The Marine Safety & Security Council

Partnering with Industry, Government, and the Public

Plus—The MSSC turns 70

Its history, leaders, and practices
6 From War to Peace
How the Merchant Marine Council transitioned from an emergency wartime board to a permanent advisory body.
by Mr. Ryan David Hatley

11 The Founding Fathers of the Marine Safety and Security Council
by Mr. Ryan David Hatley

15 The Marine Safety and Security Council Today
by CDR Michael Cavallaro

18 The Marine Safety and Security Council
A member’s perspective.
by Mr. Jeffrey Lantz

21 A Regulation’s Impact
Oil record book maintenance requirements.
by LCDR Brian McNamara

25 The Law is Mightier than the Sword
Partnerships form the foundation for maritime authority, response, and enforcement.
by LCDR Tiffany Hansen

29 Shipbuilders Council of America v. U.S. Coast Guard
The Coast Guard defends its rebuilt foreign regulations.
by Mr. Robert Bruce and CDR John Luce

35 Field Regulations
Protecting maritime safety and security.
by LT Sara Senser

40 Hard Water
Exploring Coast Guard authorities over ice.
by LT Terrence Thornburgh

43 Recognizing Excellence in Field Regulations
by CDR Michael Cavallaro
Public Partnerships—How Can You Join In?

45  Petition for Rulemaking
    The public’s role.
    by CAPT Sandra Selman

47  Effective Commenting
    Make your voice heard.
    by Ms. Rebecca Orban

50  Making it Easier to Comment on Proposed Rules
    Developments in e-docketing.
    by Mr. Jim McLeod

53  Hear Ye, Hear Ye
    The public meeting and informal rulemaking.
    by CDR Michael Cavallaro

The Future of Public Partnership

55  The Future of Coast Guard Rulemaking
    Ongoing efforts to improve the regulatory process.
    by Ms. Krysten Urchick

58  Regulation Room
    How the Internet improves public participation in rulemaking.
    by Ms. Jackeline Solivan and Ms. Cynthia Farina

63  A Regulatory “Look Back”
    Retrospective review of DHS regulations.
    by Ms. Christina E. McDonald

On Deck

4  MSSC Chairman’s Perspective
    by Rear Admiral Frederick J. Kenney

5  Champion’s Point of View
    by Ms. Kathryn Sinniger

66  Chemical of the Quarter
    Understanding Potassium Nitrate
    by Ms. Amy Parker

Nautical Queries
67  Engineering
69  Deck

Upcoming Events
71  Upcoming in Proceedings
As Thomas Jefferson wrote in the Declaration of Independence: “...Governments are instituted among Men, deriving their just powers from the consent of the governed.” In order for a regulatory regime to derive its power from the consent of those regulated, it must be participatory, transparent, and allow the community to express views and ideas so that regulators can consider and act on them. This is particularly true when regulating the safety, security, and environmental protection standards for shipping, fishing, and boating—industries that form critical components of the U.S. economy and our way of life. The Administrative Procedure Act, enacted in 1948, defines the minimum standards for participatory rulemaking. Subsequently, several presidents and Congress have expanded those requirements to ensure accessible opportunities to participate in the regulatory process.

Having just finished its 70th year of continuous existence, the Coast Guard’s Marine Safety and Security Council (MSSC), known as the Merchant Marine Council when formed in 1942, has been in the vanguard of ensuring that the voices of the regulated community are heard and considered as new standards are developed and implemented.

My personal experience with the MSSC runs the entire course of my 32-year Coast Guard career, starting when I was a fresh ensign assigned to the staff of the Marine Safety Council from 1981 to 1983, through my role as chairman today. Through its oversight of the Coast Guard’s regulatory function, the MSSC prioritizes regulatory initiatives, monitors and directs improvements to the regulatory process, and serves as the Commandant’s senior advisory panel on regulatory matters. Through publication of the Proceedings, whose first issue appeared in 1944, the MSSC provides industry and the regulated public with a user-friendly way to keep abreast of current issues of interest.

This issue of Proceedings provides the reader with an informative history of the roles and functions of the MSSC, reinforces the Coast Guard’s need for public participation in our rulemaking process, and provides helpful hints and tools on how one can become more involved in the process. With your participation in the rulemaking process, the quality and beneficial impact of the regulations the Coast Guard issues continually improves. If you have not participated in the rulemaking process before, I hope this issue will spur your interest.
Three years ago, we published a Proceedings edition focused on Coast Guard rulemaking. Recognizing that our stakeholders often viewed the legal requirements and process behind rulemaking as a complicated maze, we focused on providing an introductory primer on those legal requirements and the rulemaking process.

My vision for this edition of the magazine was to dive a bit deeper into the Coast Guard’s rulemaking process and provide the reader greater detail. As the article topics were developed and expanded, another theme quickly emerged: the Coast Guard’s emphasis on partnership—with industry, other government agencies, and the public—when developing rules designed to save lives, protect the environment, and safeguard our maritime security.

This edition begins with a series of articles focused on the Marine Safety and Security Council to honor its 70th year of service. Founded as the Merchant Marine Council during World War II, members advised the Commandant on matters such as life-saving devices, fire prevention, and crew rating requirements. Today, the council continues to provide oversight, review, and guidance in its role as the Commandant’s policy advisor on all regulatory activity. Notably, the council also created Proceedings magazine, which underscores the importance the Coast Guard has always placed on communicating with industry and the public, thereby cultivating partnerships with stakeholders.

We also highlight the Coast Guard’s collaborative efforts with stakeholders to make effective, enforceable rules that enhance our marine safety, security, and stewardship missions. For example, the “Partnership in Action” section contains an article that recounts the impact of regulations requiring maintenance of an accurate oil record book. This article also addresses how the Coast Guard works with the Department of Justice to prosecute pollution violators, which ultimately benefits the vast majority of industry owners and operators. “Partnerships at the Field Level” addresses how field regulations help protect the public and how the Coast Guard partners with state and local officials to enforce exclusionary zones on ice. “Public Partnerships” explains the petition for rulemaking, how to write effective comments, and the role of the public meeting in informal rulemaking. Finally, “The Future of Public Partnership” explains how technology is making it easier to become involved.

I hope these articles give you a better understanding of the Coast Guard’s regulatory process and show how that process has leveraged stakeholder partnerships as an essential component. We believe it’s important for everyone—from industry, other government agencies, environmental advocates, to the general public—to be confident that the Coast Guard values their interests and input in the rulemaking process. Our partnerships truly make us better.
Despite changing technology and modernization, the U.S. Coast Guard Marine Safety and Security Council’s (MSSC) mission has not changed much since the council’s founding as the Merchant Marine Council (MMC) in 1942: to advise the Coast Guard Commander regarding the safety and security of America’s mariners, vessels, and environment.

However, in the 70 years since the MMC’s founding, particular regulatory issues have risen to the top of the council’s agenda.

**The Inspection and Navigation Regulations Board**

Prior to World War II (WWII), the Department of Commerce conducted many regulatory functions. A similar advisory board already existed—the Inspection and Navigation Regulations Board (INRB) was constituted in 1936 when the Bureau of Navigation and the Bureau of Steamship Inspection merged to form the Bureau of Marine Inspection and Navigation (BMIN).

Mr. Joseph P. Weaver was the Bureau of Marine Inspection and Navigation’s first director. His successor, Mr. Robert Stockton Field, had a bigger impact on the future Merchant Marine Council. Mr. Field, a retired Navy commander and Department of Commerce employee, directed the INRB in a number of projects including legislation and regulations relating to the 1929 Safety of Life at Sea Convention.

---

*From War to Peace*

How the Merchant Marine Council transitioned from an emergency wartime board to a permanent advisory body.

by Mr. Ryan David Hatley

Law Student

American University’s Washington College of Law
Winter 2012 | Spring 2013
Proceedings

WWII Brings Changes
With WWII raging in Europe, the Inspection and Navigation Regulations Board worked closely with the Army and Navy to help the United Kingdom’s war effort. Ironically, the war effort would ultimately end the INRB when President Roosevelt issued an executive order to transfer the functions of the BMIN and INRB to the U.S. Coast Guard following Japan’s attack on Pearl Harbor and America’s entry into World War II.¹

Executive Order 9083 directed the Commandant of the Coast Guard to protect American merchant ships and seamen. It also transferred certain functions and personnel of the Bureau of Marine Inspection and Navigation (and, consequently, the Inspection and Navigation Regulations Board) from the Department of Commerce to the Coast Guard. Additionally, it directed the MMC to take over the INRB’s duties on June 1, 1942.

Now overseen by the USCG, the Inspection and Navigation Regulations Board advised the Commandant regarding life-saving devices, fire prevention, and crew ratings requirements. Very importantly, the Inspection and Navigation Regulations Board brought its culture of working closely with the maritime industry to the USCG.

The Merchant Marine Council
BMIN personnel were given the opportunity to accept Coast Guard officer commissions at a rank corresponding with their federal service. Many BMIN and INRB staffers, including Mr. Field, served on the newly formed Merchant Marine Council. Although brief, Chairman Field’s service bridged the leadership gap between the INRB and the MMC.

The MMC contributed to the war effort by protecting merchant mariners engaged in transporting war supplies from U.S. and allied ports to troops in battle. At that time, mariners faced many dangers, primarily from enemy submarines attacking allied shipping routes.² By the end of WWII, some 700 merchant marine vessels were lost and about 8,300 mariners perished. In addition, one in 26 mariners was counted as a casualty, giving the merchant marine service the highest such rate.³

As a result, establishing new regulations regarding fire protection, lifeboats and life rafts, first aid kits, emergency communication devices, and other lifesaving equipment were among the council’s top priorities. The MMC also worked to ensure there were an adequate number of training schools for mariners.

The council’s most controversial issue was a regulation that allowed for the removal of “subversive” mariners. Unions and mariners resented the measure, borne of concerns that labor activities or support for labor candidates was considered subversive by some Coast Guard officers.

Transitioning to a Postwar Council
The council began transitioning to a postwar mission in 1943, two years before the official end of WWII. Council member Halert C. Shepheard, a captain in the Coast Guard Reserve and a former civilian employee in the Bureau of Marine Inspection and Navigation, was the primary driver.

The council began focusing on issues that Shepheard and the other former BMIN members had addressed prior to the war. For example, the council set standards on the lifesaving equipment allowed on vessels.
Previously, the council had not focused on any particular standards for lifesaving equipment; members were more concerned that vessels had some lifesaving equipment onboard.

In addition, the MMC focused on structural and engineering issues regarding vessels that had been brought to light during the war. The council’s work on these issues led to greater cooperation between the council and industry and improved the previously strained relationship due to the increased cost associated with new regulations during the war.

The MMC and industry collaborated to develop new pilotage rules for the U.S. western rivers at the Western Rivers Panel in October 1943. This method of rulemaking would become standard for the council.

By establishing *Proceedings of the Merchant Marine Council* magazine (see sidebar) and focusing on workplace safety and engineering standards, the council placed itself in the position to adapt to a postwar merchant marine before the war’s end. This early transition reinforced the Coast Guard’s role as a government body that could regulate and oversee the private sector.

The Postwar Merchant Marine Council
The Bureau of Marine Inspection and Navigation was intended to revert to the Department of Commerce after the war’s end; however, because of the success of the merchant marine training, inspection, safety, and certification programs while under the USCG Commandant, Congress permanently transferred the BMIN and its authority to the Coast Guard in 1946. That same year, Halert C. Shepheard took over as chair of the Merchant Marine Council.

Just a few years before, the greatest causes of casualties in the merchant marine were enemy submarines and airplanes. During the postwar period, the council focused on educating mariners and their employers about safety. Just as under the BMIN, the primary impetus for rulemakings would be industrial or shipping accidents.

Focus on Safety
Radar was the most influential new technology in the maritime industry during this time. Consequently, this became a major concern, because mariners often relied on radar alone to detect nearby vessels or obstacles—resulting in otherwise easily avoidable collisions.
Additionally, based on lessons learned during the war, the international community came together in 1948 to amend SOLAS once again. A number of current and future council members would attend the conference as part of or in assistance to the U.S. delegation.

The 1950s and 60s Bring New Technology and Innovation

In the 1950s and 1960s, new technologies and new faces came to the MMC as the postwar period ended and a new SOLAS conference finished. By then, most of the original council members had retired. However, the council’s work was more diverse than before.

Safety issues in the emerging offshore oil industry arose and led to offshore oil platform regulations. In addition, radar problems were addressed at the 1960 SOLAS Convention, and a similar emerging technology surfaced called radar television aid to navigation. This technology would come before the council repeatedly during this period, bringing with it the same safety issues as radar—mariners relying too heavily on the new technology.

During this period, the Merchant Marine Council also focused on environmental issues such as oil pollution, which had been a concern since the early days of merchant shipping. In 1954, MMC Chairman Halert C. Shepheard proposed creating an oil pollution panel to address measures for oil pollution regulation.

The 1970s and 1980s

During the 1970s the council’s major international projects included the International Convention for the Prevention of Pollution from Ships and unifying the rules of the road.

Domestically, the council’s duties would expand under the Federal Boat Safety Act of 1971, the Bridge to Bridge Radiotelephone Act, and the Ports and Waterway Safety Act. Some of the major regulatory projects that the council focused on included new oil pollution, towboat operator licensing, and transportation of hazardous and radioactive materials regulations.

The council also changed its name from the Merchant Marine Council to the Marine Safety Council (MSC) to reflect its authority over all marine safety issues. Additionally, the Coast Guard’s chief counsel became its chairperson, a role that continues today.

The issues before the council during the 1980s were very similar to the issues the council contemplated
in the 1970s, such as advising the Commandant on ways to implement the international agreements of the 1970s. Apart from new technologies, the 1980s was relatively quiet. Then, from the early to mid-1990s, the council began addressing environmental issues resulting from the Exxon-Valdez incident and the subsequent Oil Pollution Act of 1990.

**Homeland Security**
Following the terrorist attacks of September 11, 2001, the Coast Guard’s mission broadened considerably when it was transferred from the Department of Transportation to the newly formed Department of Homeland Security. As a result, the council’s work changed as well.

To reflect this, the council’s name changed once again, to the Marine Safety and Security Council. Even with these changes, the council’s general mission—advising the Commandant on regulatory issues—has remained the same.

**About the author:**
Mr. Ryan Hatley is a law student at American University’s Washington College of Law and a 2010 graduate of the University of North Carolina at Charlotte. He interned with the United States Coast Guard from May to August 2012.

**Endnotes:**
4. Oil pollution by ships had been mentioned as early as 1754 by Captain Jonas Hanway, a British merchant sailing in the Caspian Sea. He noted that the sea around the Holy Islands was flammable with petroleum oil. Complaints of oil pollution would increase when petroleum became a major fuel source.
The Founding Fathers of the Marine Safety and Security Council

by MR. RYAN DAVID HATLEY
Law Student
American University’s Washington College of Law

Five long-serving members influenced the direction of the Marine Safety and Security Council during its early years as the Merchant Marine Council (MMC): Robert S. Field, Harvey F. Johnson, Halert Shepheard, Kenneth Harrison, and Robert Smyth. These men guided the council and the Coast Guard during the first decade of the Coast Guard’s new regulatory mission, and their influence continued to affect council decisions for years to come.

CAPT Robert S. Field

Robert Stockton Field graduated from the Naval Academy in 1911 and served in the U.S. Navy until 1937. After he retired, Field joined the Bureau of Marine Inspection and Navigation (BMIN) and served as its director until the bureau’s transfer to the United States Coast Guard.1

Eventually, the Navy recalled Field and ordered him to serve at Coast Guard headquarters in Washington, D.C. In June 1942, the Commandant appointed him as first chairman of the Merchant Marine Council. Field’s time as chairman was short lived, and he retired in 1943. Despite his brief tenure, Field served a crucial role by bringing to the Coast Guard the BMIN’s practice of working closely with industry to develop regulations.

Rear Admiral Harvey F. Johnson

The second MMC chairman, Harvey Fletcher Johnson, took over after Field and led the council until its permanent transfer to the U.S. Coast Guard. Under Johnson’s leadership, the council focused on construction standards, manning, and oil contaminated ballast water regulations.

Soon after, the council expanded its role and reach to the average mariner by focusing on workplace safety issues and publishing the first Proceedings magazine. Ultimately, Johnson’s success as council chairman led to the permanent transfer of BMIN duties to the USCG.
Shepheard was the chief U.S. representative at the Safety of Life At Sea convention in 1948. Shepheard retired in 1956, but his influence on the council continued for several years. Following his death in 1975, the Chamber of Shipping of America established the Rear Admiral Halert C. Shepheard Award, which it bestows in recognition of exceptional achievement toward merchant marine safety—an area to which Shepheard contributed greatly throughout his long and distinguished professional life.²

Mr. Kenneth S. Harrison

Kenneth S. Harrison served on the council longer than any other member. During his career as a civil servant, Harrison amassed more than 35 years of reserve service in the Army Reserve Corps and the Coast Guard Reserves. Following his service in the Army Reserve Corps, Harrison earned L.L.B. and L.L.M. degrees from Georgetown University.

Harrison was appointed USCG chief counsel in 1938 and was commissioned in the Coast Guard Reserve at the beginning of WWII. Harrison served as the MMC chief counsel for 25 years, where he promoted procedures that facilitated the Coast Guard’s relationship with industry. Although Harrison retired in 1967, the Commandant appointed him to work on special projects for several years following his retirement.
CAPT Robert A. Smyth was the longest serving MMC executive secretary. He served in the Navy during WWI. After the war, he earned his engineer’s license and became a chief engineer. From 1931 to 1942, he served as an inspector for the Bureau of Navigation and Steamboat Inspection and for the Bureau of Marine Inspection and Navigation. In 1942, Smyth accepted a commission as a Coast Guard lieutenant and became the first MMC executive secretary. As such, he was responsible for many of the council’s administrative duties and published many of the council’s official actions. Undoubtedly, Smyth’s work and influence laid the groundwork for the role of the executive secretary.

However, Smyth’s influence extended well beyond this role. He produced much of the council’s documents, and, as a result, his personal influence pervaded much of the council’s work. Smyth received promotions through the rank of captain before his retirement in 1959, and served in a number of roles on the council, including chief of the Merchant Marine Technical Division and assistant chief of the Office of Merchant Marine Safety. Occasionally, Smyth would also serve as acting chairman of the council.

All of these men served on the original Merchant Marine Council, and they all contributed to the council in some way—whether it was defining how a certain position would function or influencing how the entire Coast Guard would operate. Even though their tenures ranged from seven months to 27 years, their contributions still affect us today.

About the author:
Mr. Ryan Hatley is a law student at American University’s Washington College of Law and a 2010 graduate of the University of North Carolina at Charlotte. He interned with the United States Coast Guard from May to August 2012.

Endnotes:
1. The history of the Coast Guard’s regulatory responsibilities began well before the Bureau of Marine Inspection and Navigation. The first federal steamboat inspection law was passed in 1838. An inspection bureau responsible for enforcing those laws and regulations was established in 1852. The Steamboat Inspection Service would merge with the Bureau of Navigation (established in 1884) in 1932 to form the Bureau of Navigation and Steamboat Inspection. It was renamed the Bureau of Marine Inspection and Navigation in 1936.
2. Three council chairmen have been presented this award: RADM Charles P. Murphy (1977), RADM Roderick Y. Edwards (1979), and VADM William F. Rea (1994).
The Marine Safety and Security Council Today

by CDR Michael Cavallaro
Executive Secretary
U.S. Coast Guard Marine Safety and Security Council

The Marine Safety and Security Council (MSSC) has grown in its 70-year history to meet the evolving challenges within the maritime community. The council advises the Commandant regarding rulemaking projects and partners with the Department of Homeland Security to provide thorough review of rulemaking projects to weigh the benefits and burdens regulations impose on the public.

The MSSC’s Authority
Title 33, Code of Federal Regulations, Subpart 1.05, describes the MSSC as a body “composed of senior Coast Guard officials [that] act as policy advisor to the Commandant and is the focal point of the Coast Guard regulatory system. The Marine Safety and Security Council provides oversight, review, and guidance for all Coast Guard regulatory activity.”

As such, all regulatory project proposals submitted to the Marine Safety and Security Council for approval must describe the scope of the proposed regulation, alternatives considered, and potential costs and benefits, including possible environmental impact. As part of its process, the MSSC also ranks new projects against pre-existing regulatory projects.

Within the Coast Guard, Commandant Instruction 16703.2 describes MSSC membership, roles, responsibilities, processes, and reports. This directive is updated as necessary.

Responsibilities
As noted, the MSSC is responsible for Coast Guard regulatory activity and approves all regulatory projects. But what exactly does this mean?

First, a regulatory action is “any substantive action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking.”¹ Coast Guard rules in Title 33, CFR subpart 1.05 refer to the regulatory process and regulatory projects—the former begins when an office chief identifies a need for a new regulation or changes to an existing regulation, the latter requires MSSC approval.

