft posted to website for review/comment.

♦ 05 Oct 2012 2nd Draft posted to website for review/comment.

♦ 21 Dec 2012 FINAL Draft posted to website for review/comment.

The **GOAL**....have the EM action completed by end of January 2013. Publication is scheduled for June 2013.

If you have comments or wish to see changes, please use the template (see sample on the right). Comments will only be considered in this format. You can download the template at:

http://www.usace.army.mil/SafetyandOccupationalHealth.aspx

EM 385-1-1, 2008 Safety and Health Requirements Manual - Comment Template

NOTE: Comments must be filed electronically using this form, and submitted in Microsoft Word format.

The form can be obtained electronically on the CE SO website: http://www.usace.army.mil/SafetvandOccupationalHealtha.spp
First 4 columns must be filled in for a comment to be considered.

Insure an email address for the submitting party is included along with the comment sheet so a reply can be provided.

Section	Organization Making Comment	Comment/Rationale	Suggested Language	Committee Disposition

FREQUENTLY ASKED QUESTIONS -

Over the last few months, the Crane High Hazard Working Group (WG) has received numerous questions from the field. To categorize, the questions come in a couple of different ways:

Some are seeking clarification on just "what" the EM is saying...with respects to cranes and rigging,

Some are seeking interpretations on the language found in the EM and how to apply the standard in their working environment,

Some questions challenge the language of the EM as compared to OSHA Regulations or the ANSI/ASME standards,

Some aren't sure there is a question, but simply need to have a dialogue with the WG in an effort to ensure compliance moving forward with a task/activity.

The WG addresses many questions on a weekly bases and we're seeing some of the same questions come around multiple times. So...when we get questions, we're asking for pictures of what you situation looks like because the chances are...some of you out there might have the same question. As you'll seen in the responses below, we've included pictures (where needed) to help give you a visual on what the issue was. The axiom...a picture is worth a 1,000 words, made our ability to respond....much easier.

THANK YOU for asking questions...we'll keep doing our best to provide you the support needed.

Q1: We operate a ROE Stinger 80-2 mobile truck, hydraulically powered, 16 foot three stage boom that extends to 45 feet when fully extended. Rated capacity is 8.5 tons. We also operate two cranes that are mounted to the decks of vessels that pick up debris on San Francisco Bay. The equipment - A telescopic hydraulic crane with a claw to pick up debris with a 7 ton capacity and a 20-Ton excavator with-out tracks, welded to the deck with a three link boom and claw. These two vessels are owned by USACE and go out on the bay every day. I've been given direction to get my men certified, before operating. What training is required?





M/V Racoon and Excavator

Effer extension crane

- A1: The excavator on the M/V Racoon is not a crane but is an excavator mounted to the barge. No crane training is required for the excavator on the M/V Racoon as long as it is not used for hoisting (with rigging). If used for hoisting with rigging, then the operator has to be designated in writing per Section 16.S. HOWEVER: Because the 20-Ton excavator was taken off the tracks and mounted to the deck, it changed the configuration and stability/capacity of the machine. A structural stability analysis/architectural analysis (derated range/load chart) would be required by a structural/naval architectural engineer per section 16.L.
- A1: The EFFER extension crane is a floating crane and as such, requires Class I hydraulic telescoping fixed cab operator training with a floating plant module. The 8.5 Ton Mobile truck, hydraulically powered ROE stinger is a hydraulic truck crane and would require the operator to have Class I, mobile hydraulic crane training.
- Q2: One of our Engineers who is working on Hoist Structural Capacity Calculations for us "BELIEVES" that OSHA or USACE does not approve of shackles made in China. Do you know of such ruling?
- A2: As applied, when looking at the ASME B 30.26 standards, "China" is not a manufacturer, it's a country and as such stamping a shackle with a country name and not the manufacturer's name, would not meet our requirements.
- Q3: If a crane or hoist is already entered as an asset in the database, what are additional requirements?" Are there any additional requirements per OPORD 2011-82?
- A3: None at this point. Based on the information provided to the WG from the FEM's National team...complete asset record (serial number, etc) classification, then fill in attributes and associated qualifying data. A FRAGO will be forthcoming identifying additional data entry requirements.
- Q4: Would it be possible for your team discuss a way to add a requirement to section 15 for written proof of qualifications or training for Riggers. I think it would validate the existing personnel qualifications.
- **A4**: The Corps of Engineers mirrors the definition found in 29 CFR 1926.1400 Definitions for a Qualified Rigger/Qualified Person, which is written proof of qualification by the employer. Our EM, in Section 01.A.13 requires written submittal via an Activity Hazard Analysis (AHA) and/or Accident Prevention Plan (APP).

