

THE CRANE CORNER

Navy Crane Center Technical Bulletin

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A WORD FROM TOPSIDE

Tim Blanton

T he 2016 edition of NAVFAC P-307 will soon be signed and in effect. In advance of this, the Navy Crane Center has been visiting different geographical areas, highlighting the significant changes. This is the first major change since Change 1 of the 2009 edition and it continues to broaden the scope of the Navy shore weight handling program from what was initially a focus on equipment condition and safety. In fact, the word "equipment" was removed from the title. Equipment and operations safety will always be a key element of the manual, but there are other elements of a weight handling program that are necessary for an activity to meet its mission.

In line with this, a new section has been added addressing program management. Activities with larger crane inventories will be required to have a dedicated weight handling program manager. Most activities with substantial weight handling programs already have such a manager. More detail is provided for the activity's self-assessment, which now is required annually. The monitor program (formally called surveillances), which most activities have already adopted, is now mandatory. Metrics are required, from basic measurements such as crane accident/near miss data and monitor program findings, to more advanced metrics for larger activities that perform their own maintenance or provide such services to other activities such as crane reliability for critical and costly cranes. And to maintain a forward look for aging equipment or new missions, a crane replacement/modernization plan is also required for larger and critical cranes.

Changes have been made to better align with industry/consensus standards and to maintain adherence to OSHA requirements. In the area of load testing, the nominal test load for mobile cranes, mobile boat hoists, rubber-tired gantry cranes, and category 4 cranes is 100 percent of rated load. For all crane types, the test load tolerance is now +0/-5 percent. In training and licensing, the Certifying Official course and the Contractor Crane Awareness course are now mandatory, and the crane types and categories have been clarified for licensing performance tests. The subject of synthetic sling protection has been enhanced to help avoid potentially catastrophic consequences of improper protection.

A significant cost-saving initiative is the elimination of load tests, special identification

markings, and documentation of periodic inspections of most rigging hardware (shackles, eyebolts, links, rings, etc.). This is in alignment with consensus standards. An additional initiative is the reduced periodicity for some maintenance items where our data show it is safe to do so, to better align maintenance periodicities with cranes that are in the quadrennial load test program.

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With one exception, activities will have one year to come into compliance with the new requirements. NAVFAC P-307 has been reorganized, with sections rearranged in a more logical sequence. Due to the effect on activity documents, activities will have three years to ensure they comply with the new section and paragraph numbering.

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 applicable to other activities, we issue a Crane Safety Advisory (CSA) or an Equipment Deficiency 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 nonload bearing or nonload controlling parts. A complete list of CSAs and EDMs can be found on the Navy Crane Center's web site at http://www.navfac.navy.mil/ncc.

<u>CSA 225 – MANUFACTURING DEFECT ON SQUARE D MODEL 9001SKRU PUSH</u> <u>BUTTON UNITS USED IN 9001SKYP PENDANTS MANUFACTURED AFTER 2009</u>

Background:

A. The purpose of this CSA is to inform activities of a possible manufacturing defect on Square D, Model 9001SKRU, multi-speed push-button units. The 9001SKRU push-button units affected include the 9001SKRU-2, -3, -4, and -5. Schneider Electric USA, Inc. has determined that improper factory lubrication may cause the push-buttons to become difficult to actuate, or not open as expected after actuation. Due to this issue, the Original Equipment Manufacturer (OEM) has recalled all Model 9001SKRU push-button units manufactured between January 1, 2010, and October 15, 2010. The date codes for the affected push-button units are 1001 to 1041 and can be found on the top of the push-button unit.

B. The 9001SKRU push-button units are only supplied by the Original Equipment Manufacturer (OEM) installed in 9001SKYP pendant stations or as individual components to be installed in customized installations (e.g. wall control stations). In order to verify the date code on the push-button units, it is necessary to disassemble the pendant push-button station. It may be necessary, depending on the pendant configuration, to remove the push-button units from the pendant station in order to read the date code.

Direction:

A. Within the next 180 days, all activities utilizing Square D 9001SKRU multi-speed pushbutton units (either in 9001SKYP pendants or in custom installations) shall disassemble the pendant or control station to inspect the push-button unit date codes for inclusion in this recall. Push-button units with date codes outside of 1001 to 1041 are not included in the recall and may be returned to service. SKYP pendants manufactured prior to 2010 are exempt from this recall and do not need to be disassembled.