If an office chief feels there is a need for a new regulation or changes to an existing regulation, he or she will submit a project initiation request to the chief of the Project Development Division. As mentioned, this requestor (or sponsor) must explain the rulemaking project and its objectives, the authority to take regulatory action, account for any statutory or other deadlines driving the project, and describe costs and benefits to the public and industry.

After that, the Project Development Division convenes the regulatory agenda planning team, consisting of Project Development Division personnel, the Coast Guard’s chief economist, and the chief of the Office of Regulatory and Administrative Law. The team consults with the sponsor to determine if the sponsoring office is ready to work on the rulemaking project and if resources are available to staff it.

If the team approves the project, it then creates a rulemaking project team consisting of a representative from the sponsoring office, who is the subject matter expert; a regulatory development manager responsible to keep the project on schedule and facilitate
team communication, coordination, and document clearance; an economist; an environmental protection specialist; a project counsel; and a technical writer.

When proposals are ready for the Marine Safety and Security Council, the executive secretary distributes them to the council's voting members for concurrent clearance.²

Depending on the MSSC's comments, the sponsor may direct project proposal amendments, thereby re-initiating the clearance process. If the Marine Safety and Security Council approves a project, it is added to the rulemaking project priority list at the rank determined in the rulemaking proposal.³

The clearance of significant rulemaking documents is similar—after the voting members have concurred on the rulemaking document, the executive secretary forwards the document to the Commandant for review. If approved, the document will go on to additional senior administration review, including submission to the Office of Information and Regulatory Affairs at the Office of Management and Budget, per Executive Order 12866.

MSSC Structure
The MSSC consists of voting and non-voting members. While membership has fluctuated throughout the years, the current MSSC has six voting members. The USCG Judge Advocate General serves as the council chairman, and the other voting members are the Assistant Commandant for Prevention Policy, the Assistant Commandant for Response Policy, the Assistant Commandant for Resources, the Assistant Commandant for Public Affairs, and the Director of Commercial Regulations and Standards.

Non-voting members include the Director of Incident Management and Preparedness Policy, the Director of Inspections and Compliance, the Director of Marine Transportation Systems, and the Director of the National Pollution Funds Center. The council may invite other assistant commandants or flag-level/senior executive service officials to serve as ad hoc members for specific rulemaking projects to leverage their expertise.

A legal advisor and the executive secretary support the Marine Safety and Security Council. The legal advisor provides legal opinions to the MSSC and coordinates review of significant rules after Commandant approval. The executive secretary schedules all council meetings, maintains administrative records, coordinates with the Project Development Division to create and distribute MSSC reports and helps develop the rulemaking project prioritization list. The executive secretary also receives project proposals and regulatory documents, distributes them to MSSC voting members, and forwards regulatory documents to the Commandant for review and approval.

Meeting Procedures
The Marine Safety and Security Council convenes annually to review and discuss rulemaking projects and resource needs, vote on the rulemaking project
prioritization list, and set regulatory development program goals for the next year.

In addition, the MSSC meets quarterly to discuss new business and to monitor the regulatory development program’s progress. Meetings must include the chair, at least three voting members or their acting representatives, the legal advisor, the executive secretary, and the chief of the Office of Standards Evaluation and Development.

Reports
Twice a year, the MSSC provides a report to Congress regarding the state of Coast Guard rulemaking. A majority of voting MSSC members must vote to approve these annual reports. The executive secretary routes the reports to the Vice Commandant and Commandant prior to forwarding them to the Coast Guard’s legal representative at the Office of Governmental Affairs for transmission to Congress.

Looking Ahead
The MSSC has undergone many changes throughout its 70-year history that have strengthened the council, making it well suited to fulfill its charge to advise the Commandant and provide oversight, review, and guidance for Coast Guard regulatory activity. While the practices of the MSSC may not be ideal for other federal government entities, its efficiency in providing oversight, review, and guidance for Coast Guard regulatory activity is worthy of careful study and consideration.

About the author:
CDR Michael Cavallaro is the deputy office chief, U.S. Coast Guard Office of Regulations and Administrative Law, and executive secretary, Marine Safety and Security Council. Previous assignments include assistant legal officer at the Coast Guard Academy and marine inspector/investigator at Sector Hampton Roads. He received his J.D. from George Mason University School of Law.

Endnotes:
1. E.O. 12866 Sec. 3(e).
2. COMDTINST M16703.1, Preparation of Regulations, 3.F.1., per 6.B.2, a rulemaking receives increased scrutiny and generally takes longer to process if it is significant under the criteria provided in E.O. 12866. The Office of Management and Budget has final authority to determine whether a rule is significant under that order. Under the order, significant rulemakings are those likely to result in rules that may:
   a. have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;
   b. create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
   c. alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
   d. raise novel legal or policy issues from legal mandates, the president’s priorities, or the principles set forth in the executive order.
3. Each rulemaking proposal must include a proposed priority ranking, based on such factors as anticipated executive branch interest in the rulemaking, legal implication of the rulemaking, alignment with the Commandant’s strategic goals, interest to advisory committee(s) or the international community, and leveraging Coast Guard resources.
Technologies and operations are changing at a rapid pace, and some of these changes were unheard of during my earlier days. Regardless, I must keep up with these trends as a member of the Marine Safety and Security Council (MSSC), as the council is charged with providing strategic leadership and advice to the Commandant regarding the Coast Guard’s regulatory program.

Background
My experience with the rulemaking process and the MSSC dates back to my first assignment as a lieutenant at Coast Guard headquarters. This was my first exposure to the MSSC, known back then as the Marine Safety Council. I clearly recall my first regulatory project. I learned that MSC approval was required before I could proceed.

One of my primary responsibilities as director of Commercial Regulations and Standards is to lead our service’s rulemaking development program. I have been involved with this work for the past 30 years and have watched the industry and the regulatory process become more complex.

I wondered who was on the council and why I must receive their approval. I have since come to appreciate the role of the MSSC and the value it provides to the Coast Guard’s overall regulatory program. Since then, my responsibilities have grown from a subject matter expert engineer drafting technical requirements for ship engineering and lifesaving equipment to chief of the Office of Design and Equipment Standards in 2006. That was when I also became a member of the Marine Safety Council. Today, I am one of the longest serving members of the MSSC, and I have gained a unique perspective on the value of the council—how it has adapted to address and lead the changes in our regulatory development program.
The MSSC is the Commandant’s advisory body for all Coast Guard regulatory initiatives. As such, MSSC members are among the Coast Guard’s senior leaders—flag officers and members of the senior executive service who supervise and lead staffs that develop regulations.

**Roles and Responsibilities**

MSSC functions include process management, work program development and prioritization, product approval, strategic guidance for the regulatory development program, and advice to the Commandant.

Each rulemaking project is drafted in accordance with a comprehensive set of guidelines to ensure all laws, presidential executive orders, and administration policy directives are followed. These guidelines also emphasize the need for interagency cooperation and rigorous justification of any burdens, require that new regulations are consistent with broader Coast Guard program objectives, and justify that they can be properly implemented and enforced.

With respect to work program development and prioritization, the council approves all new rulemaking projects, amendments to projects already under development, and suspensions of any outdated projects. The council also provides direction to the Proceedings of the Marine Safety & Security Council’s editorial staff on topics of interest.

**The Council in Action**

Each year, the MSSC determines a set of strategic goals for rulemaking projects. It approves and develops a rulemaking project list that is prioritized based on the level of executive and congressional interest, availability of Coast Guard resources, and whether law mandates it.

Regulatory projects are initiated for several different reasons. For example, new laws or our international treaty obligations may require them. Others come about after Coast Guard casualty investigations reveal needed changes to the standards in existing regulations. In addition, some projects publish standards that will keep apace of new operations and vessel design trends in the maritime industry.
The MSSC also provides strategic guidance to the regulatory development program, taking stock of changes in the maritime industry and environment, Coast Guard operations and resources, and other domains to identify regulatory needs. It also provides regular reports to the Commandant of the Coast Guard regarding rulemaking actions, so interventions made through regulations can be systematically considered along with other Coast Guard functions, ranging from search and rescue to law enforcement.

What’s in a Name?
While the council’s role has changed little in the last 20 years, after 9/11 its name expanded to include “Security,” reflecting the increased emphasis on security in Coast Guard missions and acknowledging the time and effort devoted to developing security-related regulations. The composition of the council has also changed to accommodate changes in headquarters organization, ensuring the senior leaders responsible for programs administered through regulations are properly represented.

Since the Coast Guard’s move to the DHS in 2003, the council has overseen the effort to create detailed guidelines that standardize the Coast Guard’s rulemaking process. We now produce annual reports to Congress regarding our rulemaking program progress, including measures of our project cycle time and compliance with legislative mandates that require new regulations.

Consequently, the council’s work in prioritizing projects is methodical and easily defended, which has been crucial in recent years, when enhanced scrutiny of federal regulatory efforts has dictated we provide more detailed cost/benefit justifications in our rules.

Hot Topics
The MSSC revisits its annual prioritized rulemaking quarterly to ensure regulations teams are applying their limited time and budgets to projects in a way that maximizes the progress that can be made on the large body of rulemakings under development.

The council members review each project to ensure each regulation receives a thorough, cross-programmatic analysis before publication. This offers the extra advantage of observing rulemakings through a strategic lens to make sure each is consistent with the Coast Guard’s big picture goals, complements other policy documents and initiatives, and takes into account the views of our maritime stakeholders. Council approval also assures the Commandant and administration leaders that each rule is well conceived and ready to be enacted.

Looking Toward the Horizon
The MSSC continues to fulfill the intent of the Merchant Marine Council, its earliest predecessor, to advise and assist the Commandant on matters relating to navigation and maritime safety and to provide a forum in which all interested parties may express their views on actions taken on contemplated regulations.

I am proud to be a council member and to help guide the Coast Guard’s regulatory development program.

About the author:
Mr. Jeff Lantz is a retired Coast Guard captain and is currently the USCG director of Commercial Regulations and Standards. His responsibilities include developing U.S. national maritime safety and environmental protection regulations and policies and overseeing U.S. initiatives regarding international maritime safety, security, and environmental protection standards.

He serves as the U.S. Head of Delegation to the International Maritime Organization (IMO) Maritime Safety Committee and Marine Environmental Protection Committee. He is the chairman of the IMO Council.

He graduated from the Coast Guard Academy and the University of Michigan, where he obtained advanced degrees in naval architecture, marine engineering, and mechanical engineering.
The maritime industry has experienced a recent increase in federal prosecution of vessel owners, operators, and crewmembers who have violated pollution standards. Much attention has been given to “magic pipe” cases in which vessel crew discharge oily mixtures directly overboard without first passing the mixtures through oily water separators. The U.S. Department of Justice (DOJ) also charges vessel owners and operators for criminal violations of other federal laws such as falsifications during investigations. Federal investigations and prosecutions for these cases are resource-intensive, and the Coast Guard has faced challenges in federal courts for its administration of federal vessel pollution laws during these investigations.

The core issue of these cases usually involves someone’s failure to maintain an accurate oil record book. Although Congress did not pass a federal statute with this stipulation, 33 C.F.R. 151.25 requires certain vessels to fill out an oil record book and maintain the book onboard for three years.

This maintenance requirement is one of many technical regulations the U.S. Coast Guard passed through the notice-and-comment rulemaking process to implement international and national law governing vessel-source pollution. From time to time, federal courts may hear cases regarding the process the Coast Guard used to take action or publish a rule. In the case of the oil record book maintenance requirement, however, federal courts upheld the regulation and interpreted it in such a way to give effect to the Coast Guard’s federal maritime pollution law administration.

The Oil Record Book Regulation
Normal engine room operations generate enormous quantities of oil and byproducts; cargo and ballast transfers can create additional amounts of oily water mixtures. International standards require vessel crew to dispose of the contents of bilges and certain tanks through an oily water separator that filters oil solids out of the fluid before pumping the water overboard at sea.

Oily water separators, however, can be expensive to maintain and vessel crews may have a financial incentive to bypass the oily water separator and pump oily water directly overboard. Coast Guard regulations
require the master of a vessel to log transfers in an oil record book, which helps to ensure all vessels conduct proper transfers of oily water and do not bypass the monitoring equipment.

**MARPOL, APPS**
The oil record book maintenance regulation is just one part of a broad framework of international and U.S. laws designed to combat vessel-source pollution. The international community mobilized in the 1970s to address vessel-source pollution issues as a result of high-profile marine pollution casualties. The International Convention for the Prevention of Pollution from Ships and the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships are the two key international legal instruments from this decade. Together, they are commonly known as MARPOL 73/78 or MARPOL, which created new legal standards for the maritime industry.

First, MARPOL solidified the emerging international norm of “port state control.” Second, it established sweeping requirements for vessel masters to maintain certain documents and certificates onboard. Third, MARPOL established that oily water could be pumped directly into the ocean under limited circumstances (if the ratio of oil to water was 15 parts per million or less), while a vessel was underway. Even then, masters must log transfers of oily water in an oil record book.

The Coast Guard initiated its own rulemaking to further the act’s statutory mandate and created additional regulations to establish pollution plans (among other requirements). Public comments primarily addressed the administrative burden of keeping log entries. The Coast Guard acknowledged the public comments but, in its agency discretion, did not change the proposed rules. Interestingly, no member of the public commented on the requirement to “maintain” the oil record book.

**Inspections, Enforcement Options**
The Coast Guard investigates potential APPS regulation violations, including the oil record book maintenance requirements, through the Coast Guard’s Port State Control program and under the authority of the Coast Guard’s organic maritime law enforcement statute, 14 U.S.C. § 89(a).

This statute authorizes the Coast Guard to “make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the United States has jurisdiction, for the prevention, detection, and suppression of violations of laws of the United States. For such purposes, commissioned, warrant, and petty officers may at any time go on board of any vessel subject to the jurisdiction, or to the operation of any law, of the United States, address inquiries to those on board, examine the ship’s docu-
ments and papers, and examine, inspect, and search the vessel.”

U.S. Coast Guard marine safety personnel typically conduct vessel inspections for APPS compliance. If personnel discover potential violations of the Act to Prevent Pollution from Ships, they may require the vessel owner and the operator post surety as a condition of the vessel departing port.

The federal government has several enforcement options available for violations of MARPOL, the APPS, and implementing regulations, including violations for knowingly failing to maintain an oil record book, which can range from civil penalties to federal criminal charges. In most cases, a Coast Guard district commander can refer a case for criminal prosecution to the U.S. Department of Justice. With regard to this decision, the district commander will consider factors such as the nature and extent of the alleged offense(s), the violation history of the alleged offender, and whether the alleged offender received an economic benefit from the offense.

The ultimate decision to move forward with a criminal prosecution, however, rests with the DOJ. In addition, the Department of Justice can forward any cases brought to its attention outside of the typical Coast Guard referral process. Depending on the facts and the behavior of the defendant or defendants during the investigation, the Department of Justice may charge the defendant or defendants with several offenses besides a knowing failure to maintain an accurate oil record book, including conspiracy, falsification of records, and obstruction of justice.

**Federal Interpretation of the Requirement**

The principle of flag state jurisdiction is that a vessel is subject to the jurisdiction of its flag state anywhere in the world. By contrast, port state jurisdiction is limited, as to geography and proscribed activity. The oil record book maintenance requirement is significant, because it is a means by which the United States, in its exercise of port state jurisdiction, may deter activity over which it does not hold jurisdiction to act.

For example, the United States generally does not hold jurisdiction over a foreign-flagged vessel discharging the contents of a bilge tank directly overboard—bypassing the oily water separator—more than 200 nautical miles from the shore of the United States. However, if such a transfer is not logged in the oil record book, and subsequently the vessel owner, operator, master, or crew knowingly fail to maintain the oil record book within the navigable waters of the United States, then the United States has jurisdiction to prosecute the knowing failure to maintain the oil record book.

The maritime defense bar unsuccessfully challenged the oil record book maintenance requirement. In a series of federal cases, attorneys for vessel interests
argued that even if their vessels held inaccurate oil record books, if the inaccurate entries were made outside of U.S. jurisdiction then there could be no failure to “maintain” within the navigable waters of the United States. The courts disagreed. The resulting decisions established the principle that the criminal violation of 33 U.S.C. 1908(a) and 33 C.F.R. Part 151.25 is the knowing failure to maintain an accurate oil record book within the navigable waters of the United States. It does not matter where the vessel was located when the false entry was made in the oil record book or when a required entry was omitted from the book.13

The requirement for vessels to maintain an oil record book is one part of a broad international and national regulatory regime to combat vessel-source pollution. The specific regulation, promulgated through the notice-and-comment rulemaking process, helps the Coast Guard enforce federal maritime pollution laws through the solidifying doctrines of port state control and port state jurisdiction. Significantly, the federal courts have “filled in” the meaning of the word “maintain” in this regulation in such a way as to give effect to the Coast Guard’s maritime stewardship mission.

About the author:
LCDR Brian McNamara has served in the Coast Guard for more than 12 years as a deck watch officer, law enforcement instructor, and attorney. He holds a Master of Laws in Admiralty and is a judge advocate.

Endnotes:
3. U.S. v. Coalition for Buzzards Bay, 644 F.3d 26 (1st Cir. 2011) (holding that the Coast Guard committed procedural error in the rulemaking process for a regulation governing navigation in Buzzards Bay).
8. See generally 33 C.F.R. Part 151 Subpart A.
12. U.S. v. Ionia Management S.A., 498 F.Supp.2d 477 (D.Conn. 2007), is one example of such a case.
13. The Fifth Circuit Court of Appeals summarized its interpretation of the APPS and the regulations by stating: [accurate oil record books are necessary to carry out the goals of MARPOL and the APPS. If the record books did not have to be “maintained” while in the ports or navigable waters of the United States, then a foreign-flagged vessel could avoid application of the record book requirements simply by falsifying all of its record book information just before entry into a port or navigable waters. If the oil record book requirements could be avoided in this manner, the Coast Guard’s ability to conduct investigations against foreign-flagged vessels would be severely hindered, and the regulation would allow polluters (and likely future polluters) to avoid detection. We refuse to conclude that by imposing limitations on the APPS’s application to foreign-flagged vessels Congress intended so obviously to frustrate the government’s ability to enforce MARPOL’s requirements. Instead, we read the requirement that an oil record book be “maintained” as imposing a duty upon a foreign-flagged vessel to ensure that its oil record book is accurate (or at least not knowingly inaccurate) upon entering the ports of navigable waters of the United States. U.S. v. Iho, 534 F.3d 398 (5th Cir. 2008). The Second Circuit relied on this principle in U.S. v. Ionia Management, 555 F.3d 303 (2nd Cir. 2009). The Third Circuit held that while the criminal offense is the failure to maintain the oil record book in U.S. waters, any improper discharge of oily water related to the improper log entries could not be considered a related offense for the purpose of enhancing the criminal conviction under the Federal Sentencing Guidelines. U.S. v. Abrogar, 459 F.3d 430, 437 (3rd Cir. 2006).
At any given moment, more than 50,000 merchant vessels transit the world’s waterways, carrying 90 percent of all trade between more than 150 maritime nations. Any instability occurring within a trading partner’s maritime boundaries translates into disruption in the global supply chain. This potential for instability necessitates U.S. Coast Guard awareness and attention.

For example, where a country lacks the appropriate laws, its maritime forces will find difficulty executing rules of engagement, administrative penalties, and a host of other operational details. Within the last few years, U.S. Coast Guard attorneys have partnered with government attorneys in developing countries to draft maritime laws where existing legislation was weak or nonexistent. These drafting partnerships help the host nation comply with international treaty obligations and establish and validate the host nation’s maritime administration authorities, response, and enforcement regulations.

Robust Coordination
Several U.S. Coast Guard attorneys serve as full-time rulemaking consultants to foreign governments. Rule drafting engagements may focus on any of the U.S. Coast Guard statutory missions, such as port security or marine pollution. However, the host nation may also ask attorney consultants to help design a military justice system, detainee operations framework, or human rights laws.

The U.S. Department of State and the U.S. Department of Defense evaluates the host country’s request for drafting assistance before sending a U.S. Coast Guard attorney abroad. Government officials may also seek assistance from an international organization such as the International Maritime Organization (IMO).

Coordinating international engagements with attorneys and governance advisors imbedded in international organizations like the IMO multiplies forces, reduces costs, and increases the likelihood of project completion. U.S. Coast Guard attorneys also use their various connections at institutions, such as the International Maritime Law Institute, to promote the importance of maritime-related rulemaking and offer resources to legislative drafters. Technical committees in regions such as the South Pacific also serve as invaluable forums in which U.S. Coast Guard drafting advisors can reach large audiences in a cost-efficient manner.

