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As chairman of the Marine Safety and Security Council, I have a special interest in every edition of *Proceedings*. This edition is no exception, and focuses on a topic of great interest to me: international engagement. Although the word “coast” is part of our organization’s name, our missions, activities, and core interests are truly international in scope. As the Coast Guard of the world’s sole superpower, it is vital that we have robust engagement with our international partners to leverage and address the unprecedented opportunities and challenges that we face in every corner of the globe.

The accelerating globalization of commerce and trade, increased international communications and flow of information, and the rise of transnational threats demand regular and systemic international engagement. As you will see in this edition, the Coast Guard has developed the competencies and capacities necessary to cultivate and implement successful international strategies, policies, and programs in the global maritime realm. The Coast Guard has been, and continues to be, actively engaged in every key region of the world, as well as in key international forums such as the International Maritime Organization. These efforts include negotiation and implementation of international standards for shipping, maritime security, and maritime environmental protection. Another endeavor, joint operations, protects global trade routes from pirates and other criminals; prevents drug and weapons trafficking and other smuggling activities; deals effectively with illegal migration; and combats illegal, unregulated, and unreported fishing that can decimate fish stocks. I am particularly proud of our efforts to assist other nations in building their capacity to protect their maritime interests, including our international training teams and our recently updated Model Maritime Service Code.

While our current engagement and cooperation efforts will continue, we are constantly seeking to implement new initiatives and improve existing programs, as well. The opening of new trade relationships and the ubiquity and transparency of information has resulted in a growing interdependence among economies, technologies, governments, and societies. The result has been unprecedented economic growth, commerce, and migration of people and ideas to every corner of the globe. However, the globalization phenomenon also carries with it threats and challenges to marine safety and security, the environment, and national sovereignty. In turn, this places additional strains on individual nations and democratic institutions. One obvious solution is increased international engagement and cooperation to strengthen our friends and to confront our common enemies, be they terrorists, pirates, organized criminals, operators of substandard or dangerous vessels, or those who pollute or otherwise degrade the marine environment.

The articles in this edition explain how the Coast Guard has successfully engaged in Europe, Asia, Africa, and Latin America, as well as on and over the world’s oceans. Other articles discuss our plans to increase the level and scope of our international engagement activities in order to meet the dynamic demands of our increasingly interconnected world. I hope and trust that this edition provides our policy makers, industry stakeholders, and international partners with encouragement and examples to develop new and innovative relationships to promote effective international engagement. It is clear to me that the Coast Guard can help provide effective solutions to the seemingly intractable problems that we face in ensuring an orderly, peaceful, productive, and hopeful world for us and our progeny.
The world community’s increasing interconnectedness presents unparalleled opportunities for economic growth and progress. At the same time, the shrinking buffers of time and space between nations may also harbor new threats and challenges. Each U.S. Coast Guard member should take great pride in knowing that the Coast Guard is at the forefront of providing innovative and effective solutions in the international arena to enhance the economic, physical, and social well-being of the maritime realm and the American people. This edition of *Proceedings* showcases some of the many ways the Coast Guard is leading global maritime international engagement.

The U.S. Coast Guard carries out its missions on every continent and in every ocean, and has a key role to play in promoting U.S. interests around the globe. Whether providing at-sea training to protect fisheries or interdict drugs or illegal immigrants off the coast of Africa; negotiating international agreements to combat piracy in southeast Asia; developing improved procedures to promote safety of navigation at the International Maritime Organization; or working with other governments as a Coast Guard representative at the State Department or in Asia, Europe, or Latin America, U.S. Coast Guard officers, enlisted members, and civilians are active players on the international stage. There is no other organization that has the capability to deploy such a broad range of both “soft power” (diplomacy, rule of law, training, mission experience) and “hard power” (unique national defense and law enforcement capabilities) options to further national objectives in the maritime realm.

The U.S. Coast Guard Strategy for Maritime Safety, Security, and Stewardship emphasizes the need for an international maritime engagement strategy to improve global governance and management of the maritime domain. As the Commandant said in a 2008 speech to the World Maritime University in Malmo, Sweden, “The maritime challenges of the 21st century are clearly beyond any one nation’s ability to resolve. As Commandant of the U.S. Coast Guard, I understand our responsibility to the international community. We value a collaborative approach.”