B. Push-button units with date codes between 1001 and 1041 shall be operationally tested for jerky (not smooth) movement between push-button detents, excessive push-button pressure, sticking push-buttons, and other signs of improper operation. Any push-button units showing indications of improper operation shall be immediately removed from service. Push-button units demonstrating proper operation may be temporarily returned to service; however, all push-buttons with date codes between 1001 and 1041 shall be replaced as soon as possible and no later than the next annual maintenance inspection period.

C. Activities that have identified Square D 9001SKRU multi-speed push-button units with date codes between 1001 and 1041 may send the units back to Square D for a free replacement using a replacement product order form. Activities shall only return the push-button units and not the entire pendant control station. The OEM point of contact for this recall is Ann Beaman at phone number 919-266-8338. The replacement product order form as well as pictures of the affected units and locations of the date codes can be found at the Navy Crane Center website at: <u>https://hub.navfac.navy.mil/webcenter/content/conn/WebCenterSpaces-ucm/path/Enterprise%20Libraries/ncc/Documents/DCIandOF.pdf.</u>

CSA 225 Pushbutton Date Code Identification



<u>CSA 226 - YALE SERIES LH 10-TON AND 12-TON MANUAL CHAIN HOIST</u> <u>PROTRUDING HOUSING COVER SCREW</u>

Background:

A. The purpose of this CSA is to inform activities of a protruding housing cover screw that can foul the top sheave assembly and load chain on Yale Series LH 10-ton and 12-ton manual chain hoists.

B. An activity reported a loud popping noise during a lift with a Yale Series LH 12-ton manual chain hoist in which the top sheave assembly and load chain were contacting a housing cover screw which was protruding less than a $\frac{1}{4}$ ". The activity checked additional hoists and found other hoists with the same condition.

C. The hoist Original Equipment Manufacturer (OEM) was contacted and was not aware of any reported hoists with this issue; however, the Yale Series LH 10-ton and 12-ton manual chain hoists have been out of production for at least 15 years. Parts for this hoist are no longer supported by the OEM due to its age.

Direction:

A. Prior to the next use, activities shall inspect the top sheave (Item 13) located in the top yoke (Item 5), housing assembly (Item 39), and load chain (Item 73) for protruding housing cover screws (Item 31) or abnormal wear using the OEM Parts and Instruction Manual as a guide.

B. If a housing cover screw is found protruding or abnormal wear is found, activities shall remove all three housing cover screws, 5/16"-18 X 2 1/2", and shorten the screw lengths such that the housing screws no longer protrude. Use a file to smooth and remove burrs. Shortened screws shall be match-marked with the appropriate housing cover location. Reinstall and ensure the screws are properly tightened.

<u>CSA 227 - IMPROPER LOCATION OF PIVOT BLOCK SET SCREW FOR THRUST</u> <u>ROD OF JOHNSON EJ STYLE THRUSTER BRAKES</u>

Background:

A. An activity reported the thrust rod on a Johnson thruster shoe brake had unthreaded from its pivot block causing the brake to not release. The activity determined that the set screw location in the pivot block was improperly positioned to secure the thrust rod in place and allowed the rod to unthread from the pivot block.

B. The brake OEM supplied a repair procedure that relocated the set screw hole, added a new set screw, and drilled the rod to ensure proper engagement of the set screw. The brake OEM has acknowledged that this type of defect has occurred on another brake and that other pivot blocks on EJ style thruster shoe brakes may have improperly located set screws. The affected EJ style thrusters use a single set screw in the pivot block. Failure of the set screw and subsequent unthreading of the thrust rod will cause the brake to not release (fail-safe).

Direction:

A. Before or during the next annual or "B" preventive maintenance period, activities with Johnson thruster shoe brakes utilizing EJ style thrusters shall inspect the thrust rod block set screw for effective contact on the rod. The set screw must make contact with the rod within the threaded section of the rod. Photos to help identify the deficiency and the thruster style type may be found on the Navy Crane Center web site at

https://hub.navfac.navy.mil/webcenter/content/conn/WebCenterSpaces-ucm/path/Enterprise%20Libraries/ncc/Documents/CSA-227%20Photos.pdf.