International drafting engagements may require coordination inside the U.S. government. Additionally, U.S. Coast Guard legal drafting advisors value the feedback the interagency process contributes to the overall success of drafting missions. As the lead coordinator for all international engagements, the Department of State oversees all governance consultants, including U.S. Coast Guard drafting advisors. The Department of State and the U.S. Agency for International Development primarily use contracted lawyers
for drafting missions. However, local U.S. embassies may request U.S. Coast Guard lawyers for drafting assistance in matters relating to maritime law.

**The Steps**

U.S. officials normally implement a four-step drafting process with a host nation. Depending on the complexity of the law, the drafting process could be a multi-year project. Although the Coast Guard legal program does not have a one-size-fits-all approach to international engagements, there is a rough methodology to delivering best drafting practices and consultation services to foreign colleagues.

- **Step 1:** The U.S. Coast Guard attorney learns about the host nation drafter and the host nation’s legal system, including the host nation’s constitution, status as a civil or common law jurisdiction, and existing laws that relate to maritime authority.

- **Step 2:** The Coast Guard attorney advisor and the host nation drafter diagnose problems to be addressed in the new law. For example, the “problem” might need to be addressed through national law; or, it might only need written agency policy. Government-affiliated operators, such as port security officers, are essential during this phase. Unlike attorney drafters, operators have the most current view of daily problems, like piracy, fisheries violations, or poor port security practices.
The U.S. Coast Guard and host nation attorney drafters will discuss applicable international law requirements, such as the Djibouti Code (piracy) or the International Ship and Port Facility Security Code (port security), if no national law directly or indirectly addresses the topic. At this stage, the legislative drafting technique called “incorporation by reference” is an option, in which the drafter states that an international law is now accepted into the nation’s legal system. One advantage of using incorporation by reference is instant relief from international community pressure to enact laws. Disadvantages include the lack of locally driven issue spotting and a dearth of response and enforcement measures, which are not usually addressed in international law, so incorporating international law by reference leaves gaps in these areas.

**Step 4:** At this point, the draft law is ready to receive further comment. Host nation governments handle this in a variety of ways and government, private, nonprofit, or a combination of all stakeholders may be involved. Although public and private entities are often at odds over how much regulation is needed, they do agree that strong rule of law means an increase in trade and a decrease in crime.

Although the host nation drafter and the U.S. Coast Guard attorney advisor keep in touch at this comment and revision stage, the primary U.S. government proponent of the new law is the local U.S. embassy’s political economics officer or possibly the host nation’s U.S. ambassador. In the end, the host nation government decides to enact or reject the draft law.

**Adaptability**

Lasting, workable laws stem from locally driven efforts, rather than external pressures. Therefore, developing countries’ maritime authorities must balance the urgency to comply with international mandates and the desire to craft a realistic regulatory framework. U.S. Coast Guard attorney advisors must also understand the depth and quality of the host nation’s resources before espousing change. Laws must leave room for innovation and flexibility.

---

<table>
<thead>
<tr>
<th><strong>Model Maritime Service Code</strong></th>
<th><strong>Model Port Security Compendium</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Created in 1994; second version released 2008</td>
<td>Created in 2011</td>
</tr>
<tr>
<td>Addresses all 11 USCG statutory missions</td>
<td>Addresses one USCG statutory mission (Title 46)</td>
</tr>
<tr>
<td>Audience is drafters who want to build a maritime service like the USCG</td>
<td>Audience is drafters who want to address ship and port facility security issues</td>
</tr>
<tr>
<td>U.S.-centric with references to international law</td>
<td>Worldwide best practices of nation states</td>
</tr>
<tr>
<td>Approx. 400 pages</td>
<td>Approx. 40 pages</td>
</tr>
<tr>
<td>1994 version is online; 2008 version is not available online</td>
<td>Not available online</td>
</tr>
</tbody>
</table>

---

**Step 3:** After the drafters identify any issues in the existing legal authorities, the host nation drafter will draft a new law or regulation with assistance from the U.S. Coast Guard attorney advisor. The goal is to formulate written grassroots solutions to the governance problem. Model codes such as the U.S. Coast Guard Model Maritime Service Code and the Model Port Security Compendium are helpful drafting tools.
Facilitating solutions also requires that Coast Guard personnel understand that model codes are not always the answer to governance problems and may be offensive to other governments. Model legal codes are more likely to be helpful and accepted by the host government when they:

- include worldwide (rather than strictly U.S.) best practices;
- allow for the easy separation of regulatory and enforcement functions into different agencies;⁶
- are written in the host country’s primary language.⁷

**Forward Focus**

By taking a coordinated, flexible approach to drafting missions, the U.S. Coast Guard legal community is at the forefront of an exciting time in the international rulemaking movement. Weak maritime governance creates soft borders, ripe for drug runners, poachers, and pirates.

National maritime administrations need formal laws outlining their authorities. Laws have the potential to give order, continuity, and legitimacy to a country’s national maritime force. U.S. Coast Guard attorneys, always ready, remain on call to offer assistance to drafters across the globe.

**About the author:**

LCDR Tiffany Hansen is a U.S. Coast Guard attorney, assisting attorneys on four continents with port security regulation drafting. Prior international law experience includes serving as a detainee operations attorney advisor in Baghdad, Iraq.

**Endnotes:**

1. International Chamber of Shipping.
6. Worldwide, many maritime authorities are split between maritime regulatory and enforcement authorities. This contrasts with the USCG, which blends both together.
7. Although a relatively basic point, this is very important when distinguishing between words like “safety” and “security,” which are the same word in several languages including French and Spanish.
It is not uncommon for Congress to pass statutes that leave gaps in the meaning of a law for the agency tasked with administration of the statute to fill in. Similarly, when agencies issue regulations, they may also leave gaps in the meaning of the regulation.

When the agency fills in those gaps through an informal action, based on the regulation, how much deference will a court give to the agency’s interpretation of its regulation? That was the question in the Shipbuilders Council of America v. U.S. Coast Guard (Shipbuilders),\(^1\) and the court of appeals decided that even if the Coast Guard’s informal action was not entitled to the most deferential treatment, the agency’s interpretation of its regulation would be affirmed.

### The Challenge

The case arose from a challenge by a group representing U.S. shipbuilders to a Coast Guard National Vessel Documentation Center (NVDC) decision. The Shipbuilders Council of America disagreed with the determination that a vessel was not considered to be “rebuilt foreign” when it had work done in China to create a double hull and bring it into compliance with the requirements of the Oil Pollution Act of 1990 for continued operation as an oil tanker in the U.S. coastwise trade.

The plaintiffs in the Shipbuilders case also challenged another NVDC determination that a vessel had not been rebuilt. That case asserted essentially the same arguments against the Coast Guard’s interpretation of its rebuilt foreign regulations and was litigated at the same time as the Shipbuilders case. After the Fourth Circuit’s decision in the Shipbuilders case, the NVDC’s decision was affirmed in the second case as well.\(^2\)

### Background

The U.S. restricts coastwise trade to vessels built in the United States that meet U.S. citizen ownership and control requirements. The law also states that any vessel that qualifies for the coastwise trade will lose those privileges if it undergoes foreign rebuilding.\(^3\) However, the law did not define the term “rebuilt.”

Congress left it to the Bureau of Customs, the administering agency, to define the term. Customs issued a regulation in 1957 that included what is now referred to as the “considerable part test,” which is still the touchstone for the definition of foreign rebuilding: “A vessel is deemed rebuilt foreign when any considerable part of its hull or superstructure is built upon or substantially altered outside of the United States.”\(^4\)
Soon after, Customs ruled that the addition of a foreign-built midbody (complete sections of a vessel built in foreign shipyards) to a coastwise vessel in a U.S. shipyard did not cause the vessel to be rebuilt foreign, using its considerable part test. As a result, Congress again amended the law in 1960 to provide that the addition of a foreign-built major component to a coastwise vessel would also lead to a loss of coastwise privileges. Customs then amended the rebuild regulations to incorporate the “major component” concept.

**Agency Change and Regulation Development**

About the time the Department of Transportation (DOT) was created, the Coast Guard transferred from the Treasury Department to the DOT; and the vessel documentation function, which included the task of making rebuilt foreign determinations, transferred from Customs to the Coast Guard. The Coast Guard then developed policies and practices for making rebuild determinations, explained in informal letter rulings.

In 1996, the Coast Guard issued a regulation that explained the definition of rebuilt foreign encompassed two tests—the “major component” test and the “considerable part” test. With respect to the major component test, the regulation specified that the addition to a coastwise vessel of a major component not built in the United States would cause the vessel to be deemed rebuilt. However, the regulation did not further explain the policies and practices used to determine what constitutes a major component.

Two of the important terms related to the considerable part test—“hull” and “superstructure”—were already defined in 46 C.F.R. Part 67. In addition, previous Coast Guard policy determined that, because the focus of the considerable part test was on work building upon or altering the hull and superstructure, work involving items such as outfitting, machinery installation, and other work not involving the hull and superstructure of the vessel was excluded from the rebuilt foreign determination.

The Coast Guard chose not to address this policy and practice explicitly in the regulation itself. However, it appears now to be sufficiently well understood (by knowledgeable practitioners anyway) to not have become a significant issue in the *Shipbuilders* litigation.

Finally, the new regulation included language that explained the policies and practices for deciding if a considerable part of the hull or superstructure had been built upon. For vessels made of steel, for example, a vessel is not considered rebuilt when work is performed that constitutes less than 7.5 percent of the vessel’s steelweight. On the other hand, the vessel is considered rebuilt if such work constitutes more than 10 percent of the vessel’s steelweight. In between the 7.5 percent and 10 percent parameters, the Coast Guard may use discretion to consider whether the vessel is rebuilt.

**Litigation Questions Policy, Definition**

The *Shipbuilders* litigation made it clear that the 1996 rulemaking, along with the effort to more fully explain the Coast Guard’s policies and practices regarding its rebuilt foreign determinations, left some gaps that the Coast Guard filled when it issued informal letter rulings. The major question addressed in the *Shipbuilders* case was how the Coast Guard defined a major component and decided if the major component test was applicable, in addition to the considerable part test.

There was no challenge to the Coast Guard’s policy of finding that a vessel was rebuilt foreign if, applying the major component test, a component was added that exceeded 1.5 percent of the vessel’s steelweight. The Coast Guard’s letter rulings had consistently used the 1.5 percent standard in applying the major component test, and the plaintiffs apparently did not feel a need to contest that standard, which is much more restrictive than the 7.5 to 10 percent standard used for the considerable part test.

Instead, the plaintiff challenged the Coast Guard’s explanation for why it did not apply the major component test to the work done on the vessel in question—the addition of steel to build an inner wall inside the hull to complete its double hull (the vessel already had a double bottom).

**Judicial Review**

Generally, the Administrative Procedure Act governs the judicial review of agency action. The act states that courts review the administrative record upon which an agency action is based and must affirm the agency action unless it is “arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law.”

The Honorable Leonie Brinkema, best known for presiding over the criminal trial of Zacarious Moussaoui, was the district court judge who heard the case. Before she evaluated the Coast Guard determination that the vessel was not rebuilt foreign, Judge Brinkema had to decide which standard of deference was applicable.
Standards of Deference
For example, in *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, the U.S. Supreme Court provided lower federal courts with guidance regarding the deference due to agency actions interpreting statutes and regulations. The court held that when an agency issues a regulation following notice-and-comment rulemaking—to implement a statute that expressly or implicitly delegates to the agency authority to fill gaps left by ambiguity in the statutory language—the courts must affirm the agency interpretation if it is based on a permissible construction of the statute. The agency interpretation need not be the only permissible reading of the statute. Courts may also evaluate other agency actions, short of notice-and-comment rulemaking, to determine if the agency intended to create a rule having the force of law. A properly established rule of that sort is also entitled to what is now referred to as *Chevron* deference.

In *Auer v. Robbins*, the Supreme Court held that an agency interpretation of its own regulation is controlling, unless it is plainly erroneous or inconsistent with the regulation. Therefore, generally, when an agency action is based on the agency’s interpretation of its own regulation, courts must defer to the agency interpretation of the regulation.

The least deferential standard follows from the case of *Skidmore v. Swift & Co.* This standard applies in cases where an agency interpretation of statute is challenged following an agency action that is not intended to create a rule with the force of law or where the agency action results from an informal process that suggests a less rigorous consideration of the issues. For example, an informal agency adjudication, resulting in a non-precedential ruling letter, would likely only be afforded *Skidmore* deference by a court. Under this standard, the court respects the agency interpretation of law only to the extent of its power to persuade the court that it is well founded.

**Coast Guard Afforded Least Deference**
Judge Brinkema found that the Coast Guard determination that the work in China did not constitute the addition of a major component was only entitled to *Skidmore* deference. She stated the Coast Guard’s position that the major component test only applied when a large, discrete separable component was added, was not adopted pursuant to formal rulemaking or another procedure bearing the indicia of a “legislative-type” determination. Therefore, between the *Chevron* standard and the *Skidmore* standard, she found the *Skidmore* standard to be more appropriate.

She also found the *Auer* standard of deference to be inapplicable, because the language in the regulation dealing with the major component test was very similar to the language in the statute it implements. The *Auer* standard is not applied in the case of so-called “parroting regulations,” because no special agency expertise or insight is required to issue a regulation that simply repeats what the statute says.

**District Court is not Persuaded**
Applying the *Skidmore* standard to the Coast Guard position on applicability of the major component test,
How the Courts Evaluate Agency Processes

Many Coast Guard actions are subject to Administrative Procedure Act review, although relatively few are challenged in court. Those actions result from processes that range from relatively formal procedures, like issuing a regulation following notice-and-comment rulemaking, to very informal determinations, for example, whether a picture submitted with an application for a merchant mariner’s credential meets the requirements for an acceptable photograph.1 The formality of the process or other indication that the agency has ruled authoritatively after careful consideration of the issues, are key factors in the analysis of whether the action will be afforded Chevron deference.

A formal adjudication based on the Coast Guard’s interpretation of its own regulation, for instance, a Vice Commandant’s decision on appeal from a suspension or revocation of a merchant mariner’s credential—involving the meaning of incompetence as defined in regulation—might be accepted as controlling law under the Auer standard.

Less formal actions that are not mandated via statute or regulation, and that involve some degree of discretion exercised on a case-by-case basis, may receive only Skidmore deference. Under Skidmore deference, a reviewing court will provide little deference at all beyond the administrative record’s ability to persuade the court that the action is reasonable and furthers the purposes of the statute.

Informing Future Agency Actions

For agency actions like the Coast Guard’s rebuilt foreign determinations, many considerations can be involved in deciding how much of the agency’s policies and practices should be codified in regulation and how much should be left to development and explanation on a case-by-case basis in letter rulings. If policy development and application is left to a case-by-case basis, the Coast Guard should carefully consider the process to make those decisions. The formality of the process and precedential nature of the decisions are important factors in the deference those decisions are likely to receive if later challenged in court.

Deciding Factors

Factors that courts consider in evaluating agency processes include:

- how many of the determinations/ruled are issued and if they are issued centrally or throughout the agency;
- if the determinations/ruled have the force and effect of law;
- the extent to which the action involves agency expertise;
- the importance of the question to administration of the statute;
- the complexity of that administration;
- the extent to which the agency has given careful consideration to the question over a period of time.

Endnote:

1. For purposes of discussing the relative formality of agency processes, we use the terms “formal” and “formality” in their usual sense and not as those terms are used in reference to rulemaking in the Administrative Procedure Act.
the work was performed, it would be easy to avoid the major component test by building the component upon the hull or superstructure piece by piece, instead of attaching it to the vessel as a prebuilt component. Accordingly, she found that the Coast Guard’s decision that no major component had been added to the vessel in China was invalid and that the matter should be remanded to the Coast Guard for further proceedings under a different interpretation of the statute and regulation.

According to Judge Brinkema, “Without any discussion or analysis of the language in the Jones Act, the Coast Guard’s [preliminary determination letter] declined to characterize the inner hull as a ‘major component’ because, unlike a bulbous bow or deck, it was not a separable component that would be added to the hull.”

**The Coast Guard Appeals**

The Coast Guard appealed the decision to the Circuit Court of Appeals. In defending its policies and practices, the Coast Guard explained that it would apply the considerable part test if work was done by building upon the hull or superstructure of the vessel steel piece by piece.

On the other hand, if a large and discreet singular component was attached to the hull or superstructure, then the major component test would be applied to that component. Any work on the hull or superstructure not deemed to be the addition of a major component would be assessed under the considerable part test.

The circuit court found that the district court’s decision was wrong under the *Skidmore* standard, because the Coast Guard’s reasons for its position on the application of the major component test were persuasive and that interpretation ought to have been upheld.

The major problem with the district court’s disapproval of the Coast Guard’s making a distinction based on the manner in which the work was done, is that if work of any kind had to be tested under the 1.5 percent limit of the major component test, then the considerable part test, with its greater limits, became meaningless.

According to the circuit court: “In its appeal, the Coast Guard persuasively argues that the separable / inseparable distinction is a necessary part of its holistic interpretation of the regulation. Only by drawing a firm line between work that is to be assessed under the major component test and work that is evaluated using the considerable part test, the agency contends, can both prongs of the regulation be given effect.”

Courts generally will favor the interpretation of a statute that gives meaning to every part of the statute, over an interpretation that renders parts of the statute superfluous or ineffective. In this case, the statute was ambiguous in terms of how to apply the major component test. The circuit court found: “The Coast Guard is the interpretive body best positioned to take account of the myriad factors involved in arriving at a reasonable construction of the complex regulatory scheme for coastwise endorsements; and its interpretation offers a way to harmonize the regulation so that each provision has independent significance.”

The circuit court also found that the Coast Guard’s policies and practices for application of the major component test were entitled to deference from the court, because they were reasonable, longstanding, and consistent with the legislative history.

**District Court Reversed**

With that, the circuit court reversed the district court’s invalidation of the Coast Guard’s interpretation of the major component test. Accordingly, in the Coast Guard’s further consideration of the foreign work on the vessel, it followed its interpretation of the major component test and found that no major component had been attached to the vessel.

As previously noted, the circuit court’s decision also affirmed the Coast Guard’s position in a second court case that presented essentially the same challenge to the Coast Guard’s policies and practices regarding application of the major component test.

**For Future Consideration**

When developing the foreign rebuild regulations in 1995 and 1996, the Coast Guard made an intentional decision to forego a regulation governing items not considered to be work on or alteration of the hull and superstructure, although its notice of proposed rule-making discussed the Coast Guard’s policy and practice. The Coast Guard did not codify the 1.5 percent steel weight limit for major components, presumably because that standard was already being consistently applied.

One factor in favor of regulation is that a policy or practice that is required to be applied by regulation
CDR John Luce is the office chief of the Coast Guard Office of Claims and Litigation. He received his law degree in 2000 and has spent most of his career since then in legal billets including deputy office chief in the U.S. Coast Guard Office of Claims and Litigation as well as a detail to the Department of Justice as a trial attorney in the Torts Branch, Aviation and Admiralty Litigation.

Endnotes:
1. 578 F.3d 234 (4th Cir. 2009).
4. 46 C.F.R. § 67.177
5. The practice involved constructing the midbody section of a vessel in a foreign shipyard and attaching a false bow to the midbody to tow it to the U.S. Once at its U.S. destination, the false bow was removed and the midbody was added to the vessel, greatly increasing its cargo capacity in a process known as jumboizing the vessel. See Deng, “Built” or “rebuilt”? That is the question: Risk of losing the coastwise privilege after vessel modification projects outside the United States, 35 Tulane Maritime Law Journal (TMLJ) 241, 246.
10. 551 F.Supp.2d at 454.
11. 578 F.3d. 234, 244.
12. 578 F.3d 234, 245.

may be easier to defend if it is challenged in court. An agency action mandated by the regulation or based on a permissible interpretation of the regulation should receive Auer deference.

That is something for agency policy makers to keep in mind when writing regulations to govern future agency actions. However, as the Shipbuilders case shows, if the administrative record for an agency action is sufficient to persuade a court that the agency action is reasonable and furthers the purpose of the governing statute, the agency action should be able to withstand any Administrative Procedure Act challenge.

About the authors:
Mr. Robert Bruce retired from Coast Guard active duty following a 30-year career spent mostly in legal billets. In 2004, he began work in a civilian position in the Coast Guard Office of Claims and Litigation, where he served as a litigation attorney for six years. In 2010, he became the chief of the Coast Guard Hearing Office, where he continues to supervise Coast Guard civil penalty hearing officers and their support staff.
The Coast Guard helps support maritime safety in a number of ways. For example, the Coast Guard protects the public’s safety during events like a fireworks display on or over water, for the duration of construction work on a bridge, or during a speed boat race down a river.

