Office of Marine and Aviation Operations SAFETY NEWS

From the Safety and Environmental Compliance Division

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This month's edition focuses on environmental programs and environmental compliance. We have had a number of non-injury environmental mishaps relating to ship operations and maintenance: four during the month of January 2012 and two in December 2011. The Policy Spotlight covers requirements for Shipboard Oil Pollution Emergency Plans (SOPEPs), and there is a very good Best Practices article describing the Hazardous Communication and Hazardous Materials (HAZCOM/HAZMAT) program at the Aircraft Operations Center.

We are pleased to report that we have experienced a reduction in accidents resulting in personal injury this month. Everyone is asked to keep up the good work and to remain diligent to prevent accidents.

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POLICY SPOTLIGHT

Our fleet maintains USCG-approved Shipboard Oil Pollution Emergency Plans (SOPEPs). The SOPEP details the members of the vessel spill response team, the location of spill equipment, and station bills to be employed during spills. It also defines requirements for spill equipment and quarterly spill drills.

The Shipboard Environmental Compliance Officer (ECO) is responsible for the SOPEP and works with the Vessel Spill Response Team to ensure the ship is prepared for spills.

If your vessel has not conducted an oil spill drill in some time, start with a "walk through drill." The ECO and Vessel Spill Response Team should identify the highest risk locations for spills, and then identify the closest spill kit to this location. Determine how long it takes to get equipment from the kit and decide if that is the best equipment staging option available. Open the kits to assess their contents: is there sufficient supply of diapers, kitty litter, socks and disposal bags? Determine how you'll plug scuppers in a hurry (balled up diapers are better than nothing). Determine location of absorbent booms; how many feet are on board; how will you use

the absorbent boom in the event of a discharge. Log the drill. Contact MOC ECO if you require additional spill equipment.

Conduct an announced drill next. Use water, diluted coffee, or another stand in for oil to simulate the spill. Respond as quickly as possible. Debrief the drill to identify successes and opportunities for improvement. Log the drill.

Once you've practiced, ask the CO about conducting an unannounced drill. Use a previous spill on your ship as a "scenario" or contact MOC ECO to identify good mock up spills from other ships. Inform as few people as possible. Time the drill; debrief the experience. Log the drill. Feel free to be creative by including a spill during a fire or damage control drill.

Your SOPEP will be reviewed annually by the ECO and briefed to the CO prior to submission to USCG. At that time, we'll make changes to your document to keep it fresh.

Remember, spill plans, like a SOPEP **only work if you exercise them**

COMMON INTERESTS

Below is a brief article on oil spill prevention and response excerpted from a recently published U.S. Navy Energy, Environment & Climate Change Fact Sheet.

Oil Spill Prevention & Response

Oil spill prevention is a high priority for the U.S. Navy. When spills do occur, the Navy has equipment pre-staged worldwide and uses highly trained personnel to contain and clean up spills as rapidly as possible.

The best way to minimize oil spill effects is to keep oil out of the water in the first place. The Navy has an aggressive spill prevention program that is improving oil handling procedures, personnel training, equipment reliability, and design and maintenance of ship engines.

The Navy continues to strive to reduce the number and volume of oil spills. Throughout its spill prevention program, the Navy concentrates on the entire spectrum of oil handling and is committed to continuous improvement.

Navy activities report all oil spills, ranging from a small sheen (<1 cup) to vessel groundings (>100,000 gal), including spills from unknown sources. Reports are made through the Navy chain of command as well as to the National Response Center, the federal government's national communications center.

The Navy maintains an in-house capability to respond to spills of all sizes. In addition to pollution control equipment strategically positioned at shore locations around the globe, every Navy ship is equipped with an oil spill kit that is designed to prevent spills from entering the water. The Navy routinely exercises response plans and equipment to ensure preparedness.

The Navy works closely with the U.S. Coast Guard, EPA, state on-scene coordinators, and other affected stakeholders to contain oil spills from any source. For example, Navy fleet oil skimmers collected half of the crude oil recovered from the Exxon Valdez spill in Alaska.

In response to the Gulf of Mexico oil spill of 2010, the Navy supplied approximately 100,000 feet of oil containment boom to reduce the environmental impact of the spill. Naval Sea Systems Command's (NAVSEA) Supervisor of Salvage and Diving (SUPSALV) positioned equipment from Texas to Florida to support the oil spill response effort. In addition to the boom systems, SUPSALV also shipped 23 oil skimming systems to help clean up the spill. Navy equipment there has collected the equivalent of over 23,000 barrels of oil.

Oil spill prevention and response efforts are just two of the many ways the Navy works hard to protect the environment while meeting its national security requirements.

Oil Spill Preparedness at OMAO

Our experiences are similar to Navy: preparedness requires training; equipment staging; and knowledge of reporting procedures. Each of our ships maintains a Vessel Spill Response Team – ask your CO or your Shipboard Environmental Compliance Officer who is on your team.

