

A WORD FROM TOPSIDE Tim Blanton

# http://www.navfac.navy.mil/ncc

Editor: 757-967-3803/DSN 387-3803 / nfsh ncc crane corner@navy.mil

Contraction in the

Inside this issue:	
A Word From Topside	1
Tip of the Spear	2
Summary of Weight Handling Equipment Accidents, First Quarter, FY20	3
CSAs/EDMs	5
Weight Handling Program Briefs	7
Upcoming Revision to NAVFAC P-307	11
Weight Handling Program Safety Videos	12
Share Your Success	12

First and foremost, I am hoping that you and your families are safe and healthy during this unparalleled event, as we collectively deal with the COVID -19 pandemic. With regard to the Navy's weight handling program, I want to take this opportunity to discuss some steps that we are taking, as well as some actions that you can take to mitigate the risk and keep you safe during weight handling operations.

- Crane Safety Advisory (CSA) 238 -NCC recently issued CSA 238, which provides activities with exceptions to specific NAVFAC P-307 requirements. Exceptions shall only be utilized to prevent disruption of mission support. CSA 238 should be consulted for specific exemptions and requirements, which include (1) crane certification may be extended by 60 days, which is independent of the current extension allowance per NAVFAC P-307, paragraph 4.5.1, (2) category 3 noncab operator retraining may be delayed for 60 days, (3) crane operator licenses that will expire within the next 60 days may be extended by 60 days, including expiration due to expired physical examination, (4) NAVFAC P-307, section 14 equipment and rigging gear requiring periodic inspection and test may be extended by 60 days, independent of the existing exception (NAVFAC P-307, paragraph 14.4.4.), (5) accident, near miss, and unplanned occurrence final reports may be delayed by 30 days (60 days total), but continue to provide

initial notification as required, and (6) for contractor crane operations that present no exposure and no risk to Navy personnel, Navy property, or the general public, contractor crane oversight may be reduced at the contracting officer's discretion.

Weight Handling Program Evaluations - We have curtailed all travel associated with oversight (evaluations) of Navy weight handling programs. In the interim, we will continue to remotely review your requested the program using information and documentation that your activities typically provide in advance of the evaluation, focusing on weight handling program management. To provide additional time due to the COVID-19 impacts, evaluations teams are requesting the information 90 days (versus 60 days) prior to the scheduled evaluation. The evaluation team will be holding limited discussions with activity supervision and management during the regularly scheduled evaluation week and activity evaluation response times have been increased to 60 versus 30 davs following receipt of the evaluation report.

- <u>Mitigating Actions</u> – We issued Weight Handling Program Brief (WHPB 20-08), which provides some useful guidelines that should be used during this period of time to promote safety and reduce risk. **For deck plate personnel**, you may be working with personnel with whom you are not familiar.

For any operation, it is imperative that you conduct a good interactive pre-lift briefing which includes personnel assignments, load weights and equipment capacities, stopping points, etc. For any anomalies that occur, stop and notify supervision. For supervisors, you must make time to oversee work. It is extremely important that you understand the level of experience and balance among your crew(s) and adjust personnel or provide additional oversight if needed. Ensure you take the time to provide your crew(s) feedback on deficiencies, poor practices, or improvement items identified. For management, in addition to the guidelines provided for supervisors, and more importantly, ensure that the tasks being executed are

prioritized, mission essential, and that the right equipment is available for the task.

In closing, your safety and health are paramount, whether we are discussing COVID-19 or weight handling operations. In either case, whether coming to work for mission essential tasks or going to the grocery store to get needed supplies for your family, please take the time to prepare, protect yourself, and execute the task smartly, to include stopping if needed should the parameters or factors change. Always practice operational risk management!

# TIP OF THE SPEAR SECOND QUARTER FY20 EVALUATION SUMMARY

wenty-one Navy weight handling programs were given full and 2 shipyards were given limited evaluations of special focus areas. For the programs given full evaluations, 20 were satisfactory and 1 was unsatisfactory.

Due to the travel restrictions as a result of the outbreak of the COVID-19 virus, subsequent program reviews were conducted remotely and were limited to a review of activity provided program management information, effectiveness of corrective actions taken since the previous evaluation, and discussions with activity supervision and management. Seven activity programs were remotely reviewed. Since the review did not cover all areas of the activity's weight handling program, an overall grade (e.g., satisfactory) was not provided.