B. Activities having brakes with improperly located set screws are to contact Patrick Bechara of Johnson Brakes, 416-213-9991, for replacement pivot blocks or instructions to modify the existing block. The thruster style can be identified from the data plate. Modifications to the existing block or thrust rod require the activity to submit a Crane Alteration Request for Navy Crane Centers approval per NAVFAC P-307.

WEIGHT HANDLING SAFETY BRIEFS

 $N_{\rm avy}$ Shore Weight Handling Safety Briefs (WHSB) are intended to be a concise and informative, data driven, one page snapshot of a trend, concern, or requirement related to recent/real time issues that have the potential to affect our performance and efficiency. The WHSB is not command specific and can be used by your activity to increase awareness of potential issues that could result in problems for your weight handling program. The WHSB can be provided directly to personnel, posted in appropriate areas at your command as a safety reminder to those performing weight handling tasks, or used as supplemental information for supervisory use during routine safety meetings. Through data analysis of issues identified by accident and near miss reports, and taking appropriate actions on the information we gain from that analysis, in conjunction with effective communication to the proper personnel, we have the tools to reduce serious events from occurring. As we improve the Navy Weight Handling safety posture, we improve our performance, thereby improving our efficiency, resulting in improved Fleet Readiness! This brief discusses controls/mitigation strategies that are necessary when other independent operations occur within a crane operating envelope.

When WHSBs are issued, they are also posted on the NCC's web site at: <u>http://www.navfac.navy.mil/ncc</u>.

Weight Handling Safety

Title: CRANE OPERATING ENVELOPE (COE) INTERFACE Target Audience: CRANE TEAM PERSONNEL & SUPERVISORS

Dynamic Work Environment/COE Controls



Work Coordination and Control



10 February 2016

Recent collision-related crane accidents reinforce the need to maintain constant vigilance and control of the crane's operating envelope. In one accident, a crane collided with a contractor's scaffolding and in another, a crane collided with an aerial work platform that unexpectedly entered the crane operating envelope (COE).

It is preferable the crane operations be secured in the vicinity of work but that is not always feasible. Below are some risk mitigation considerations that may help prevent crane collisions when work has to be performed in the vicinity of a COE:

- Control the work area! Inspect the crane operating envelope prior to commencing operations and remain vigilant during crane movement. Do not become complacent and remember, changes can and do occur in your COE without your knowledge.
- Talk to each other! Communications between crane team members is essential. If communication between the operator and the rigger/signaler is hindered or lost during operations, the operation shall be stopped until communications are re-established. Brief and re-brief as often as needed to mitigate risk.
- Restrict personnel from working on platforms in the vicinity of operating cranes. Maintenance that requires the use of aerial work platforms (AWP) should include a brief that details the method of communication for coordinating movement of the crane and AWP. Evaluate the need for establishing hazardous energy control procedures to protect personnel from inadvertent movement of equipment. Other proactive measures should be considered such as the need for temporary rail stops.
- Ensure that adequate zones of safety are established around maintenance areas in production facilities.

SAFETY

Navy Crane Center 16-S-01

Weight Handling Safety

Title: THE "ABC"s of SYNTHETIC SLING PROTECTION Target Audience: RIGGERS AND CRANE TEAMS

Use the Proper Materials for Sling Protection





When using synthetic slings, keep in mind the "ABC"s of synthetic sling hazards: Abrasion, Bearing, and Cutting.

Abrasion can occur when the sling is in contact with rough surfaces, such as concrete pipe. The sling protection shall be suitable to accept the abrasion without being destroyed.

<u>Bearing</u>. As the sling contact width decreases, the pressure increases and sling protection material may be severed. When required (e.g., small diameter pin with multiple highly loaded slings), the calculation for determining a sling protection's resistance to bearing failure shall be obtained from the sling OEM and varies according to the material, radius, and pressure.



3 March 2016

<u>Cutting</u>. This is the primary cause of reported synthetic sling failures. Soft protective materials (canvas, fire hose, leather straps/gloves) do not ensure adequate protection from cutting. The sling must be completely blocked from contacting the load edge with a hard material, such as split piping sections or special rounded shoes (see illustrations). Sling OEMs also provide products that protect slings from sharp corners or edges. Activities should contact the OEM for availability of such products.

Slings wrapped around corners and edges have the potential to fail from

Also, ensure the rigging configuration is stable and slings cannot slide off the sling protection.