We regularly hear that 'off the shelf' HAZWOPER training does not prepare us for common spills in our fleet. Starting in 2011, we teamed up with contractors to provide NOAA-specific HAZWOPER training that focuses on **our** procedures for oil spills, laboratory spills, spill preparedness, and reporting. NOAA-specific HAZWOPER has been delivered in New England, Pascagoula, MS, and Newport, OR. Have your Shipboard ECO contact MOC ECO (Julie Wagner) to schedule HAZWOPER for ships in your area.

Proper equipment staging reduces responses time and can even keep oil out of the water. Vessel Spill Response Teams should assess the inventory for proximity to high risk spill locations, quantity and type of equipment – perhaps during a "walk through" drill. The equipment must be inventoried to ensure it meets minimum requirements each quarter. Everyone on board needs to know the location of spill equipment and the ship-specific procedures for announcing a spill.

Everyone knows to notify the National Response Center (NRC) following a spill, but our internal reporting requirements are leaving many in our fleet confused. We are working on clarifying our own internal reporting procedures. For the moment, please use the NF-57-17-137 to notify of spills within 24 hours of the event. This report can stand in for the "Written Report to MOC" detailed in the SOPEP. See "News and Notes" for more information.

Be mindful of events and activities that have risk of spills and make sure all parties involved know the location of the closest kit and who to notify in the event of a spill. We will start sharing information about spills that have occurred in our fleet – so we can learn from one another.

ACCIDENT STATISTICS

The total number of OMAO near miss, minor/first aid, medical treatment, lost time, and environmental incidents reported in January 2012 is listed in the table below. A bar chart showing monthly recordable and lost time accident rates follows.

Near Miss – 1
Slip Trip Fall - 1
Minor/First Aid – 2
Struck by – 2
Medical Treatment (no lost time) - 0
None
Lost Time – 2

Contact with - 1 Struck by – 1

Environmental – 4

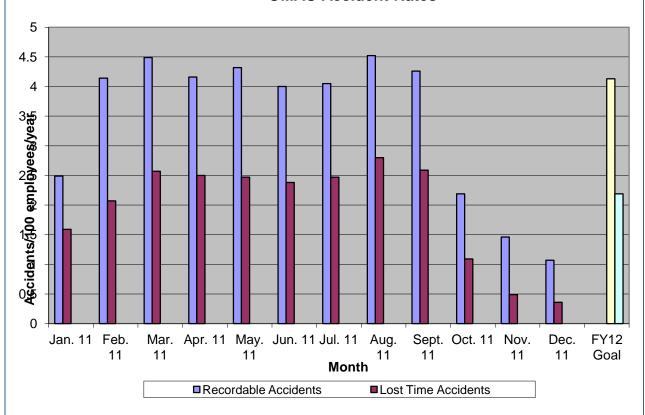
Oil spill non-injury - 4

Other - 2

Car accident (non- Fire (non-injury) - 1

injury) - 1

OMAO Accident Rates



The bar chart above shows OMAO accident rates over the previous 12 months. As can be seen, although OMAO experienced a series of high rates during FY11 there has been a significant decrease over the past three months. We have found these types of fluctuations are often attributable to changes in operating tempo and field season activities. Please keep this in mind and plan to participate in safety stand-downs and safety-related activities accordingly. OMAO accident rates in FY11, current year-to-date rates, and goals for FY12 are listed below.

	FY11 Total	FY12 YTD	FY12 Goal
Recordable Accident Rate	4.26	1.07	4.13
Lost Time Accident Rate	2.59	0.36	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. Please review and consider how we can all learn from these events. Consider using this content in a safety stand-down or during an oil spill drill.

All accidents and incidents must be reported in a timely manner, **including reports of environmental incidents**. NOAA requires that all workplace accident/illness/incident reports be submitted within 24 hours of occurrence and that serious incidents resulting in a fatality, permanent disability, hospitalization of three or more employees, or property damage in excess of \$1M, and those that pose an immediate threat to public safety and the environment are to be reported within eight hours of occurrence. Procedures for submitting accident and incident reports are included in this month's News and Notes section.

Description: A crewmember struck their foot on the corner of a mini-refrigerator in the stateroom resulting in a lost time accident due to a broken toe. The incident occurred in port at night while the crewmember was barefoot returning from the bathroom. The room was well lit, and the crewmember had walked past the fridge hundreds of times previously without incident.

Casual Factors: An obstructed walkway was the primary cause. The fridge on the floor (in the only available location) created a narrow walkway in the stateroom. Not wearing foot protection was also a contributing factor.