An international engagement approach adds value to our national commitment to develop sound governance for the world’s oceans, to advance unimpeded global commerce, and to ensure the security, safety, and economic well-being of the United States. International engagement, which the Coast Guard carries out effectively across a wide spectrum of issues, is more relevant and important than ever before.

The articles in this edition provide a small sampling of the many ways in which the Coast Guard is engaged in promoting the United States’ interests in the world. We are fortunate to have a wealth of Coast Guard officers, enlisted members, and civilian personnel step forward to share their expertise and experience on a wide variety of subjects. As we carry out the vision of our leaders, let us build upon the experience that we bring, and develop innovative and effective ways to engage with our international partners to promote a more peaceful, orderly, just, safe, and prosperous world.
The world’s oceans cover more than 70 percent of the globe and contain 97 percent of the world’s water. The vast ocean spaces have served as critical avenues for global and regional trade, rich sources of food and commodities, dumping grounds for human and industrial wastes, broad defensive barriers and strategic military battle space, limitless subjects for scientific research, invaluable opportunities for recreation, and endless sources of human wonder and joy.

For most of human history, the world community has taken a laissez-faire approach to the sea and its resources. However, as various governments have come to realize the limits and vulnerabilities of these waters, and to stake claims to sovereignty over them, a consensus has developed that the oceans need and deserve a special legal regime to ensure a clear and appropriate balance among the various claimants. International agreement is essential to protect this environment and its resources from uncontrolled use and abuse. The 1982 U.N. Convention on the Law of the Sea (or UNCLOS), which codifies a broad range of international legal principles applicable to the ocean regime, represents a tremendous advance in promoting and protecting a broad range of critical ocean policy interests.

UNCLOS promotes many of the United States’ most vital interests. For that reason, it has achieved widespread support. Indeed, it is quite remarkable when such often-divergent voices as virtually all congressional Democrats; many leading Republicans; environmental groups; the national security and intelligence communities; the fishing, shipping, and telecommunications industries; each of the Joint Chiefs of Staff; and the oil and gas industry all come together to strongly support the United States becoming party to an international agreement.

The History
The convention was negotiated between 1973 and 1982, during the administrations of U.S. presidents Nixon, Ford, Carter, and Reagan. The results of the negotiations reflect a commitment toward a comprehensive regime of ocean law and policy that the United States and the Soviet Union made as far back as 1965. It replaces four out-of-date Geneva Conventions, and provides an effective and balanced framework governing virtually all aspects of the law of the sea.

The 110-foot Coast Guard cutter Maui patrols the waters of the Central Arabian Gulf along with the aircraft carrier USS Harry S. Truman in April 2008. Photo courtesy of the U.S. Navy.
Among other things, UNCLOS covers:

- the rights and obligations of states within their territorial seas, exclusive economic zones, and continental shelf;
- international straits;
- the high seas;
- protection of the marine environment;
- marine scientific research;
- island and archipelagic states.

It also contains a long-standing goal of the United States: effective, compulsory provisions to settle most ocean disputes between nations.

UNCLOS is now in force for some 157 states worldwide (plus the European Union), including virtually all major maritime powers and our allies and trading partners. Unfortunately, the full Senate has not yet taken a vote on the convention, and the U.S. is not yet a party. However, there is now a window of opportunity for the United States to regain its natural leadership position in the development of the international law of the sea while promoting many of its critical national security, global mobility, and economic and environmental interests.

This window has not always been open. Nor has the entire convention always been so favorable to our vital national interests. When President Reagan considered the entire text in the early 1980s, he wisely identified several unacceptable provisions concerning a newly crafted bureaucratic international regime to govern mining activities on the deep seabed. He called for international engagement to renegotiate the objectionable provisions. However, President Reagan also made clear that the United States would comply with the remaining provisions as customary law because they reflected an appropriate balance of interests and clearly contributed greatly to America’s national security interests and economic and environmental well-being.

Many of our allies agreed with this approach and, working together, the United States and other engaged nations fixed the objectionable provisions in 1994. However, despite several administrations’ efforts, the full U.S. Senate has not yet taken a vote on UNCLOS.

What Are We Waiting For?
The time has now come for the United States to become party to this vital convention and regain its leadership position in ocean policy affairs. One benefit: Becoming a party to UNCLOS would greatly enhance homeland security. In his testimony before the Senate Foreign Relations Committee, Admiral James Watkins, former Chief of Naval Operations and Chairman of the U.S. Commission on Ocean Policy, called the convention “the foundation of public order of the oceans.” U.S. military forces, including Coast Guard units, rely heavily on the many critical freedoms of navigation, overflight, and operational principles codified in the convention. Under the current legal regime, the United States is not guaranteed such rights. While there is a strong argument that transit passage and archipelagic sea lanes passage have become established rights under customary international law, not all agree.