Q5: It does not appear that tainter gates meet the general requirements in the EM and as identified in our findings for OPORD 2011.82. The last sentence of the section states it applies to "....such equipment when used with chains, slings or other rigging to lift suspended loads." The tainter gates are a fixed system with redundant cables. The gates do not use chains, slings or other rigging nor are they a suspended load. The load does not/cannot change.





A5: This question was asked many times/in many ways and the WG spent a fair amount of research to ensure we got this correct. According to ASME B 30.7, a winch is arranged for mounting on a foundation or other supporting structure for moving loads (e.g., moving a rolling weight). As such our (USACE) Tainter/roller gates are considered winches based on the mechanical nature of the braking system and are not governed by the EM 385-1-1.

Alibi - The WG considered additional facts:

- ♠ A hoist is for lifting and a winch is for pulling.
- ♦ A Winch is geared for pulling a load on a relatively level surface. A winch uses a dynamic brake that must slide.
- A Hoist is geared to lift (dead weight) and has a locking brake that can support a "hanging" load.
- If a Hoist can lift (dead weight) 250 lbs., then it may be capable of pulling 1000 lbs rolling weight across a hard packed surface. If a Winch can pull 1000 lbs. across a hard packed surface, it may only have the capacity to support 100 lbs. (dead weight) because the winch employs a different braking system than that of a hoist.
- A Hoist is used for lifting and supporting "dead weight".
- A Winch is used for pulling (moving rolling weight).

Q6: Is an anchor barge exempt from the critical lift requirements when recovering an anchor weight. The weight of the concrete anchor is 83% capacity of the anchor barge.

A6: See 16.A.01, Exemptions: a. states: "Anchor handling or dredge-related operations with a vessel or barge using an affixed A-frame." It has to be an affixed A-frame as this makes this equipment a winch and not a crane/hoist and as such, Section 16 does not apply.





Q7: We are doing a 24 hr initial mobile crane training. The EM-385-1 say's on page 313 that a mobile crane certification is valid for 5 years. On page 320, it says that Class I operators must have an 8 hr refresher every year. So on mobile cranes does that start after 5 years or do we need to do a mobile crane refresher every year with our overhead crane refresher. Our understanding is when we get our training for overhead cranes which are also Class I crane, are we certified on mobile cranes also? The certification expires at different times. Could you please shine some light on this subject?

A7: Our answer is broken down in the following manner:

- For Corps employees, we require annual (every 12 months) training be received so once you get licensed, that license is good as long as you are receiving annual refresher training.
- You are receiving an annual overhead crane refresher include in that the mobile crane specific items and you can do both at the same time (i.e., if the written exam included mobile crane questions too) OR you can have a separate class. Your choice. Either way, there has to be a written exam.
- ♦ The OPERATIONAL exam has to be specific to the TYPE of crane (even though they are both Class I) every year.
- If you are licensing by an in-house examiner, your license (good for 5 years for mobile or for 3 years for overhead) would really never expire as long as you get the annual refresher because we require a written and practical exam every year.
- IF you are getting a license from an external vendor, they tell you there is an expiration date. You would have to go back on the 5th year or 3rd year or whenever it expired, to get a new license. IN addition, you'd have to be maintaining your annual training (USACE-requirement).

