



SPECIAL ANNOUNCEMENTS

CG-FAC is extremely proud to support the Coast Guard men and women who this year completed over 16K facility inspections, 54K TWIC inspections, more than 24K container inspections, and reviewed and approved all 43 Area Maritime Security Plans.

CG-FAC will soon publish a 2014 "Year in Review" to further highlight the great work and efforts throughout the field and program management levels.

Feedback

How can we improve Waves on the Waterfront? Would you like to see more articles from the field? More technical articles? More policy driven articles?

We welcome any suggestions! Please submit comments to Mr. Ryan Owens at:

Ryan.F.Owens@uscg.mil.

Waves on the Waterfront

CG-FAC, Office of Port and Facility Compliance
Safety, Security, and Stewardship

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Maritime Security Survey Report *by Mr. Geoff Powers*

In June of 2014, the Coast Guard Office of Port and Facilities Compliance distributed a security survey to maritime security partners in government, industry and academia to help identify and prioritize maritime security improvements within regimes, industry and across the U.S. Marine Transportation System. Though Coast Guard's current maritime security program is considered mature, and efficient, and the maritime industry's implementation of the requirements of the Maritime Transportation Security Act is considered a great success, we recognized the need to improve our procedures, increase efficiency, and enhance the already strong maritime security partnership between industry and government stakeholders. (continued on page 5)

U.S. Coast Guard Mishap Report

On January 10, 2015 during a Certificate of Compliance exam on a tank ship carrying ammonia, USCG members and vessel crew were exposed to dangerous levels of ammonia gas while testing the emergency shut down capabilities of the vessel's cargo valves as required by the Foreign Gas Carrier Examiner Training Aid (Revision: MARCH 2014) and IGC Code 5.6.4.

As soon as the emergency shutdown was actuated, the three USCG members and vessel's crew smelled a strong odor of ammonia gas and all members proceeded away from the manifold area because of a loss of breath and reports of stinging eyes, nose and throat. The vessel's crew had Toxirae II personal toxic gas monitor meters; some of the meters alarmed when the incident occurred then later went out of alarm when the ammonia content in the area went below 20 PPM. None of the USCG required 4 gas meters alarmed during the incident because it does not test for ammonia. The USCG members and vessel crew went forward of the manifold area to find fresh air. The vessel's crew stated that the discharge was probably due to loose bolts holding the blank flanges to the spool piece on the manifold. After a few minutes past, the Chief Officer and a member of the USCG proceeded back to the manifold area to observe the containment area beneath the manifold valves and look at the emergency shutdown system. The Chief Officer was wearing a personal toxic gas meter (continued on page 7)

Coast Guard Hosts Public Meeting to Discuss Maritime Cybersecurity Standards by LCDR Josh Rose

On January 15th, the Office of Port and Facility Compliance (CG-FAC) hosted a public meeting to gather input from industry and other governmental partners on the development of guidance of maritime security standards. The meeting, along with comments period, was published in the [Federal Register](#). The Department of Transportation did an excellent job assisting the Coast Guard in hosting the event by providing a venue. Over 100 people attended the event, while 300 watched it [online](#).

The successful event began with VADM Michel, Deputy Commandant of Operations (below), giving an introduction of how dynamic and challenging cyber is for the maritime industry. Four interagency partners were asked to speak at the meeting, demonstrating the importance to learn from other agencies as much as our industry partners. A member of CG CYBER was one of the first guests (see right center). He spoke of the increasing threat to the maritime environment cyber poses by discussing real time events along with potential vulnerabilities to systems. National Institute of Standards and Technology (NIST) discussed the development and layout of the [NIST Cyber Standards](#), a set of standards, guidelines, and practices to promote the protection of critical infra-

structure. Nuclear Regulatory Commission (NRC) then discussed the process used to develop regulations in the nuclear and energy sector. Finally, Industrial Control Systems Cyber Emergency Response Team (ICS-CERT) gave a brief overview of their agency and how they can assist industry with cyber risk analysis and response to cyber incidents.

