



THE CRANE CORNER

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A WORD FROM TOPSIDE

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As we approach the holiday period, there is always a concern that the risk of having an accident will increase. During this period our focus on specific job tasking can be distracted by thinking about upcoming holiday events. This is also a time of the year where personnel are using a lot of leave and their positions have to be potentially filled by someone who is not as familiar with the task as others. It is essential that personnel associated with the Navy's Weight Handling Program understand that this situation brings with it an inherent increase in risk potential and as such we must compensate for this additional potential risk. That compensation may come in the form of increased monitor program oversight, increased supervision on the deck-plate, increased detail in lift planning and technical work documents, and increased detail in pre-job briefs. It is always important to work as a team, but it is crucial to work as a team when there are new players or distractions. In the last issue of 'Word from Topside', I discussed the use of the safety triangle, and a healthy, maturing weight handling program would populate the lower portion of the triangle. I noted that we all make mistakes. This is a time of

year, due to all that is going on with getting ready for the holidays as well as all that is going on with respect to world issues, that we can easily become distracted for a split second and in that split second an event which results in an accident can occur. Do not let that happen to you or your team! As minor anomalies occur, 1) stop, 2) understand the anomaly, 3) appropriately document as a monitor observation or near miss/unplanned occurrence, and 4) share this important information with those who may in the future experience a similar event. As a Navy Weight Handling Program community, we learn from our minor anomalies, and as such we increase our sensitivity such that the potential risk of a larger event is minimized.

I hope that each person associated with the Navy's Weight Handling Program has an enjoyable holiday season and above all remains safe in ALL they do. By paying attention to and learning from the minor issues, we sensitize ourselves to the task we are accomplishing and thereby minimize the potential of higher level events.

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 non-load bearing or non-load controlling parts. A complete list of CSAs and EDMs can be found on the Navy Crane Center's web site.

CSA 229 – UNPLANNED HOIST MOVEMENT DUE TO INTERFACE CARD FAILURE ON MAGNETEK SERIES 2 DRIVES

1. BACKGROUND:

A. An activity reported that a crane equipped with a Magnetek Series 2 drive, began hoisting in slow speed without the operator actuating the pendant pushbutton controller. Personnel had to secure power in order to prevent further hoisting. Investigation and discussions with the drive manufacturer determined that the cause of the unintended movement was a capacitor failing as a short for the up direction input on the input card. This shorted capacitor resulted in a command to the drive to hoist at slow speed without the presence of an input from the controller. The activity reported that it had experienced additional failures of a capacitor on other interface cards for the Series 2 drives, but this is the first time that a failure has caused unintentional movement.

B. The failed input card is a G5IF interface card that is included with all Magnetek Series 2 G+ and VG+ drives and consists of 8 inputs that take a 120V input from the crane and convert it to a 24V input used by the microprocessor drive.

The inputs for this card are multi-functional and can be configured for different uses depending on control circuit design, however, terminals 1 and

terminals 2 are always used for directional run commands. LEDs on the board indicate if a given input is on or off. Some applications require the use of more than 8 inputs and in those cases a G5IN4 card may be installed which gives the microprocessor drive an additional 4 inputs. Similarly constructed P3S2 interface card can also be found on Magnetek Series 2 P3 drives.

C. The drive manufacturer believes that the failure of the G5IF card experienced by the activity may be caused by the card being subjected to repeated spikes in voltage and current and/or possible exposure to excessive heat over a prolonged period of time. The shorting out of capacitors can occur on any input to the G5IF card, but, will only cause unintended movement if the failure is on one of the directional run command terminals (1 for forward or 2 for reverse). A failure of the capacitor as an open circuit will not cause unintended movement. Final upper limit switches in compliance with CSA 121A would prevent a two-blocking condition from occurring if the hoist drive was to fail as described in paragraph 1.A. Additionally, activating the emergency stop/power off pushbutton on a crane that is compliant with CSA 121A would prevent any additional uncontrolled movement if the hoist drive was to fail as described in paragraph 1.A. There has been no reported failures on any newer series Magnetek drives (Series 3 and Series 4) as these drives take advantage of more rigid components (such as surface-mount ceramic capacitors) that are less susceptible to failure.

2. DIRECTION:

A. Within the next 120 days, activities shall identify all cranes utilizing Magnetek Series 2 drives (G+, VG+, or P3) and test each G5IF, G5IN4 (if equipped), and P3S2 interface card for capacitor failure. Activities shall reference the crane schematics for each function and the applicable Magnetek Series 2 instruction manual as testing will be unique based on the control schematic of each function.

