Office of Marine and Aviation Operations

SAFETY NEWS

From the Safety and Environmental Compliance Division

FIFTH EDITION MARCH 2012

We are pleased to announce that Mr. Kevin L. Ivey has reported aboard as Chief, Safety and Environmental Compliance Division. Mr. Ivey comes to NOAA's Office of Marine and Aviation Operations after serving 21 years in the U.S. Coast Guard. His assignments while in the Coast Guard included: Chief of the Port Operation School at Training Center Yorktown Virginia; Chief of Prevention for Marine Safety Unit Galveston, Texas City, Texas; and Chief of the 8th Coast Guard District's Marine Casualty Investigations Branch, New Orleans, LA. Mr. Ivey is qualified in Pollution Investigations, Marine Casualty Investigations, Facility Inspections (Safety and Security), Domestic Vessel Inspections, and Foreign Vessel Inspections. Mr. Ivey holds a BA degree in English, a Joint Professional Military Education Level 1 from the Naval War College, and a MS degree in Quality Systems Management with a concentration in Homeland Security. Additionally, Mr. Ivey holds certifications for Lean Six Sigma and Safety Management Systems Audits.

The focus of this month's newsletter is personal protective equipment, commonly referred to by its acronym, PPE. PPE is viewed as the final defense against accidents and injuries, with engineering design and operating procedures being the primary and secondary methods used to achieve safety in the workplace. There are many noteworthy items throughout the newsletter including identifying the winner of the first ever NOAA Ship of the Quarter Proactive Safety Award. In the statistics section this month we show the percentage of accidents broken down by type, in addition, we provide an update of our accident rates for the year. We are pleased to report that accident statistics show that near-miss reporting and reporting of minor incidents is increasing. This is great news, because recognizing near-misses and taking the time to report and analyze near misses and minor incidents improves safety and prevents more serious accidents/incidents from occurring. Again, everyone is asked to keep up the good work and to remain diligent to prevent accidents.

CONTENTS

POLICY SPOTLIGHT

Some safety regulations are very prescriptive regarding the type and use of personal protective equipment (PPE) required for a given job, for example the handling of materials containing asbestos, but for the most part, OSHA provides only general standards and guidance regarding PPE and puts the onus on the employer to determine what precisely is required. PPE that is most commonly needed when working on or around ships and aircraft include: hard hats, personal floatation devices, eye protection, face shields, ear protection, gloves, and foot ware. In addition, specific tasks may call for the use of fall arrest equipment, respirators, or anti-exposure coveralls.

The key to the effectiveness of all PPE is choosing the correct equipment and wearing it properly, for example, it may be more important to choose foot ware with oil/slip resistant soles than foot ware with steel toes. Similarly, it may be equally important to choose eye protection that not only protects the eye from potential physical impacts, but also provides a tight seal around the eye to prevent small particles and debris from entering the eye. Regarding glove technology, it has advanced to such a degree that there is practically a glove for every job imaginable that protects the fingers and hands without compromising tactile requirements or dexterity. PPE is easily obtained and replaced, not so with eyes, and hands, and feet. Please choose, use, and wear PPE properly.

PPE requirements applicable to the NOAA Fleet are addressed in Procedure 1701-06, Personal Protective Equipment. The procedures for the acquisition of PPE are outlined in Procedure 1701-11, Procurement of Protective Clothing and Equipment. Both documents are available via the OMAO Document Management System on the inside OMAO website, http://10.49.29.4/WebDesktop/Binders.aspx.

COMMON INTERESTS

Below is article from CLMI – Safety Training's January 2012 newsletter with interesting information about OSHA violations. The article lists several common safety requirements on which we need to focus.

