

Office of Marine and Aviation Operations

SAFETY NEWS

From the Safety and Environmental Compliance Division

EIGHTH EDITION

JUNE 2012

We are currently at the height of the field season and are approaching the height of the hurricane season. Those deployed at sea and in the air often experience increased operating tempos during this time which raises exposure to risk. The newness of the field season has worn off. Based on historical accident rates, that usually means fewer accidents, but as the field season wears on, the number of accidents typically increases. Perhaps this is due to fatigue or maybe at times, carelessness brought on by familiarity or complacency. Don't become a statistic. Get proper rest. Stay alert. Work safe.

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POLICY SPOTLIGHT

Message from Mr. Kevin Ivey, Director, SECD

Resist the temptation to cut corners:

As the Director of the Safety and Environmental Compliance Division for OMAO I have the opportunity to review all accident and injury reports. During the time that I have held this position I have noticed that far too many of these "accidents" were altogether preventable. On a monthly basis a cadre of dedicated safety professionals from all across OMAO meets to discuss each and every report of accident and injury. Recently we have noticed a recurring theme while analyzing the reports. A literal reading of what is reported often implies that no one is accountable for the accident. The fact that there was no policy or procedure in place to govern the specific activity the employee was engaged in at the time of the incident is not justification for a lapse in judgment. Let's be clear; the absence of policies or procedures does not give us license to do "anything". No procedure or policy will ever replace situational awareness, good judgment, and sound work practices. Each employee shares some responsibility for his or her own safety as well as the safety of their co-workers. If you as an employee are able to recognize that one of your core work processes doesn't have a governing policy or procedure then you should begin to develop a set of safe work practices for that activity. In all that we do

during our work day there are inherent risks. To minimize those risks we all must resist the temptation to cut corners or settle for “good enough”. Doing things safely and carefully may take more time initially but will save time, injury, and possibly your life in the long run. Resisting the temptation to cut corners and settling for “good enough” is the first step in each of us being accountable and taking responsibility for our own safety and the safety of our co-workers.