As a judge advocate, I focus on rulemaking to perform this duty. A rule is a published statement informing the public that they must do or refrain from doing something in a certain area at a specific time. For example, implementing a field regulation, known as a safety zone, can help keep members of the public a safe distance away from a fireworks barge during a fireworks show.

Field regulations are rules that affect only localized areas, because field units using the informal rulemaking process draft them. Informal rulemaking has been used for decades and is a vital tool for ensuring maritime safety and security.

Types of Field Regulations
Field regulations come in many varieties and can be used to help counter almost any threat to maritime safety. The most common types involve security zones, safety zones, regulated navigation areas, and special local regulations, as described below.

Security Zones
A security zone is an area of water or land where access is restricted to protect vessels, harbors, ports, or waterfront facilities from sabotage, accidents, or other sources of damage. A security zone typically surrounds the vessel or waterfront facility it is intended to protect and prevents unauthorized vessels from approaching. It may be stationary for zones that protect a fixed facility or mobile for zones that protect a ship in motion.

For example, the captain of the port may establish a security zone that prohibits unauthorized vessels from transiting or anchoring within a certain distance of a fuel transfer facility to protect the facility from sabotage.

Safety Zones
A safety zone is an area of water or land where access is restricted for safety purposes. Like a security zone, the safety zone typically surrounds a vessel or waterfront facility, but the intention is to protect not what is in the zone, but those around it.

Regulated Navigation Areas
A regulated navigation area is an area of water where vessels must adhere to special navigation requirements. These zones help control vessel traffic in places determined to have hazardous conditions. They usually prescribe what type of vessels may enter the area, restricting vessels by clearance, draft, or length.

Regulated navigation areas may also set a maximum transit speed or otherwise regulate a vessel’s manner of travel. For example, if the captain of the port determines transit under a specific bridge causes unique hazards, he or she may establish a regulated navigation area stating ships with a draft of more than 30 feet may not transit the bridge within 90 minutes of low tide.

continued on page 38
Exclusionary Zones

Safety zones protect people from things.

Crew from the Coast Guard Cutter Hawser enforce a safety zone around a fireworks barge. U.S. Coast Guard photo by Petty Officer Mike Hvozda.

A Coast Guard small boat patrols a safety zone established for the 2012 America’s Cup World Series races in San Francisco, Calif. U.S. Coast Guard photo by Chief Petty Officer Mike Lutz.

Coast Guard personnel enforce a safety zone around a burning sailing vessel. U.S. Coast Guard photo by Petty Officer Casey Cann.

A Coast Guard member informs spectators of the safety zone in place in San Diego Bay during the 2011 America’s Cup. U.S. Coast Guard photo by Petty Officer Henry G. Dunphy.
Security zones protect things from people.

Coast Guard personnel maintain a security zone for a liquefied natural gas shipment. U.S. Coast Guard photo by Petty Officer Donnie Brzuska.

Coast Guard crew members enforce a safety and security zone during the 2010 Cleveland Tall Ships Festival. U.S. Coast Guard photo by Petty Officer Brandon Blackwell.

A small boat crew patrols a security zone on waterways surrounding the main venue of the Republican National Convention. U.S. Coast Guard photo by Petty Officer Crystalynn A. Kneen.
Field regulations are established using informal rulemaking procedures that require the Coast Guard to complete specific notice-and-comment processes before putting a new rule into effect. The procedures are designed to ensure that the public has notice of the rule and has a meaningful opportunity to suggest changes to the rule before it takes effect.

**The Steps**

**Notice of Proposed Rulemaking**

The first step for most field regulations is to create a notice of proposed rulemaking (NPRM), which is issued to inform the public that the Coast Guard wishes to add, remove, or change a rule. When drafting an NPRM, the Coast Guard considers factors such as the rule’s potential impact on the environment and on small businesses.

The NPRM includes a preamble explaining what the Coast Guard is planning to do and a copy of the proposed regulatory text. It invites public comment on the proposed rule and states the public comment due date.

An NPRM is published in the *Federal Register* and is available on the Federal Docket Management System (FDMS) website at www.regulations.gov. FDMS stores information relating to the specific Coast Guard rulemaking activity docket for each field regulation. Each Coast Guard rulemaking docket includes:

- documents published in the *Federal Register*, such as the NPRM;
- supporting documents, such as an environmental analysis or other materials the Coast Guard used in the rulemaking process;
- public comments.

**Public Comment Period**

The next step of the informal rulemaking process is the public comment period, which begins when the NPRM is published and typically lasts for 30 to 90 days. Once the NPRM appears on www.regulations.gov, any member of the public can view and comment on it, using the website’s “submit a comment” feature.

All written comments are included in the docket for public review. The Coast Guard also summarizes all comments received by telephone or in person, so other members of the public may see the comments and respond. A public meeting may be held to discuss a proposed rule if needed or requested, and a summary of that meeting will be posted to the docket for review.

**Final Rule**

The Coast Guard creates a final rule after reviewing and considering all the comments and determining that there is not a need for another round of notice and comment. In addition to stating the final version of the regulatory language, the final rule will discuss comments the public submitted on the proposed rule, explain why the Coast Guard agreed or disagreed with the comments, and identify any changes made to the proposed rule in response to the comments. Final rules are published in the *Federal Register* and are available online at www.regulations.gov at least 30 days before the rule takes effect.

---

**Special Local Regulations**

Implementing special local regulations can protect the public’s safety during a regatta or another kind of marine event, where several areas will be impacted, or when the nature of the event requires specific instruction to the public. For example, to promote safety during a power boat race, the district commander may issue special local regulations establishing three areas near the race:

- a “spectator area” where vessels are required to operate at no wake speed,
- a “buffer zone” that excludes all vessels,
- a “race area” that prohibits access for all vessels except those participating in the race.

**Regulation Duration**

Field regulations can be temporary or permanent. Temporary final rules are typically used for events with a definite beginning and end such as fireworks shows or sailing regattas. These rules can be in effect for a few minutes, like a zone intended to protect the public during a fireworks show, to more than a month, like a zone intended to protect the public during a pier demolition project.

Permanent field regulations are used when permanent protections or precautions are needed for a specific vessel or facility. For example, the captain of the port may put a permanent security zone around a cruise ship terminal.
Enforcement

While field regulations are in effect, the captain of the port will designate one or more representatives to assist with enforcement. These representatives may be members of the Coast Guard or Coast Guard Auxiliary, local authorities, or other people helping to coordinate the event that necessitated the zone.

Field regulation violations can carry civil and criminal penalties. For example, a person violating a safety zone in U.S. territorial waters may face a civil fine of up to $40,000 per violation. A willful or knowing violation could result in a criminal felony conviction and carry a sentence of up to six years in prison. If the willful or knowing violation involved use of a dangerous weapon or injury to an officer authorized to enforce the safety zone, the prison sentence may be as long as 12 years.

About the author:
LT Sara Senser is a judge advocate in U.S. Coast Guard District 11. She received her commission from the Coast Guard Academy in 2003 and her Juris Doctor from the University of Washington in 2010.

Endnotes:
1 33 C.F.R. § 27.3.

Emergency Field Regulations

The Coast Guard must sometimes take action to protect the public’s safety during an emergency without first going through the 90-day notice-and-comment procedure. In these cases, regulations established in response to emergencies are exempted from the standard notice-and-comment procedures.

Thus, in emergencies, the Coast Guard may publish a final rule without first publishing an NPRM or inviting public comment. If the Coast Guard does not publish an NPRM, the final rule will include a detailed explanation of why the standard notice-and-comment procedures were not used.

Additionally, for final rules that were not preceded by an NPRM, the Coast Guard must ensure mariners are told of the rule’s requirements before any enforcement action. In emergency situations, mariners are often informed of the final rule via a broadcast notice to mariners or by the Coast Guard personnel on scene enforcing the rule.

Endnote:

For More Information:

For more information visit www.regulations.gov.

www.uscg.mil/proceedings
Participating agencies also gave advance notice of the safety zone to the local community, and the exercise went off without any safety zone incursions or enforcement action.

**Authority Gaps**
Creating a safety zone on ice highlights certain enforcement challenges posed by a change in the maritime environment from “soft” to “hard” water. Although the change in environment does not, in and of itself, impact the U.S. Coast Guard’s authority over U.S. navigable waters, it does expose certain authority gaps in the Coast Guard’s enforcement arsenal and presents capability and competency challenges, particularly with the presence of vehicle and pedestrian traffic on the ice.

The U.S. Coast Guard’s primary maritime law enforcement statute 14 U.S.C. 89(a), states:

*The Coast Guard may make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the United States has jurisdiction, for the prevention, detection, and suppression of violations of laws of the United States. For such purposes, commissioned, warrant, and petty officers may at any time go on board of any vessel subject to the jurisdiction, or to the operation of any law, of the United States, address inquiries to those on board, examine the ship’s documents and papers, and examine, inspect, and search the vessel and use all necessary force to compel compliance.*

This enforcement authority applies to boarding “vessels” on U.S. jurisdictional waters. Generally, the Great Lakes within the U.S. boundary with Canada...
are internal waters subject to U.S. jurisdiction regardless of the condition of the water (hard or soft). However, the extent to which vehicular traffic on the ice (such as trucks and snowmobiles) can be deemed "vessels" for enforcement purposes under 14 U.S.C. 89(a) is less clear.

The same uncertainty applies to captain of the port orders. A COTP order can restrict the movement of, or constrict the operation of a vessel on a U.S. waterway for safety and security reasons or to ensure compliance with the law. For example, a COTP order could direct a vessel to remain anchored in an icy channel to avoid the hazards of transit; similarly, the captain of the port could direct the same vessel to transit only with tug escort. Although this authority vests wide discretion in the COTP, it also limits exercise of this discretion to "vessels" within a COTP zone.

**Exclusionary zones**

Exclusionary zones, by contrast, have wider enforcement application. These zones are areas of water and/or shore an authorized senior Coast Guard official, typically the COTP, designates as an area of restricted access for a particular reason and duration.

Among these, safety zones are established for safety and environmental reasons such as restricting access to firework displays in ports and waterfronts. On the other hand, security zones help prevent damage or injury to any vessel or waterfront facility, safeguard U.S. ports, harbors, territories, or secure the observance of U.S. rights and obligations such as restricting access to a presidential visit on or near a waterfront.

Establishing these zones permits the authorizing Coast Guard official to deny any person or vessel access to the zone; to deny any person from bringing any vehicle, vessel, or object into the zone; to direct any person, vehicle, or object within the zone to leave the zone; and to require any person within the zone to obey his or her orders.

Because exclusionary zones apply to persons, vessels, and vehicles attempting to enter or already in the zone, they include pedestrians and vehicles on ice.

Given this scope, exclusionary zones provide effective enforcement authority for ice conditions and are essential for ice enforcement.

**Capability challenges**

Although an effective enforcement authority for ice conditions, exclusionary zones require adequate resource and personnel training for enforcement in ice conditions. The 9th Coast Guard District (D9) maintains a modest fleet of 10 airboats, often used for ice rescue and to project law enforcement presence on the water and ice. These assets are farmed out to select stations across D9’s wide area of responsibility.

Although Coast Guard boarding officers and team members are trained in interdicting and boarding vessels, they have less familiarity with law enforcement vehicle and pedestrian stops.

**Partnerships**

Given these capacity and competency challenges, effective enforcement efforts often require partnering with other agencies at the state and local level. Statutory authority for these partnerships exists in 14 U.S.C. § 141, which permits the U.S. Coast Guard to avail itself of federal and state employees and facilities, as may be helpful in the performance of its duties. The same statute permits the Coast Guard to assist federal, state, and local agencies when Coast Guard assets and personnel are available and qualified to perform a particular activity.

Additionally, 33 C.F.R. § 6.04-11 permits the Coast Guard COTP to enlist the aid and cooperation of federal, state, county, municipal, and private agencies.
The 9th Coast Guard District (D9) is expansive and unique. It shares a maritime border of roughly 1,500 miles with Canada, and its area of responsibility encompasses the federal navigable waters of the Great Lakes states and connecting waterways, including portions of the St. Lawrence Seaway, Illinois River, Lake Winnebago, New York State Barge Canal, and various tributaries.

D9 personnel carry out a variety of missions within its area of responsibility including search and rescue (SAR), maritime safety and security, environmental protection, maritime law enforcement, aids to navigation, and ice breaking. In winter, when the Great Lakes and tributaries freeze, D9 personnel engage in SAR operations on the ice and domestic ice breaking missions to free up shipping lanes and harbors for commercial vessel traffic.

To support ice rescue operations, D9 runs the Ice Capabilities Center of Excellence at Station/Aids to Navigation Team Saginaw River in Essexville, Mich. Coast Guard personnel and partner state and local first responders attend the school to learn about the fundamentals of ice rescue. It is the only U.S. Coast Guard training center dedicated to ice rescue.

Additionally, to address domestic ice breaking operations, the district maintains a fleet of harbor tugs and buoy tenders with ice breaking capability, including the queen of the fleet, the USCGC Mackinaw, the only U.S. heavy ice breaker assigned to the Great Lakes.

to assist in the enforcement of security zones issued under that part. Additional regulations authorize state and local law enforcement officers who have authority to enforce state criminal laws to make arrests for certain exclusionary zone violations—provided the violation is a felony, and the officer has reasonable grounds to believe the person has committed the violation.5

D9 leverages these authorities through memoranda of understanding or agreements with partnering state agencies in Indiana, New York, and Pennsylvania for maritime safety and security zone enforcement. Besides strengthening partnerships, these agreements multiply available enforcement assets including hard water resources like airboats and snowmobiles. They also provide availability to state and local personnel who have greater familiarity with law enforcement involving vehicular and pedestrian traffic.

The Result
In support of the January 18, 2012, rescue exercise, the COTP of Sector Lake Michigan established a safety zone surrounding the exercise area to protect the people who regularly traverse the ice. Personnel and assets from many agencies enforced the zone.

Coordinating with state and local partners assured effective safety zone enforcement and will continue to do so in D9’s area of responsibility.

About the author:
LT Terrence M. Thornburgh is a judge advocate in the 9th Coast Guard District legal office. Prior to this assignment, he deployed in support of Operation Deepwater Horizon as a pollution response coordinator in Mobile, Ala., and later as a claims adjudicator at the National Pollution Funds Center in Arlington, Va.

Endnotes:
1. 33 C.F.R. § 2.24(a) defines U.S. internal waters as waters shoreward of the territorial sea baseline.
2. For the purposes of this article, exclusionary zones refer to safety and security zones as defined in 33 C.F.R. §§ 6.01-05, 165.20, and 165.30. Exclusionary zones are established through the rulemaking process. For a detailed explanation of this process, refer to The Coast Guard Rulemaking Process article by Roger Battarini in Proceedings of the Marine Safety and Security Council, Spring 2010.
3. Safety zones promulgated for environmental reasons are limited in scope. The PWSA authorizes safety zones to control vessel movement within a waterway to avoid collisions, allisions, and groundings that may result in damage or pollution to the marine environment. It does not, however, authorize a safety zone to be established solely to protect marine protected species unless there is a nexus to navigational safety.
4. These prohibitions are taken from 33 C.F.R. § 165.23 for safety zones. Security zone prohibitions in 33 C.F.R. § 165.33 are generally consistent, but also permit the COTP to take possession or control any vessel in the security zone and deny any person from boarding or taking any article or thing onboard a vessel or waterfront facility within the security zone.
5. 46 U.S.C. 70118.
Recognizing Excellence in Field Regulations

by CDR Michael Cavallaro
Deputy Office Chief
U.S. Coast Guard Office of Regulations and Administrative Law

The Judge Advocate General’s Excellence in Field Regulations Award Program recognizes outstanding service in developing and processing field regulations. “Field regulations,” however, is a term of art; there is no such thing as a field regulation in the Administrative Procedure Act. In contrast to regulations that originate from Coast Guard headquarters and have broad effect, field regulations originate at a Coast Guard sector or district office, affect a limited geographic area, and are often of limited duration. In fact, the Coast Guard is one of only a few federal agencies that routinely publish temporary rules of limited geographic area.¹

An awards program for developing and processing field regulations is necessary for a number of reasons. First, the Coast Guard publishes about 400 field regulations per year, so there are a lot of them. Second, it is critical for field regulations to be written properly. Publishing a field regulation with a significant or “fatal” error can create an enforceability problem for the Coast Guard.²

The Program
For these reasons, the Judge Advocate General believes it is important to have an awards program to recognize the outstanding efforts of personnel who develop and manage field regulations to support Coast Guard mission execution within their areas of responsibility, thereby serving the public interest.

The Excellence in Field Regulations Awards Program falls under the Judge Advocate General’s Spirit of Excellence Award Program. Like other awards within that program, the Excellence in Field Regulations awards builds morale and fosters a climate of achievement that benefits the Coast Guard and the public.

The District Award
The district award recognizes legal offices that provide service to their district, sectors within that district, and the public in developing, reviewing, and processing field regulations. Award nominees are evaluated based on:

- completeness, accuracy, and sufficiency of work product;
- consistent use of Coast Guard technology, systems, and processes;

¹
²
• innovations and improvements to promote the field regulations process and the use of field regulations;
• successfully implementing a system to provide feedback to clients and promulgate best practices for the district legal office;
• strength of training and staff development;
• quality of service provided to clients and the public.

The Sector Award
The sector award recognizes the efforts of sector personnel who develop and manage field regulations to support Coast Guard mission execution within the unique characteristics of a sector’s area of responsibility. Nominees for the award are not lawyers. However, they are evaluated on many of the same factors described for the district award. Additional criteria include:

• compliance with the Administrative Procedure Act,
• proper use of Coast Guard authorities to accomplish the desired regulatory outcome,
• processing timeliness and efficiency.

Field regulations are vital to the Coast Guard’s day-to-day operations, and the Judge Advocate General’s awards program recognizes and celebrates this achievement. Nominations for the award have increased since the awards were instituted, reflecting their growing prestige within the Coast Guard community.

The Winners
The winners of the 2012 Judge Advocate General Excellence in Field Regulations Awards were: the 9th Coast Guard District and Sector New York.

The District Award
The 9th District Legal Office developed more than 100 field regulations (including a nationally significant field regulation to control the spread of Asian carp, an invasive aquatic nuisance species) that were essential to sector and unit operations and public safety. The legal office achieved this goal by constructing a safety zone and a regulated navigation area to protect the marine environment for an extensive river system that incorporated flexibility, creativity, and balance of USCG, other federal agency, and local interests.

The Sector Award
Sector New York’s Waterways Management Office evaluated approximately 950 marine event permits, resulting in 20 detailed field regulations to establish security zones, safety zones, special local regulations, regulated navigation areas, and special anchorage areas. Sector personnel consolidated more than 60 annual recurring marine events into one regulation, significantly reducing their numbers, streamlining the process, and reducing administrative burden.

About the author:
CDR Michael Cavallaro is the deputy office chief, U.S. Coast Guard Office of Regulations and Administrative Law, and executive secretary, Marine Safety and Security Council. Previous assignments include assistant legal officer at the Coast Guard Academy and marine inspector/investigator at Sector Hampton Roads. He received his J.D. from George Mason University School of Law.

Endnotes:
2 Id. at 33.
When President Obama first assumed office, he issued a memorandum to the heads of executive agencies addressing his immediate concerns with a lack of openness and transparency in the federal government.\(^1\) Accordingly, his administration and all federal government agencies strive to put the president’s order into practice by becoming more transparent, participatory, and collaborative with the American public.

While the president’s guidance may have been a sea change for some organizations, it was “ops normal” for the Coast Guard rulemaking program. In fact, the Coast Guard already partners with the public in its petition for rulemaking process and considers this collaboration essential.\(^2\)

**Public Petition**

Any member of the public may “petition” the Coast Guard to start a new rulemaking project. This request is known as a petition for rulemaking. The petition itself does not have to take any particular form; it can be a simple email request or a complex multi-page document.

A petition should be addressed to the executive secretary of the Coast Guard Marine Safety and Security Council. It should explain why the requester believes a new Coast Guard rulemaking is necessary and should include any supporting information.

**The Process**

When the executive secretary receives a petition, he or she will obtain a docket number from the Federal Docket Management System and notify the petitioner regarding how to access the docket. The executive secretary will then forward the petition to the appropriate Coast Guard program office for their professional review to evaluate the merits of the petition. That office has the option to draw on the expertise of other offices to fully evaluate the petition and make a final determination whether to initiate a new rulemaking project. The petitioner is notified regarding the decision, and the notification will provide the reason or reasons supporting the decision.

Some petitions are of such public interest that the Coast Guard may seek additional input from the public before making a final decision and will publish a notice and request for public comment in the Federal Register.

Regardless of its size, the petition and all of its supporting documents, along with the Coast Guard’s final decision, are published and maintained for public inspection in the public docket.

**All Are Equal**

The petition for rulemaking process is an equal opportunity activity, providing identical access to Coast Guard rulemaking officials regardless of a requester’s status. A concerned citizen receives the same consideration as a well-funded and organized industry group.