Our goal for the meeting was to gain feedback from industry and other governmental agencies (OGAs) on the following questions:

- What cyber dependent systems, commonly used in the maritime industry, could lead or contribute to a transportation security incident if they failed or were exploited by an adversary? What would the consequences be?
- What procedures do vessel and facility operators use to identify potential cyber vulnerabilities? Are you using existing processes from governmental agencies, insurance companies or your own? What is your risk assessment process? Are there existing programs that the Coast Guard could recognize? To what extent do they address transportation security incident risks?



- What factors should determine when manual backups or other non-technical approaches are sufficient to address cyber vulnerabilities? Once you've identified your risk, there needs to be a variety of ways to mitigate that risk. Sometimes these solutions can be very non-technical such as a float switch that can cut off a system if the technological system fails.

- To what extent do current training programs for vessel and facility personnel address cyber? In many cases, the largest risk is the end-user and training can mitigate a great deal of risk. How much risk could be mitigated by providing training? What should that training cover? Are there training programs out there right now that include the type of cyber training that could work for maritime industry?

- How can the Coast Guard leverage the Alternative Security Program? The Coast Guard has standards mostly addressing physical securities for vessels and facilities. We have programs where vessel and security operators submit plans to address physical security risks. We also have ASPs which allow certain segments of industry that essentially develop their own alternative way of meeting security requirements. With this, you get an 'umbrella' plan for all the members of that association or organization. The Coast Guard agrees that it achieves a necessary level of security that is acceptable. Perhaps this is appropriate with cyber. For all companies, under an umbrella, to adopt a cyber security plan, and apply to all facets of the company. I offer this as the ASP as a potential way to address cyber standards as a complement to their already existing security plans.

- How can vessel and facility operators reliably demonstrate that critical systems meet appropriate cyber security standards? Both industry and the Coast Guard want to be able to say that we are confident we have a good security system in place in regard to cyber risks. How can we be confident that a system is secure? The Coast Guard is interested in finding a credible way that both parties can be sure there is a secure plan in place so that all concerned are confident we have good secure systems for our ports, vessels and facilities.

- Do classification societies, insurers and other third parties recognize cyber security practices that could

help the maritime industry and Coast Guard address cyber risks? Are there existing practices in place we can look at? What is already being done 'out there' that the Coast Guard can recognize? We are not looking to reinvent the wheel. We would like to know what you are currently doing within your own organizations and companies.

These questions are posted on the [docket](#) associated with the federal register, and will remain open for comment until April 15th, 2015. Though we have already received great comments from industry, we would like to hear more! Please pass along to your port partners the information and ask them to comment. Any questions can be directed to [LCDR Josh Rose](#) or [LT Josie Long](#).



Seafarers' Access to Maritime Facilities / Consolidated Cruise Ship Security Regulations Notice of Proposed Rulemaking (NPRM)



Seafarers' Access to Maritime Facilities NPRM is completed, and was published December 29, 2014. A public meeting was held January 23, 2015 at the DOT building in Washington, DC.

Representatives from Seafarer Unions, Vessel Owners, Facility Owners, and Seaman's Churches were in attendance and provided

comment. The public comment period for the docket closed on February 27, 2015 with over 150 comments received.

This proposal would require each owner or operator of a facility regulated by the Coast Guard to implement a system that provides seafarers and other individuals with access between vessels moored at the facility and the facility gate, in a timely manner and at no cost to the seafarer or other individual. Generally, transiting through a facility is the only way that a seafarer or other individual can egress to shore beyond the facility to access basic shoreside businesses and services, and meet with family members and other personnel that do not hold a Transportation Worker Identification Credential. This proposed rule would help to ensure that no facility owner or operator denies or makes it impractical for seafarers or other individuals to

transit through the facility, and would require them to document their access procedures in their Facility Security Plans.

The Consolidated Cruise Ship Security Regulations NPRM was published in the Federal Register on December 10, 2014. A public meeting was held in Ft. Lauderdale on February 9, 2015 and was attended by more than fifty industry representatives. The public comment period for the docket closed on March 10, 2015 with over 20 comments received.

This proposal would amend the Coast Guard's regulations on cruise ship terminal security. The proposed regulations would provide detailed, flexible requirements for the screening of all baggage, personal items, and persons—including passengers, crew, and visitors—intended for carriage on a cruise ship. The proposed regulations would standardize security of cruise ship terminals and eliminate redundancies in the regulations that govern the security of cruise ship terminals.