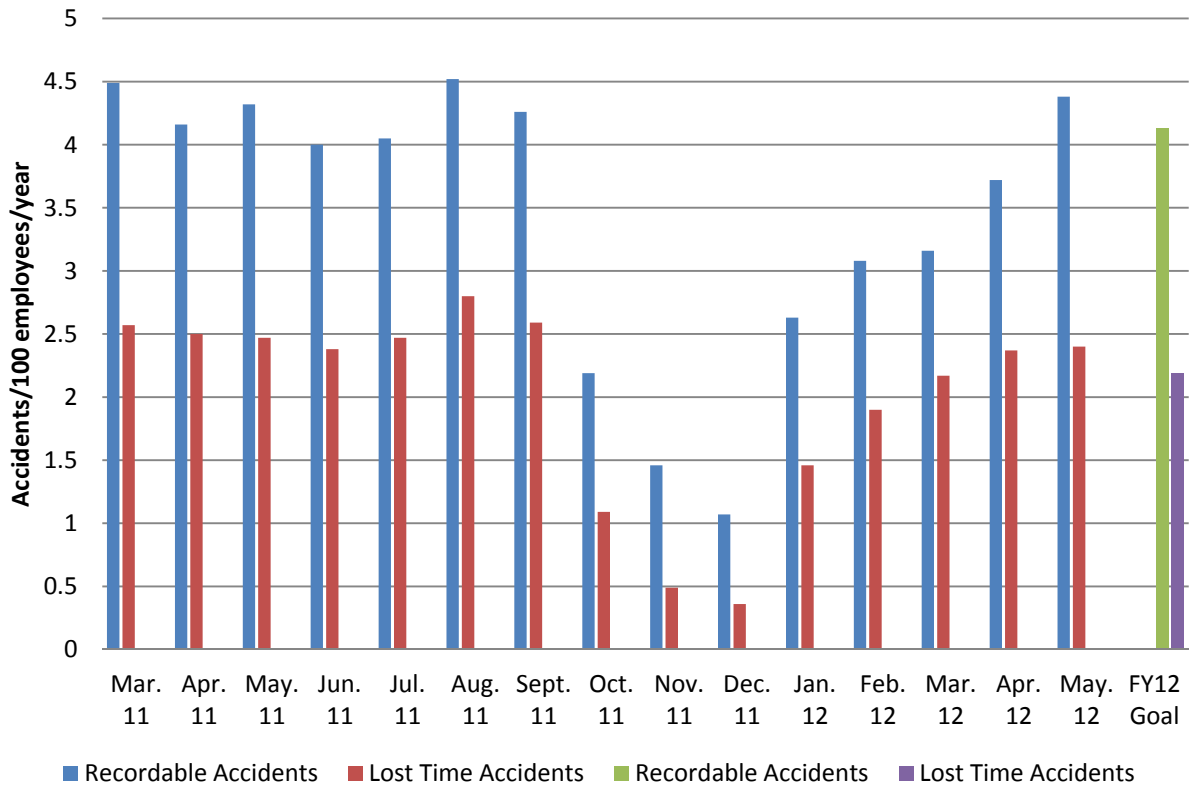


ACCIDENT STATISTICS

The total number of OMAO near miss; minor/first aid; medical treatment; lost time/light duty; and other incidents reported during June 2012 is listed in the table below. Accident rates over the past 15 months are shown the bar graph that follows.

Near Miss - 2 Near miss - 2
Minor/First Aid - 6 Slip, trip, fall - 2 Exertion/Strain - 3 Contact with - 1
Medical Treatment - 2 Slip, trip, fall - 1 Laceration - 1
Lost Time/Restricted Duty - 2 Slip, trip, fall - 1 Contact with - 1
Other - 0 Environmental - 0

OMAO Accident Rates



OMAO Annual Accident Rates*

	FY11 Total	FY12 YTD	FY12 Goal
Recordable Accident Rate	4.26	4.38	4.13
Lost Time Accident Rate	2.59	2.40	2.19

*Accident rates are calculated based on the total number of recordable and lost time accidents that occur in the workplace compared to the total number of hours worked by all employees at that workplace. The accident rate represents the number of accidents that have occurred per 100 employees for the year.

RECENT INCIDENTS: CAUSES AND LESSONS LEARNED

This section provides a description of recent incidents that have occurred in OMAO. In many cases, more thorough follow-up investigations have been conducted and more comprehensive lessons learned have been disseminated to targeted audiences within OMAO. The information below is intended to remind us of the importance of staying safe.

Description: A crewmember aboard a NOAA ship was returning to the vessel. While crossing the brow which was being

Description: In the process of assisting to tie up a NOAA ship, an employee at a NOAA port facility sustained a rope burn to the

<p>temporarily supported on the well deck by a five gallon plastic bucket, the brow slipped off the bucket and see-sawed down to the deck. The impact caused injury which required medical evaluation and treatment.</p> <p>Causal Factors: An improperly secured and supported brow was the primary cause of this incident. A temporary arrangement was in place due to maintenance being done on the brow.</p> <p>Lessons Learned: Ensure brows are properly supported with equipment designed and intended for that purpose. If proper support needs to be removed temporarily, restrict use of the brow until permanent means to support the brow are in place.</p>	<p>fingers that required first aid when the heaving line being handled surged and slipped through the grasp after taking the weight of the eye of the mooring line.</p> <p>Causal Factors: Primary cause of this incident was the heaving line taking the full load of the mooring line. Lack of experience, lack of attentiveness, and lack of communication, verbal or otherwise, between line handlers on the ship and on shore were contributing factors.</p> <p>Lessons Learned: Ensure people involved with tying up vessels are properly trained and experienced in line handling. Consider use of gloves during line-handling evolutions to prevent rope burns and other injuries.</p>
<p>Description: NEAR MISS – While in port, a lightning strike occurred on or near a NOAA ship in the vicinity of the shore power connection causing both shore power breakers to trip which caused the ship to lose power. Several people on deck at the time had just concluded crane operations and witnessed the deck “light up” above them and transit the shore power cable.</p> <p>Causal Factors: Root cause of the lightning strike was a thunder storm in the area. Root cause of the near miss was personnel not being aware of the severity of the storm and their surroundings, downplaying the associated risk, and continuing work on deck in order to accomplish a project task. A contributing factor was not closing the weather decks. The procedures for closing weather decks in port were not well defined.</p> <p>Lessons Learned: In this case, the ship plans to update deck equipment qualification procedures and crane operations to indicate no crane operations when lightning is visible - no matter how far away it appears. OOD and bridge watch will also monitor weather alerts (including mobile alerts) and restrict work to inside during lightning hazards. NOAA lightning awareness information will be reviewed and shared with all hands.</p>	<p>Description: A crewmember aboard a NOAA ship was organizing materials in the machine shop and had a stack of copper tubing on the deck. While traversing the work area, the crewmember stepped on the tubing instead of walking around the tubing. The tubing did not roll, but the surface was slippery and the crewmember lost footing, slipped, and sustained an injury in an effort to regain balance.</p> <p>Causal Factors: Primary cause of the incident was stepping on the tubing instead of walking around it. The work being done in the machine shop was ironically part of an ongoing effort to improve organization of materials and overall safety conditions in the shop.</p> <p>Lessons Learned: The primary lesson learned is a reminder of the need to apply the cardinal rules associated with traversing areas throughout the ship. Never step on fire hoses, the bites of lines, or other obvious tripping hazards typically found on the deck of a ship. A secondary item for consideration is not to jeopardize near term safety in an effort to make long term safety improvements without first assessing the hazards associated with the work involved.</p>