For example, the Coast Guard has recently received petitions proposing a wide variety of rulemakings, including requests to:

- amend offshore platform and oil spill response regulations to protect endangered sea life,
- alter the classification of stand-up paddleboards,
The uniform, fair, and public consideration of each petition is exactly the transparent, participatory, and collaborative governance the president envisioned in his memorandum.

About the author:
CAPT Sandra Selman has been a Coast Guard judge advocate since 1994 and currently serves in the Office of the Judge Advocate General as chief of military justice. Her previous assignment was deputy of the Office of Regulations, and she served as the executive secretary, Marine Safety and Security Council from 2010 to 2011.

Endnotes:
2. 33 CFR §1.05-15.
The Coast Guard relies on public comments to inform its decisions regarding policy and regulation. Public comments tell us whether our policies are working, provide real-world information about regulated activities, alert the Coast Guard to problems or unforeseen effects, and can challenge the assumptions on which our existing policies are based. Commenting also allows the public to express views and preferences and to request public meetings or additional discussion.

The Coast Guard Invites Public Comment
The Coast Guard requests public comment on proposed rules, unless the matter is so urgent or so minor that a public comment period is not appropriate. We also solicit comments on some draft policy letters and other nonbinding documents, prior to issuing them in final form.

The Coast Guard has a legal obligation to provide for public comment on most proposed rules.1 More
Focus on the Details
It’s important to emphasize that the Coast Guard focuses on the information provided in a comment, not on the number of comments: Commenting on a proposed rule is not the same as voting on it. We encourage you to send your detailed, individual views and experiences, rather than a form letter or a general statement of agreement or disagreement. The most useful comments are those that explain why the Coast Guard should take (or not take) a particular action.

We are particularly interested in comments that provide data on which we can base decisions—casualty details, operational costs, recreational use patterns, and environmental conditions are all important types of information. For example, if we propose a rule on small boat design, we appreciate comments on the cost (to manufacturer and user) of incorporating the design change, the feasibility and safety of using the new design, the number of people who already use the new design voluntarily, the possible environmental impact of the change, the impact of the timing or deadline for compliance, and any alternative designs we may not have considered. These details and specifics help us make good decisions that are supported by facts, and they help us explain why we chose some alternatives and not others.

Effective public comments address all of the following:

- **What** you want the Coast Guard to do. For example, you might endorse the proposed rule, object to it, or suggest something different.
- **Why** you want the Coast Guard to take that action. If you make a suggestion, explain why it is better than other possible alternatives.
- **Examples and specific details** supporting your position. If you are aware of relevant studies or reports, please share them.

Most public comments focus on the substantive details of the proposed rule or policy. However, we also welcome comments on other relevant matters such as our estimate of the cost, paperwork burden, or possible environmental effects.

Elements of an Effective Comment

Where the Coast Guard Uses Comments
We review every public comment before we make a decision. Although we cannot respond to comments individually, we summarize comments and respond to them in a follow-up document.

If we have solicited comments on a proposed rule or draft policy, we will explain in our final document how or why we changed the rule in response to public comments. If a public comment suggests a very different solution than the one we have proposed, and we want to hear more about it or possibly adopt it, we may issue a supplemental request for additional comments prior to deciding on the final document.
Sometimes we receive public comments outside the scope of the proposal or the Coast Guard’s authority. Although we may not take action in response to these comments, we will note in our response that we received them. If feasible, we forward these comments to other Coast Guard divisions that may benefit from them.

**Where Comments Go**

The Coast Guard uses an electronic docket to receive, store, and view comments. The docket contains the original proposal, supplemental information, all public comments, and any final rule or other follow-up document. The electronic docket has an email subscription feature that allows members of the public to receive alerts when new items are posted.

With some exceptions, all comments received from the public are posted to the electronic docket. Comments should not contain any private information that the comment publisher does not want in the public docket.

**How to Comment**

Follow the instructions in the published notice or proposed rule to submit a comment. Most people submit comments online. For those received via mail, facsimile, or hand delivery, the docket management staff will scan and post online.

Commenters can telephone or email the Coast Guard with questions about the proposal and the docket. Any substantive comments on the proposal are recorded in the electronic docket: We do not conduct substantive “off the record” conversations that circumvent the purpose of public comment. If we receive an email or telephone call we believe should be recorded in the docket, we will contact the commenter for permission to place it (with name and contact information) in the docket. If we cannot reach the person, we will post the substance on the docket as an anonymous comment.

**Timing Matters**

Anyone requesting a public meeting or an extension of the comment period should submit that comment early so the Coast Guard has time to review and act upon it before the comment period closes. We are not always able to grant requests for meetings or extensions; however, it is easier to do so if we receive the request early.

The written comment should explain why the meeting or extension is necessary.

If we decide to hold a public meeting or extend the comment period, we will publish a notice in the *Federal Register* with the details, and that notice will appear in the docket.

Similarly, it is also helpful to submit a comment earlier, rather than later, if you find an error in a proposed rule or believe the scope of the proposed action should be changed. This type of comment typically prompts additional questions, more detailed responses from others, or even a revised proposal.

Sometimes people submit comments late to “have the last word.” This is unfortunate, because reactions from others are very helpful, and early comments allow others to elaborate on the ideas. Additionally, if someone contradicts or misinterprets your comment, you can submit a second comment with more information.

Comments are due by a specific date. A comment is considered “received” on the day it is successfully transmitted online, or, in the case of physical paper comments, received at the docket management address. If a comment arrives a few days late, we usually are able to consider it. However, comments arriving later than that might not be considered.

**Now What?**

The Coast Guard wants public comments, because people provide us with important information that can affect Coast Guard policy. When submitting public comments on a proposed rule or policy, identify the part of the rule you are commenting on, what you want the Coast Guard to do, and why the Coast Guard should do that. Remember to provide detailed information to support your suggestions.

We look forward to hearing from you!

**About the author:**

Ms. Rebecca Orban earned her J.D. from the University of Michigan Law School. Prior to her work in the Coast Guard Office of Regulations and Administrative Law, she practiced energy and environmental law in the private sector, focusing on issues related to energy facilities, offshore operations, and spill risk management.

**Endnote:**

1. 5 U.S.C. § 553.
2. Electronic docket is available at www.regulations.gov.
Making it Easier to Comment on Proposed Rules

Developments in e-docketing.

by Mr. Jim McLeod
Attorney Advisor
U.S. Coast Guard Office of Regulations and Administrative Law

“\textit{I wish I had thought of that.}”

Nobody wants to hear a government official say this about a binding regulation he or she just issued. Fortunately, the notice-and-comment rulemaking requirements in the Administrative Procedure Act (APA) help us avoid this scenario.

\textbf{Background}

The APA, enacted in 1946, requires agencies to permit the public to submit written comments on proposed regulations. Sometimes the Coast Guard goes beyond this requirement and holds public meetings to provide an opportunity for oral presentations and other interaction.

During the 1950s, the Merchant Marine Council (one of the Marine Safety and Security Council’s predecessors) invited the public to comment on proposed regulations at public hearings and allowed individuals to submit written comments by mail.\textsuperscript{1} In fact, until the 1990s, mail or hand delivery were the only two methods available to the public to submit written comments.

\textbf{DOT Pioneers E-Rulemaking}

In 1967, the Coast Guard moved to the Department of Transportation (DOT) from the Department of Treasury. In the 1990s, DOT started using Internet technology to make commenting easier on rule proposals, make dockets available online, and allow for online comment submission.

Even so, as late as 1997, 11 DOT rulemaking components (including the Coast Guard) maintained a public docket room, and three of the components shared a common facility.\textsuperscript{2} In the 1990s, a person had to visit Coast Guard headquarters to view a Coast Guard rulemaking docket—unless the docket was small enough to mail. Mr. Michael Vitt, a member of the Towing Safety Advisory Committee, recalls what it was like to visit Coast Guard headquarters and sort through boxes of documents. “You had to dig for the more substantive or reasoned comments.”

\textbf{33 CFR § 1.05–15 Public participation.}

The Coast Guard considers public participation essential to effective rulemaking, and encourages the public to participate in its rulemaking process.
In 1995, DOT moved to consolidate nine separate docket facilities into a single central office and initiated a transition from a paper-based system to optical imaging technology. By 1999, the first part of the vision was realized, and there was one centralized facility set aside for the public to view all dockets from the various DOT rulemaking agencies.

In 1998, DOT’s Bureau of Transportation Statistics became the leading agency to offer the public the option to file comments on a rulemaking using DOT’s Docket Management System (DMS) website. In 1998, the Coast Guard announced the option of viewing dockets via DMS; however, it was not until 1999 that we began offering the option to submit comments online via the DMS.

So, DOT components were ahead of the curve when the E-Government Act of 2002 was enacted, specifying that agencies:

- accept rulemaking submissions by electronic means;
- ensure that a publicly accessible federal government website contains electronic dockets for rulemakings that offers access to all written submissions in the rulemaking docket (whether or not they were submitted electronically).

In 2003, DOT added a list serve to DMS that automatically sends an email to notify members when something was added to the docket. That same year, the Coast Guard transferred to Department of Homeland Security, but continued to use DOT’s DMS until 2007, when DMS was replaced by the Federal Docket Management System (FDMS), a government-wide, electronic docket management system.

The Federal Docket Management System: www.regulations.gov

A collaborative partnership of federal agencies, including DHS and DOT, governs the FDMS, and approximately 300 federal agencies use it. The regulations.gov website made it much easier for the public to:

- determine what rules an agency has proposed,
- view regulatory and environmental assessments,
- read and submit comments,
- search the docket for documents addressing a particular issue,
- track the progress of a rulemaking,
- learn more about the rulemaking process.

Navigating the Website

The website www.regulations.gov is easy to navigate. Each rulemaking document an agency publishes in the Federal Register will have a docket number. It may appear in several places, but it will always appear above the summary in the headings. Coast Guard docket numbers are 12 characters long and start with “USCG.”

Search and Comment

Visit www.regulations.gov to see what is in a docket or to submit comments on the proposed rulemaking for a docket. Type the docket number in the search box and hit “enter.”

Locate the document you are interested in and open it; to comment, click the “comment” button or icon. You can type in the box that appears or attach a file.

Once you have completed your comment, you can preview it and submit it. If the system has successfully received your comment, it will confirm this on a subsequent screen, but it may take 24 hours or more for your comment to appear in the docket.

If you comment on someone else’s comment, you should note that in the text of your submission, because the system will simply record your comment as a submission to the docket.

Commenting Tips

✔ Clearly identify the issues you are commenting on.
✔ When applicable, specify page number, column, and paragraph citation of the text you are commenting on.
✔ Explain the reasoning behind your position.
✔ Identify credentials and experience that may distinguish your comments from others.

Alerts

To subscribe to email alerts, open a docket folder, click on the “sign up for email alerts” link, enter your email address, and select how frequently you would like to receive these alerts.

Endnotes:

1 Note that www.regulations.gov sometimes changes its webpage, and these instructions may become outdated; regardless, the “Frequently Asked Questions” link provides up-to-date instructions.
2 The list of acceptable file types is: .bmp, .doc, .xls, .pdf, .gif, .htm, .html, .jpg, .jpeg, .png, .ppt, .rtf, .sgml, .tiff, .txt, .wpd, .xml, .docx, .xlsx, .pptx.
3 If you provide contact information, it helps us get in touch with you if we have questions about your comment, but you are free to submit your comment anonymously.
Public Participation is Essential for Effective Rulemaking
Unlike jury trials, we did not adopt informal rulemaking from the British. It’s an American invention of participatory democracy. You won’t receive a summons for rulemaking duty, and technology may not make the problems a rulemaking seeks to solve less complex, but www.regulations.gov does make docket material more accessible to the public and makes it easier to submit comments and become active participants in the rulemaking process.

About the author:
Mr. Jim McLeod has been an attorney advisor in the Office of Regulations and Administrative Law since April 2001. He previously conducted a general law practice in the District of Columbia with a focus on criminal trial and appellate work, and most recently was appointed as a special assistant U.S. Attorney on an environmental crimes case involving Coast Guard regulations. He obtained a B.S. in biology from the College of William and Mary, a J.D. from Vermont Law School, and an L.L.M in law and government from American University’s Washington College of Law.

Endnotes:
1. See 17 FR 5665, June 24, 1952, Vessel Inspection Regulations. We currently use the term “public meeting” to avoid suggesting to someone that a rulemaking may be governed by APA trial-type procedures requiring agency hearings on the record. See 5 U.S.C. 553 (c). (“When rules are required by statute to be made on the record after opportunity for an agency hearing, sections 556 and 557 of this title apply instead of this subsection.”)
2. 55 FR 44738, 57773, October 29, 1990, Unified Agenda. The 11 components were: U.S. Coast Guard, Federal Aviation Administration, Federal Highway Administration, Federal Railroad Administration, National Highway Traffic Safety Administration, Federal Transit Administration, Saint Lawrence Seaway Development Corporation, Bureau of Transportation Statistics, Research and Special Programs Administration, U.S. Maritime Administration, and Office of the Secretary.
3. The APA defines “agency” as (1) “each authority of the Government of the United States, whether or not it is within or subject to review by another agency. …” See 5 U.S.C. 551 (1). The Coast Guard, which is within the Department of Homeland Security, is referred to as a sub-cabinet agency, not a sub agency.
4. Two other websites may also be of assistance to those seeking to participate in the rulemaking process. Twice a year, each federal agency describes the status of its ongoing rulemaking projects. These entries appear in www.reginfo.gov, where you can search for a project by its title or regulation identifier number, and another excellent online source for reviewing proposed rules is www.fdsys.gov. If you want to see a copy of a law, regulation, or Federal Register publication, simply cut and paste the citation.

For More Information:
visit:
www.regulations.gov
www.reginfo.gov
www.fdsys.gov
Hear Ye, Hear Ye

The public meeting and informal rulemaking.

by CDR Michael Cavallaro
Executive Secretary
U.S. Coast Guard Marine Safety and Security Council

Public meetings have taken place since the Pilgrims settled America. In recent years, presidents and presidential candidates often hold “listening tours” to explain a policy or position to the public; members of Congress hold town hall meetings with constituents for similar purposes. Today, the public meeting remains a tradition in the federal rulemaking process.

That said, while the public has the opportunity to comment during the rulemaking process, a public meeting is not necessarily given for a particular rulemaking, when that rulemaking is issued under the informal rulemaking procedures of the Administrative Procedure Act. Rather, a public meeting is typically held on regulatory proposals of particular importance and/or complexity.

Authority for a Public Meeting

A section in Title 33 of the Code of Federal Regulations, Subpart I.05 (Rulemaking), addresses the matter of public participation in Coast Guard rulemaking. This section states that the Coast Guard “considers public participation essential to effective rulemaking, and encourages the public to participate in its rulemaking process.” With respect to public meetings, it states they “may also be held to provide an opportunity for oral presentations.”

This constitutes very little law on the subject of public meetings, but holding them is in keeping with the spirit of the Administrative Procedure Act, which only requires notice of and opportunity to comment on an informal rulemaking. This stands in contrast to formal rulemaking, where statute requires more formal proceedings. Hearings for formal rulemakings are “trial-type,” or evidentiary in nature and grant interested parties the right to present evidence, conduct cross-examinations of witnesses who introduce opposing evidence, and submit rebuttal evidence.1

The courts have said that only two situations require an agency to use formal rulemaking under the Administrative Procedure Act. First, if a federal law explicitly requires an agency to hold hearings before making rules on a subject. Second, if the law requires the agency to issue rules once there has been a hearing “on the record after opportunity for an agency hearing,” the courts have said this also requires a formal rulemaking.2 For these reasons, formal rulemaking has been the exception rather than the rule, because such “trial-type” proceedings are time-consuming, complex, and expensive.

Making the Public Aware of the Meeting

Meetings are announced in the Federal Register. It is Coast Guard policy that the agency will provide at least 30 days between publication of the meeting notice and the date of the meeting.3 The notice indicates the time and place of the meeting, the subject to be discussed, and any special registration requirements. It may also provide a contact number for those who require special assistance or have questions about the meeting facility.

In addition, we may also use press releases or social media tools to announce a meeting.

Conduct of Public Meetings

Arranging logistics is critical for holding a smooth, productive public meeting. For example, when Coast Guard officials announced a series of public meetings to receive comments on implementing Standards
Coast Guard officials must be careful to not allow the public to digress into a free-for-all. Coast Guard officials must be careful to not allow the public to digress into a free-for-all. Coast Guard officials must be careful to not allow the public to digress into a free-for-all. Coast Guard officials must be careful to not allow the public to digress into a free-for-all.

In addition to logistical measures, we can take other steps to ensure the public gets the most out of a meeting, such as arranging for the rulemaking project manager to preside at the meeting, or for a flag officer or another senior official to attend the meeting—to indicate by deed that the agency considers the meeting important.

Coast Guard public meetings follow a standard format. In most cases, the presiding officer opens the meeting with administrative matters and provides a summary of the published proposal. Because the primary purpose of a public meeting is to gather information about a rulemaking, Coast Guard officials will normally listen to comments without engaging in a dialogue with those who comment.

Sometimes, a question-and-answer format may be used; in these cases, answers are restricted to matters of fact contained in the initial proposal or already in the docket. While a reasonable amount of give and take in such circumstances may be acceptable, meetings are structured to facilitate receiving comments. Coast Guard officials must be careful to not allow the meeting to digress into a free-for-all.

**Ex Parte Communications and the Public Record**

Coast Guard policies prohibit ex parte communications in informal rulemaking, which is verbal or written communication that takes place off the public record. This type of communication can create the appearance of unfairness, or deny those on one side of an issue the opportunity to respond to comments made by the other. Public meetings avoid the unfairness of ex parte communications.

We avoid ex parte communications by ensuring that all comments received at a public meeting become part of the docket. Moreover, Coast Guard personnel enter into the docket all handouts and presentations the public offers at the meeting; written comments, such as a letter delivered to a Coast Guard official at the meeting; and comments sent to a Coast Guard official after the meeting.

Coast Guard officials who do receive ex parte communications will encourage the submitter to send this information to the docket for consideration. Individuals can always submit their comments anonymously. Since ex parte communications in the context of a rulemaking will increase the risk of a legal challenge to the rule’s legitimacy, the Coast Guard will normally inform the commenter that it will submit this information to the docket anonymously.

**The Benefits of a Public Meeting**

Not every informal rulemaking project includes a public meeting; however, it is a useful tool to offer to the public, especially when a project is controversial, complex, or both. A properly organized public meeting can increase the public’s confidence that concerns and opinions are considered with the seriousness they deserve.

Some of the most significant Coast Guard rulemakings in the past have included public meetings, including the aforementioned STCW rulemaking, as well as rulemakings regarding the Transportation Worker Identification Credential, and towing vessel inspections. Reviewing the dockets for those rulemakings is a good way to further your understanding of the purpose and conduct of Coast Guard public meetings.

**About the author:**

CDR Michael Cavallaro is the deputy office chief, U.S. Coast Guard Office of Regulations and Administrative Law, and executive secretary, Marine Safety and Security Council. Previous assignments include assistant legal officer at the Coast Guard Academy and marine inspector/investigator at Sector Hampton Roads. He received his J.D. from George Mason University School of Law.

**Endnotes:**

2. See 5 U.S.C. (section) 553(c). In United States v. Florida East Coast Railway, 410 U.S. 224 (1973), the Supreme Court, reviewing a section of the Interstate Commerce Act, held it did not mandate the use of formal rulemaking procedures because it only required a decision “after hearing,” rather than employing the precise phrase “on the record after opportunity for an agency hearing” used in section 553(c). After Florida East Coast Railway, a statute requiring use of formal rulemaking procedures can be expected to have those “magic” words.
4. All Coast Guard rulemaking electronic public dockets are available at www.regulations.gov.
5. Administrative matters include availability of sign-in sheets for attendees and sign-up sheets for those members of the public wishing to speak, time limits for speakers, a request that commenters speak from the podium microphone and state their name and organization before beginning, and announcing that the meeting is being recorded (or summarized) and the resultant record will be placed in the docket.
In 2011, President Obama signed Executive Order 13563, *Improving Regulation and Regulatory Review*, which directs agencies to tailor their regulations to:

- maximize the cost/benefit ratio;
- impose the least burden on society;
- maximize the net benefits, including potential economic, environmental, public health, and safety advantages;
- specify performance objectives instead of behavior or manner of compliance.

The order also directs agencies to perform a retrospective review of their current regulations as well as assess available alternatives to regulation.

Agencies are also encouraged to engage in international regulatory cooperation to streamline those regulations most important to their missions by working to eliminate duplicative regulatory burdens for persons engaged in international business.