Effective monitor programs result in better recognition of unsafe crane and rigging operations, which in turn result in better recognition of lower threshold accidents (avoidable contact with no damage) and near misses, thus helping to prevent serious accidents. In addition, the monitor program better enables development of a value-added activity self-assessment.

## SUMMARY OF PROGRAMS EVALUATED

21 Navy WHE programs were given full

evaluations, 20 were satisfactory, and 1 was unsatisfactory. Two shipyards were given limited evaluations of special focus areas. Seven activity programs were remotely reviewed.

For the programs that were given full evaluations, the satisfactory rate was 95%. The satisfactory rate for first two quarters of FY20 was 98%.

## SATISFACTORY CRANES

18 of 22 cranes inspected were satisfactory (82%). For the first two quarters of FY20, 73 of 79 cranes were satisfactory (92%).

ReasonsforUnsatisfactoryCranes.Undocumented damage to hoist block.Upper and lower hoist limit switches wereinoperable.Main hoist brake spring out of tolerance.Crane improperly down-rated.

#### **EVALUATION ITEMS**

<u>Common Evaluation Items (five or more items)</u>: Monitor program weaknesses continued to dominate, as this was an item for 28 of the 30 activities evaluated/ reviewed, followed by weak or non-self-critical activity self-assessments. - Lack of monitor program or established program that needs improvement or does not cover all program elements – 28 items.

- Weakness in (or non-existent) activity selfassessments, self-assessments not acted upon, not internally focused, not developed utilizing documented monitor or metrics data – 23 items.

- Operator's Daily Check Lists/Operator's Monthly Check Lists (ODCLs/OMCLs) and simulated lifts performed incorrectly or not performed - 11 items.

- Various unsafe crane and rigging operations observed by the evaluation team (side loading, unattended load, standing/walking beneath load, operating without signals, poor signaling, pinch points, slings bunched in hooks, load not balanced, no synthetic sling protection, brakes not checked at start of lift, side loading of shackles, trackwalker out of position, swivel hoist rings not torqued, trolley racked to one side, etc.) – 12 items.

- Operators/riggers/inspectors/test directors lacked essential knowledge (recognizing crane accidents, complex lifts, knowing the weight of the load, how to connect special equipment, etc.) – 8 items.

- Inspection and certification documentation errors – 9 items.

- Lack of (or low number of) lower order crane accident/or rigging accident and near-miss reports – 7 items.

- Lack of leading metrics/metrics not being properly analyzed – 6 items.

- Expired or non-program gear in use or not segregated from in-service gear – 6 items.

- Rigging gear, containers, brows, test weights, etc., not marked properly or marking not understood by riggers (including illegible marking, mismatched components, SPS vs GPS, pin diameter not marked on alternate yarn roundslings) – 5 items.

- Crane marking issues, including hand signals not posted, monorail tracks not marked with rated capacities, directional signs not marked on crane, crane capacity incorrectly marked, hook not prominently identified, electrical equipment not marked per NEC, certification tag not visible to operator, multiple certification dates posted, no indicator that lower limit testing is not required) – 5 items.

- Unrecognized/unreported accident, near miss, or unplanned occurrence (including damaged gear not investigated for cause) – 8 items.

# SUMMARY OF WEIGHT HANDLING EQUIPMENT ACCIDENTS FIRST QUARTER FY20

he purpose of this message is to disseminate and share lessons learned from select shore activity weight handling accidents, near misses, and other unplanned occurrences so that similar events can be avoided and overall safety and efficiency of operations can be improved.

For the first quarter of FY20, 65 Navy weight handling accidents (52 crane and 13 rigging) were reported, as compared to 74 for the fourth quarter of FY19. Significant accident rates for crane and rigging accidents both declined substantially compared to fourth quarter percentages (crane significant accident percentage decreased from 27 to 17 percent and rigging significant accident percentage went from 28 to 23 percent). As discussed in paragraph 7, near misses increased, indicating an increase in sensitivity to lower level issues that likely contributed to the reduction in significant accidents. Despite the decline in the number of significant accidents, 2 accidents (1 crane and 1 reportable rigging) met OPNAV criteria. Contractor accidents increased by approximately 33 percent in the first guarter as 12 accidents (7 crane and 5 rigging) were reported, and of more concern, 9 of those accidents were significant, with only 5 near misses reported.