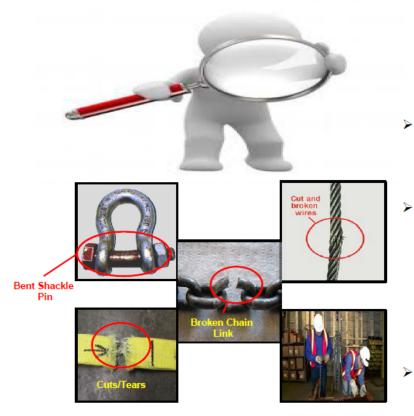
Riggers must be trained in recognizing the different damage types and determining what protection methods, material, and components are required to adequately protect synthetic slings.



Navy Crane Center 16-S-02

Weight Handling Safety

Title: POST-USE INSPECTION OF RIGGING GEAR Target Audience: RIGGERS AND CRANE TEAMS



Too often, damaged rigging gear is discovered at a gear storage site or gear room after the gear has been turned in from use. Finding the damage there (or well after the occurrence) makes it more difficult to track the damage back to a specific application or time as to when the gear was damaged.

- A post-use inspection of rigging gear is strongly recommended. It is easy to perform and the inspection provides a better opportunity to isolate and learn when and how any damage discovered may have occurred.
- If damage to rigging gear occurs during a crane or rigging operation, personnel must stop and inform supervision. The evolution shall be investigated per section 12 of NAVFAC P-307 to determine if an accident has occured. It is important to remember to inspect the rigging gear and not just return the damaged gear to the gear room for disposal versus investigating and reporting in order to identify a root cause and implement corrective actions to prevent recurrence.
- Activity weight handling instructions should include actions to take in the event damaged rigging gear is returned to the gear room or storage site.

Navy Crane Center 16-S-03

14 April 2016

SAFET

SUMMARY OF WEIGHT HANDLING EQUIPMENT ACCIDENTS FIRST QUARTER FISCAL YEAR 16

 \mathbf{F} or the first quarter of FY16, 82 Navy weight handling accidents (66 crane and 16 rigging) were reported. Accidents increased by 20 percent from the fourth quarter of FY15, but significant accidents declined slightly (14 vs 15). Significant accidents (overload, dropped load, injury, two-block, derailment, or overhead power line contact) are accidents that have a greater potential to result in serious injuries or substantial material damage or equipment costs and may require a more detailed investigation. With regard to contractor operations, 11 crane and rigging gear accidents, including 2 significant accidents, were reported.

INJURIES

Accidents: Three injuries were reported. An employee was injured when his finger was caught between the outrigger beam and the frame of a mobile crane during retraction of the outriggers, a mechanic's finger was injured when it was caught between a plate and a pump's foundation during final seating, and a rigger attempting to position a component was struck and injured when the component slipped from its rigging. No contractor injuries were reported.

Lessons Learned: Risk identification and mitigation is an essential part of every weight handling evolution. Supervisors should make a point of discussing possible scenarios that lead to personnel injuries, like extremities caught in pinch points and being struck by the load or rigging gear. Eliminating the need to manually handle the load, remaining alert to sudden shifts of the load, and maintaining a safe distance from a load being moved would have likely prevented each of these accidents. The second injury listed above occurred when a mechanic's fingertip was caught in a pinch point while installing a pump onto its foundation. Mechanics utilized pry-bars to assist with the alignment, but were unable to obtain proper seating. A gap remained between the pump and foundation so a mechanic attempted to investigate the cause of the gap. The mechanic placed a hand on top of the pump and a portion of one finger in the gap (pinch point). The mechanic's weight on the pump caused the pump to shift and pinch the mechanic's finger. The mechanic had been briefed on pinch points prior to commencing the job.

Dropped loads: Four dropped load accidents were reported. A dropped load occurred when a crane's wire rope was damaged as a result of being miss-spooled, a jet engine component dropped from a lifting fixture, and while removing a gas generator turbine shaft (GGTS) from a test stand, the shaft became unbalanced, slipped from the rigging, and dropped to the shop floor. In another instance, a shipboard main engine mount liner being rigged from the engine room slipped from the lashing and dropped to the deck.