Q8: NCCCO certifies to type. i.e. hydraulic swing cab, hydraulic fixed cab or lattice boom cranes. However if the test crane does not meet the NCCCO minimum boom length requirements the operator is limited to "short boom" cranes. So if the 20 ton crane had a 30' boom the operator would probably not be able to operate a 90 ton crane with a 90' boom, etc. NCCER and CIC each have different rules for certification.

- ♦ Is a pendant (or manual) controlled bridge crane a class I or II crane based on the requirement for wireless remote control cranes to be class I and shop cranes class II?
- ♦ I try to comply with EM-385 1-1 to the greatest extent possible. To that end, if I understand change 6 correctly, 16B.03.a.(6) "An operator deemed qualified to operate a particular piece of equipment or for higher capacity equipment of that type and class. The operator's certificate must state the type, class and capacity of equipment on which the operator was certified."
- It is clear that the capacity must be noted on the certificate but the first sentence seems to indicate that it is ok to operate a crane of higher capacity. (How about lower capacity?) What is the reason for the capacity requirement on the certificate?
- ♦ Should testing be done on a smaller crane than the crane the operator will operate on the job?
- A8: Let's start with the easy one. A pendant control is not considered a remote control. The intent of remote control is radio frequency or other similar type of wireless control.

Yes. Based on the current EM, the operator can operate a lower capacity crane of the same type and class.

The requirement for capacity on the operator's certificate is to identify the type/class of equipment the employee was actually tested on. It was/is our intent that to operate a crane of a higher capacity (same class/type), the operator would need to receive additional operational clearance testing by a qualified operator familiar with the higher capacity of crane for which the employee is desiring to operate.

No. I would test/certify on the most complicated same type and class of crane that I had available .

Q9: What are the latest standards for servicing and inspecting come-a-longs, chain falls, and chain hoist. I am not having good luck with web sites associated with any of the OSHA. ANSI, or ASME standards

 $\textbf{A9}: \ \ \text{Check ASME B30-21} \ / \ \ \text{ASME B30-16}. \ \ \text{Additionally, see (on a Government computer)} \ \ \underline{\text{www.wbdg.org}} \ \ \text{for access.}$

Q10: Does your (EM) guidance pretty much follow that of Fed OSHA in regards to rigger/signal person qualification. Do you have a number of set hours established for the curriculum in mind, 1 day, 2 days, etc.

A10: Change 6 to EM 385-1-1 does parallel the OSHA requirements with regards to rigger/signal person qualifications. With respects to a number of set hours of instruction, the answer is no. The subject material and the instructor will identify the requisite level of class instruction required to meet the requirements.

Q11: My contractor is being very deliberate and consciences. In the document you provided you state in the last paragraph ...Hoisting with the excavator (below the hook rigging) a certified rigger and lift supervisor will be on site. He (and I) is asking me to define hoisting (using the thumb?) and how certified? Also, If the bridge is demoed without equipment on the bridge will a demo engineer be required. I have included a pic of the bridge to be removed to help. He did not bid with a demo engineer in mind and we did not specify that either, except through EM 385-1-1.

A11: Hoisting is below the hook rigging, i.e. off the bucket, utilizing the pad eye, etc that uses rigging....... So anytime they use the excavator in any configuration that uses rigging, (thumb and digging bucket is not rigging) then they have to have a qualified operator. Remember hoisting is only allowed as long as the Manufacturer allows for this and the equipment has a load chart.

Q12: I have identified several on-line training sources for signal person and rigger training. You indicated that on-line training may be acceptable if there is a written and practical examination provided. Would it be acceptable to utilize on-line training that includes passing an exam and then performing a practical training session administered by a senior crane operator? If that is acceptable, can someone in the working group provide guidance on administering a practical?

A12: We haven't had a chance to research but will. I think the KEY to training USACE employees is ... ENSURE our employees understand OUR requirements. As noted, in some cases the USACE regulations are MORE stringent than the OSHA regulations. With that said, the WG understands the value of; ANSI standards, the IPT Crane and Rigging Training manual, but please ensure that your vendor knows that they MUST teach the requirements in our manual.