**Regulations Review**

Taking its cue from the administration’s stance on the regulatory process, Department of Homeland Security (DHS) officials issued the *Final Plan for the Retrospective Review of Existing Regulations*,1 which promotes a process to identify obsolete, unnecessary, counterproductive, or burdensome regulations. In addition to applying the retrospective review requirements, DHS staff worked to ensure all rulemakings follow the principles of the executive order.

The Coast Guard, a component of DHS, has promoted removing outdated provisions; amending regulations that no longer serve the same purpose; and streamlining regulations, so that stakeholders can have more predictable, less costly obligations. Following the DHS plan, Coast Guard personnel have analyzed its data to identify problems with existing regulations by using casualty investigations and inspections to identify regulations in need of review and using voluntary consensus standards and vessel reviews to evaluate new technical or technological changes. (See related article that follows.)

We have also looked at the reasons to accept rulemaking projects, by asking the questions:

- Does a statute or international treaty require the rule?
- Is the Coast Guard overseeing the rulemaking procedures?
- Do benefits outweigh the cost of the rulemaking project?

This ensures we implement necessary rules to continue our missions without unduly burdening stakeholders.
Future Challenges

The goal is to improve the regulatory process without jeopardizing the integrity of our missions. However, like other agencies, the Coast Guard faces an uncertain fiscal future, which may hinder our efforts to change the regulatory process.

Executive Order 13563 is a blueprint for agencies to encourage more public input, publicize the regulations necessary to achieve their missions, and provide transparency in the regulatory process. Moreover, these processes can aid federal agencies as they face an uncertain fiscal future.

About the author:
Ms. Urchick is an attorney in the U.S. Coast Guard Office of Regulations and Administrative Law. Prior to working at the Coast Guard, Ms. Urchick worked for the Office of General Law at the U.S. Department of Energy. She is a graduate of Penn State University and the Michigan State University College of Law.

Endnote:

However, as quantifying benefits can be challenging, the Coast Guard has several studies underway to help better understand and apply innovative approaches to estimate benefits.

Regulatory Tools

To become more efficient, Coast Guard personnel are improving the technology used in the rulemaking process. Updated software and rulemaking databases will improve the average time the government requires to issue regulations.

Stakeholders can also use these technologies to gain a more predictable estimation for when a regulatory burden will cease or be imposed. This will improve our efficiency and should provide further transparency.
A Coast Guard Maritime Safety and Security Team conducts tactical maneuvers while enforcing a moving security zone. U.S. Coast Guard photo by Petty Officer Thomas Hartung.
Regulation Room

How the Internet improves public participation in rulemaking.

by Ms. Jackeline Solivan
Open Government Fellow
Cornell e-Rulemaking Initiative

Professor Cynthia R. Farina
McRoberts Professor of Research in the Administration of the Law
CeRI Principal Researcher

Cornell eRulemaking Initiative (CeRI) designed and operated Regulation Room, a pilot project that provides an online environment for people and groups to learn about, discuss, and react to selected proposed federal rules. The project is a unique collaboration between CeRI academic researchers and the government. The U.S. Department of Transportation (USDOT) was CeRI’s first agency partner and chose Regulation Room as its first open government “flagship initiative.” USDOT received a White House Open Government Leading Practices Award for its collaboration in the project. CeRI owns, designs, operates, and controls Regulation Room, but works closely with partner agencies to identify suitable “live” rulemakings for the site and to evaluate success after a rule closes.1

The CeRI team includes researchers from communication, computing, conflict resolution, information science, law, legal informatics, and political science. This interdisciplinary approach is unusual and has allowed the team to draw on many different areas of research in designing Regulation Room. Four USDOT rulemakings have been offered so far on the site.

Background
When rulemaking occurs, the originating agency must give public notice of the proposal, reveal any scientific studies or data, and explain legal and policy rationales. The agency must also provide a reasonable time (typically 45 to 90 days) for public comments. The agency is also legally required to read these comments and consider them. Although the right to comment is universal, industry groups, trade and professional associations, and similar legally sophisticated and well-resourced entities have dominated the process.2

Since the mid-1990s, individual agencies and the federal government have used the Internet to broaden rulemaking participation. Early agency-specific systems, such as USDOT’s Docket Management System, were superseded by www.regulations.gov (the government-wide e-rulemaking portal). These systems essentially put the conventional process online: Citizens go to a website, view the notice of proposed rulemaking (NPRM) and other key rulemaking documents, and submit a comment in a comment box or by attaching a document file.

This approach makes rulemaking materials easier to access, to submit and view comments. However, there has not been a substantial expansion of meaningful public participation.3 To be sure, some rulemakings now spark more than 100,000 email comments generated via advocacy groups, but these largely duplicative comments tend to add little substantive information to the rulemaking. Simply putting the notice-and-comment process online has not been enough to elicit informed and helpful participation by a broader range
of affected individuals such as small business owners and small government entities.

**Three Barriers to Broader Participation in Rulemaking**

The Regulation Room project starts from the hypothesis that a successful public participation system must address three barriers to citizen engagement in rulemaking.

1. **Lack of awareness** that rulemakings of interest are going on and that participation is possible. Even if a new rulemaking does attract media attention, people rarely know they can take part in the process by commenting.

2. **Information overload** from voluminous and complex rulemaking materials. Effective participation is informed participation; yet, the notices of proposed rulemaking and the supporting analyses can total hundreds of pages. In addition, our readability analyses reveal that even for rules that are not highly technical, these documents are often written at a graduate school level.

3. **Unfamiliarity with how to participate effectively.** Lacking an understanding of the nature and importance of rulemaking, many affected individuals and groups do not know that participation in this process is not like voting. The prevalence of mass email comment campaigns is dramatic evidence that new participants often do not understand the importance of giving reasons, acknowledging competing arguments, discussing alternatives, and substantiating claims.

Our goal in Regulation Room is to discover how human effort and Web 2.0 technologies can lower these barriers to elicit a broader range of public participation that has value to rule makers.

We try to discover where and how these target individuals and groups receive information. We identify membership associations, recreational and trade publications, and influential individuals (such as bloggers), and reach out to them through email, telephone, and online communications.

We develop a list of keywords and phrases to use proactively on Twitter, and we post ads on Facebook and Google by setting up continuous automated searches and responding with comments or “tweets” when the rule or its subjects appears in news sites, blogs, or Twitter. Regulation Room has a presence on Facebook, which is designed to encourage users to share issue posts and individual comments. We coordinate media outreach with agency partners and try to persuade conventional and online media to publicize the rulemaking and the availability of Regulation Room.

**Managing Information Overload**

A crucial participation technology in Regulation Room is “targeted” commenting, which is the ability for users to attach their comments to specific segments of text. E-rulemaking proponents have advocated such functionality to encourage more focused and specific comments, rather than the vague global expressions of support or opposition newcomers often submit. Targeted commenting can help comment analysis, because comments on the same topic are grouped together.

However, length and readability level makes it difficult for users to comment directly on the text of an NPRM. The Regulation Room solution utilizes several information design strategies:

- **Triage:** After carefully reviewing the NPRM, we identify and foreground the information new commenters will most likely be interested in and need; we package this information in thematic segments (six to 10 “issue posts”) of manageable length.
- **Translation:** Employing plain-language writing principles, we use relatively simple vocabulary and sentence structure.
- **Layering:** We use Web 2.0 hyperlinks to allow users to go deeper (to relevant sections of primary documents, statutory text, or background information) or to find help (glossary and brief explanation tool tips). Through layering, all information in the notice of proposed rulemaking and supporting documents is available in a form that gives users control and is less likely to overwhelm them.

Our goal in Regulation Room is to discover how human effort and Web 2.0 technologies can lower these barriers to elicit a broader range of public participation that has value to rule makers.

**Alert and Engage**

The process of remediating public unawareness begins long before the comment period opens. First, the team works with its partners to identify the range of possibly affected individuals and entities and create a communication outreach plan. Although everyone is welcome to participate in Regulation Room, our primary focus is to engage stakeholders who would most likely not participate unless they are actively recruited and encouraged to learn about the rulemaking.
Overt and Covert Education

Although we continue to refine our design strategies, we doubt it is possible for many inexperienced commenters to navigate the information demands of effective rulemaking participation without some human assistance. Therefore, the other essential tool Regulation Room uses to reduce the barrier of information overload is human moderation. Trained moderators:

- recognize when users are missing or misunderstanding important information and help them acquire it,
- encourage more knowledgeable or engaged users to go more deeply into the agency’s analysis,
- point out other issues and other comments that are related to the commenter’s apparent interests or concerns.

Regulation Room moderators are frequent, visible voices in the discussion. Additionally, they emphasize a substance-neutral moderator persona. Their job is to facilitate a knowledge-building community that supports learning, participation, and access to the rulemaking process. They model the kind of thoughtful, inclusive engagement that we try to cultivate as the site norm. Most important, they remain neutral about the agency’s proposal or commenters’ reactions to it.

Site Design and Functionality

Giving users the ability to rate or recommend a comment is a proven inducement to online engagement. Nonetheless, we made the deliberate choice not to encourage “rulemaking as voting” by including user voting or ranking mechanisms in Regulation Room. Moderators can “recommend” comments that illustrate effective commenting, which reinforces desired site norms and teaches effective participation.

We have begun experimenting with an “endorse” function, based on post-rule survey evidence that some Regulation Room visitors did not comment.
because others had already made the point they would have made. While we applauded the desire to avoid content duplication, we were also aware of research suggesting that users get more satisfaction out of online experiences if they actively participate rather than simply “read.” Therefore, we added “endorse” as a way to participate without increasing comment repetition.

So far, use of endorse has been modest, allaying our fears that people might stop making substantive comments and simply start voting via endorse. Moreover, noncommenters make up approximately 25 percent of the endorsements, which suggests that functionality fulfills an important role for some participants. In addition, another subset of those who endorse a comment then add their own comment later suggests that endorsing may be a precursor to more substantive participation.

Initial Regulation Room experience gives cause for optimism about broadening public participation in rulemaking. The overwhelming percentage of those who comment are new to the rulemaking process, and our partner agencies have reported that this new participation can bring valuable situated knowledge to their decision making.

At the same time, the Regulation Room experience cautions that the challenges are considerable and government leaders may not fully appreciate them. Motivating individuals to participate in an unfamiliar process has proven far more difficult than we anticipated. Making complex regulatory policy issues accessible to new participants requires carefully designed technical and human support. In particular, moderation is important, because it helps commenters obtain needed information and nudges them to make effective comments.

The computer science part of the Regulation Room research includes discovering whether aspects of the moderation process can be automated. In the near term, however, it is not realistic to expect technology to replicate the value human moderators add.
We believe Regulation Room’s most important lesson is that broadening effective public participation requires considerable investment from the citizen participants and from their government.

About the authors:
Ms. Jackeline Solivan is a Cornell e-Rulemaking Initiative post-doctoral fellow. She received a B.S. in policy analysis and management from Cornell University and a J.D. with a concentration in public law from Cornell Law School.

Ms. Cynthia R. Farina is the faculty director of the Regulation Room project, a lifetime fellow of the Administrative Law and Regulatory Practice Section of the ABA, and a public member of the Administrative Conference of the United States. She co-authors the leading casebook on administrative law, and she has been a Cornell Law School faculty member since 1985.

Endnotes:

Note: The articles contained in Proceedings are submitted by diverse public and private interests in the maritime community as a means to promote maritime safety and security. The views expressed by the authors do not necessarily represent those of the U.S. Coast Guard or the Department of Homeland Security or represent official policy.
A Regulatory “Look Back”

Retrospective review of DHS regulations.

by MS. CHRISTINA E. MCDONALD
Associate General Counsel for Regulatory Affairs
U.S. Department of Homeland Security
Office of the General Counsel

President Obama issued Executive Order 13563, *Improving Regulation and Regulatory Review*, on January 18, 2011. The executive order touched on several matters related to rulemaking and reaffirmed many of the principles that have long governed the review of federal agency rulemaking. Notably, however, the executive order identified retrospective analysis as one of several new principles that should guide agency regulatory decision making.

Of particular note, the executive order directed federal agencies to develop a plan to periodically review their existing regulations. For the Coast Guard and the other regulatory components within DHS, this new executive order meant that we had to develop and implement a retrospective review plan that would enable us to look back at our existing regulations and determine which ones we should keep, remove, or amend.

**Developing the DHS Plan**

DHS responded to the president’s directive by developing and releasing a preliminary plan on May 26, 2011, and ultimately a final plan on August 22, 2011.¹ The DHS Final Plan for the Retrospective Review of Existing Regulations sets forth a framework for reviewing existing DHS regulations and identifying those that may be obsolete, unnecessary, unjustified, excessively burdensome, or counterproductive.

DHS’s plan focuses on public openness and transparency, and public feedback has been invaluable to DHS’s retrospective review efforts. Before publishing our preliminary plan, we solicited public input on how we should develop our plan and on which existing rules we should consider for review. After publishing our preliminary plan, we sought public comment on the content of that preliminary plan.

DHS sought public input through a variety of mechanisms. Using traditional means, we published notices and requests for comment in the Federal Register. On the more nontraditional front, we posed questions on IdeaScale, an online tool for facilitating public dialogue where users can submit ideas, comment on each other’s ideas, and vote on each other’s ideas. Approximately 178 users posted a total of 98 ideas on IdeaScale. (In response to those 98 ideas, users submitted 76 comments and 174 votes.)

The public input that DHS received regarding its retrospective review efforts has covered a variety of subjects and included a number of suggestions. That public input informed the development of the DHS plan and the identification of DHS regulations for retrospective review.

**Highlights of the DHS Plan**

A central tenet of the DHS plan is the critical and essential role of public input in driving and focusing DHS retrospective review. We recognize that the impacts and effects of a rule tend to be widely dispersed in society, therefore
members of the public, and especially regulated entities, are likely to have useful information, data, and perspectives on the benefits and burdens of existing regulations. Gaining insight into that information, through public comment, informs refinements of the DHS regulatory framework.

The DHS process for retrospective review centers around public comment. Our three-year retrospective review cycle kicks off with the solicitation of public comment, with the goal of identifying regulations that may benefit from retrospective review.

The plan leaves open the option of (1) seeking public comment broadly on all DHS regulations or (2) focusing public comment on a specific category of regulations (e.g., security or immigration and border management) or on a specific DHS regulatory component (e.g., U.S. Coast Guard, Transportation Security Administration, U.S. Customs and Border Protection).

During the three-year cycle, DHS applies a three-step framework to review its existing regulations:

- **First**, we consider a variety of factors to select regulations as candidates for retrospective review. The primary factor is public feedback regarding potential improvements to a regulation. Beyond public comments to a Federal Register notice, DHS also incorporates public feedback in the form of ongoing stakeholder contacts and unsolicited feedback (e.g., rulemaking petitions).

  Other important factors include program official experience, field feedback, enforcement challenges, advisory council input, oversight entity reports, accident and incident data, and any changed circumstances (such as technological developments, advances in science, changed economic conditions, or other factors).

- **Second**, we prioritize the selected regulatory candidates, based on a number of factors, and identify those upon which we will focus our efforts. The primary factor is net benefits. We want to prioritize regulations that would result in the greatest increases in net benefits or reductions in net costs.

  Other important factors relevant to prioritization include the significance determination of the rulemaking under Executive Order 12866, the applicability of other legal requirements, the extent to which the revisions could reduce overlap or result in better harmonization of existing regulations, the ability to make the regulatory changes without statutory changes, the amount of time since previous revisions, and the available resources.

- **Third**, we assess the effectiveness of the selected regulations. We seek to determine whether the regulation is effectively and efficiently meeting its regulatory objectives while simultaneously minimizing burdens.

  For the purposes of our plan, we grouped DHS regulations into four broad functional categories: security; maritime safety and environmental protection; immigration and border management; and emergency management and assistance.

  The identification of different efficacy factors for each category was necessary given the inherent differences among regulatory categories. With respect to maritime safety and environmental protection, DHS will determine effectiveness based on an analysis of safety data.

**Implementing the DHS Plan**

DHS has only recently begun implementing its retrospective review plan. We are in the midst of our first three-year cycle, which we initiated in March 2011. Following our analysis of the public comments and relevant data that we received, we identified a few categories of retrospective review regulations, including (1) regulations for which DHS will currently conduct retrospective review and (2) regulations that are candidates for retrospective review in the future.

Our plan contains appendices, and in those appendices, we list regulations in both categories. In addition, we provide regular updates to the public on the status of our retrospective efforts. Our most recent update, from September 2012, is on the DHS Open Government website. DHS’s next three-year cycle will begin in 2014, and we will initiate that cycle with a formal solicitation of public comment.

When seeking comments from the public, we ask that commenters identify, with specificity, regulations for retrospective review. We also ask that commenters provide, in as much detail as possible, an explanation of why DHS should modify particular regulations. In addition, we seek specific suggestions on ways that the department can better achieve its regulatory objectives. We encourage interested parties to provide specific data to document the costs, burdens, and benefits of existing requirements.
U.S. Coast Guard Regulations for Retrospective Review

There are currently three Coast Guard regulations for which DHS is conducting in-progress reviews and considering amendments to existing regulatory provisions:

1. **Implementation of the Amendments to the International Convention on Standards of Training, Certification, and WATCHkeeping for Seafarers (STCW) and Changes to Domestic Endorsements**

   This rulemaking will address training requirements for merchant mariners. It will implement amendments to the STCW, which sets forth minimum training and demonstrations of proficiency requirements for merchant mariners.

   There is a need to update these regulatory requirements in order to address gaps in minimum training requirements for seafarers. In addition, the changes will provide additional flexibility for sea service and training requirements and clarify STCW requirements in response to requests for interpretation and guidance.

   The Coast Guard published a supplemental notice of proposed rulemaking on August 1, 2011. The next step will be for the Coast Guard to publish a final rule.

2. **Elimination of the Transportation Worker Identification Credential (TWIC) for Certain Mariner Populations**

   This rulemaking will address TWIC requirements for a subset of the mariner population. Preliminary analysis suggests that promulgation of this regulatory change would eliminate TWIC requirements and eliminate trips to TWIC enrollment centers for approximately 18,000 mariners annually.

   In December 2011, the Coast Guard issued a policy letter that implemented an interim process to provide burden relief to mariners. The next step will likely be for the Coast Guard to issue a rulemaking on the matter.

3. **Update to Maritime Security Regulations**

   This rulemaking will address maritime security regulations under the Maritime Transportation Security Act (MTSA) of 2002. This rulemaking would update existing MTSA regulations. Through this rule, the Coast Guard would formalize several categories of exemptions from MST. Currently, the Coast Guard is granting such exemptions on an ad hoc basis.

   This regulatory change would be a response to requests for interpretation and guidance, and it would clarify MTSA requirements. In addition, DHS estimates that formalizing the exemptions would provide an annual savings of $125,000 to society.

   In addition to these in-progress Coast Guard regulatory initiatives, there are also long-term retrospective candidates in the Coast Guard arena.

   - The Coast Guard is considering evaluating the effectiveness of its Automatic Identification System; Vessel Carriage Requirement (for Vessel Traffic Service Area) regulation in increasing navigation safety, reducing risk of accidents, and enhancing marine domain awareness.

   - The Coast Guard will review whether the reporting requirements and onboard testing device requirements found in its Marine Casualties and Investigations; Chemical Testing Following Serious Marine Incidents regulation have increased enforcement of the Coast Guard drug testing requirements.

   - The Coast Guard will consider evaluating whether the data received under the reporting requirements found in its Reporting Marine Casualties regulation fulfill the purpose of the requirements and whether any modifications to regulations are necessary.

   - The Coast Guard will consider updating regulations in 33 CFR and 46 CFR that contain material that Coast Guard has previously incorporated by reference.

In reviewing, evaluating, and incorporating the public comment, DHS will afford significantly more weight to feedback that identifies specific regulations, offers concrete and actionable data, or provides viable alternatives that meet statutory obligations and regulatory objectives. Feedback that simply states that a stakeholder feels strongly that DHS should change a regulation, but does not contain specific information on how the proposed change would impact the costs and benefits of the regulation, is far less useful.

We encourage all members of the public to continue to engage with DHS through the regulatory process and to provide input in response to our retrospective review efforts. Most importantly, we encourage stakeholders to identify specific regulations that would benefit from retrospective review, and to provide concrete data that would support any regulatory modifications. This information will assist in making DHS’s regulatory program more effective or less burdensome in achieving its regulatory objectives.

**About the author:**

Ms. Christina E. McDonald joined DHS in 2006 and has served as the Associate General Counsel for Regulatory Affairs at DHS since 2010. She previously worked as a trial attorney at the Federal Railroad Administration and as an honors attorney at the U.S. Department of Transportation. She holds an LL.M. from Georgetown University, a J.D. from the University of Maryland, and a B.A. from Franklin and Marshall College.