B. In order to accomplish the testing required by paragraph 2.A, activities shall compare the monitoring parameters (U1-10 for the G5IF card, U1-25 for the G5IN4 card, and U-06 for the P3S2 card) with the expected state for each associated input. The inputs shall then be cycled to ensure the associated monitoring bit changes state. More information on appropriate testing procedures and excerpts from the Magnetek Series 2 Drive manuals for reference can be found at <https://hub.navfac.navy.mil/webcenter/content/conn/WebCenterSpaces-ucm/path/Enterprise%20Libraries/ncc/Documents/CSA%20229%20Web%20Instructions.pdf>. Additional assistance from Navy Crane Center In-Service Engineering is available as required. Activities shall report back the number of cards tested, the associated cranes and functions, and the outcome of testing to Navy Crane Center including any serial numbers other card identification for failed cards.

C. Activities that find any G5IF, G5IN4, or P3S2 cards with failed capacitors are to replace all Magnetek Series 2 G5IF, G5IN4, and P3S2 cards on the associated crane. The G5IF and the G5IN4 cards remain readily available for the

foreseeable future from the drive manufacturer. The availability of the P3S2 interface cards is unknown at this time. The point of contact for replacement cards at Magnetek is Mr. Loren Weisensel/Field, Application Specialist at 866-624-7378 or 262-252-2960.

D. Activities are reminded that all cranes that contain hoist drives equipped with micro-processor drives are required to be in compliance with CSA 121A and the safety features specified in that document. Activities are also reminded that operators shall immediately activate the emergency stop or power off function if they sense loss of control, shall remain at the controls at all times while a load is suspended from the crane, and that cranes shall be properly stowed and power secured in accordance with NAVFAC P-307 and local instructions. Finally, activities are reminded that equipment deficiencies, as defined by paragraph 3.1.1 of NAVFAC P-307, shall be reported to Navy Crane Center.

E. Navy Crane Center will provide updated information or guidance as a revision to this CSA.

TIP OF THE SPEAR FOURTH QUARTER FY17 EVALUATION SUMMARY

All activity weight handling programs evaluated in the fourth quarter were satisfactory (one program was marginally satisfactory). Navy Crane Center evaluation teams are now reviewing for compliance with the new requirements of the June 2016 revision of NAVFAC P-307, which went into effect on 1 July of this year. A monitor (observation) program is now a requirement and most activities reviewed are using this tool to enhance safety. One issue with some activities that perform maintenance and certification is that they are not including maintenance and inspection processes in their monitor programs. Poor practices, shortcuts, etc., can just as well occur during these

processes as with crane operations. As was noted in the previous Crane Corner, a well-running monitor program will enhance the development of effective self-assessments in order to improve an activity's overall program. Another new requirement is the crane replacement and modernization plan. Some activities have not yet developed long-range plans for modernization and/or replacement of their category 1 and 2 cranes and their category 3 and 4 critical cranes, to ensure continuity of the activity's mission. These plans need to be updated annually. A third new area is the development of metrics. Effective metrics can provide proof of self-assessment concerns and can help justify needed actions.

SUMMARY OF PROGRAMS EVALUATED

29 Navy WHE programs were evaluated. 28 were fully satisfactory. One program was marginally satisfactory. In addition, one assist visit was performed.

For FY17, 205 activity programs were evaluated, with seven programs found marginally satisfactory and zero unsatisfactory programs (100% satisfactory rate).

SATISFACTORY CRANES

35 of 38 cranes were satisfactory (92%). For FY17, 163 of 196 cranes were satisfactory (83%).

Reasons for Unsatisfactory Cranes.

Defective Hoist brake.

Damaged wire rope.

Trolley motor not in accordance with CAR comment.

EVALUATION ITEMS

Common Evaluation Items (five or more items):

- Lack of monitor program or established program that needs improvement or does not cover all program elements – 21 items.

- Operators/riggers/test directors lacked essential knowledge (recognizing crane accidents, complex lifts, knowing the weight of the load, how to connect special equipment, etc.) – 20 items.

- Various unsafe crane and rigging operations observed by the audit 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.) – 15 items.

- Operator's Daily Check Lists/Operator's Monthly Check Lists (ODCLs/OMCLs) and simulated lifts performed incorrectly or not performed – 15 items.

- Inspection and certification documentation errors – 11 items.

- Poor inspections/inspection processes (incl. inspector removing load bearing fasteners voiding certification, inspections not performed, work documents not available for in-process inspections, unsafe practices, wire rope not inspected completely, fall protection (Personal Property Equipment) not utilized, deficiencies not identified) – 9 items.