Lessons Learned: Three of the four dropped load accidents resulted from improper rigging. Specifically, the load was dropped because it was improperly secured or lashed. Components with a high center-of-gravity require additional measures for ensuring the load remains stable and secure during the lift. Prior to commencing any lift, personnel should carefully examine the load to ensure all rigging is correctly installed and the load is secure in the rigging. One accident of particular concern occurred when a crane was side-loaded while inverting a large component. The side-loading severely damaged the crane's wire rope to the point of failure resulting in a

dropped load. The accident investigation identified that the operator who normally performs this operation was not available and the replacement operator had never performed this lift. Management and supervision must consider the level of experience when considering personnel assignments. Lifts of large and complex geometric shapes shall also be considered complex lifts requiring additional supervision and procedural controls.

Overloads: Seven overload accidents were reported, three of which were crane capacity overloads and four rigging gear capacity overloads. A beam clamp was overloaded, causing it to slide from the beam, causing the load to contact a ship's structure, rigging gear was overloaded due to a binding condition during the removal of a shipboard enclosure, and while extending the boom of a mobile crane for maintenance, the crane tipped forward on both blocks and contacted the ground. Two chain falls were overloaded during the removal of an upper and lower padeye assembly from its installed position. A category 3 jib crane and associated rigging gear used to lift a transmitter unit were overloaded; and two synthetic slings failed when they were used to remove an oil cooler that was still fastened in place.

Lessons Learned: Each of the overload accidents could have been prevented if personnel conducted adequate pre-lift preparations and performed a load/rigging inspection prior to the lift. Two of the accidents occurred as a result of personnel not correctly identifying the weight of the load. Utilizing basic skills such as determining the weight of the load, removing all fasteners on components to be lifted, and selecting the right gear for the job, is essential for completing the job safely and successfully. A detailed and interactive pre-job brief along with a careful inspection of the load will help prevent overloads like the ones identified above. Binding controls identified in Section 10 of NAVFAC P-307, must be utilized where overloading of the crane or rigging gear is possible due to binding conditions. Any amount of hoisting with a load in a binding condition has the potential to result in significant overload. Weight handling personnel must remember that binding can occur at various locations throughout a lift and identifying these binding locations is critical to ensure binding controls are implemented.

Identifying the reasons why accident numbers increase and decrease is not always easy. There are many variables in play that could affect accident potential (experience of personnel, workload, pace of operations, weather, etc.). Our best chance of weight handling success is to understand and apply requirements and to perform as trained. Accident totals may have increased by 20 percent from last quarter, but the number of significant accidents declined. This is movement in the right direction! The important part to understand is that by identifying, reporting, and assessing the less significant accidents, we learn from them. We are able to identify patterns and weaknesses that may lead to much more significant accidents. A look at recent accidents suggests that weight handling personnel should increase focus on pre-lift preparations, ensuring that the load is ready to be lifted, and inspection of the load and rigging gear prior to the lift. Detailed and interactive pre-lift briefs help ensure that individuals have accomplished these actions and are focused on the job at hand. Each activity should carefully examine the causes of each accident individually and as a whole in order to determine actions necessary to conduct safe weight operations.

Nearly half of the reported near misses during the quarter related to rigging gear. Issues included incorrect gear selection, improper use of rigging gear, and insufficient gear inspection. Rigging

gear is required to be inspected utilizing the pre-use inspection requirements of NAVFAC P-307, Section 14, and is critical to ensuring the gear is safe for use. Performing rigging gear inspection after use is also highly recommended to identify damage that may have occurred during operation in order to investigate the cause of the damage.

A healthy weight handling program includes a culture wherein people instinctively focus on the value of gaining lessons learned from the reporting of lower order or unusual events in a weight handling operation to prevent more serious events from occurring. Leadership should encourage this and not negatively focus solely on the total number of events reported, but on eliminating the significant and serious weight handling accidents. The identification, documentation, and correction of near misses and other unplanned occurrences significantly improve safety and efficiency of weight handling operations.

Weight handling program managers and safety officials should review the above lessons learned with personnel performing weight handling operations and share lessons learned at other activities with personnel at your activity. Personnel are again reminded of the upcoming changes to NAVFAC P-307. Commanding Officers are encouraged to support their personnel regarding the identification of deficiencies and near misses, but also the reporting of all accidents that meet the Navy's accident definition. Personnel should also be reminded that no task is so important or urgent that it cannot be performed safely. Taking the time to be safe and performing careful inspections will increase fleet support in the long run. Remember, eliminating significant accidents, including personnel injuries is the primary focus.