OSHA'S TOP 10 CITATION LIST FROM 2011

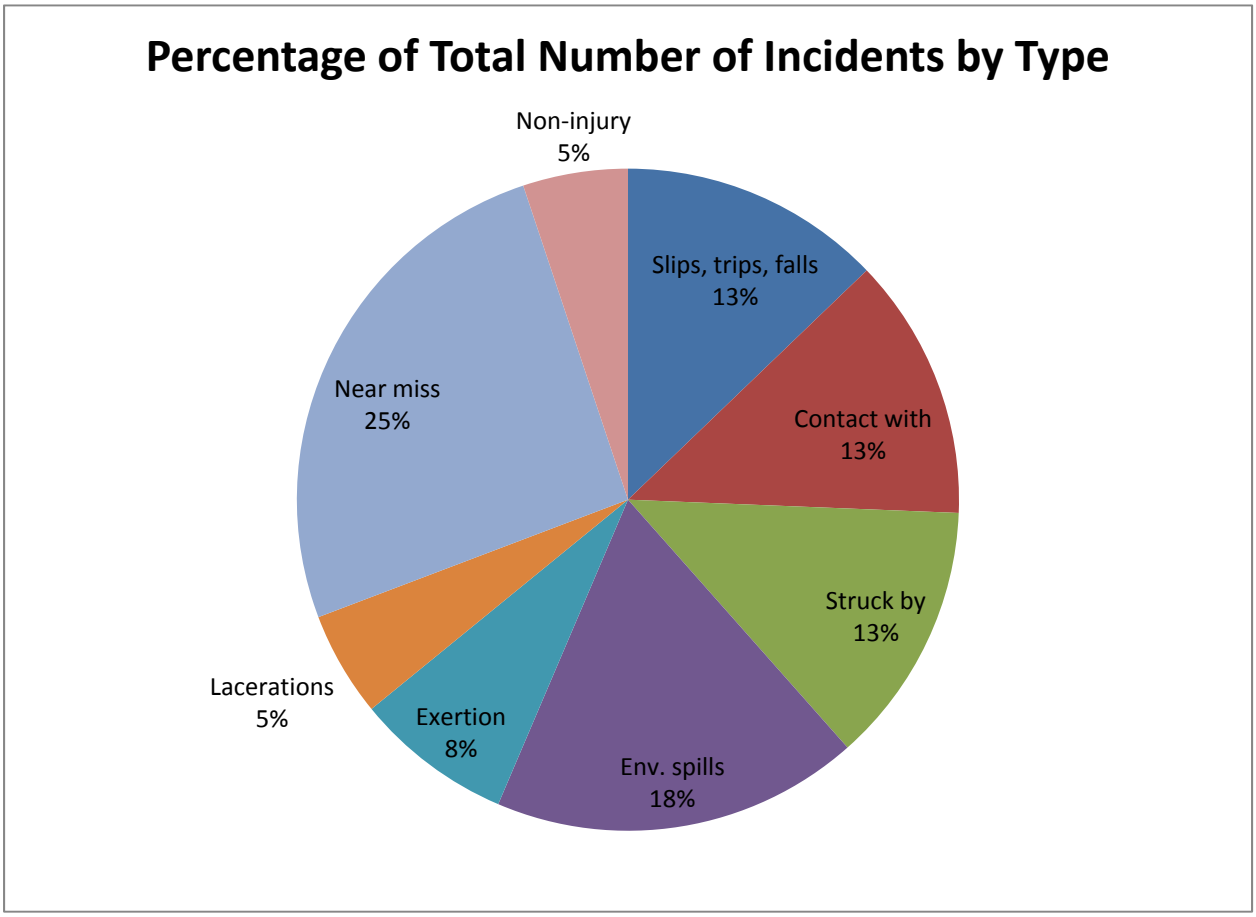
Patrick Kapust, deputy director of OSHA's directorate of enforcement programs, released the list in November on the National Safety Conference (NSC) expo floor in Philadelphia. From fall protection, which garnered the highest number of violations in FY 2011, to machine guarding, these are the hazards and standards that employers may want to pay closer attention to:

1. Fall protection – 7,139 violations. "Falls continue to be the leading cause of fatalities in construction," said Kapust.
2. Scaffolding – 7,069 violations. In 2010, Kapust said, 37 workers died from scaffolding-related incidents.
3. Hazard Communication – 6,538 violations. "Employees have the right to know and identify hazards," Kapust pointed out.
4. Respiratory Protection – 3,944 violations.
5. Lockout/tagout – 3,639 violations
6. Electrical – wiring methods – 3,584 violations
7. Powered Industrial Trucks – 3,432 violations
8. Ladders – 3,244 violations.
9. Electrical – general requirements – 2,863 violations. According to 2009 BLS data, 1,600 nonfatal injuries were attributed to electrical shock.
10. Machine guarding – 2,728 violations. Kapust pointed out that in 2010, 90 workers were killed in machinery. In 2009, 5,930 occupational amputations were reported.