The Homeport Portal Migration – *You Can Help!*

The Office of Port and Facilities Activities (CG-FAC) is working with the USCG Operations Systems Center (OSC), and other Headquarters program offices in the modernization of the Homeport Informational Portal. The Homeport portal was originally launched in 2005. The software framework it was built on has become obsolete and is no longer supported. This Homeport Technical Refresh project will migrate Homeport functionalities and content onto a SharePoint software framework in FY15.

We are asking your help in reviewing existing published content on Homeport in an effort to minimize the amount of outdated or irrelevant content that will need to be migrated into the SharePoint framework. Not only will the elimination of outdated information make the new Homeport portal more relevant, it will also enhance the ability of this project to be completed within FY15. Any questions concerning this project can be directed to LCDR Scott White at (202) 372-1116 or Scott.C.White@uscg.mil.

Federal Aviation Administration's Notice of Proposed Rulemaking (NPRM) to allow the operation of small Unmanned Aircraft Systems (UAS)

By Mr. Christopher Dougherty



On February 23, 2015 the Federal Aviation Administration (FAA) filed a Notice of Proposed Rulemaking (NPRM) proposing to amend applicable regulations to adopt specific rules to allow the operation of small Unmanned Aircraft Systems (UAS) in the National Airspace System. Many Coast Guard regulated facility and vessel operators have expressed concern about the use of these systems in the maritime environment. The Office of Port and Facility Activities encourages Maritime Transportation System stakeholders to take the opportunity to review this NPRM and provide the FAA with any appropriate comments. The public can review and comment on this

NPRM by visiting the docket [FAA-2015-0150] on www.regulations.gov or by following the following URL: <http://www.regulations.gov/#!documentDetail;D=FAA-2015-0150-0017>.

Note that while most UAS activity is innocent, vessel and facility operators, and other members of the public, who observe suspicious UAS activity should report that activity to the local Captain of the Port, and to the National Response Center at 1-800-424-8802

RECALL OF SELECT DISPOSABLE WALTER KIDDEE HAND PORTABLE FIRE EXTINGUISHERS

Walter Kidde is recalling some of their disposable hand portable fire extinguishers with black plastic handles. These extinguishers are disposable (non-rechargeable) dry-chemical extinguishers with a 12-year life-span. The recall does not involve rechargeable extinguishers that require yearly servicing. Details on the recall including how to obtain a replacement can be found at:

<http://www.cpsc.gov/en/Recalls/2015/Kidde-Recalls-Disposable-Plastic-Fire-Extinguishers/>

Maritime Security Survey Report (continued from front page)

The survey was not associated with any regulatory project, initiative, or change. It focused instead on identifying weak and strong programs including regimes, escorts and patrols, training and exercises. It also provided several open comment opportunities for individual responses to ensure that security issues not specifically addressed in the survey received visibility. The survey was sent to a diverse group of participants including, academia, maritime industry, and federal, state, and local agencies. The professional diversity of the surveyed population insured comprehensive results. In total, 236 maritime sector stakeholders participated in the survey.

The survey was divided into several areas of interest including; cybersecurity, threat intelligence sharing, maritime domain awareness, small vessel security, and security training to name a few. The survey validated perceived strengths and weaknesses and provided better granularity on emerging maritime security issues such as cybersecurity, complacency, and need for greater collaboration between the Chief Information Officer and the security officer in addressing computer system vulnerabilities.

The survey results were widely distributed to Area Maritime Security Committee (AMSC) members. To obtain a copy or view the results please contact your local AMSC executive officer or local Captain of the Port.