Lessons Learned: In most circumstances, the obvious corrective action would be to relocate or remove the fridge and/or require foot protection to be worn. In this case, however, there is no other place to locate the fridge. In addition, the employee lives aboard the ship and having a fridge adds to the quality of life aboard ship. Finally, wearing shoes to and from the bathroom at night may not be a practical solution. The employee acknowledges the need to be more careful, and the ship is looking into the possibility of adding padding to the corner of the fridge to prevent and reduce the severity and likelihood of a similar incident in the future.

Description: A hydraulic hose failed on a shipboard crane while attempting to load gear onto the ship. Hydraulic oil sprayed onto the deck and into the water. The crane was quickly secured and steps were taken to stop further discharge. Spill response equipment was well staged. A majority of the spill was contained on deck and cleaned up. The National Response Center was contacted and a spill report was submitted.

Casual Factors: Primary cause of this incident was equipment failure. Contributing factor may have been inadequate preventative maintenance of the crane's hydraulic hose.

Lessons Learned: Hydraulic line failures are our most common cause of oil discharge. A visual inspection of equipment is done on a regular basis but in this case, as in many instances, there was no evidence that the line was about to fail. We need to continue to be proactive with respect to equipment maintenance and inspection. Additionally, converting from mineral-based oil to biodegradable hydraulic oil in shipboard cranes and winches should be considered as funding permits. Ensure visual inspection of hydraulic lines occurs routinely. Conduct a spill drill on a ruptured hose. Have ECO and Vessel Spill Response Team check spill equipment staging. Order more supplies if

needed.

Description: A transmission fluid spill occurred from a pier-side air compressor that belonged to a ship-repair contractor. The spill was discovered by a crewmember aboard ship. Due to the air compressor malfunction, approximately three gallons of transmission fluid sprayed onto the pier and ship as well as into the water. The majority of the fluid ended up on the pier or was retained by a drip pan under the air compressor. Spill response was initiated by the ship. The spill was contained and cleaned-up using sorbent boom, absorbent pads, and kitty litter.

Causal Factors: A failed hose in the contractor's air compressor was the primary cause of the spill. A contributing factor may have been poor maintenance or inadequate preventive maintenance practices.

Lessons Learned: The contractor was the responsible party; however, lessons learned apply to future operations regardless of who is responsible. Use of drip pans and other secondary containment measures is of high importance. Stage drip pans under equipment that contains oils. Maintaining spill response plans and equipment is also vital. Be prepared to respond to spills, even if we are not the responsible party. For situations in which machinery is used on the pier. consideration should be given to securing or protecting the drainage on the pier provided taking that action does not interfere with other conditions or operations. Contractor past performance and demonstration of sound work practices should continue to be considered when awarding ship-repair contracts.

Description: After disassembling a structure that was used as a welding table, a Third Assistant Engineer (3AE) and an Oiler aboard ship propped a 3 ft by 3 ft, 3 inch thick heavy-grated steel plate that had been removed from the table against a stanchion and secured it with a line. After realizing it was blocking the walkway, they decided to move it. The 3AE rigged a canvas strap and chain-fall around an overhead frame and connected it to the steel plate. As final preparations were made to lift the steel plate, it fell onto the 3AE's leg pinning 3AE's ankle to the deck resulting in a dislocated ankle and a broken leg. The Commanding Officer conducted a safety briefing the following morning to remind crew they should be meeting daily with department heads to discuss potential safety hazards associated with tasks assigned for the day. A Standard Operating Procedure will be developed for engineering lifts including specific guidelines for utilizing deck department for assistance.

Casual Factors: The improper rigging and lifting of a large heavy object was the primary cause of the accident. Contributing factors include lack of assistance by personnel better suited to perform the job.

Lessons Learned: Rigging is a specialized activity that requires proper use of equipment by trained personnel. Attempts should never be made to perform tasks in which there is any uncertainty regarding use of equipment or procedures. In addition, communication and cooperation between departments should take place and proper tools and personnel should be assigned to perform tasks for which they are trained.

BEST PRACTICES

The Aircraft Operations Center's (AOC) Environmental Management HAZCOM/HAZMAT

Program is a great example of putting environmental laws into best practices. While all industry must follow OSHA regulations, some do it better than others. AOC's program in its current form was created by Mr. John Harrison who took his many years of experience with the Air Force and put his knowledge to good use. The key to the success of the program started with a strong written policy followed by initial training for all hands and continued training on an annual basis. The physical assets of the program are the true cornerstone of maintaining compliance on a daily basis at the user level. The collection systems are well organized, clearly marked, easily accessible to its users and kept in pristine condition. The Supply personnel at AOC are responsible for maintaining the collection sites and the right to know center along with controlling the use of hazardous materials at the Center. As with any program, it is only as good as those administering it, and AOC has some of the best.