Q13: With the submission of Annex A and Annex B of OPORD 2011-82, we would like to get clarifications from the District or HQ on crane standard interpretations. As we are getting the MVS-District crane program put into place, there will be numerous items that come under question so this may just be a start.

• Section 16: Is it possible to get a complete version of the new Section 16 instead of comparing the old version with line-by-line changes?

A: Yes...Go to the CESO homepage to get the consolidated version of the EM at: http://www.usace.army.mil/SafetyandOccupationalHealth/

SafetyandHealthRequirementsManual.aspx

• Torque Inspections: Section 16.D.10.c.(4) states: "Proper tension (torque) of high strength (traction) bolts used in connections and at the slewing bearing". Can this be determined by sound-test or does the inspector need to torque each bolt?

A: Follow the manufacturer's requirement for testing the torque of connection and slewing bolts.

- Hydraulic Testing: Section 16.D.10.c.(11) states: "Hydraulic and pneumatic valves (Spools sticking, Leaks, Valve housing cracks, Relief valves failure to reach correct pressure)" Does this require breaking of lines and testing pressure or is this requirement satisfied through a load test? If breaking lines is required, our contractor will need to know the location and process for breaking lines due to the complications that can occur from opening a closed process.
- A: Follow what the crane manufacture calls for. Additionally, some crane have built-in quick disconnects on the relief valve to insert a gauge.
- Annual Refresher Training: Currently our Class I operators are trained IAW with Section 16. We have a plan (3rd party contract) in place to provide initial and refresher training as part of the 5-yr IDIQ contract explained in Annex B. In scheduling the refresher training for 12 sites within the district, some of the existing crane operators (whom have been regular crane operators for years) will be beyond a 365-day calendar year in the refresher. According to Section 16.C.01.a(2)(b) "Annual: 8-hour refresher training, with successful completion (passed) of written and practical/operational examination" uses the wording as "annual". What is the interpretation of "annual" is it from fiscal year to fiscal year, calendar year, on a 365-day requirement or is there a grace period of any duration from initial and recurring training dates (ie 14-months or within 30-days of previous annual date, etc.?)

A: As it relates to the training itself, we are looking at a 365 days from the date of your last refresher. The question, as it relates to a grace-period brings up a good point. The intent is for this training to occur within the 365 day period, however our organizational ebb and flow in responding to mission inserts (tornado's, floods, hurricane response) can impact planned events. The official interpretation is that a 60-day grace period be allowed IF necessary.

• Floating Plant Cranes: Although floating plant cranes are considered a Class I crane, EM-385 does not specify additional training requirements (other than standard Class I operations) and no additional practical or written exam requirements. Since none are specified, does that translate to if a crane operator tests on a specific class, type and load rating of a land-based crane, are they then qualified to run the same on floating plant (either tracked or pedestal-mounted?)

A: Floating Plant Cranes, identified as Class I require 24-hours (minimum) of initial training and 8-hours (minimum) of annual refresher training. Currently, the HHWG is not aware of any floating crane testing organizations. What needs to occur is—Participate and Pass the written/practical examination that most closely represents a land based equivalent crane that will be operated. Once certified, the employer would designate the employee as a qualified operator for the floating crane. Additionally, the HHWG recommends the employer provide further hands-on training, and practical operational testing on the floating crane to insure competency and capability.

- ♦ New USACE Crane Operators (new Corps Employee): According to option 1 (16.B.03.a), if an operator is certified under a nationally accredited agency, they are required to have it reviewed within 3-years and is portable and valid from 5-years of issuance (note there is no requirement for annual refresher training). The question is, if an employee that has met those requirements (commercially attained CCO) and is a new employee to USACE, is the initial training still required since the operator is already CCO? If so, is there a grace period to become compliant with the annual refresher training required by 16.C.01.a.(2)(a) for Initial or 16.C.01.a.(2)(b) for Refresher?
- A: No. The Initial Training would not be required, however the Refresher Training is required and a 60-day grace period deemed acceptable.
- ♦ Annual Refresher Training: Is there a minimum # of hours that we are required to cover during class I refresher training (ex: 2.5 hours crane operation, 1.5 hours rigging, 1 hours signal, etc.)