ACCIDENT STATISTICS

The total number of OMAO near miss; minor/first aid; medical treatment; lost time/light duty; and other incidents reported during the second quarter of 2012 (January – March 2012) is listed in the table below and is shown as a percentage by incident type, on the pie chart that follows.

Near Miss - 10				
Near miss - 10				
Minor/First Aid - 6				
Contact with - 1	Struck by - 3		Slip, trip, fall - 1	Laceration - 1
Medical Treatment - 7				
Contact with - 3	Struck by - 1	Slip, trip, fall - 1	Exertion - 1	Laceration - 1
Lost Time/Restricted Duty - 7				
Contact with - 1	Struck by - 1		Slip, trip, fall - 3	Exertion - 2
Other - 9				
Non-injury - 2	Environmental - 7			



OMAO Annual Accident Rates

	FY11 Total	FY12 YTD	FY12 Goal
Recordable Accident Rate	4.26	3.09	4.13
Lost Time Accident Rate	2.59	1.90	2.19

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: While chipping paint with a needle gun on the back deck aboard a NOAA ship, a paint chip came in contact with a crewmember's eye despite having safety goggles on at time. An eye wash station was	**Description**: A crewmember aboard a NOAA ship was drilling a hole into a bulkhead through a piece of attached sheet metal high on the bulkhead. While working on the sheet metal, some debris came in contact with the

used to remove the paint chip and the eye was examined by the medical person in charge aboard the ship. No damage to the eye was observed, only minor irritation. The crewmember returned to work and again debris got into the eye despite wearing goggles and a dust mask. The eye wash station was used again for the second paint chip. After an examination of the goggles and how they fit, it was concluded that the paint chips must have come in through a gap between the face and the nose piece. **Causal Factors**: The primary cause of the incident was improper fitting goggles. The selection of goggles in various sizes and shapes available to the crewmember was limited. **Lessons Learned**: Ensure the workplace has an appropriate variety of sizes and styles of safety goggles suitable for the job and to assure a proper fit for all workers who need them. As a result of this particular incident, the ship has found that the use of foam lined ski goggles work very well and may become a permanent part of the ship's PPE inventory.	crewmember's eye despite the fact that safety goggles were being worn at the time. The debris entered through the space between the goggles and skin. The emergency eye wash station in the space was used to flush the eye and additional eye wash was provided by the ship's medical person in charge. The crewmember had eye pain, but no visible redness or swelling of the eye was present. Within the next couple of days, pain and irritation persisted requiring the eye to be examined by a doctor. **Causal Factors**: The primary cause of the incident was wearing goggles that did not fit properly enough to prevent debris from entering the eye. A contributing factor was the fact that the work being done was above eye level making it more likely that debris would fall onto the employee in the vicinity of the employee's eyes. **Lessons Learned**: As a result of this incident, the ship reviewed its inventory of safety goggles and locations where goggles were stored. Additional goggles were procured and placed at work locations to ensure an adequate number and type were available that will properly fit each crewmember. The need to wear properly fitted eye goggles and the availability of additional goggles were discussed during a follow-up safety stand down aboard the ship.