TIP OF THE SPEAR (Notable Evaluation Items)

 N_{avy} Crane Center's evaluation teams assess activities' core weight handling program functions, including the crane maintenance functional area which consists of maintenance, inspection, testing, engineering, and equipment based training to determine the effectiveness of the equipment and personnel supporting the weight handling program. These assessments identify violations, deficiencies, poor practices, and highlight weaknesses and vulnerabilities within the crane certification process. The assessments not only determine the state of the equipment and evaluate personnel performance, but also identify potential challenges on the horizon and aspects of the program requiring bolstering to mitigate declines in performance. Although equipment condition remains satisfactory, weight handling programs, in general, are experiencing new challenges, with high attrition rates of experienced personnel due to an aging workforce, increased budget constraints, competition from the private sector with regard to hiring, and impending new crane technologies requiring advanced systems training. In the area of training, one of the three pillars of the industrial work model (the others being procedures/processes and supervisory/management oversight), it is important that less experienced personnel are being provided strong fundamental skills, in addition to advanced skills and realistic mock-up training. Additionally, another key pillar, procedures/processes, must be well defined. Many large weight handling activities are focusing efforts in these areas and continue to show growth within their programs.

Training of personnel is key to the success and effectiveness of the crane certification program. Several activities are working on standardizing personnel development processes, including incorporation of subject matter experts (SMEs) to identify and provide targeted training of systems employed on the activities' equipment. In turn, a key system competency tracking system for personnel qualifications has been implemented. These processes provide a standard to which personnel are trained on systems and provide management a tool to ensure properly trained and qualified personnel are assigned to perform work. In addition to competency tracking, several activities are in the process of developing crane component and system mockups, reflecting actual equipment in the inventory, reflecting deck-plate conditions. These component and system mock-ups provide invaluable training opportunities for personnel in a less stressful (minimal risk) environment. At one particular facility, the activity has utilized the mock-up area to perform electrical overhaul and testing of control systems prior to the installation of components/systems onto equipment. This process enabled the activity to utilize less qualified personnel to perform the overhaul in a controlled environment under SME oversight, providing invaluable training opportunities while accomplishing needed overhaul work, which ultimately reduced crane overhaul downtimes and lessening production impacts. Where feasible, the incorporation of necessary work into training, with strict expert oversight, can result in achieving both production needs and training goals with negligible impact.

In addition to training personnel, sound, technically accurate, detailed processes and procedures are important in specifying work necessary to be accomplished in support of crane certification. The need for strong, well developed, and detailed work instructions continues to be a focus area for Navy Crane Center evaluation teams, particularly due to the loss of experience discussed above. As a result, it is imperative to review, and expand where needed, existing procedures and processes to ensure additional detail is provided to ensure the correct task is accomplished in the specific manner necessary to ensure efficiency and reliability of the work, which may not have been necessary for long tenured, more experienced personnel. This enables the worker to perform the task without delays, improves crane reliability, and lessens impacts to maintenance and, in turn, production schedules.

As related to the effectiveness of efforts expended in the areas noted above, it is imperative to employ a system to identify areas of weaknesses to ensure success in your weight handling programs. Although the aforementioned two areas, training and procedure/process development, are key for growth in the crane maintenance function area, just as important is the need to constantly and consistently monitor and oversee the execution of in-process work. Supervisory and management oversight, the last and most important pillar of the industrial work model, ensures that standards and expectations are met and shores up any weaknesses in the other two areas (pillars). The other benefit in providing strong oversight is that by identifying and documenting in-process deficiencies, poor practices, and process improvements, management is provided a tool to identify and trend areas of weakness within the program. Trending of weaknesses is important for activity management to ensure the correct problem areas are being focused on and the development of specific short and long-term corrective actions are having the Although monitoring (oversight) programs are generally focused toward desired effect. management and supervision, participation is encouraged from the deck-plate workforce which often identifies opportunities for improvement and other efficiencies. Therefore, it is essential that all personnel be empowered to develop a self-critical focus and readily identify mistakes,

poor practices, and potential process improvements which will allow for further growth in the respective weight handling program.

SHARE YOUR SUCCESS

 W_{e} 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>.

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.

HOW ARE WE DOING?

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Please email your comments and suggestions to <u>nfsh_ncc_crane_corner@navy.mil</u>