OMAO Safety and Environmental Compliance Division regularly posts Accident Investigation and Lessons Learned on the following web site:

http://www.omaο.noaa.gov/accident_investigations_lessons_learned/index.html

BEST PRACTICES

Below is a brief summary from a discussion shared by the NOAA Aviation Safety Board. It is related primarily to aircraft operations and air travel, but it is applicable to a wide range of scenarios.

“Best practices call for the wearing of only natural fibers like cotton or wool when traveling by air . . . and when working around open flames, or in areas where there is increased risk of fire . . . because of the greater flammability of synthetics.”

The best ideas for improving safety come from the field. Do you have an idea to help prevent injuries? Please send it to the SECD Chief (omaο.secd@noaa.gov) and we will plan to share it throughout OMAO.

NEWS AND NOTES

Ship of the Quarter Safety Award – We are pleased to announce that **NOAA Ship *Fairweather*** is the winner of the Ship of the Quarter Safety Award. Congratulations *Fairweather!* Crew members will receive either one day or two days of additional time off based upon their time spent aboard the ship during the quarter. The order of finish in the scoring was: first place, *Fairweather*; second place, *Okeanos Explorer*; followed by *Thomas Jefferson* and *Oscar Elton Sette*, in third and fourth respectively. The difference in scoring across the fleet was primarily due to increased near miss reporting, mitigation of hazards, and proactive safety stand-downs above and beyond minimum requirements that addressed ship-specific safety issues and needs.

Please remember to submit reports of proactive safety activities to Safeship.moc@noaa.gov. For more information about the award, please refer to safety procedures document 1701-23, Proactive Safety Improvement Award – Ship of the Quarter. The document is available via the OMAO Document Management System on the inside OMAO website, <http://10.49.29.4/WebDesktop/Binders.aspx>.

AOC Safety Pro of the Quarter - LTjg Johannes Gebauer was awarded the Safety Pro of the Quarter Award for his extra diligence in regards to a maintenance-related safety issue. After NOAA Aircraft N45RF was returned to service following landing gear work, the pilots noticed the trunion bolt on one set of landing gear protruding further than the other set and questioned the mechanics at the contract facility that performed the work. The mechanics indicated that it was normal since the gear had been shimmed. The pilots accepted this answer and the aircraft flew multiple missions before LTjg Gebauer was briefed on the situation and inspected it himself. He too was concerned with the difference between the gear and likewise questioned the mechanics who performed the work. Instead of accepting the mechanic's explanation he took pictures and sent them to AOC's mechanics and got a second opinion. It turns out that the condition was indeed not safe and had it gone uncorrected most likely would have resulted in the one set of

landing gear failing either in flight or on the deck, either of which most likely would have had catastrophic results. LTjg Gebauer is to be commended for his perseverance, assertiveness and professionalism in preventing what easily could have been a serious mishap or worse. Congratulations LTjg Gebauer!

ICAP Aviation Professional of the Year, Aviation Safety Category – Commander Mark Nelson was recently awarded the 2012 Interagency Committee on Aviation Policy (ICAP), Aviation Professional of the Year, in the Aviation Safety Category. This award is given annually to the best Federal Aviation Professional in an aviation safety position whose primary duties support an Executive Agency's Federal flight program. This prestigious award recognizes CDR Nelson's demonstrated excellence in improving the safety, efficiency, and effectiveness of NOAA AOC's aviation program in his role as Chief, Safety, Standardization and Training Branch. ICAP was established by GSA to promote sound policy and foster the highest aviation standards within the non-DoD federal aviation community. ICAP membership includes DOC, DOJ, DOT, DOI, DHS, NASA, and NOAA. This award not only reflects the many significant achievements of CDR Nelson, but also reflects the effectiveness of AOC's Safety Program in total. Bravo Zulu to Mark for his uncompromising efforts in cultivating an effective safety culture at AOC!