**Endnote:**

Understanding Potassium Nitrate

by Ms. Amy Parker

Chemical Engineer
Hazardous Materials Division
U.S. Coast Guard Headquarters

What is it?
Potassium nitrate, also known as saltpeter, is a solid compound commonly used in fertilizer. Important macronutrients nitrogen and potassium, responsible for plant growth and flower/seed formation, are readily available in potassium nitrate.

In addition to being a good source of essential plant nutrients, potassium nitrate is also an efficient oxidizer. As such, it’s been used in gunpowder, fireworks, and rocket propellants.

How is it shipped?
Potassium nitrate is a transparent or white powder or crystal. It can be shipped by being packaged into bags, in bulk containers, or in loose bulk form. Due to its chemical hazard (note its utility in explosives), it is required to transport the chemical according to the applicable regulations.

Why should I care?

Shipping concerns
The primary concern with the shipment of potassium nitrate is its strong oxidizing potential. Its classification as a Class 5.1 oxidizing substance indicates it can generate oxygen when wet, causing or contributing to the combustion of other materials. Therefore, potassium nitrate should be stowed away from sources of heat or ignition in cool, dry places. It should be stowed away from foodstuffs and all readily combustible materials.

Health Concerns
Potassium nitrate can be harmful and cause irritation to the eyes, skin, and respiratory and gastrointestinal tracts. Eye and skin contact can lead to redness, itching, and pain. Inhaling potassium nitrate can lead to coughing and shortness of breath; ingestion may result in nausea, vomiting, and diarrhea. As with all nitrates, chronic exposure to potassium nitrate may cause anemia and have adverse effects on the kidneys.

Fire or explosion concerns
Although potassium nitrate is noncombustible, it will increase the flammability of other combustible materials. Existing fires are enhanced in the presence of potassium nitrate due to an increase in oxygen levels generated by potassium nitrate reduction. If potassium nitrate is involved in a fire, it is imperative that emergency responders wear appropriate protective clothing such as gloves, boots, and coveralls in addition to self-contained breathing apparatuses.

Carbon dioxide is not an effective means of controlling fires involving potassium nitrate; therefore, large volumes of water may be required to extinguish the fire. Ship stability should be given due consideration as significant amounts of water may accumulate.

What is the Coast Guard doing about it?
Transport of potassium nitrate as a bulk cargo is regulated under 46 CFR Part 148 and the International Maritime Solid Bulk Cargoes Code. When transported as a packaged cargo, it is shipped according to 46 CFR Part 173 and the International Maritime Dangerous Goods Code.

About the author:
Ms. Amy Parker is a chemical engineer in the Hazardous Materials Division at U.S. Coast Guard Headquarters. She is responsible for developing domestic and international regulations for the marine transport of solid bulk cargoes and representing the U.S. at the International Maritime Organization’s subcommittee on dangerous goods, solid cargoes, and containers.
1. During initial cool-down in a refrigeration system, which of the devices is used to prevent excessive gas pressure at the compressor suction?
   
   A. Suction pressure hold back valve   
   B. High pressure cutout   
   C. Solenoid valve   
   D. Low pressure cutout

2. The function of a centrifugal pump double volute casing is to ____________.
   
   A. reduce radial thrust on the impeller   
   B. double the liquid velocity through the pump when compared to a single volute   
   C. reduce the hydraulic end thrust   
   D. provide the effect of multi-staging

3. When a hydraulic valve lifter is on the base circle of the cam, ‘zero’ valve lash is maintained by the ____________.
   
   A. valve spring   
   B. plunger spring   
   C. oil pressure   
   D. rocker arm
1. **A. Suction pressure hold back valve**
   
   Correct answer. This valve is situated in the compressor suction line and senses the pressure downstream at the compressor inlet. When box temperatures are in range, the compressor suction pressure is in the normal range and below the set point of the suction pressure hold back valve; and, consequently, the valve is wide open and the compressor capacity is not limited. With higher box temperatures, however, the suction pressure will rise to the set point of the valve, and the valve will then throttle the flow of suction gas to the compressor, reducing the compressor volumetric displacement during the initial pull-down period. The suction pressure hold back valve is also known as a crankcase pressure regulator.

   **B. High pressure cutout**
   
   Incorrect answer. This is a safety switching device, which shuts down the compressor in the event of unusually high discharge pressure, regardless of the cause. It does not directly sense the compressor suction pressure and does not function to prevent excessive gas pressure at the compressor suction.

   **C. Solenoid valve**
   
   Incorrect answer. This is a generic term referring to any number of electro-magnetically operated valves in the system, which depending on the application may vary widely in terms of function.

   **D. Low pressure cutout**
   
   Incorrect answer. This is an operating control switching device, which normally starts and stops the compressor and is part of a pump down circuit, which also includes thermostatically controlled box solenoid valves. Even though it does directly sense suction pressure, it does not function to prevent excessive gas pressure at the compressor suction. In fact, it closes (to start the compressor) on a rise in suction pressure and opens (to stop the compressor) on a fall in suction pressure.

2. **A. reduces radial thrust on the impeller**
   
   Correct answer. A centrifugal pump double volute casing has a dividing wall existing in the volute through 180 degrees. This dividing wall is designed to neutralize the radial reaction forces when at less than design capacity. As such, the radial loading on the pump shaft bearings is minimized throughout the entire range of pump capacities.

   **B. double the liquid velocity through the pump when compared to a single volute**
   
   Incorrect answer. The liquid velocity through the pump is a function of impeller speed and diameter. All other factors being equal, there would be no essential difference between liquid velocity through a single volute pump as compared to a double volute pump.

   **C. reduce the hydraulic end thrust**
   
   Incorrect answer. A centrifugal pump double volute casing is designed to handle issues related to radial thrust, and is not designed to handle any issues related to end (axial) thrust. Centrifugal pumps are sometimes designed with an impeller with a double suction, which is used to neutralize axial (end) thrust. This is not to be confused with a double volute casing.

   **D. provide the effect of multi-staging**
   
   Incorrect answer. Multi-staging is used to increase the pressure output of a centrifugal pump beyond what one pump impeller can deliver. This increase in pressure output is accomplished by the use of multiple impellers, with each impeller discharging into the suction of the impeller of the following stage. The centrifugal pump double volute casing does not increase pressure over that of a single volute casing.

3. **A. valve spring**
   
   Incorrect answer. The valve spring is the closing force for the valve itself. Its function is to keep the valve seated when the valve lifter or cam follower is on the base circle of the cam. It has no direct impact on valve lash.

   **B. plunger spring**
   
   Correct answer. The plunger spring acts so that the pushrod seat remains in contact with the pushrod at all times. As such, the hydraulic valve lifter maintains “zero” valve lash.

   **C. oil pressure**
   
   Incorrect answer. Whether valve lifters or cam followers are mechanical or hydraulic in nature, oil is required as a lubricant, as the device reciprocates within its bore. With hydraulic valve lifters, oil is also used as a hydraulic medium to make up for changes in overall lifter length; however, it is the plunger spring itself which maintains “zero” lash.

   **D. rocker arm**
   
   Incorrect answer. The rocker arm is designed to translate the upward motion of the valve lifter or cam follower to the downward motion of the diesel engine valve and vice versa. The rocker arm is used to set valve lash on mechanical lifters. The rocker arm does not maintain ‘zero’ lash. Only hydraulic valve lifters do, by the action of the plunger spring.
1. What does a pyrometer measure on a diesel engine?
   
   A. Water temperature  
   B. Water pressure  
   C. Exhaust temperature  
   D. Air box pressure

2. Which of the following best describes the requirement of the emergency pump control when used as the emergency shutdown on tank vessels?

   A. Stop the flow of oil at the main deck manifold  
   B. Prevent the oil from leaving the shore facility  
   C. Prevent the oil from siphoning through the pump  
   D. None of the above

3. Determine the great circle distance and initial course from Lat 37°47.5’N, LONG 122°27.8’W to LAT 33°51.7’S, LONG 151°12.7’E.

   A. 6324.2 nm, 310.3°T  
   B. 6345.3 nm, 301.7°T  
   C. 6398.0 nm, 298.3°T  
   D. 6445.2 nm, 240.3°T

4. Both International and Inland: Which statement is TRUE concerning a vessel under oars?

   A. She must show a stern light  
   B. She is allowed to show the same lights as a sailing vessel  
   C. She must show a fixed all-round white light  
   D. She must show a day-shape of a black cone
Deck Answers

1. A. Water temperature Incorrect answer. A standard thermometer is used to measure the jacket water temperature.
   B. Water pressure Incorrect answer. A standard pressure gauge is used for this measurement.
   C. Exhaust temperature Correct answer. Reference: Kates and Luck; Diesel and High Compression Gas Engines. A pyrometer is generally considered as a unit for measuring high-temperatures that would be encountered in the exhaust system.
   D. Air box pressure Incorrect answer. Customarily, a manometer is utilized to measure air box pressure.

2. A. Stop the flow of oil at the main deck manifold Incorrect answer. The regulation requires that the system stop the siphoning of liquid through the pump including within the vessel itself. Stopping the flow at the deck manifold would not stop the internal transfer on most piping configurations.
   B. Prevent the oil from leaving the shore facility Incorrect answer. The question is inquiring as to the requirements of the emergency pump control on a tank vessel, not the shore facility.
   C. Prevent the oil from siphoning through the pump Correct answer. Reference: 33 CFR 155.780. “If an emergency pump control is used, it must stop the flow of oil or hazardous material if the oil or hazardous material could siphon through the stopped pump.”
   D. None of the above Incorrect answer

3. A. 6324.2 nm, 310.3°T Incorrect answer
   B. 6345.3 nm, 301.7°T Incorrect answer
   C. 6398.0 nm, 298.3°T Incorrect answer
   D. 6445.2 nm, 240.3°T Correct. Reference: Bowditch; The American Practical Navigator
   Reference: Plant; Formula for the Mariner.
   The problem can be solved utilizing the following formulas:
   
   Cos Distance = (Cos Lat1 × Cos Lat2 × Cos Dlo) ± (Sin Lat1 × Sin Lat2)
   
   Cos Initial Course = (Sin Lat2 - (Cos Distance × Sin Lat1)) ÷ (Sin Distance × Cos Lat1)

   Dlo = (180° – 151°12.7' E) + (180° – 122°27.8' W) = 86.3250°
   
   (Cos Lat1 × Cos Lat2 × Cos Dlo) = 0.04206826
   (Sin Lat1 × Sin Lat2) = 0.34144141
   
   Cos Distance = (Cos Lat1 × Cos Lat2 × Cos Dlo) ± (Sin Lat1 × Sin Lat2)
   Subtract when crossing the equator
   
   Cos Distance = (0.042068260) - (0.34144141)
   Cos Distance = -0.299383
   Distance = 107.4204 × 60° = 6445.2264 nm
   
   Cos Initial Course = (Sin Lat2 - (Cos Distance × Sin Lat1)) ÷ (Sin Distance × Cos Lat1)
   Lat2 is negative when crossing the equator
   
   (Sin Lat2 - (Cos Distance × Sin Lat1)) = (-0.37373964)
   (Sin Distance × Cos Lat1) = 0.753998648
   
   Cos Initial Course = (-0.37373964) ÷ (0.753998648)
   Cos Initial Course = 0.4957
   Initial Course = N 119.7137° W
   Initial Course = (360°-119.7137°)
   Initial Course = 240.2862°

4. A. She must show a stern light Incorrect. A vessel under oars may show the lights prescribed for a sailing vessel, and if she did, a stern light would be included.
   B. She is allowed to show the same lights as a sailing vessel Correct answer. Reference: Inland and International Rule 25d(ii):
   “A vessel under oars may exhibit the lights prescribed in this rule for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.”
   
   C. She must show a fixed wall-round white light Incorrect. This is not a requirement of a vessel under oars.
   D. She must show a day-shape of a black cone Incorrect. There is no day shape requirement for a vessel under oars.

Mailing Address:
U.S. Coast Guard,
Proceedings Magazine,
2100 2nd St. S.W.
Mail Stop 7681
Washington, DC 20593

Phone:
202-372-2316

Email:
HQS-DG-NMCProceedings@uscg.mil

Website:
www.uscg.mil/proceedings
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landslide, Ms. Jennifer</td>
<td>Enhancing International Efforts to Prosecute Suspected Pirates.</td>
<td>65</td>
</tr>
<tr>
<td>Lantz, Mr. Jeffrey G.</td>
<td>Protection and Indemnity Clubs: Insuring and ensuring marine safety</td>
<td>4</td>
</tr>
<tr>
<td>Law, Mr. James</td>
<td>The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself.</td>
<td>63</td>
</tr>
<tr>
<td>Lammers, Mr. Karl</td>
<td>100 Years of Marine Safety; Summer 2012; Protection and Indemnity Clubs: Insuring and ensuring marine safety since the time of the Titanic.</td>
<td>83</td>
</tr>
<tr>
<td>Lusk, LCDR Leanne</td>
<td>100 Years of Marine Safety; Summer 2012; We Are SAR: Search and rescue over the last 100 years.</td>
<td>49</td>
</tr>
<tr>
<td>Luzader, MSTCS John</td>
<td>100 Years of Marine Safety; Summer 2012; From Sea to Air to Space: A century of iceberg tracking technology.</td>
<td>17</td>
</tr>
<tr>
<td>McIntyre, Mr. Steven</td>
<td>100 Years of Marine Safety; Summer 2012; Classification’s Imprint on International Regulation.</td>
<td>78</td>
</tr>
<tr>
<td>Mc Lay, LT James</td>
<td>Global Enforcers: Coast Guard law enforcement detachments tackle piracy at its source.</td>
<td>51</td>
</tr>
<tr>
<td>McTaggart, CDR Joshua</td>
<td>The Marine Casualty Investigation Process; Fall 2012; Investigations National Center of Expertise: Committed to improving marine casualty investigations.</td>
<td>23</td>
</tr>
<tr>
<td>Meskun, LT Matthew</td>
<td>Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training.</td>
<td>31</td>
</tr>
<tr>
<td>Miller, LCDR John H.</td>
<td>100 Years of Marine Safety; Summer 2012; 100 Years of Fire Safety Progress: The evolution of SOLAS fire protection requirements.</td>
<td>45</td>
</tr>
<tr>
<td>Min, LT Jodi</td>
<td>100 Years of Marine Safety; Summer 2012; Chemical of the Quarter: Understanding Ammonium Nitrate.</td>
<td>98</td>
</tr>
<tr>
<td>Murphy, Dr. Donald L.</td>
<td>100 Years of Marine Safety; Summer 2012; The International Ice Patrol: Safeguarding life and property at sea.</td>
<td>13</td>
</tr>
<tr>
<td>Noakes, Mr. Giles</td>
<td>100 Years of Marine Safety; Summer 2012; Best Management Practices: Industry-approved techniques to avoid, evade, and defend against piracy.</td>
<td>19</td>
</tr>
<tr>
<td>Offutt, Mr. Todd</td>
<td>100 Years of Marine Safety; Summer 2012; Getting the Word Out: Regional information brokers keep mariners apprised.</td>
<td>29</td>
</tr>
<tr>
<td>Phillips, LCDR Catherine</td>
<td>100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission.</td>
<td>27</td>
</tr>
<tr>
<td>Penoyer, CDR Brian</td>
<td>100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations.</td>
<td>88</td>
</tr>
<tr>
<td>Peverett, Ms. Tracy</td>
<td>Combating Piracy; Spring 2012; The International Maritime Organization: Organizing the maritime response.</td>
<td>12</td>
</tr>
<tr>
<td>Piersall, Captain Charles H.</td>
<td>100 Years of Marine Safety; Summer 2012; Industry Standards that Complement Safety Regulations: An international solution for a global industry.</td>
<td>74</td>
</tr>
<tr>
<td>Rawson, Mr. Charles</td>
<td>Combating Piracy; Spring 2012; International Requirements for Ship Structures: Protecting ships from the sea and the sea from ships.</td>
<td>34</td>
</tr>
<tr>
<td>Raymond, CDR Joe</td>
<td>100 Years of Marine Safety; Summer 2012; The Senate Investigation into the Loss of the Titanic: A search for facts and the beginning of the myths.</td>
<td>93</td>
</tr>
<tr>
<td>Reardon, LCDR John</td>
<td>Combating Piracy; Spring 2012; Lessons Learned; Their Last Catch: The Bering Sea claims another fishing vessel.</td>
<td>70</td>
</tr>
<tr>
<td>Renschler, LT Aaron</td>
<td>Combating Piracy; Spring 2012; LEDET 406: A personal journey in pirate defense.</td>
<td>54</td>
</tr>
<tr>
<td>Rivera, LT Eric</td>
<td>The Marine Casualty Investigation Process; Fall 2012; Slime and Punishment: Environmental crimes investigation.</td>
<td>12</td>
</tr>
<tr>
<td>Rodriguez, CDR Mike</td>
<td>Combating Piracy; Spring 2012; Anti-Piracy Programs and the Use of Arms Aboard Ships: The mariner’s perspective.</td>
<td>21</td>
</tr>
<tr>
<td>Schopp, LT Michelle</td>
<td>The Marine Casualty Investigation Process; Fall 2012; Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training.</td>
<td>31</td>
</tr>
<tr>
<td>Sekimizu, Mr. Koji</td>
<td>100 Years of Marine Safety; Summer 2012; International Maritime Organization: 100 years after the Titanic.</td>
<td>23</td>
</tr>
<tr>
<td>Servidio, RDML Joseph A.</td>
<td>The Marine Casualty Investigation Process; Fall 2012; Assistant Commandant’s Perspective.</td>
<td>4</td>
</tr>
<tr>
<td>Sheehan, Mr. Daniel F., P.E.</td>
<td>The Marine Casualty Investigation Process; Fall 2012; What Hath Regulation Wrought? Third-party ship management.</td>
<td>71</td>
</tr>
</tbody>
</table>
Simbulan, LCDR Michael
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Investigations Feedback Loop: Safety alerts, recommendations, and lessons learned. p.54

Sirkar, Mr. Jaideep
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

Smith, CDR Robert L., Jr.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; A Century of Technological Advancements on the Outer Continental Shelf. p. 59

Staffelbach, LCDR Hans
Vol. 69, No. 1; Combating Piracy; Spring 2012; Global Enforcers: Coast Guard law enforcement detachments tackle piracy at its source. p. 51

Stevenson, Mr. Douglas B.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Caring for Seafarers Affected by Piracy. p. 60

Sturm, Mr. Francis J.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Champion’s Point of View. p. 5

Sullivan, LT Christina
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; No Stone Left Unturned: Searching for answers after a trawler sinking. p. 6

Thomas, Mr. Brian
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

Thomas, CAPT Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Champion’s Point of View. p. 5

Waddington, LCDR Randy
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Leveraging Investigation Partnerships: Joint efforts foster a safer maritime domain. p. 34

Webster, Ms. Sarah K.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Catcher-Processor Vessel Sinks at Sea. p. 76

Weinert, LCDR Tyson
Vol. 69, No. 1; Combating Piracy; Spring 2012; Locate, Disrupt, Detain: Collaborative efforts thwart a pirate attack. p. 45

Williams, Mrs. Kristen
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Top Ten Most Severe Marine Casualties. p. 57

Zukunft, RADM Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Assistant Commandant’s Perspective. p. 4
ASSISTANT COMMANDANT’S PERSPECTIVE
Lantz, Mr. Jeffrey G.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Director’s Perspective: Practically Unsinkable. p. 4

Servidio, RDML Joseph A.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Assistant Commandant’s Perspective. p. 4

Zukunft, RADM Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Assistant Commandant’s Perspective. p. 4

CARGO HANDLING
Fawcett, Mr. Keith
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ship Simulation: A versatile marine safety tool. p. 26

CASUALTY INVESTIGATION
Allegritti, Mr. Thomas A.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Show Me the Data: Using information to drive safety improvements. p. 70

Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ensuring Competence: The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

Dickey, Mr. David
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Fishing Vessel Casualties: Using investigations to improve safety. p. 66

Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear: How modern electronics influence the marine industry. p. 40

Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; U.S. Coast Guard’s Marine Investigations Program: A world-wide impact. p. 43

Farley, Mr. Timothy
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; U.S. Coast Guard’s Marine Investigations Program: A world-wide impact. p. 43

Fawcett, Mr. Keith
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ship Simulation: A versatile marine safety tool. p. 26

Fink, Mr. James P.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Captain Domenic A. Calicchio Award: Acknowledging selfless contributions at Training Center Yorktown. p. 17

Fish, CAPT David
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Champion’s Point of View. p. 5

Gronlund, Dr. Wayne R.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; CSI New London: U.S. Coast Guard forensic oil spill analysis. p. 47

Helton, CDR Robert
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Captain Domenic A. Calicchio Award: Acknowledging selfless contributions at Training Center Yorktown. p. 17

Hobson, LCDR Jacob
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training. p. 31