LNG as a Marine Fuel

by David Condino, and LCDR Darwin Jensen,

With increased focus in recent years from International Maritime Organization member states on reduction of emissions from ships, especially those ships that burn heavy fuel oil, the maritime industry began looking for green alternatives. Coincidentally, with the development of domestically produced (and plentiful) natural gas coupled with more restrictive air emissions standards for marine engines, the U.S. maritime industry began looking to incorporate the use of clean burning natural gas as a marine fuel. (Continued on Page 6)

In order to address the growing interest in using LNG as a marine fuel the Coast Guard established an LNG working group in 2012 composed of certain Coast Guard elements charged with assessing the need, and developing where necessary, policy and standards to ensure the safety, security and environmental stewardship of natural gas transfer operations to and from waterfront facilities and vessels. The immediate objectives of the working group was to (1) to determine the applicability of existing regulations (33 CFR 126, 127 and 154 as well as other agency regulations) to transfers of LNG for use as a fuel from both fixed tank and mobile transfer units to or from a vessel; and (2) determine the best way to provide guidance to industry, field units and all other stakeholders (e.g. policy memo/letter, NVIC, MSG, COMDTINST, etc.).

The working group was initially composed of representatives from CG-FAC, CG-OES, CG-ENG, and CG-094. Additionally, the working group monthly meetings had representatives from the Liquefied Gas Carriers National Center of Excellence, the Pipeline and Hazardous Materials Safety Administration, the Federal Energy Regulatory Commission, the Federal Motor Carriers Safety Administration and other Coast Guard staff and field units. CG-FAC was selected to coordinate meetings, document meeting minutes and coordinate correspondence. The working group quickly determined that while Coast Guard regulations in 33 CFR 127 technically cover all LNG transfers to or from a vessel, the regulations may be impractical when applied to the relatively smaller volume transfers of LNG for fuel. The working group also recognized that industry was moving forward with plans for LNG fueled vessels and regulatory changes would take time. The Coast Guard would need to develop policy, based on existing regulations, for dealing with LNG fuel transfers to/from vessels.

The working group, with CG-ENG leading the drafting team and input from the group, immediately began drafting two policy letters to deal with specific issues related to vessels and waterfront facilities intending to conduct LNG fuel transfer operations. The policy letters would cover recommended transfer procedures and other operating guidelines for vessels and waterfront facilities providing LNG to vessels for use as fuel. The Policy Letters would not apply to vessels that carry LNG as cargo and would not provide guidance on LNG fueled vessel design criteria (a separate CG-ENG/CG-CVC issue). In early 2014 the USCG published a Federal Register notice requesting public comments on the two draft policy letters. The Coast Guard received numerous comments from the public during the 90 day comment period and began the process of answering those comments, making adjustments to the policy letters and issuing the finalized Policy Letters.

On February 19, 2015, after nearly three years of hard work, with CG-FAC-2, safety branch, guiding this process via the LNG intra-agency work group, CG-OES published Policy Letter 01-15, "Guidelines for liquefied natural gas fuel transfer operation and training of personnel on vessels using natural gas as fuel" and Policy Letter 02-15, "Guidance related to vessels and waterfront facilities conducting liquefied natural gas (LNG) marine fuel transfer (bunkering) operations" in the Federal Register (<http://www.gpo.gov/fdsys/pkg/FR-2015-02-25/pdf/2015-03852.pdf>). For more information on the LNG working group please go to the CG-FAC-2 portal page at <https://cgportal2.uscg.mil/units/cgfac2/SitePages/Home.aspx> and click on "LNG& CNG"