#### Page 3

#### DROPPED LOADS

Five dropped load accidents were reported, three crane and two rigging. Two accidents resulted in injuries and are discussed below. While hoisting an anchor off a trailer, a synthetic sling slid off the left side fluke resulting in a dropped load resulting in \$79K in damage. This was the first OPNAV class "C" accident of FY20. The front end of a small trailer fell to the floor when one of two synthetic slings slipped off the crane's hook due to not being engaged inside the safety latch. A chain link in the hoist chain of a category 3 crane broke while lifting a basket containing parts from a dip tank resulting in a dropped load.

**Lessons Learned:** The activity determined that improper rigging was the direct cause for the dropped anchor. A contributing issue was that the originally briefed lifting points were obstructed by the placement of the dunnage supporting the Instead of stopping and notifying anchor. supervision, the crane team developed an alternative rigging method. The long-term corrective actions developed by the activity included developing a rigging sketch and classifying all future similar lifts as complex. The details of this event were also added to the activity's weight handling training program. The trailer dropped load could have been prevented by taking time to inspect the rigging configuration prior to lifting to ensure the rigging was properly attached to the load and the crane. The cause of the basket dropped load was determined to be due to the corrosive environment causing deterioration of the chain link. The activity is taking long-term actions to upgrade the chain's material and increase inspection periodicity.

#### **INJURIES**

Four injuries were reported, three from rigging operations and one from a crane operation. An OPNAV class "C" accident occurred when a portable hoist load chain fell from its storage bag striking a worker on her hard hat causing a head injury. An employee suffered an injury when the load fell on his finger. A rigger apprentice was injured when his finger caught in a pinch point during motor installation. A worker suffered a finger laceration while installing rigging gear on the hook of a crane.

**Lessons Learned:** As discussed in above, two dropped load accidents resulted in injuries. The most important way to prevent dropped load injuries is to ensure that personnel are kept clear of the fall zone. As a result of these events, NAVCRANECEN issued a Weight Handling Program Brief (WHPB-20-01) to inform Navy activities of the dangers of being under a load or in the fall zone. In all of the above cases, improper rigging and poor risk mitigation were the root causes of the accidents. Supervisors should focus on identifying and mitigating risks prior to each lift, and ensure personnel know to stop when a risk is identified during operations. Additionally, prior to performing any weight handling evolutions, it is essential that personnel be briefed on any hazards associated with the lift and on not being under a load and or in pinch points.

## OVERLOADS

Five overload accidents were reported in the first quarter. All five were rigging gear overloads that occurred during crane operations. A tool used to remove a component was slightly overloaded during a constrained lift. While installing a component on a ship using a floating crane, a large wake resulted in movement causing an overload of the rigging gear. A chain fall was overloaded and damaged during a lift of a large component. The padeves on a portable enclosure were overloaded when the enclosure was lifted using the wrong rigging configuration. A dump tank lifting padeye was overloaded while attempting to lift the tank.

Lessons Learned: The overload of the tool during the constrained load lift occurred due to lack of communication and coordination between the worker relaying readings on the load indicating device and the mechanic. Slow "clickby-click" operation of the chain fall accompanied with manipulation of the tool is necessary for successful removal of components in binding situations. Poor risk mitigation resulted in rigging gear being overloaded due to the wake caused by a passing boat. Subsequently, the activity took action to implement controls to prevent wakes during waterborne operations with a floating crane. The chain fall was overloaded because of improper rigging when the sling used was too short to support the rigging configuration. In addition, personnel did not adequately monitor the rigging configuration during the lift to ensure the gear was not under strain as expected. The activity took corrective action to update the procedure to provide adequate detail to ensure the appropriate gear was installed in the correct sequence of the lift. During the enclosure lift, personnel did not account for the reduction in capacity due to sling angle or ensure the fourpoint rigging configuration was equalized.

The activity developed a training bulletin and updated lift sketches to prevent recurrence. The cause of the dump tank padeye overload was attributed to inadequate planning and failure to perform as trained. The team established stopping points for the lift; however, they did not incorporate sufficient margin between the stop point and capacity of the padeyes, i.e., the team did not adhere to the process that was established and briefed. The activity established long-term corrective actions to codify the process for utilizing stop points and developed a lift sketch that included the established stop points for lifts of tanks that can be over filled.

## **TWO-BLOCK**

One crane accident was a two-blocking event. A category 4 articulating boom truck crane was two blocked during pre-load testing operation.