Description: A member of the engineering department aboard a NOAA ship was cleaning the ship's fuel oil purifier. While reassembling a fairly large, tight fitting metal component of the purifier, the ship rolled, causing the component to slip from the crewmembers grasp, sliding along the crewmembers hand, resulting in a laceration that required first aid provided by the ship's medical person in charge. **Causal Factors**: The primary cause of this incident was ship's motion in rough seas, which in turn, caused the loss of control of the equipment being handled. **Lessons Learned**: Wear gloves that improve your grip and protect your hands when handling objects that have the potential to puncture or cause lacerations if they were to slip from your grasp. Perform maintenance that poses a risk of injury due to the handling of sharp objects during periods of calm weather if possible, or work with a "buddy" so that objects can be handled more securely.	**Description**: A crewmember aboard a NOAA ship at sea, while transiting through a water tight door leading from the house to the weather deck, tried to stop the door from slamming as it swung closed. The door was too far into its swing and the crewmember's thumb was crushed by the door as it slammed shut. The crewmember's injury was initially treated by the medical officer aboard the ship but required follow-up medical attention ashore when the ship returned to port. **Causal Factors**: Primary cause of this incident was improper hand placement on a water tight door. **Lessons Learned**: Maintain control of water tight doors and hatches at all times. They are extremely heavy and have a sharp knife edge that seals the door/hatch against the jamb. Always be aware of your finger and hand placement when transiting hatch openings. Never attempt to stop a swinging water tight door or hatch that you have lost control of while it is in motion.

BEST PRACTICES

During Asbestos Abatement and Hazardous Waste Operations and Emergency Response (HAZWOPER) training several years ago, the instructor showed the class the following and asked, "What's wrong with this picture?"

The worker is wearing the respirator incorrectly (note the face mask head straps). The respirator face mask should be worn under the hood of the protective

coveralls. Otherwise the face mask needs to be removed before the coveralls are taken off. As a result, the respirator can't provide protection from debris and contamination that may become airborne when the coveralls are taken off.

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 (omao.secd@noaa.gov) and we will plan to share it throughout OMAO.

NEWS AND NOTES

Ship of the Quarter Safety Award – Scoring for the NOAA Ship of the Quarter Safety Award has been tallied. The scoring at the top was very close, and . . . the winner is: **NOAA Ship *Okeanos Explorer***. Congratulations for earning the first NOAA Ship of the Quarter Proactive Safety Award! 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, *Okeanos Explorer*; tied for second were *Nancy Foster*, *Thomas Jefferson*, and *Ferdinand R. Hassler*; tied for third were *Ka'imimoana*, *Oregon II*, *Ronald H. Brown*, and *Bell M. Shimada*. The difference in scoring across the fleet was primarily due to increased near miss reporting, increased proactive safety stand-downs, and training above and beyond minimum requirements to address 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.

Safety Management System at AOC - The Aircraft Operations Center is the latest U.S. Government aviation program to become internationally recognized as Safety Management System (SMS) Level 1 certified. During the week of 28 Feb, 2012, four auditors conducted a detailed inspection of the AOC's policies and procedures as they pertain to aircraft operations, maintenance, safety and safety management. The audit lasted three days in which AOC personnel were interviewed, policies were reviewed and practices were combed over. At the end of the audit, there were five minor findings and thirteen best practice recommendations for the AOC to implement, all of which are currently in work. The AOC has been recommended for SMS Level 1 certification and will proudly display this certificate onboard every aircraft. In two years the AOC will be eligible to request Level 2 certification. For Level 2, the auditors will ensure policies and procedures are in full action and being complied with by all employees and contractors. Based on current practices, it is believed AOC is currently operating closer to Level 2 than Level 1.

Fleet Inspection Website – A fleet inspection website is now available via the OMAO home page at the following address: http://www.omao.noaa.gov/noaafleetinspection/index.html. The site has a lot of good information including the current fleet inspection schedule, recent news, USCG marine safety alerts, and links for submitting questions regarding fleet inspection requirements.

Incident Investigation Reports and Lessons Learned Documents – Several recent incident investigation and lessons learned documents have been posted on the web. They can be viewed via the link on OMAO's home page, http://www.omao.noaa.gov/.