Bravo Zulu from CG-FAC to Sector New York by MSTC Kevin Collins

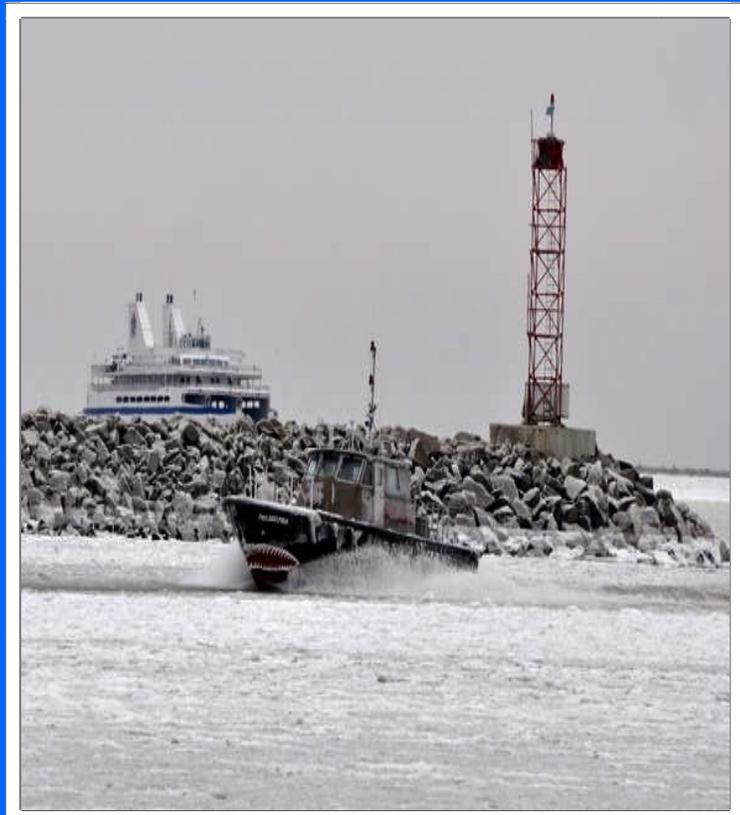
After reading the Safety Corner in the MST Rating Force Notes distributed January 2015, the container program managers would like to send out a Bravo Zulu to Sector New York's Prevention Department. There could have potentially been a serious casualty while conducting a routine container inspection. With the safety strap, four gas meter, and container inspection team accurately in place, the security lock was cut and door slightly opened for the initial safety check of any shifting of cargos. After the all clear, the newly qualifying team member (on his check ride) went to close the door, to remove the strap, for further inspection and the door fell off the hinges; thankfully there were no injuries. All of the training, expertise, application of PPE, and knowledge of the new container TTP's at Sector New York prevented a member from serious injury or death. Bravo Zulu to all and keep up the great work.



Baby it's Cold Outside! By LT Josephine Long

Much of the country has seen recorded breaking low temperatures and extreme inclement weather. This presents both on and off duty risks. Look out for your shipmates to make sure they are dressed in appropriate cold weather personal protective equipment and practicing good safety habits .

Frostbite and hypothermia are not your only health risks associated with cold weather. Proper hydration is just as important when working in cold temperatures and it is in extreme heat. Dehydration is commonly associated with warm temperatures. Many don't feel thirsty when it's cold, and our bodies also lose water in the winter due to respiratory fluid loss from breathing. Drink plenty of water when exercising or working outside, and watch for signs of dehydration for your shipmates and self.



It was a dark and stormy night . . .

by Ms. Betty McMenemy

Alternative Security Programs (ASP) are coming of age but some aspects remain a *mystery*. One recent issue involved compliance documentation: who should have what and when should they have it?

First, the vessel or facility owner/operator must be a member in good standing of the ASP sponsoring organization; if there is ever a question about this, please feel free to call Betty McMenemy at Headquarters. To be deemed in compliance with part 104/105, the ASP must be implemented in its entirety - no exceptions. Owners/operators must then send a letter to the appropriate plan approval authority, the Marine Safety Center (MSC) for vessels and the cognizant COTP for facilities, identifying which ASP they have implemented. This letter must also contain a list of vessel names and official numbers and/or facility locations attesting they are in full compliance. For vessels, this letter should also identify the CSO (by name or title) and how he/she may be reached at any time. Although the Coast Guard is under no regulatory obligation to do so, the MSC provides an acknowledgment letter to the owner/operator. This letter is scanned into MISLE in the documents section of every vessel operating under an ASP.

In a nutshell, vessel and facility operators are required to have on-site:

- A copy of the ASP in use;
- A vessel/facility-specific security assessment report;
- A letter signed by the vessel or facility owner/operator, stating which ASP is being used and certifying that the vessel or facility is in full compliance with that program. For vessels, the Marine Safety Center provides an acknowledgment letter to the operator and adds it to the vessel's MISLE documents, but there is not regulatory requirement to have this on board the vessel.
- If the ASP is for a facility a completed CG-6025, Vulnerability and Security Measures Summary, must be submitted to the COTP and kept with the ASP documentation. This must be updated and resubmitted to the COTP as specified in the ASP, but at a minimum when the ASP is submitted for its 5-year renewal.
- While the sponsoring organization must resubmit their ASP for approval every 5 years, there is no requirement for the operator to periodically resubmit their letter.