Lessons Learned: NAVFAC P-307, paragraph 10.2.2.3 requires activities that utilize cranes that are not equipped with two-block prevention devices to develop a procedure designed to minimize the possibility of two-blocking. In this case, the activity determined that the operator was also inexperienced and was not paying attention to the signal person and was operating more than one function at a time. The activity is taking action to comply with the NAVFAC P-307 requirements and implementing an activity hazard analysis for operation of this specific crane.

#### **NEAR MISSES**

Activities reported 105 near misses (74 crane and 31 rigging) in the first guarter of FY20, as compared to 89 in the fourth guarter of FY19, an increase of 18 percent. This was a five-year high for first quarter near miss reporting. NAVCRANECEN began issuing periodic WHPBs to recognize activities that are reporting "good" near misses, i.e., those where personal intervention prevented accidents. Some examples reported recently include: a brow lift was stopped when it was identified that electrical service lights were still connected; personnel called "all stop" when a bridge crane was trolleved with the hand chain of a chain fall fastened to the railing: a "stop" was called when test weights beneath the rigged test weight began to lift due to being frozen together; a lift was stopped to prevent overloading a shackle when a side-loading condition developed, a cover on a load was not secured during a lift, risking the possibility of a dropped load. The increase in first quarter near misses speaks volumes of each contributing command's commitment to their weight handling monitor programs, which drive the identification of near misses. Each activity is encouraged to keep up the good work of identifying, documenting, and sharing lessons learned within your organization and our Navy weight handling program.

## SAFETY RECOGNITION

Weight handling program managers, operations supervisors, and safety officials should review the above lessons learned with personnel performing weight handling operations and share lessons learned from other activities with personnel at your activity. As identified earlier, the significant accident rate is declining; however, your help is needed to continue with identifying issues at the lowest level to achieve the goal of zero significant accidents. A concerted effort has been made to encourage activities to focus on increasing monitor program observations and to report near misses and it is starting to make a difference. Activities understand the importance of the monitor program as indicated by the increased reporting of near misses. I encourage you to challenge your weight handling professionals to continue their efforts in educating the workforce to self-report deficiencies via the monitor program. This creates opportunities to share lessons learned with the entire Navy's weight handling program community.

# CRANE SAFETY ADVISORIES AND EQUIPMENT DEFICIENCY MEMORANDA

We receive reports of equipment deficiencies, component failures, crane accidents, and other potentially unsafe conditions and practices. When bearing or non-load controlling parts. A complete applicable to other activities, we issue a Crane list of CSAs and EDMs can be found on the Navy Safety Advisory (CSA) or an Equipment Deficien- Crane Center's web site. cy Memorandum (EDM). A CSA is a directive and

often requires feedback from the activities receiving the advisory. An EDM is provided for information and can include deficiencies to non-load

#### <u>CSA 236 – RECALL OF CROSBY GROUP INC</u> 7/8-INCH SHACKLES

1. Background:

A. The purpose of this Crane Safety Advisory is to inform activities of a known deficiency in certain 7/8 -inch, 6.5 metric ton shackles from The Crosby Group (CROSBY). CROSBY has issued a safety alert to inform customers of this issue. CROSBY has determined that the below listed shackles may have a defect in the bow that can reduce the ultimate load capacity from the published catalog values. Continued use may result in loss of load.

B. CROSBY has identified that 7/8-inch, 6.5 metric ton shackles with stock/model numbers 1019542 S-2130, 1019533 G-2130, 1018151 G213, 1018160 S -213, 1018516 G-209, 1018525 S-209, and 1262031 G-2130OC with the Product Identification Code (PIC) of 5VJ are affected. The PIC is a three-digit code located on the curved portion of the shackle bow. These shackles were manufactured and distributed between July and November of 2019. No other sizes or PICs are part of this recall.

2. Direction:

A. Activities shall identify and remove from service all CROSBY 7/8-inch, 6.5 metric ton shackles identified as meeting the stock/model numbers and PIC in paragraph 1.B above within seven days.

B. CROSBY requests that return and replacement of the shackles be arranged through your Crosby Distributor. For additional information on the recall contact CROSBY Technical Support at 1-800-772-1500.

## <u>CSA 237 – POTENTIAL DEFICIENCY OF CF</u> <u>MODEL HARRINGTON HOIST</u>

1. Background:

A. The purpose of this Crane Safety Advisory is to inform activities of a known deficiency with certain CF model hand chain hoists from Harrington Hoists, Inc. Harrington has issued an important product issue notification to inform customers of the potential risk that the identified hoist may not hold a load due to improper application of rust inhibitor which may cause the hoist's pawl to fail to engage properly with the ratchet disc.