Safety Goggles – There has been an increase in the number of incidents where debris has irritated crewmember's eyes even though safety goggles were being worn. Don't become complacent about wearing safety goggles. It is easy to believe they aren't needed because when chosen and worn properly the wearer usually doesn't know that they prevented something from entering the eye. It is only when they are not used properly that we find out how important they truly are. Learn from recent incidents that have occurred to others. Chose the correct type of safety goggles based on the hazards the job presents and wear the goggles properly. The following website from Grainger Safety Quick Tips contains good information on the types and uses of safety goggles: http://www.grainger.com/Grainger/static/safety-goggles-types-uses-cleaning-315.html?r=l&cm_mmc=LabSafety-_-Integration-_-AllPages-_-AllPages, and the following link provides clarifying guidance from OSHA regarding selection of face and eye protection: http://www.osha.gov/SLTC/etools/eyeandface/ppe/impact.html.

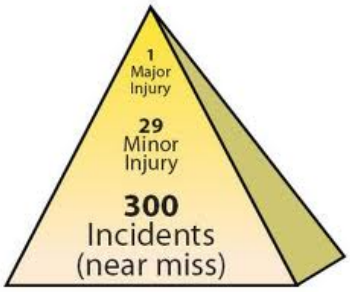
DOC Energy and Environmental Stewardship Awards – The Department of Commerce recently announced its 2012 Energy and Environmental Stewardship award winners. Congratulations go out to OMAO's Aircraft Operations Center Green Team, recipient of this year's Building the Future Award.

The Building the Future Award recognizes a Federal civilian or military facility or installation that successfully demonstrates the policy and performance goals of Executive Order 13514 by incorporating sustainable practices and principles into all aspects of their operations by highlighting significant achievements in building or installation design, operation and management, supply chain management, resource conservation, community engagement, employee involvement, and innovation in order to create a more sustainable facility.

Congratulations AOC!

TERM OF THE MONTH

Accident Pyramid: The accident pyramid was developed by H.W. Heinrich in 1931. It is based on the study of industrial accidents and employee injuries. It is commonly referred to as the safety pyramid. The study revealed that for every 300 non-injury incidents, there are 29 minor injuries and one major injury. These findings suggested that if an organization can reduce near miss incidents, they can eliminate major injuries.



SAFETY STAFF

OMAO	MOC	AOC
Mr. Kevin Ivey Chief, SECD Kevin.ivey@noaa.gov 301-713-7706 CDR Debora R. Barr Deputy, SECD Debora.r.barr@noaa.gov 301-713-7675 Bill Cunningham SECD Staff Bill.cunningham@noaa.gov 301-713-7666 Jim Kelley NOAA Aviation Safety Jim.kelley@noaa.gov 301-713-7612 Jack Burks Fleet Inspection Sylvester.j.burks@noaa.gov 757-441-6766 CDR Keith Golden Small Boat Program Keith.golden@noaa.gov 206-553-0258 Dave Dinsmore NOAA Dive Program Dave.dinsmore@noaa.gov	Doug Friske Chief, STEM Douglas.a.friske@noaa.gov 757-441-6709 Doug Smith STEM Staff Douglas.w.smith@noaa.gov 757-441-6465 Julie Wagner STEM Environmental Officer Julie.n.wagner@noaa.gov 541-867-8808 Kevin Fleming STEM Fleet Training Coordinator Kevin.j.fleming@noaa.gov 757-441-6800 Ted Fulton STEM Staff Ted.fulton@noaa.gov 757-441-3484	CDR Mark Nelson AOC Safety Officer Mark.b.nelson@noaa.gov 813-828-3310 x3102 LCDR Nick Toth AOC Safety Staff Nicholas.j.toth@noaa.gov 813-828-3310 x3015 LT Chris Kerns AOC Safety Staff Christopher.kerns@noaa.gov 813-828-3310 CDR John Harris, USPHS Aviation Medical Officer John.harris@noaa.gov 813-828-3310 Jon F. Dixon Aviation Life Support Equipment Jon.f.dixon@noaa.gov 813-828-3310 x3040

206-526-6705 Steve Urick NOAA Dive Safety Steve.urick@noaa.gov 206-526-6223		

Safety . . . our mission depends on it