For example, the Islamic Republic of Iran, whose territorial waters overlap the shipping lanes in the critical Strait of Hormuz (through which much of the world’s oil passes) contends that only states that are party to UNCLOS are entitled to the full rights of transit passage. Moreover, neither of these critical navigational rights exists under any of the 1958 Geneva Conventions on the Law of the Sea, to which the United States continues to be bound. Becoming a party to the 1982 convention will supersede our obligations under the 1958 conventions and will ensure the entire range and extent of our critical mobility rights in all the ocean waters of the world.

National Security
The navigation principles contained in UNCLOS would allow U.S. and allied forces to use the world’s oceans to meet challenging national security requirements, including those necessary to fight the global war on terrorism and to project military power overseas. Our national maritime security strategy has long required worldwide mobility. Innocent passage includes the rights of foreign military vessels to pass through the territorial sea of coastal states. The convention protects these rights, specifically and objectively enumerating what actions would constitute a violation of innocent passage.

Global mobility also requires undisputed access through, under, and over international straits, such as the Strait of Malacca and the Strait of Hormuz, and archipelagic waters, such as the key sea lanes through Indonesia and the Philippines. The relevant provisions of the convention guarantee these critically important transit rights to military and civilian vessels, aircraft, and submarines, no matter the purpose of the transit, cargo, or means of propulsion.

UNCLOS also guarantees the right to operate and conduct exercises in international waters beyond the territo-
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appropriate balance on the jurisdiction to prescribe and state sovereign rights in international waters to enforce environmental laws within the EEZ. By doing so, UNCLOS ensures the inclusive navigational and enforcement interests of all countries.

Environmental and Economic Advantages
The various provisions on the protection of the marine environment are particularly important. At the same time, the provisions do so in a way that limits coastal state sovereign rights in international waters to economic activities, such as offshore fishing and the generation of alternative forms of energy, and provides an appropriate balance on the jurisdiction to prescribe and enforce environmental laws within the EEZ. By doing so, UNCLOS ensures the inclusive navigational and overflight interests of all countries.

Moreover, from an economic perspective, the United States emerges a clear winner under these provisions of the convention. Because of its lengthy coastline and island possessions that border on several particularly productive ocean areas, the United States has the largest and richest EEZ in the world. Moreover, our extended continental shelf has enormous potential in yet-to-be-discovered oil and gas reserves, particularly in the Gulf of Mexico, Bering Sea, and Arctic Ocean. UNCLOS provides a strong and consistent framework to develop additional prudent and workable international standards to protect the marine environment.

Recent discoveries by the icebreaker CGC Healy reveal that the U.S. continental shelf in the Arctic Ocean is much more extensive than originally thought. Only by becoming party to UNCLOS and participating in its processes, however, can the United States obtain secure title to these vast resources, adding some 290,000 square miles for sovereign resource exploitation. Moreover, no American business enterprise is likely to invest the many billions of dollars necessary to develop a distant, deep-water, offshore oil or gas field, no matter how rich it might be, unless it has an undisputed right to do so under both domestic and international law. In addition, the convention’s deep seabed mining provisions, as amended in 1994, would permit and encourage American businesses to pursue free-market-oriented approaches to deep ocean mining. The 1994 Part XI Implementing Agreement was crafted in such a way so as to protect the interests of investors and the United States. As a result, the offshore oil and gas and mining industries all strongly support accession to UNCLOS. These industries, however, would not have free reign. The convention establishes a comprehensive framework and sets forth fundamental obligations for protecting the marine environment from all sources of pollution: vessel source, land-based, offshore activities, atmospheric, and ocean dumping.

The War on Drugs
The United States could use the provisions of UNCLOS effectively to combat excessive maritime claims, which can interfere with narcotics interdiction and other law enforcement efforts. Several critical coastal states continue to claim territorial seas of 200 nautical miles, in violation of the convention’s 12-nm limit. These countries see our law enforcement operations in their claimed territorial seas as violations of their sovereignty and are either reluctant or refuse to cooperate with proposed actions against vessels engaged in drug-smuggling that are interdicted in these disputed areas.