B. Hoists identified in the product notification were manufactured between 1 March 2019 and 7 October 2019. Hoists affected by this notification can be validated by serial number on the Harrington website at: <u>https://</u> www.harringtonhoists.com/tech\_support/CF-Pawl-Search.lasso.

2. Direction:

A. Prior to use, activities shall verify Harrington model CF hoists produce a clicking sound when the hand wheel is rotated in the clockwise direction. If this clicking sound is not present, the hoist shall immediately be removed from service.

B. Within the next 30 days, activities shall review their inventory and identify all CF hoists manufactured in the date range listed in paragraph 1.B. Hoists may either be serviced in accordance with the following instructions on the Harrington website at <u>https://harringtonhoists.com/tech\_support/CF-Pawl-video.lasso</u> or by contacting your local distributor or Harrington Product Support at 800-233-3010 for servicing direction.

#### CSA 238 – EXCEPTIONS TO NAVFAC P-307 REQUIREMENTS DUE TO COVID-19 PANDEMIC

1. Background:

A. The purpose of this Crane Safety Advisory is to provide activities with exceptions to specific NAVFAC P-307 requirements in the areas of Weight Handling Equipment (WHE) maintenance, certification, engineering, training and licensing, rigging, accident reporting, and contractor crane operations due to the ongoing disruption in operations from the COVID-19 pandemic.

B. These exceptions shall only be utilized when reduction in personnel from COVID-19 pandemic effects will disrupt continuity of mission support due to adherence to NAVFAC P-307 requirements. Documentation of use of these exceptions shall be maintained in the appropriate equipment or personnel history file until such time that normal periodicity is regained. Report equipment numbers using this exception to NAVCRANECEN via email: NFSH NCC Compliance@navy.mil.

2. Direction:

A. Maintenance. NAVFAC P-307, paragraph 3.6 provides the certifying official authority to defer a maintenance inspection, lubrication, or servicing/ maintenance schedule during an emergent condition such as the COVID-19 pandemic. No additional exception is required.

Β. Certification. Crane certifications may be extended by 60 days. This extension is independent of the certification extension allowed by NAVFAC P-307, paragraph 4.5.1 (a condition inspection is not required before utilizing the extension provided in this CSA and the paragraph 4.5.1 extension may be invoked after this Cranes with extension voided expires). certifications due to work performed on load bearing, load controlling, or operational safety devices shall be re-certified in accordance with NAVFAC P-307. Extensions of certifications of cranes third party certified by NAVCRANECEN shall follow NAVFAC P-307, appendix M, A new NAVCRANECEN paragraph 1.2. certification to accompany the activity certification extension is required.

C. Engineering. The forwarding period for local CARs may be delayed by 60 days.

D. Personnel Training. Category 3 non-cab operator retraining may be delayed for 60 days.

E. Operator Licensing. Licenses that will expire within the next 60 days may be extended by 60 days. This includes expiration due to expired physical examinations. License suspension following a crane accident is not mandatory.

F. Rigging. NAVFAC P-307, section 14 equipment requiring periodic inspection and test may be extended by 60 days. This extension is independent of the exception for inspection and test extension in NAVFAC P-307, paragraph 14.4.4. Ensure pre-use and post-use inspections of equipment are being accomplished in

accordance with NAVFAC P-307, paragraph 14.4.2.

G. Accident and Near Miss Reporting. Accident, near miss, and unplanned occurrence final reports may be delayed by 30 days (60 days total). Initial notification shall be in accordance with NAVFAC P-307, paragraph 12.6.1. Crane and rigging operations may continue, with supervisory permission and correction of proximate cause, following lower threshold crane accidents only. Lower threshold crane accidents are hereby defined as "avoidable contact" type accidents with no damage, not even a paint scrape (NAVFAC P-307, paragraph 12.4.1.g).

H. Contractor Crane Operations. For contractor crane operations that present no exposure and no risk to Navy personnel, Navy property, or the general public (i.e. only contractor exposure and risk, such as a controlled area where a building is being constructed), contractor crane operations oversight may be reduced at the contracting office's discretion.

I. Other Reports or Data. Other reports or data due to NAVCRANECEN may be delayed by 60 days. Initial notification of deficiencies shall continue to be accomplished in accordance with NAVFAC P-307, paragraph 3.1.1.