A: The Refresher training has to be a minimum of 8 hours total. There is no current guidance as to how many hours per subject because each Class of crane/hoist would be different.. There is training criteria being developed for in-house train-the-trainers that will detail subject material to be covered.

Annual Refresher Training: Is there a limit to the # of personnel we can have attend a class I operator training refresher?

A: No.

- Class I vs. Class III Training: We are assuming that personnel who have taken the class I operator training do not need the class III training as long as practical/written exam includes the types of hoists she/he will be using. Is this correct?
- A: Class III is now Class II (see Change 7). Only if the equipment information is covered during the Class I training. The assumption is that Class I training covers the relevant portions of the equipment you will be operating (type/class specific). The topic material is relative to the equipment operated.

The Crane HHWG will collect these and other questions and post them to our SharePoint site at: https://cops.usace.army.mil/sites/S/CHH/default.aspx

RIGING INSPECTIONS

Being a Safety guy, I'm always impressed by the professionals we have working on our Projects and if you've had the opportunity to witness our employees in action, in the routine and complex matters, you'd be impressed.

I enjoy working with on Crane and Rigging Working Group, because its one of those specialty areas that demands our employees utilize special; skills, tools, and a special mindset to insure a safety operation...every time! So let's talk about rigging inspections, a vital component in the overall safety of a mission.

Our EM 385-1-1, Section 15, right up front, recognizes the importance of the toolsof-the-trade in regards to rigging hardware. We state in Section 15.01(a)...Rigging equipment shall be inspected as specified by the manufacturer, by a Competent Person, before use on each shift and as necessary during each shift to ensure that it is safe.

This article is intended to focus in on sling inspections and the general requirements and inspection criteria to be aware of. Because of the complexity of each type of sling, we'll address six (6) areas of concern..things you should know.. We will look at; Slings (general), Wire Rope Slings, Nylon Web Slings, Polyester Round Slings, Alloy Steel Chain, and Wire Mesh Slings.

Slings-general - Removal criteria for any sling should be observed

- √ Damaged / Defective slings shall not be used
- $\sqrt{}$ Shall not be shortened with knots or bolts or other makeshift devices
- √ Shall not be kinked
- $\sqrt{}$ Shall not be loaded in excess of their rated capacities
- $\sqrt{}$ Shall not be configured to balance loads and prevent slippage
- $\sqrt{}$ Shall be securely attached to the load

Wire Rope Slings

- √ Missing or illegible sling identification
- Broken Wires (see ANSI B30.9 for additional criteria)
- √ Severe localized abrasion or scraping
- Kinking, Crushing, Bird Caging, or other damage to rope structure
- √ Evidence of heat damage
- √ End attachments that are; cracked, deformed or worn

Nylon Web Slings

- $\sqrt{}$ Missing or illegible sling identification
- √ Acid or caustic burn
- √ Melting or charring of any part of the sling
- √ Holes, tears, cuts or snags
- $\sqrt{}$ Broken or worn stitching in load bearing splices
- √ Excessive abrasive wear

Polyester Round Slings

- Missing or illegible sling identification
- √ Acid or caustic burns
- √ Evidence of heat damage
- $\sqrt{}$ Holes, tears, cuts or snags that expose core yarn
- √ Broken or damaged core yarn
- √ Weld splatter that exposes core yarns

Alloy Steel Chain

- √ Missing or illegible sling identification
- √ Cracks or breaks
- √ Excessive wear, nicks, or gouges
- √ Stretched chain links or components
- $\sqrt{}$ Bent, twisted, or deformed chain links or components
- √ Evidence of heat damage (example—uV degradation)

Wire Mesh Slings

- √ Missing or illegible sling identification
- $\sqrt{}$ Broken weld or a broken brazed joint along the sling edge
- √ Broken wire in any part of the mesh
- √ Reduction in wire diameter of 25% due to abrasion or 15% due to corrosion
- $\sqrt{}$ Lack of flexibility due to distortion of the mesh
- V Distortion of the choker fitting so the depth of the slot is increased by more than 10%

Improper design, use, or maintenance of your rigging can cause equipment to fail or a load to drop, resulting in personal injury, death, or significant property loss.