ASP approval letters are issued by COMDT (CG-5P) Director of Prevention Policy to the submitting organization and not individual vessels or facilities. A complete list of currently approved ASPs with copies of approval letters is maintained on Homeport. Copies of ASPs are available to Inspectors on the secure side of Homeport.

References:

33 CFR 101.120(b)
33 CFR 104.120(a)(3)
33 CFR 104.140
33 CFR 105.120(c)
33 CFR 105.140

CG-FAC-1 Reorganization

The Domestic Ports Division (CG-FAC-1) is pleased to announce that it has conducted a review of its functional missions and conducted an internal alignment of its various programs. This re-alignment reflects the efforts of Division staff to balance workloads and resource constraints while better reflect the interdependencies within those programs.

The following re-structuring (and associated program management) is:

Division Chief: CDR Nick Wong

Deputy: Mr. Ryan Owens

Staff: Ms. Etta Morgan, Ms. Marilynn Small

Responsibilities: National Maritime Security Advisory Committee, Transportation Sector Co-Sector Specific Agency Lead, National Infrastructure Protection Plan Implementation, Industry Outreach/Coordination, Sector Coordinating Council Development, Division Administration.

Port Resiliency/Recovery Branch: LCDR Scott White, Branch Chief

Staff: Mr. Rogers Henderson, Mr. Christopher Dougherty, LTJG Cale Cooper

Responsibilities: MTS Recovery, Homeport/AWS/CART program management, Port Security Specialist (Recovery) oversight

Critical Infrastructure Branch: LCDR Josh Rose, Branch Chief

Staff: Mr. Geoff White, LT Josephine Long, Mr. Bob Reimann

Responsibilities: Cyber Security, Area Maritime Security Committees/Plans, Port Security Specialist Oversight, Extremely Hazardous Cargo Strategy, Government Coordinating Council management

Coast Guard Mishap Report (cont from front page)

capable of detecting ammonia and remained in close proximity to the USCG member. When both individuals were in the containment area of the manifold another member from the vessel's crew re-opened the manifold valves without informing the Chief Officer or USCG member that were in the manifold containment area. Both members were then exposed to an unknown amount of ammonia that resulted in a dramatic loss of breath, immediate clinching of eyes and stinging/burning effects felt on face and exposed skin. Both members immediately jumped off the containment area beneath the manifold and ran forward to find fresh air and regain normal breathing. Another member from USCG noted that the Chief Officer's ammonia meter read 47 PPM when he was outside of the manifold area. None of the USCG members went near the manifold area for the remainder of the exam. The USCG team issued a deficiency stating the crew was unfamiliar with essential shipboard procedures relating to the ship's safety and required the company to submit a corrective action plan with flag administration concurrence.

A factor not considered by the inspection team in this incident was the possibility of equipment failure due to crew neglect. After the second vapor release, flange bolts were checked for proper torque. Though not specifically identified as to which fasteners were inadequately torqued, the inspection team was made aware that flange bolts were tightened. The valves were tested by the crew afterwards with no vapor release. The potential exists for this type of incident to occur in the future if current inspection procedures remain unchanged. Recommendations from this incident include requiring an onboard gas engineer to open all valves required to be tested and sample the area in the vicinity of such valves for flammable or toxic vapors using appropriate testing equipment prior to the inspection team approaching or entering the vicinity to evaluate an operational test. Additionally, recommendations were made for clarifying the procedures to conduct this type of inspection as well as ensuring that trainees are mentored by well seasoned and fully qualified mentors.

Our paramount goal is to ensure the safety and security of our Coast Guard members, industry personnel and the public. We can and must learn from cases like these and take appropriate actions to help prevent future occurrences.

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CG-FAC Links

www: <http://www.uscg.mil/hq/cg5/cg544/default.asp>
Portal: <https://cgportal2.uscg.mil/units/cgfac2/SitePages/Home.aspx>
Homeport: [Homeport](#)> [Mission](#)> [Maritime Security](#) or [Ports and Waterways](#)