Recently Issued Procedures Documents – Three new procedures documents: 1701-09 Hot Work Operations V2.0; 0701-17 Management of Shipboard Ozone Depleting Substances and Refrigerants; and 1102-08 Bridge Resource Management, were recently signed by RDML Devany. Electronic copies of the documents have been distributed to the fleet (ship reminder: update your SVN). Copies of the documents can also be found in the Document Management System on the inside OMAO website, <http://10.49.29.4/WebDesktop/Binders.aspx>.

Lightning Awareness – Information regarding on-the-job lightning safety is available from NOAA via the following link: <http://www.lightningsafety.noaa.gov/job.htm>. The information is useful in developing procedures and precautions for your specific work location.

Glove Safety – There has been a great deal of discussion over the years regarding use of gloves when performing various tasks. Safety professionals typically recommend that gloves be worn whenever there are hazards associated with injuries to the fingers or hands. It is understood that not all workers believe gloves will prevent injuries. Some workers in fact believe the use of gloves, in certain instances, can actually contribute to the cause of accidents. The fact remains there are many gloves available on the market today whose construction and design take into account the job being performed so that they do not potentially contribute to the cause of an accident. The key is finding the right glove for the job. More information on gloves and glove safety can be found at:

http://www.nsc.org/safetyhealth/Pages/Trends-in-hand-protection.aspx#.T_3ftZFwWcc

http://www.nsc.org/safetyhealth/Pages/8%2011%20Safety%20at%20hand%20Use%20the%20right%20glove%20for%20proper%20protection.aspx#.T_3n2pFwWcc

http://www.ansellpro.com/main/pressRoom_whitePapers_details.asp?rld=39

TERM OF THE MONTH

Situational Awareness – The perception of environmental elements with respect to time and/or space, the comprehension of their meaning, and the projection of their status after some variable has changed, such as time. Lacking or inadequate situational awareness has been identified as one of the primary factors in accidents attributed to human error. Situational awareness is especially important in work environments where information flow can be quite high and poor decisions may lead to serious consequences.

COMMON INTERESTS

Below is an article published in a recent Nafrtrade newsletter. Nafrtrade is a non-profit organization representing the interests of the shipping industry.

Seaman Fatigue: A hidden problem with serious consequences



Most Americans have experienced fatigue in the course of their work lives, such as trudging into work after a sleepless night or carrying life's worries into the workplace. Unfortunately, working while fatigued can be particularly dangerous for those who are in charge of the nation's most complex machinery like airplanes, trains and ships.

What is Fatigue?

According to the National Transportation Safety Board (NTSB), fatigue is caused by poor quality sleep or insufficient sleep due primarily to a worker's living environment, off-duty personal choices and medical conditions. When maritime workers are not well-rested, it becomes difficult for them to operate machinery properly. Unfortunately, many individuals do not recognize that they are fatigued, or they think their fatigue does not affect their ability to work.

The NTSB believes that fatigue is one of the most important factors in determining the work-hours of employees that operate machinery, including marine vessels. It recommends that employers establish hours-of-service limits using data that accounts for human fatigue.

Seaman fatigue is a major concern of marine safety groups, as it regularly contributes to seaman injuries. The International Maritime Organization's Subcommittee on Standards of Training and Watchkeeping defines fatigue as a "degradation of human performance," including the impairment of a seaman's ability to make reasonable decisions and the slowing down of a seaman's physical and mental reflexes.

What Causes Seaman Fatigue?

Ship design, scheduling and ship organization all contribute to seaman fatigue. In general, these factors affect a seaman's ability to get regular, quality sleep, stress levels and exposure to

adverse environmental or psychological conditions. Factors that negatively contribute to seaman fatigue include:

- Frequent changes to ship and crew assignments
- Shift work which requires seamen to work alternating day/night shifts
- Lack of standard operating procedures
- Frequent port calls that require loading, unloading and navigating congested waters
- Consecutive, long tours of duty
- Lack of ship automation, requiring more attention from crew
- Adverse environmental conditions like noise and vibration

How Can Seamen Avoid Fatigue?

Fortunately, it is possible for seaman to avoid fatigue, but most solutions involve employer action. Factors that can decrease seaman fatigue include:

- Continuity of ship and crew assignments
- Implementation of and training on standard operating procedures
- Adequate time between port calls
- Breaks between tours of duty
- Adequate ship automation that requires less attention from crew
- Control of ship noise and vibration

In addition to these factors, employers should allow seamen eight hours of rest after 13 hours of work in every 24-hour period and limit watches to six hours or less.

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Safety . . . our mission depends on it