The United States must not sit on the sidelines while the international community is working out the nuances of how UNCLOS is to be interpreted and applied.

The Law of the Sea Convention also provides a solid and workable legal and policy framework for the Coast Guard to interdict maritime terrorists, pirates, illicit drug traffickers, smugglers, illegal immigrants, and fisheries poachers, both in our own waters and in the seas beyond. The convention guarantees that our warships and Coast Guard cutters will enjoy sovereign immune status wherever in the world they may be operating.
Since we are not yet party to UNCLOS, it is very difficult for us to credibly argue that they must give up these excessive claims. The result is that counter-drug bilateral agreements with these nations are difficult, interdiction efforts in their claimed territorial seas are hampered, and our negotiating ability to change the situation is compromised.

Ensuring Safe and Secure International Trade
The convention promotes the freedom of navigation and overflight by which international shipping and transportation fuel and supply the global economy. Some 90 percent of global trade tonnage, totaling over $6 trillion in value, including oil, iron ore, coal, grain, and other commodities, building materials, and manufactured goods, travels on and over the world’s oceans and seas each year. By guaranteeing merchant vessels and aircraft the right to navigate on, over, and through international straights, archipelagic waters, and coastal zones, the provisions of UNCLOS promote dynamic international trade.

At the same time, UNCLOS encourages international cooperation to enhance the safety and security of all ocean-going ships. Whether it involves lumber and winter wheat shipped from the Pacific Northwest to Japan; high-quality, low-cost goods from Singapore to Long Beach; or oil from the Persian Gulf to Europe; free, safe, and secure commercial navigation and flights provide great economic and security benefits to all of us. That is the key reason the U.S. Chamber of Commerce, shipping industry, aviation industry, and other international trade groups have called for immediate access to the convention.

No Seat at the Table
UNCLOS would also greatly enhance the United States’ global leadership position in maritime affairs, an area in which the Coast Guard has long played a vital role. Many states have excessive claims with respect to baselines, historic bays, territorial seas, straits, and navigational restrictions which, in the opinion of many, are not permissible under the convention. As a non-party, our ability to seek to roll back these excessive claims is severely inhibited. Likewise, while the United States has long played a key role in the International Maritime Organization to promote maritime safety and efficiency and protect the marine environment, our leadership position is being undermined by our current outsider status.

As a non-party, the United States does not have a judge on the Law of the Sea Tribunal nor a decision maker or staff experts on the Continental Shelf Committee. And despite the fact that the 1994 Part XI Implementation Agreement guarantees the United States a permanent seat on the International Seabed Authority and an effective veto on all key decisions of that body, as a non-party, we cannot play that critical role. In article after article, UNCLOS reflects diplomatic victory after victory for the United States. However, as a non-party, we cannot take advantage of these benefits.

Hearsay and Misrepresentation
Critics have falsely alleged that UNCLOS would somehow impose restrictions on our sea-based military and intelligence operations. But according to intelligence and legal experts that J. M. McConnell, then Director of National Intelligence, cited in his letter to the Select Committee on Intelligence of August 8, 2007, the convention would actually enhance our intelligence and security operations. Moreover, after conducting several hearings and receiving testimony from intelligence, military, and legal experts, the Senate’s Select Committee on Intelligence concluded that intelligence activities would not be adversely affected by the convention.

The specific argument that the convention would prevent the U.S. from using its submarines to collect intelligence is fallacious. Several sources, including the minority views in the Senate Committee on Foreign Relations, note that Article 20 of the convention requires submarines and other underwater vehicles to navigate on the surface and show their flags when engaged in innocent passage. This is correct, so far as it goes. But the minority report then concludes that this would not
protect the significant role submarines have played—especially during the Cold War—in gathering intelligence close to foreign shorelines.