Want to know more about rigging inspections, join our July Webinars on this topic. See page 8 for details.

SHAREPOINT SITE -



The Crane Community of Practice site provides a group of people who regularly interacts to collectively learn, solve problems, build skills and competencies, and develop best practices around a shared concern, goal, mission, set of problems, or work practice.

Last fall, the Crane WG found a need to centrally locate our working files and a place where we could share documents, photographs, and assorted resources. A call and a ACE-IT ticket later, the Crane WG established a Crane Working Group Sharepoint site.

The site contains:

- ♦ Links to commonly referred to Crane sites (i.e., Navy Crane Center, OSHA Website, Marine Design Center Website)
- ♦ Whole Building Design Guide website, where you can download ANSI standards (e.g., B.30 standards)
- Upcoming Webinars
- ♦ Crane Working Group calendar, and
- ♦ Other Shared Documents
- Safety Checklists

While some of the pertinent training material is not made available to the public, the Sharepoint site serves as a resource for you to take advantage of. If you want to see what resources are available to you, go to the following site:

https://cops.usace.army.mil/sites/S/CHH/default.aspx

TRAINING NEWS -

One of the objectives of the Crane WG is to provide relevant training to USACE personnel that ensures compliance with EM 385-1-1 and the OSHA requirements, with respects to Rigging and Crane Training.

Art Kunigel is the Structural Crew Foreman at The Dalles Lock and Dam, Portland District. Art and his 30-years of crane operation experience continues to provide excellent customer support to USACE. Since the inception of the Crane WG, Art has been instrumental in the development of the rigging and crane portions of the Safety manual. Along with other members from our team, the Crane WG has developed standardized training for:

- Riggers
- Signal Persons, and
- Class I and II Crane Operators

In January 2012, the Albuquerque District contacted the Crane WG, identifying a need for training for their employees. Once the process of ... How many, What training is required, and selecting a location, Art headed for the Cochiti Dam Project, to conduct the training.

The Albuquerque District developed a You Tube video of the USACE crane course conducted by Mr. Arthur Kunigel from the National Crane/Rigging Working Group on 25-26 April 2012. See SPA personnel and Art in action in the You Tube link provided by the District, below. Great tag provided to the SPA Commander by their Public Affairs Chief.

If you require training support in your District, please contact the Crane WG. Oh yeah..... Nice Job, Art. Thanks to the Albuquerque District for their support and video documentation of the training.

Sirs,

Great new You Tube video features USACE crane training to improve worker safety and workday efficiency at Albuquerque District. The Crane School video https://tinyurl.com/78dr3wk features Arthur Kunigel, a Portland District Crane and Hoist Operator at Dalles Dam. It's a super example of how the Corps shares expertise.

Congratulations to SPA PAO producers Mark Slimp and Kris Skopeck, and thanks to Arthur Kunigel for stepping up to the camera!

I am sharing this vide with the Safety and O&M communities of practice.

VR, Torrie McAllister South Pacific Division Public Affairs Chief 415-503-6514

Interesting News :

Mark your calendar— Two identical rigging webinars are scheduled for July. The dates for the webinars are:

- ♦ 17 July (1000 to 1100 EDT)
- ♦ 19 July (1600 to 1700 EDT)

Kevin Harvey (John Day Dam—Rigger in Charge) and John Cannon (Portland District—Engineering Tech) will facilitate the instruction on proper care, inspection, and use of rigging hardware.

COUNTERWEIGHT

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