- Training issues, including contractor personnel (training not taken, training weak or not effective, refresher training not taken or not taken within three months of license renewal, lack of inspector training, instructor not authorized by NCC, locally required training not taken, training course score less than 80 percent) – 7 items.

- ODCL/OMCL documentation deficiencies (including incorrect form used) – 7 items.

- Lack of leading metrics/metrics not being properly analyzed – 7 items.

- Lack of (or low number of) lower order crane or rigging accident and near-miss reports – 6 items.

- Tagging issues (illegible or incorrect caution tags, cranes/crane structures with expired certifications not tagged, inspector did not have tag in possession, tag not removed upon condition correction, essentially permanent tags in lieu of more effective solutions, such as removal of obstruction or relocated rail stops, incorrect tag used) – 6 items.

- Lack of, or ineffective strategic plan for crane needs, modernization, or replacement – 6 items.



SUMMARY OF WEIGHT HANDLING EQUIPMENT ACCIDENTS THIRD QUARTER FY17

The 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 can be improved.

Accidents: For the third quarter of fiscal year (FY) 17, 63 Navy weight handling accidents (49 crane and 14 rigging) were reported as compared to 88 (69 crane and 19 rigging) in the third quarter of FY16. The total number of accident reports through three quarters of FY17 is below that of the first three quarters of FY16 (237 in FY16 as compared to 210 in FY17). While the total number has decreased, significant accidents have not declined in parallel. To date, 46 significant accidents have been reported (34 crane and 12 rigging) as compared to 42 in FY16 (30 crane and 12 rigging). Based on the theory of the accident prevention triangle, our near miss and no-damage accident reporting should be on the upswing and our significant accidents should be seeing reductions. Weight handling personnel must understand and recognize lower threshold accidents (including avoidable contact that results in minor or no damage) as well as near misses. Our evaluations routinely find that personnel are not aware of the reference A definitions of crane and rigging accidents and do not recognize minor events constituting accidents (such as a crane hook block contacting the floor or rigging gear found damaged after a lift) or near misses (such as a miss-spoiled wire rope that was not damaged). Recognition, reporting, and trending of these types of accidents and near misses is a sign of a healthy program and a key to preventing more serious accidents. A healthy weight handling program triangle depicts a wide base of monitor logs, a good number of near misses, some lower threshold accidents, few minor accidents, and no significant accidents (injuries, two-blocks, overloads, dropped loads, derailments, or contact with overhead electrical power lines).

Lessons Learned: The probable cause of the majority of these accidents was listed as improper rigging or poor risk mitigation. One report identified that the crane team did not utilize the proper lifting and handling gear (utilized synthetic slings because they were more convenient to work with versus wire

rope slings). Additionally, the supervisor on site did not override the team's decision. While sling protection was used in most of these instances, it proved inadequate. Reference A paragraph 14.7.4 has new requirements for sling protection. Protection against cutting of synthetic slings requires hard material to block the sling from contacting the item being lifted. Inadequate planning and inadequate pre-job briefs were also contributing factors in some of these events. A combination of good job planning and an interactive pre-job briefing (e.g., roles and responsibilities, weight of the load, specific rigging gear to be used, sling protection) could have identified deficient conditions prior to the jobs commencing.

OVERLOADS

Accidents: Two overload accidents were reported this quarter. Two synthetic slings were overloaded during load test/certification of a spreader beam. The other occurrence involved a portable floor crane that was overloaded.

Lessons Learned: In the case of the overloaded slings, numerous factors were identified. The rigger-in-charge (RIC) planned the job using the incorrect drawing to test a spreader beam, did not obtain approval for substituting synthetic slings for wire rope slings, did not account for sling angle stresses, and did not stop when a member of the crane team questioned the lift. Additionally, supervision did not adequately perform a pre-evolution review as required by local instructions and training. In the case of the portable floor crane, the overload was not identified at the time it occurred. The crane had structural damage and it was identified by maintenance personnel at the time of its prescribed load test. Activities should perform post-use inspections to ensure no damage occurred during the weight handling operation. In this case, since the damage was not identified "real time," a proper investigation could not be conducted thus preventing the activity from mitigating this problem in the future. More importantly, damaged equipment was available for use by others, increasing the potential for another accident to occur.

NEAR MISSES

Near Misses and Unplanned Occurrences:

Activities reported 86 (65 crane and 21 rigging) near misses this quarter. Four potential two-blocking events, three potential overloads, and two potential dropped loads were averted due to activity intervention. In addition, 10 of the 86 near miss reports identified miss-spoiled hoist wire rope, a condition typically associated with the improper operation of the crane, such as the side pulling of a load, or raising the hook while traveling. Improper rigging gear selection and pre-use inspection issues were identified as contributors to near misses, indicating weakness at the job planning level. Activities are encouraged to ensure that adequate planning is built into the work process.