What the minority report and other critics fail to mention is that the 1958 Convention on the Territorial Sea and the Contiguous Zone, to which the United States has long been party, contains exactly the same restriction. Moreover, the collection of intelligence in any guise within the territorial sea does not fall within the ambit of innocent passage. The United States would never accept foreign submarines or foreign warships engaging in intelligence-gathering operations in the territorial sea off of San Diego or Norfolk. Indeed, when President Ronald Reagan issued the proclamation extending the U.S. territorial sea to 12 nautical miles on December 27, 1988, consistent with the convention, one of the first things that the Coast Guard did was to advise a Soviet military vessel gathering intelligence just a few miles off of Pearl Harbor to leave the area immediately.16

The U.S. military and intelligence communities are well aware that the convention would have a positive impact on our national security. Moreover, as Senator Richard Lugar, at the time of this writing, ranking minority member of the Foreign Relations Committee, has argued, it would be unprecedented for the Senate to deny to our nation’s military and national security leadership a tool that they have unanimously claimed that they need, especially during a time of war.17

A Look Ahead

Simply stated, if the United States were to join UNCLOS, the Coast Guard and the other military services could use ocean space to carry out their important security missions much more effectively. As a party to the convention, the State Department and other agencies of the U.S. government could assert our legal and policy positions on ocean issues from a position of strength.

The window of opportunity to accede to the convention is open for now. Let us recognize the wisdom of becoming a party to UNCLOS and seize the opportunity to realize the many important benefits that will accrue to our national interest. Moreover, once we become party, let us use our natural leadership position to actively and effectively engage with other states to help guide implementation of the convention in a way that best ensures our national and international interests. International engagement on the law of the sea can only promote the ability of the Coast Guard to accomplish its many critical missions on behalf of our nation and its people.

Editor’s note:
The views expressed in this article are those of the author and do not necessarily represent official Coast Guard policy.

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Endnotes:
8. Islamic Republic of Iran, interpretative declaration on the subject of straits, made upon signature, Dec. 10, 1982. Iran’s declaration states, inter alia, that the “right of transit passage through straits used for international navigation [is a product of] quid pro quo” and that only “states parties to the Law of the Sea Convention shall be entitled to benefit … .”
9. UNCLOS, supra note 5, arts. 18 and 19.
11. Ibid.
14. “The Convention does not prohibit or impair intelligence or submarine activities. Joining the Convention would not affect the conduct of intelligence in any way. This issue was the subject of extensive hearings in 2004 before the Senate Select Committee on Intelligence. Witnesses from Defense, CIA, and State all confirmed that U.S. intelligence and submarine activities are not adversely affected by the Convention.” John D. Negroponte, Department Secretary of State, “The U.N. Convention on the Law of the Sea,” written testimony before the Senate Foreign Relations Committee, Sept. 27, 2007.
16. The author was a member of the U.S. delegation participating in U.S.-USSR talks on the law of the sea when this incident took place. A member of the Russian delegation explained to the author the nature of the challenge to the Russian intelligence vessel, after which it immediately left the territorial sea. The author subsequently confirmed these details through unclassified sources. See, e.g., Examination of the President’s Proclamation Extending the Territorial Sea of the United States from 3- to 12-Miles, Before the Subcomm. on Oceanography and Great Lakes of the House Comm. on Merchant Marine and Fisheries, 101st Cong., 5, 136 (1989)(statements of Brian Boyle, director, Office of Oceans Law and Policy, U.S. State Department)(“Within 24 hours of issuance of the Proclamation, a Soviet electronic intelligence-gathering vessel was requested to depart the extended territorial sea and did so immediately.” Id. at 5.)
This Isn’t Your Father’s Type of International Organization

Coast Guard efforts at the International Maritime Organization.

by Mr. Charles (Bud) Darr
U.S. Coast Guard Office of Maritime and International Law

In recent years, international engagement has become challenging for the Coast Guard and the U.S. government as a whole in many different areas. The Coast Guard’s work at the International Maritime Organization (IMO) is no different. Where once the United States’ delegation could raise its card high in the air and many countries could be expected to line up and follow, that is simply no longer the case. I often counsel new delegates to think of the “United States of America” card as a “red flag,” to raise it sparingly, and to intervene in small and judicious doses. Consequently, it has taken a concerted effort for the United States and the U.S. Coast Guard to find success as of late via the IMO. While we have succeeded, that success has not come easily.

International Maritime Organization
The International Maritime Organization (IMO) is an intergovernmental organization whose purpose is to encourage and facilitate the highest practicable standards in matters concerning maritime safety, efficiency of navigation, and prevention and control of marine pollution. The convention establishing the IMO (then called the Inter-Governmental Maritime Consultative Organization, or IMCO) was adopted in Geneva in 1948, and the IMO first met in 1959.