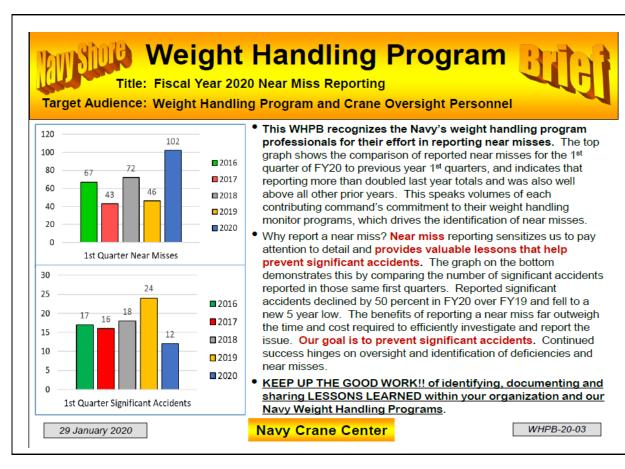
J. Resolution. NAVCRANECEN will issue additional message(s) canceling or modifying the interim deviations to NAVFAC P-307 as conditions change.

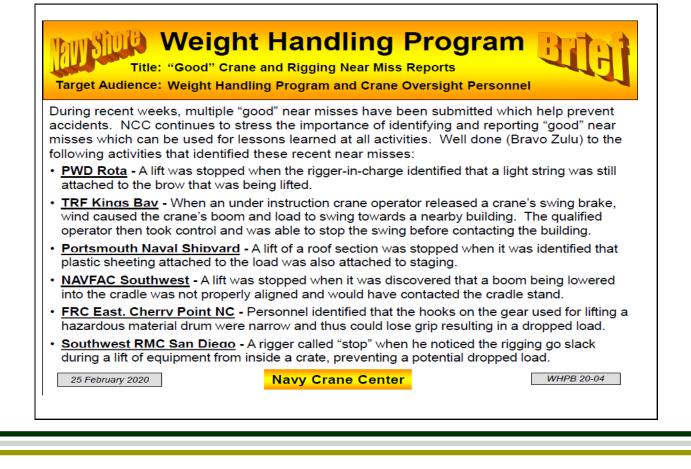
## WEIGHT HANDLING PROGRAM BRIEFS

Weight Handling Program Briefs (WHPBs) are provided for communication to weight handling personnel. The following briefs were issued during the past quarter.

The briefs are not command-specific and can be used by your activity to increase awareness of potential issues or weaknesses that could result in problems for your weight handling program. They can be provided directly to personnel, posted in appropriate areas at your command as a reminder to those performing weight handling tasks, or used as supplemental information for supervisory use during routine discussions with their employees. When Navy Shore Weight Handling Program Briefs are issued, they are also posted in the Accident Prevention Info tab on the Navy Crane Center's web site at <u>http://</u> www.navfac.navy.mil/ncc.

Navy Crane Center point of contact for requests to be added to future WHPB distribution is Tracey Simpson (tracey.simpson@navy.mil).