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. Our mutual goal is the reduction of significant accidents. As noted in paragraph 1, there has been a decline in total accidents reported this fiscal year but the number of significant accidents, as defined by reference A, paragraph 12.3, has increased. Activities should be identifying lower level events and sharing that data as this sensitizes our weight handling program community to the issues that are more minor in nature, thereby reducing the potential of higher level events. Additionally, robust monitor programs, coupled with activity feedback to the workforce, can strongly contribute to the identification of lower level events and help reduce the potential of a significant accident from occurring.

WEIGHT HANDLING TRAINING BRIEFS

Weight Handling Training Briefs (WHTBs) are provided for communication to weight handling personnel. On 21 June 2016, the new NAVFAC P-307 revision was signed and became available for immediate implementation. Navy Crane Center developed a series of briefs in order to provide specific details relating to the change.

Similar to the Navy Shore Weight Handling Safety Brief, the WHTB is intended to be a concise and informative discussion of a trend, concern, or requirement related to recent/real time issues that have the potential to affect our performance and efficiency. The WHTB is 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. WHTBs 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 Safety or Training Briefs are issued, they are also posted in the Accident Prevention Info tab on the Navy Crane Center's web site at <http://www.navfac.navy.mil/ncc>.

Navy Crane Center point of contact for requests to be added to future WHTB distribution is Christina Jodanovic (christina.jodanovic@navy.mil).

Navy Shore Weight Handling Training Brief!

Title: New: General Crane Safety Course, NCC-GCS-04
Target Audience: Category 1 Crane Operators, Trainers, Supervisors, and Managers

Updated
General Crane Safety
NCC-GCS-04
course
now available



- Good News!! The **General Crane Safety course (NCC-GCS-04) on Navy eLearning (NeL) has been updated** to reflect the most recent changes to NAVFAC P-307 and is now available. If you operate category 1 or 4 cranes, oversee operators of category 1 or 4 cranes, or train and examine category 1 or 4 crane operators, you will want to review this material to update your knowledge and familiarize yourself with the latest information. General Crane Safety is required to be taken initially by category 1 crane operators and is followed-up with General Crane Safety Refresher every two years thereafter. A minimum score of 80% is required to pass this course.



Online course
access information
and descriptions
are available at:

<http://www.navfac.navy.mil/ncc>
via the Training link

Accessing NAVFAC P-307 Online Courses

- There are 16 self-paced, web-based training courses available at no-cost via the internet and are listed in NAVFAC P-307 Table 7-1. Course descriptions, NeL access instructions, and other information can be found on the Navy Crane Center Training web page:
<http://www.navfac.navy.mil/ncc>
- Personnel accessing NAVFAC P-307 web-based training courses should use the direct link to Navy eLearning (NeL):
<https://nel.navy.mil/>
- The only requirement for accessing training courses on NeL is a DEERS validated common access card (or CAC).

The NKO web site no longer exists, use the NeL link to access courses.

Use the
Navy eLearning (NeL)
direct link:

<https://nel.navy.mil/>
to access

NAVFAC P-307 online courses



6 July 2017

Training

Navy Crane Center 17-T-04

Navy Shore Weight Handling Training Brief!

Title: Teamwork / Questioning Attitude
Target Audience: Navy Shore Weight Handling Program Personnel

Near Miss Scenario

Recently, a crane team was planning to lift a component off of a trailer. The weight of the component was well within the capacity of the crane; however, the rigger-in-charge (RIC) selected wire rope pendants to perform the lift without considering the capacity of the pendants based on sling angles. Recognizing a potential problem, a crane team rigger performed calculations that included the sling angle and notified the RIC that the selected slings could lead to a potential overload if used. In spite of the calculations, **the RIC disregarded this information and continued to rig the job using the improper rigging gear.** The crane rigger then contacted the accident prevention team who intervened before the load was lifted, thus preventing an overload situation.

A cohesive team, with "questioning attitudes", would recognize and resolve these issues quickly. When that didn't occur, the actions of one team member, who was willing to speak up and do or say the right thing, prevented an accident. Sometimes it takes personal courage to **take responsibility and push back against things that are believed to be wrong.** Good planning, technical adherence, and teamwork are all necessary for the success of our work. A questioning attitude is also necessary as it challenges us to get clarification when something doesn't seem right!

If you have doubts or questions about your task, be persistent in seeking a solution.