The IMO’s main task is to develop and maintain a comprehensive regulatory framework for shipping, including safety, environmental concerns, legal matters, technical cooperation, maritime security, and the overall efficiency of shipping. For most purposes, the U.S. Coast Guard serves as the United States’ representative to the IMO under a specific delegation of authority from the Department of State. The IMO’s highest body is its assembly. It consists of all member states and meets once every two years in regular sessions. However, if necessary, the assembly may also meet in an extraordinary session. The assembly is responsible for approving the work program, voting the budget, and determining the financial arrangements of the organization. The assembly also elects the council.

The council is elected for two-year terms, beginning after each regular session of the assembly. It is the executive organ of the International Maritime Organization and is responsible, under the assembly, for supervising the work of the organization. Between sessions of the assembly, the council performs all the functions of the assembly except the function of making recommendations to governments on maritime safety and pollution.
protection, a function that Article 15(j) of the convention specifically reserves to the assembly. The United States has always been a permanent member of the council.

Other functions of the council are to:

- coordinate the activities of the organs of the organization;
- consider the draft work program and budget estimates of the organization and submit them to the assembly;
- receive reports and proposals of the committees and other organs and submit them to the assembly and member states, with comments and recommendations, as appropriate;
- appoint the Secretary-General, subject to the approval of the assembly;
- enter into agreements or arrangements concerning the relationship of the organization with other organizations, subject to approval by the assembly.²

The IMO conducts its work via four main technical committees: maritime safety, marine environment protection, legal, and technical cooperation. It is supported by a fifth, known as the facilitation committee, which is a subordinate body of the council. The vast majority of technical work important to the Coast Guard occurs under the cognizance of the maritime safety and marine environment protection committees. Each of the IMO’s committees is led by a chairman elected by and selected from the member states.

The maritime safety and marine environment protection committees are assisted in their work via nine subcommittees:

- bulk liquids and gases;
- carriage of dangerous goods, solid cargoes, and containers;
- fire protection;
- radio communications and search and rescue;
- safety of navigation;
- ship design and equipment;
- stability and load lines and fishing vessel safety;
- standards of training and watchkeeping;
- flag state implementation.

The legal, technical cooperation, and facilitation committees do not refer matters directly to subcommittees.

Committees and subcommittees are further assisted in their work by establishing working groups, drafting groups, and intersessional correspondence groups. Subcommittees meet once per year, but at times may have intersessional working groups authorized by the council meeting together for specific purposes. A great deal of the substantive development of IMO standards occurs via these working groups and correspondence groups.

The IMO Secretariat is led by the Secretary-General, who is elected by the council and approved by the assembly for four-year terms. His staff includes approximately 300 full-time employees, who are divided into six divisions: marine environment, maritime safety, legal and external affairs, technical cooperation, administration, and conference. There are approximately 50 different nationalities represented on the Secretariat’s staff at any time.

How We Get Things Done at the IMO

The influence of the United States remains very significant at the IMO despite the increasing effectiveness of other delegations and groups of delegations at advancing their respective agendas. The core of U.S. influence today is founded upon our status as the world’s largest port state and respect due to our competence and leadership. Other influences, such as those exerted by ship-

MARPOL Annex VI

The United States demonstrated strong leadership and an enthusiastic willingness to do the hard work during the development and adoption of recent amendments to Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). The result was highly successful. The enhanced Annex VI standards are critical to the overall regulation of ship source air emissions and provide an important component of a comprehensive domestic air pollution prevention regime.

From inception to adoption, several federal agencies contributed heavily to help the IMO find a solution to some very complex problems. Most significantly, finding the correct balance of reducing oxides of sulphur and particulate matter emissions without causing serious disruptions in the worldwide supply chain of distillate fuel products was extraordinarily difficult.

A very strong interagency effort by the United States, including expert leadership of the relevant working groups by a representative of the EPA and leadership of a drafting group by a representative from NOAA, was central to forging the solution. In the end, very close collaboration with the EU, shipowner delegations, and oil producers led to a successful formula. Those amendments are scheduled to enter into force on July 1, 2010, and the United States can rightfully claim a substantial amount of credit for assisting the IMO in finding a solution.
builders, classification societies, and the European Union (EU), have substantially altered the technical and political balance of power in recent years as such groups have utilized their competence.

Managing relationships with these other groups has become increasingly important. Such relationships are not developed overnight, and it is unrealistic to expect that a well-reasoned and drafted paper will succeed on simply its own merits. Rather, it is extremely important to build support for and socialize a new concept long before the delegation gets on the plane to London. Indeed, this support should be developed well in advance of submitting a paper on behalf of the United States. Frequently, a small bit of collaboration with other delegations early on can create understanding of—and support for—a novel proposal.