Law, Mr. James
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself. p. 63

Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself. p. 63

McTaggart, CDR Joshua
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Investigations National Center of Expertise: Committed to improving marine casualty investigations. p. 23

Meskun, LT Matthew
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training. p. 31

Rebar, ENS Rebecca
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Chemical of the Quarter: Understanding Sodium Hydroxide. p. 86

Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Slime and Punishment: Environmental crimes investigation. p. 12

Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Congressman James Sener Award for Excellence in Marine Investigations. p. 15

Schopp, LT Michelle
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training. p. 31

Servidio, RDML Joseph A.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Assistant Commandant’s Perspective. p. 4

Simbulan, LCDR Michael
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Investigations Feedback Loop: Safety alerts, recommendations, and lessons learned. p.54

Sullivan, LT Christina
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; No Stone Left Unturned: Searching for answers after a trawler sinking. p. 6

Waddington, LCDR Randy
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Leveraging Investigation Partnerships: Joint efforts foster a safer maritime domain. p. 34

Webster, Ms. Sarah K.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Catcher-Processor Vessel Sinks at Sea. p. 76

Williams, Mrs. Kristen
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Top Ten Most Severe Marine Casualties. p. 57
CHAMPION’S POINT OF VIEW
Fish, CAPT David
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Champion’s Point of View. p. 5
Sturm, Mr. Francis J.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Champion’s Point of View. p. 5
Thomas, CAPT Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Champion’s Point of View. p. 5

CHEMICAL OF THE QUARTER
Felleisen, Mr. Thomas
Vol. 69, No. 1; Combating Piracy; Spring 2012; Chemical of the Quarter: Understanding Ammonium Nitrate. p. 78
Min, LT Jodi
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Chemical of the Quarter: Understanding Ammonium Nitrate. p. 98
Rebar, ENS Rebecca
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Chemical of the Quarter: Understanding Sodium Hydroxide. p. 86

CLASS SOCIETIES
McIntyre, Mr. Steven
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Classification’s Imprint on International Regulation. p.78
Rawson, Mr. Charles
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; International Requirements for Ship Structures: Protecting ships from the sea and the sea from ships. p. 34
Sheehan, Mr. Daniel F., P.E.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; What Hath Regulation Wrought? Third-party ship management. p. 71

COMBATING PIRACY
Boone, CDR Lee
Vol. 69, No. 1; Combating Piracy; Spring 2012; Countering Piracy by Enhancing Vessel Security: U.S. Coast Guard efforts to develop and refine guidance for merchant ships in high-risk waters. p. 24
Callahan, Mr. Michael D.
Vol. 69, No. 1; Combating Piracy; Spring 2012; The Maritime Security Interagency Policy Committee: Working to eliminate piracy. p. 35
Doherty, Mr. Owen
Vol. 69, No. 1; Combating Piracy; Spring 2012; Defending Against Piracy: Private armed security teams. p. 43
Fogle, LCDR James T.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Gathering Around the Table: Coast Guard, government, and industry collaborative efforts to combat piracy. p. 27
Geisert, Mrs. Christina
Vol. 69, No. 1; Combating Piracy; Spring 2012; Pirate or Criminal? A difference of location. p. 32
Genovese, Mr. Scott
Vol. 69, No. 1; Combating Piracy; Spring 2012; The Maritime Operational Threat Response Plan: The unified U.S. response to maritime piracy. p. 56

Havern, Mr. Christopher B. Sr.
Vol. 69, No. 1; Combating Piracy; Spring 2012; To Break Up the Haunts of Pirates: The Revenue Cutters’ war against maritime predators. p. 6
Helmick, Captain Jon S.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Anti-Piracy Education and Training. p. 39
Hopkins, Ms. Donna L.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Collaborating to Combat Piracy: The Contact Group on Piracy off the Coast of Somalia. p. 15
Hight, Capt. M.J.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Anti-Piracy Programs and the Use of Arms Aboard Ships: The mariner’s perspective. p. 21
Kapfer, LCDR Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; An Evolving Target: The challenge of fighting piracy at sea. p. 58
Landisde, Ms. Jennifer
Vol. 69, No. 1; Combating Piracy; Spring 2012; Enhancing International Efforts to Prosecute Suspected Pirates. p. 65
McLay, LT James
Vol. 69, No. 1; Combating Piracy; Spring 2012; Global Enforcers: Coast Guard law enforcement detachments tackle piracy at its source. p. 51
Noakes, Mr. Giles
Vol. 69, No. 1; Combating Piracy; Spring 2012; Best Management Practices: Industry-approved techniques to avoid, evade, and defend against piracy. p. 19
Offutt, Mr. Todd
Vol. 69, No. 1; Combating Piracy; Spring 2012; Getting the Word Out: Regional information brokers keep mariners apprised. p. 29
Peverett, Ms. Tracy
Vol. 69, No. 1; Combating Piracy; Spring 2012; The International Maritime Organization: Orchestrating the maritime response. p. 12
Reardon, LCDR John
Vol. 69, No. 1; Spring 2012; U.S. Prosecutions of Suspected Pirates. p. 67
Renschler, LT Aaron
Vol. 69, No. 1; Combating Piracy; Spring 2012; LEDET 406: A personal journey in pirate defense. p. 54
Rodriguez, CDR Mike
Vol. 69, No. 1; Combating Piracy; Spring 2012; Anti-Piracy Programs and the Use of Arms Aboard Ships: The mariner’s perspective. p. 21
Staffelbach, LCDR Hans
Vol. 69, No. 1; Combating Piracy; Spring 2012; Global Enforcers: Coast Guard law enforcement detachments tackle piracy at its source. p. 51
Stevenson, Mr. Douglas B.
Vol. 69, No. 1; Combating Piracy; Spring 2012; Caring for Seafarers Affected by Piracy. p. 60
Thomas, CAPT Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Champion’s Point of View. p. 5
Weinert, LCDR Tyson
Vol. 69, No. 1; Combating Piracy; Spring 2012; Locate, Disrupt, Detain: Collaborative efforts thwart a pirate attack. p. 45

Caring for Seafarers
Vol. 69, No. 1; Combating Piracy; Spring 2012; Caring for Seafarers Affected by Piracy. p. 60

Regional information brokers keep mariners apprised.

The International Maritime Organization: Orchestrating the maritime response.

Global Enforcers: Coast Guard law enforcement detachments tackle piracy at its source.

An Evolving Target: The challenge of fighting piracy at sea.

LEDET 406: A personal journey in pirate defense.
Zukunft, RADM Paul
Vol. 69, No. 1; Combating Piracy; Spring 2012; Assistant Commandant’s Perspective. p. 4

DANGEROUS GOODS
Bornhorst, Mr. Richard
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Hazardous Materials Carriage: The history of vessel safety standards. p. 63

Min, LT Jodi
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Hazardous Materials Carriage: The history of vessel safety standards. p. 63

DATA ANALYSIS
Allegretti, Mr. Thomas A.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Show Me the Data: Using information to drive safety improvements. p. 70

Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear: How modern electronics influence the marine industry. p. 40

DIRECTOR’S PERSPECTIVE
Lantz, Mr. Jeffrey G.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Director’s Perspective: Practically Unsinkable. p. 4

ENVIRONMENTAL PROTECTION
Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Congressman James Sener Award for Excellence in Marine Investigations. p. 15

FEDERAL REGULATIONS
Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ensuring Competence: The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear: How modern electronics influence the marine industry. p. 40

FIRE PROTECTION
Miller, LCDR John H.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; 100 Years of Fire Safety Progress: The evolution of SOLAS fire protection requirements. p. 45

HAZARDOUS MATERIALS
Bornhorst, Mr. Richard
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Hazardous Materials Carriage: The history of vessel safety standards. p. 63

Felleisen, Mr. Thomas
Vol. 69, No. 1; Combating Piracy; Spring 2012; Chemical of the Quarter: Understanding Sulfur. p. 78

IMO
Geisert, Mrs. Christina
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Classification’s Imprint on International Regulation. p. 78

Piersall, Captain Charles H.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Industry Standards that Complement Safety Regulations: An international solution for a global industry. p. 74

Rice, Mr. Kurt J.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The Titanic impact on marine investigations. p. 88

McIntyre, Mr. Steven
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Ship Simulation: A versatile marine safety tool. p. 26

Smith, CDR Robert L., Jr.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Leveraging Investigation Partnerships: Joint efforts foster a safer maritime domain. p. 34

We Are SAR: Search and rescue over the last 100 years. p. 49

Insurance/Indemnity
Lumbers, Mr. Karl
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Protection and Indemnity Clubs: Insuring and ensuring marine safety since the time of the Titanic. p. 83

INVESTIGATIONS
Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ensuring Competence: The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear: How modern electronics influence the marine industry. p. 40

Farley, Mr. Timothy
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The Titanic impact on marine investigations. p. 88

Fawcett, Mr. Keith
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ship Simulation: A versatile marine safety tool. p. 26
INVESTIGATIONS (continued)
Fish, CAPT David
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations. p. 88

Law, Mr. James
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself. p. 63

McTaggart, CDR Joshua
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Investigations National Center of Expertise: Committed to improving marine casualty investigations. p. 23

Meskun, LT Matthew
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training. p. 31

Penoyer, CDR Brian
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations. p. 88

Raymond, CDR Joe
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; The Senate Investigation into the Loss of the Titanic: A search for facts and the beginning of the myths. p. 93

Waddington, LCDR Randy
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Leveraging Investigation Partnerships: Joint efforts foster a safer maritime domain. p. 34

LEGISLATION
Geisert, Mrs. Christina
Vol. 69, No. 1; Combating Piracy; Spring 2012; Pirate or Criminal? A difference of location. p. 32

Havern, Mr. Christopher B. Sr.
Vol. 69, No. 1; Combating Piracy; Spring 2012; To Break Up the Haunts of Pirates: The Revenue Cutters’ war against maritime predators. p. 6

Smith, CDR Robert L., Jr.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; A Century of Technological Advancements on the Outer Continental Shelf. p. 59

LESSONS LEARNED
Farley, Mr. Timothy
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations. p. 88

Fawcett, Mr. Keith
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ship Simulation: A versatile marine safety tool. p. 26

Fish, CAPT David
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations. p. 88

Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42

Lusk, LCDR Leanne
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; We Are SAR: Search and rescue over the last 100 years. p. 49

Penoyer, CDR Brian
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; An Indelible Mark: The titanic impact on marine investigations. p. 88

Phillips, LCDR Catherine
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

Raymond, CDR Joe
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; The Senate Investigation into the Loss of the Titanic: A search for facts and the beginning of the myths. p. 93

Reddington, Ms. Krista
Vol. 69, No. 1; Combating Piracy; Spring 2012; Lessons Learned; Their Last Catch: The Bering Sea claims another fishing vessel. p. 70

Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Stime and Punishment: Environmental crimes investigation. p. 12

Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Congressman James Sener Award for Excellence in Marine Investigations. p. 15

Sirkar, Mr. Jaideep
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

Thomas, Mr. Brian
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

Waddington, LCDR Randy
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Leveraging Investigation Partnerships: Joint efforts foster a safer maritime domain. p. 34

Webster, Ms. Sarah K.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Catcher-Processor Vessel Sinks at Sea. p. 76

LICENSES
Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ensuring Competence: The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

MANNING
Doherty, Mr. Owen
Vol. 69, No. 1; Combating Piracy; Spring 2012; Defending Against Piracy, Private armed security teams. p. 43

Sheehan, Mr. Daniel F., P.E.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012; What Hath Regulation Wrought? Third-party ship management. p. 71
MARPOL
Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Slime and Punishment: Environmental crimes investigation. p. 12
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Congressman James Sener Award for Excellence in Marine Investigations. p. 15

NAVIGATION
Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear; How modern electronics influence the marine industry. p. 40

OPA-90
Law, Mr. James
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself. p. 63

PASSENGER VESSELS
Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42

Jenkins, LCDR Randy
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; The Coast Guard Marine Safety Center: Working to ensure cruise ship safety. p. 68

Lusk, LCDR Leanne
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; We Are SAR: Search and rescue over the last 100 years. p. 49

P & I CLUBS
Lumbers, Mr. Karl
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; Protection and Indemnity Clubs: Insuring and ensuring marine safety since the time of the Titanic. p. 83

POLLUTION
Law, Mr. James
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Marine Casualty Analysis: We keep history from repeating itself. p. 63

Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Slime and Punishment: Environmental crimes investigation. p. 12

REGULATIONS
Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Ensuring Competence; The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

Caputo, LCDR Ron
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; Ship Stability: The evolution of stability requirements. p. 29

Duke, Mr. Kerry L.
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; I Identify You Loud and Clear; How modern electronics influence the marine industry. p. 40

Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42

Jenkins, LCDR Randy
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; The Coast Guard Marine Safety Center: Working to ensure cruise ship safety. p. 68

McIntyre, Mr. Steven
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; Classification’s Imprint on International Regulation. p. 78

Miller, LCDR John H.
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; 100 Years of Fire Safety Progress: The evolution of SOLAS fire protection requirements. p. 45

Peverett, Ms. Tracy
Vol. 69, No. 1; Combating Piracy; Spring 2012; The International Maritime Organization: Orchestrating the maritime response. p. 12

Phillips, LCDR Catherine
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

Piersall, Captain Charles H.
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; Industry Standards that Complement Safety Regulations: An international solution for a global industry. p. 74

Rawson, Mr. Charles
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; International Requirements for Ship Structures: Protecting ships from the sea and the sea from ships. p. 34

Rivera, LT Eric
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; Slime and Punishment: Environmental crimes investigation. p. 12
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012; The Congressman James Sener Award for Excellence in Marine Investigations. p. 15

Sekimizu, Mr. Koji
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; International Maritime Organization: 100 years after the Titanic. p. 23

Sirkar, Mr. Jaideep
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

RISK
Doherty, Mr. Owen
Vol. 69, No. 1; Combating Piracy; Spring 2012; Defending Against Piracy: Private armed security teams. p. 43

SAFETY EQUIPMENT
Christensen, LT Erin
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; From Sea to Air to Space: A century of iceberg tracking technology. p. 17

Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912 – 2012: 100 Years of Marine Safety; Summer 2012; If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42
SAFETY EQUIPMENT (continued)

Luzader, MSTCS John
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: From Sea to Air to Space: A century of iceberg tracking technology. p. 17

Raymond, CDR Joe
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The Senate Investigation into the Loss of the Titanic: A search for facts and the beginning of the myths. p. 93

SEARCH & RESCUE

Lusk, LCDR Leanne
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: We Are SAR: Search and rescue over the last 100 years. p. 49

SHIP DESIGN

Caputo, LCDR Ron
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Ship Stability: The evolution of stability requirements. p. 29

Jenkins, LCDR Randy
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The Coast Guard Marine Safety Center: Working to ensure cruise ship safety. p. 68

Rawson, Mr. Charles
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: International Requirements for Ship Structures: Protecting ships from the sea and the sea from ships. p. 34

Sirkar, Mr. Jaideep
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

Thomas, Mr. Brian
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking. p. 38

SOLAS

Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42

Miller, LCDR John H.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: 100 Years of Fire Safety Progress: The evolution of SOLAS fire protection requirements. p. 45

Phillips, LCDR Catherine
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

Sekimizu, Mr. Koji
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: International Maritime Organization: 100 years after the Titanic. p. 23

Sirkar, Mr. Jaideep
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission. p. 27

SUSPENSION

Budka, CDR Scott
Vol. 69, No. 3; The Marine Casualty Investigation Process; Fall 2012: Ensuring Competence: The Coast Guard’s Suspension and Revocation National Center of Expertise. p. 51

TITANIC, RMS

Bornhorst, Mr. Richard
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Hazardous Materials Carriage: The history of vessel safety standards. p. 63

Caputo, LCDR Ron
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Ship Stability: The evolution of stability requirements. p. 29

Cass, LCDR Jacob L.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The International Ice Patrol: Safeguarding life and property at sea. p. 13

Christensen, LT Erin
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: An Indelible Mark: The titanic impact on marine investigations. p. 88

Farley, Mr. Timothy
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: From Sea to Air to Space: A century of iceberg tracking technology. p. 17

Fish, CAPT David
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: An Indelible Mark: The titanic impact on marine investigations. p. 88

Havern, Mr. Christopher B. Sr.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The Short Life and Tragic End of RMS Titanic. p. 6

Heinz, Mr. Kurt J., P.E.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: If the Titanic Sank Today: The evolution of lifesaving equipment. p. 42

Hersey, Mr. Joe
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: All Stations — Distress: Radio communications from the time of the Titanic. p. 54

Jenkins, LCDR Randy
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: The Coast Guard Marine Safety Center: Working to ensure cruise ship safety. p. 68

Lantz, Mr. Jeffrey G.
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Director’s Perspective: Practically Unsinkable. p. 4

Lumbers, Mr. Karl
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: Protection and Indemnity Clubs: Insuring and ensuring marine safety since the time of the Titanic. p. 83

Lusk, LCDR Leanne
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: We Are SAR: Search and rescue over the last 100 years. p. 49

Luzader, MSTCS John
Vol. 69, No. 2; 1912–2012: 100 Years of Marine Safety; Summer 2012: From Sea to Air to Space: A century of iceberg tracking technology. p. 17
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Volume/Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>McIntyre, Mr. Steven</td>
<td>Classification’s Imprint on International Regulation.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Miller, LCDR John H.</td>
<td>100 Years of Fire Safety Progress: The evolution of SOLAS fire protection requirements.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Min, LT Jodi</td>
<td>Chemical of the Quarter: Understanding Ammonium Nitrate.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Murphy, Dr. Donald L.</td>
<td>The history of vessel safety standards.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Phillips, LCDR Catherine</td>
<td>Safeguarding life and property at sea.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Penoyer, CDR Brian</td>
<td>An Indelible Mark: The Titanic impact on marine investigations.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Piersall, Captain Charles H.</td>
<td>Industry Standards that Complement Safety Regulations: An international solution for a global industry.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Rawson, Mr. Charles</td>
<td>International Requirements for Ship Structures: Protecting ships from the sea and the sea from ships.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Raymond, CDR Joe</td>
<td>The Senate Investigation into the Loss of the Titanic: A search for facts and the beginning of the myths.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sekimizu, Mr. Koji</td>
<td>International Maritime Organization: 100 years after the Titanic.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sheehan, Mr. Daniel F., P.E.</td>
<td>What Hath Regulation Wrought? Third-party ship management.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sirkar, Mr. Jaideep</td>
<td>The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Smith, CDR Robert L., Jr.</td>
<td>A Century of Technological Advancements on the Outer Continental Shelf.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sturm, Mr. Francis J.</td>
<td>Champion’s Point of View.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Thomas, Mr. Brian</td>
<td>Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Fawcett, Mr. Keith</td>
<td>Ship Simulation: A versatile marine safety tool.</td>
<td>Vol. 69, No. 3</td>
</tr>
<tr>
<td>McTaggart, CDR Joshua</td>
<td>Investigations National Center of Expertise: Committed to improving marine casualty investigations.</td>
<td>Vol. 69, No. 3</td>
</tr>
<tr>
<td>Meskun, LT Matthew</td>
<td>Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training.</td>
<td>Vol. 69, No. 3</td>
</tr>
<tr>
<td>Sekimizu, Mr. Koji</td>
<td>International Maritime Organization: 100 years after the Titanic.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sheehan, Mr. Daniel F., P.E.</td>
<td>What Hath Regulation Wrought? Third-party ship management.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sirkar, Mr. Jaideep</td>
<td>The International Conference on Safety of Life at Sea, 1914: The history and the ongoing mission.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Smith, CDR Robert L., Jr.</td>
<td>A Century of Technological Advancements on the Outer Continental Shelf.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Sturm, Mr. Francis J.</td>
<td>Champion’s Point of View.</td>
<td>Vol. 69, No. 2</td>
</tr>
<tr>
<td>Thomas, Mr. Brian</td>
<td>Forensic Analysis of the RMS Titanic: Unraveling the mysteries of the world’s most famous sinking.</td>
<td>Vol. 69, No. 2</td>
</tr>
</tbody>
</table>

**TRAINING**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Volume/Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>McTaggart, CDR Joshua</td>
<td>Investigations National Center of Expertise: Committed to improving marine casualty investigations.</td>
<td>Vol. 69, No. 3</td>
</tr>
<tr>
<td>Meskun, LT Matthew</td>
<td>Marine Inspection and Investigation School: Providing world-class marine casualty investigating officer training.</td>
<td>Vol. 69, No. 3</td>
</tr>
</tbody>
</table>

**VESSEL SECURITY**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Volume/Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doherty, Mr. Owen</td>
<td>Combating Piracy; Defending Against Piracy: Private armed security teams.</td>
<td>Vol. 69, No. 1</td>
</tr>
</tbody>
</table>
FORWARDING SERVICE REQUESTED