- Adequate job planning!
- Teaming to ensure agreement and the best solution!
- Technical adherence to procedures!
- Conformity to training!
- Questioning attitudes!
- Recognition of when to stop and regroup!

13 September 2017

Training

Navy Crane Center 17-T-05

WEIGHT HANDLING SAFETY BRIEFS

Navy Shore Weight Handling Safety Briefs (WHSBs) are provided for communication to weight handling personnel. Data analysis indicates a negative trend related to the occurrence of dropped load accidents at naval activities. These types of accidents can result in personnel injury if personnel are not focused on complying with the fall zone avoidance requirements of NAVFAC P-307. This WHSB is being issued as a reminder for all personnel to increase their focus on the fall zone and on the prevention of dropped load accidents.

The WHSB is 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 weight handling 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!



Weight Handling Safety Brief!

Title: ACCIDENT PREVENTION TRIANGLE FOUNDATION
Target Audience: ALL WEIGHT HANDLING PROGRAM PERSONNEL

DOES YOUR WEIGHT HANDLING ACCIDENT PREVENTION PROGRAM HAVE A STRONG/ HEALTHY FOUNDATION?



*Referenced NAVFAC P-307 section and paragraph numbers are taken from the 2016 version.

A good weight handling accident prevention program has to have a **strong foundation** consisting of three healthy blocks:

- **Monitor (Surveillance) Program.** Requires buy-in and support from all personnel as everyone must recognize the importance of identifying and documenting deficiencies, poor practices, and process improvements. Most importantly, your monitor program should be primarily internally focused (self-critical). A good rule of thumb is at least 50% of your observations should be internal (e.g., what did I or my team/personnel do wrong or what could we have done better) versus external (e.g., ship's force, other shops/departments). Lastly, the identification of tangible findings (NAVFAC P-307, par. 2.6) should also be emphasized.
- **Near Miss Data.** Within your monitor (surveillance) program observations lies numerous events, that in addition to being tangible deficiencies, rise to a higher level. These events have multiple names (e.g., close calls, "whoas", "that could have been bad") that need additional scrutiny so that actions can be taken as warranted for the accident that "almost" happened. A good rule of thumb is to strive to identify and REPORT ten near misses for every reported accident.
- **Reporting of lower threshold accidents.** Key focus area as this type of accident is extensively underreported. The reporting of accidents involving avoidable contact with no visible signs of damage is seen as a positive and is also a strong indicator that your program has matured and that personnel truly understand the importance of self-reporting. At activities with higher operational tempos, supervision and management have to be self-critical and accept that these lower threshold events are occurring.

By taking the time to stop, understand, document (and report if necessary), and subsequently learn from lower level events, significant events can be reduced and eventually eliminated.

8 June 2017

SAFETY

Navy Crane Center 17-S-04

Navy Shore

Weight Handling Safety

Title: RECOGNITION AND REPORTING OF MINOR EVENTS
Target Audience: WEIGHT HANDLING PERSONNEL

Brief!

Even the minor accidents are preventable, but only if you understand how and why they happen!

In this scenario, the rigger-in-charge is informed of a miscalculation in the weight of the load. Work is stopped, preventing a potential gear and crane overload. The causes can now be identified and corrective actions implemented prior to resuming work.

A healthy weight handling accident prevention program must include management encouragement and employee freedom to recognize and report process "deficiencies" (no matter how small). Deficiencies include process errors, near misses or minor accidents such as bumps and bangs. There is a lesson in every deficiency. To learn from them, it requires us to stop the process, understand what and why it went wrong, and then develop corrective actions to prevent recurrence. Documenting the problem and associated lessons learned provides a great opportunity to prevent future problems. ***It all starts with problem recognition and reporting by the people doing the work.***

- When a problem is recognized, work should be immediately **stopped** so that further problems can be avoided, the event reported, investigated and adequate corrective actions identified.
- Everyone must **understand** the importance and value of identifying and reporting deficiencies for analysis and subsequent implementation of corrective actions to continuously improve.
- There must be a viable data collection and **reporting** mechanism in place so that deficiencies and corrective actions are tracked, trended and analyzed. A thorough look at near misses and human factors of why an event almost happened can provide valuable lessons learned.
- The reporting, investigating and recording of minor events is an excellent high velocity **learning** tool when appropriately used by an activity. These learning/reinforcement opportunities keep safety in the forefront while also improving the efficiency of work execution and reducing the frequency of a serious event.

14 June 2017

SAFETY

Navy Crane Center 17-S-03

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 nfsh_ncc_crane_corner@navy.mil.

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?

Please email your comments and suggestions to

nfsh_ncc_crane_corner@navy.mil