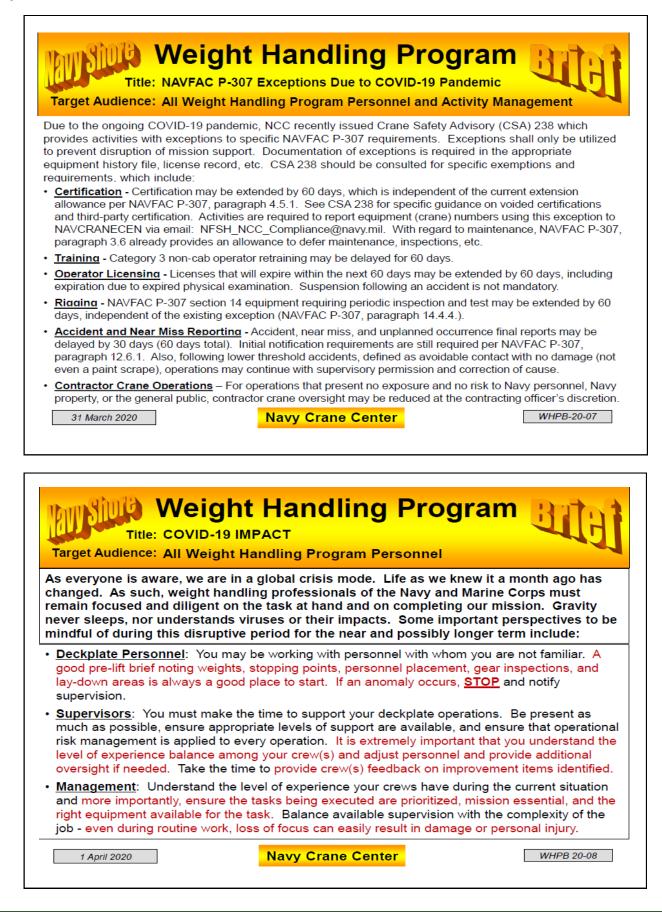


- <u>Portsmouth Naval Shipvard</u> Crane team personnel activated a portal crane's emergency stop to prevent a collision when a contractor vehicle entered the travel path.
- <u>NUWC Detachment, AUTEC</u> Crane team personnel stopped a gantry crane to avoid running over a strap that had fallen onto the track.
- <u>SWFLANT Kings Bav</u> A lift to remove a strong back from a transfer cart was stopped when personnel realized that the load would make contact with the sides of the cart.
- <u>Pearl Harbor Naval Shipvard</u> A lift was secured when personnel identified a twist in the load chain of a chain fall preventing potential damage to the chain fall.

24 March 2020

Navy Crane Center

WHPB 20-06





# ANNOUNCEMENT OF UPCOMING REVISION TO NAVFAC P-307 WEIGHT HANDLING PROGRAM MANAGEMENT

1. The purpose of this message is to announce an upcoming revision to NAVFAC P-307 and to encourage activities to submit recommendations for revisions and improvement.

2. Navy Crane Center will be developing a revision to NAVFAC P-307 for publication in 2021. As part of the revision process, Requests for Clarification, Deviation or Revision approved since the last revision, Crane Safety Advisories, and Equipment Deficiency Memoranda will be reviewed for incorporation. Known areas for

improvement will be revised and industry and consensus standards will be reviewed for updates. Additional areas targeted for revision include potential reliability-based maintenance/ condition-based maintenance allowances, articulating boom crane load testing, and a potential incorporation of NAVSEA 0989-030-7000 as an appendix. There will be multiple opportunities for activities to comment on the proposed revision later in 2020 and 2021.

# WEIGHT HANDLING PROGRAM SAFETY VIDEOS

Accident Prevention provides seven crane accident prevention lessons learned videos to assist activities in raising the level of safety awareness among their personnel involved in weight handling operations. The target audiences for these videos are crane operations and rigging personnel and their supervisors. These videos provide a very useful mechanism for emphasizing the impact that the human element can have on safe weight handling operations.

Weight Handling Program for Commanding Officers provides an executive summary of the salient program requirements and critical command responsibilities associated with shore activity weight handling programs. The video covers NAVFAC P-307 requirements and activity responsibilities.

**Mobile Crane Safety** covers seven topics: laying a foundation for safety, teamwork, crane setup, understanding crane capacities, rigging considerations, safe operating procedures, and traveling and securing mobile cranes.

**"Take Two" Briefing Video** provides an overview on how to conduct effective pre-job briefings that ensure interactive involvement of the crane team in addressing responsibilities, procedures, precautions, and operational risk management associated with a planned crane operation,

Safe Rigging and Operation of Category 3 Cranes provides an overview of safe operating principles and rigging practices associated with Category 3 crane operations. New and experienced operators may view this video to augment their training, improve their techniques, and to refresh themselves on the practices and principles for safely lifting equipment and materials with Category 3 cranes. Topics include: accident statistics, definitions and reporting procedures, pre-use inspections, load weight, center of gravity, selection and inspection of rigging gear, sling angle stress, chafing, D/d ratio, capacities and configurations, elements of safe operations, hand signals, and operational risk management (ORM). This video is also available in a standalone, topic driven, DVD format upon request.

All of the videos can be viewed on the Navy Crane Center website:

http://www.navfac.navy.mil/navfac\_worldwide/ specialty\_centers/ncc/about\_us/resources/ safety\_videos.html.

# SHARE YOUR SUCCESS

We are always in need of articles from the field. Please share your weight handling/rigging stories with our editor <u>nfsh ncc crane corner@navy.mil</u>.

HOW ARE WE DOING?

We want your feedback on the Crane Corner. Is it Informative?

Is it readily accessible?

Which types of articles do you prefer seeing?

What can we do to better meet your expectations?