AOC's Environmental Management Program has received many accolades over the past few years during its scheduled and surprise inspections. As tenants on a military base, the program is inspected annually (at a minimum) by the "ECAMP" team. In addition to base inspections, State and Federal EPA personnel routinely make "no-notice" visits. Over the past four years, not one discrepancy has been noted by any of the various inspection teams. MacDill AFB considers AOC as a "Best Practice" HAZMAT satellite collection center and uses them as an example for other tenants to follow.

If you are looking to see how a model program does business, look no further. The following pictures illustrate what a collection site should look like.









Solvents/Paints/Filters





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

A meeting is planned between OMAO SECD and MOC STEM in February 2012 to work on developing improved procedures for reporting all types of incidents. Pending the outcome of the meeting, OMAO employees are reminded to continue to submit accident and incident reports as follows:

NOAA Safety Policy requires reporting of all accidents and incidents that occur while on the job or in a duty status within 24 hours of occurrence. In addition to accidents resulting in injury and situations leading to work-related illness, reporting is required for near miss incidents, property damage incidents, and environmental incidents.

All incidents, with the exception of shipboard incidents, are to be reported using the NOAA online reporting system at http://www.seco.noaa.gov/incident_reporting. Shipboard incidents are to be reported using the NF-57-17-137 fillable pdf form (formerly the MOC-137) and submitted via email to MOC.Fleet.Accidents@noaa.gov. Electronic copies of the NF-57-17-137 have been distributed to the fleet. The form is also available on the Forms page of the Document Management System on the inside OMAO website, http://10.49.29.4/WebDesktop/Binders.aspx. The NF-57-17-137 can stand in for the "Written Report to MOC" following an oil spill.

Regardless of where they occur, aboard ship or ashore, all incidents are to be reported within 24 hours of occurrence. Serious incidents, that is, those resulting in a fatality, permanent disability, or hospitalization of three or more employees, those resulting in property damage in excess of one million dollars, and those that pose an immediate threat to public safety and the environment, are required to be reported within 8 hours of occurrence.

Two new procedures documents, 0601-01 Fuel Handling and 0701-06 Oil Spill Response and Shipboard Oil Pollution Emergency Plan (SOPEP), were signed by RDML Devany on December 20, 2011. The documents cover requirements for shipboard fueling and oil transfer, and for oil spill response. Electronic copies of the documents have been distributed to the fleet and can also be found in the Document Management System on the inside OMAO website, http://10.49.29.4/WebDesktop/Binders.aspx.

The Fleet Standards Office is currently working with the MOC Systems Development Branch to develop software that will replicate the Document Management System (DMS) that is now only available via the inside OMAO website. Once implemented, the software will automate the distribution of procedures documents to the fleet and ensure the availability of all information in the DMS independent of access to the inside OMAO website.

OMAO Emergency Phone Trees were exercised and tested on January 24, 2012. Supervisors are reminded to ensure that employee call lists are accurate and updated. Any changes to call lists or employee contact information are to be submitted to those at their respective Offices and Centers responsible for keeping Continuity of Operations (COOP) information up to date.

TERM OF THE MONTH

Spill or Discharge: Currently in our fleet this describes an incident resulting in overboard discharge of material (oil, gray water, sewage, etc). Spills contained on deck or within the confines of the ship are likely "near misses" and should be reported as such. All oil spills that enter the water, regardless of location of the vessel shall be reported to National Response Center (NRC) upon discovery of the spill and to MOC within 24 hours of the discharge (using the NF-57-17-137).

Significant Spill: Larger spills are often the result of an error chain and can provide an opportunity for more lessons learned. For oil discharges greater than 5 gallons, OMAO 0701-06 Oil Spills and SOPEP requires a "significant spill report." This report is intended to reduce our chances of repeat spills; key information will be shared with the fleet as "lessons learned." We encourage you to discuss these incidents within your Vessel Spill Response Team.

SAFETY STAFF

OMAO	MOC	AOC
CDR Debora R. Barr	Doug Friske	CDR Mark Nelson
Chief, SECD	Chief, STEM	AOC Safety Officer
Debora.r.barr@noaa.gov	Douglas.a.friske@noaa.gov	Mark.b.nelson@noaa.gov
301-713-7706	757-441-6709	813-828-3310 x3102
Bill Cunningham	Doug Smith	LCDR Nick Toth
SECD Staff	STEM Staff	AOC Safety Staff
Bill.cunningham@noaa.gov	Douglas.w.smith@noaa.gov	Nicholas.j.toth@noaa.gov
301-713-7666	757-441-6465	813-828-3310 x3015
Jim Kelley	Julie Wagner	LT Chris Kerns
NOAA Aviation Safety	STEM Environmental Officer	AOC Safety Staff
Jim.kelley@noaa.gov	Julie.n.wagner@noaa.gov	Christopher.kerns@noaa.gov
301-713-7612	541-867-8808	813-828-3310

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

206-526-6705

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

Safety . . . our mission depends on it