The European Union has become a far more influential and effective force over the IMO’s work in recent years. With 27 member-states, all of which are also IMO members, its ability to coordinate positions and exercise discipline during the sessions has substantially altered the technical and political landscape. In addition to its actual member-states, the EU can typically count on support from Norway (which enjoys special status without actual membership) and several states that desire eventual European Union membership. This creates a very powerful and organized block of IMO member-states, whether or not they actually raise their cards or just suggest they are prepared to do so.

A U.S. proposal can often be coordinated with the EU well in advance, thus utilizing the power of the European Union to achieve common goals. This can be accomplished either by seeking out common ground with individual member-states, or by coordinating via the EU presidency and European Commission (EC). Where there is European competency (i.e., there is a controlling European Commission directive in place), it is essential to coordinate via the EU presidency and EC if the goal is to avoid unified opposition.

A Recent Success Story
One recent example of close coordination with the European Union resulting in a positive outcome for the United States relates to the IMO Ballast Water Management Convention. The IMO member-states and the regulated community found themselves in an extremely difficult position because the technology necessary to comply with and implement the convention has been slower to develop than all had hoped and expected. This lack of available technology to treat ships’ ballast water in accordance with the convention was cited as creating a very serious impediment to ratifications and entry into force. This was principally because the fixed dates in the convention were beginning to roll by without any practically available way for new ships to comply. Thus, the convention remained unable to enter into force and was in real danger of permanently collapsing because most governments would not entertain the idea of ratifying an instrument inherent with potential impossibilities.

Just prior to the IMO’s 25th assembly session held in November of 2007, the Secretary-General submitted a proposal to address the problem. The Secretary-General’s proposal created some significant issues for certain governments, including the United States and several EU member-states. Through careful coordination with the EU presidency and the EC, the United States crafted and submitted a different proposal, taking a considerably more conservative approach than that proposed by the IMO Secretary-General. Because

Abandonment of Seafarers
Identifying a leadership void in the area of the problem of abandonment of seafarers, the United States took the initiative to prompt the IMO legal committee to support development of a mandatory instrument via a joint working group with the International Labor Organization (ILO). Abandonment of seafarers, particularly as a purely economic decision of an unscrupulous shipowner, is a humanitarian circumstance that civilized societies should not tolerate.

Despite able and serious commitment from some participants, the IMO and ILO have struggled with making progress on the issues over the course of many years. Eight years of effort produced little more than a set of recommendations that remain implemented by few or no states and creation of a database that remains underpopulated and underutilized.

The Coast Guard, in close coordination with the EU presidency, other key states, and seafarers’ organizations, actively promoted moving forward. Both the IMO and ILO parent bodies have now instructed the joint working group to develop a mandatory instrument, to later be negotiated within one or both organizations, as a mechanism to address the problem in a serious manner.

Once again, the United States demonstrated a willingness to chair various working groups and informal consultations, which earned a high degree of credibility with other stakeholders. As a result, a tremendous amount of progress has been made in this area during the last 18 months.
of prior coordination, that proposal enjoyed EU support both in principal and in a commitment to put forth the necessary negotiating effort to solve the problem during assembly.

The problem was a complex one: How to effectively defer the enforceable effect of certain parts of a convention, when that convention had not yet entered into force? The solution had to take into account the relevant legal limitations while sufficiently accommodating the practical problem that ships get ordered, designed, and constructed a considerable time in advance of their actual entry into service. The most substantial legal limitation was that an instrument that has not yet entered into force cannot be amended without creating a new instrument—an extremely burdensome, untimely, and impractical process, in this instance. Nonetheless, with the fixed dates in the convention rapidly approaching and ships needing to be ordered, designed, and constructed, a workable solution was essential or the convention would become largely irrelevant and unlikely to enter into force.

Committed to the convention since its inception, the United States asserted a great deal of leadership in solving the problem at assembly. Having coordinated our position well in advance of the session with the EU presidency and the EC, the U.S. delegation organized and led a full week of intense, serious, and constructive informal negotiations concurrent with the first week of assembly. Approximately 20 member and observer delegations participated in these preliminary deliberations. Largely because of a unified EU and United States position and strategy, this process resulted in a carefully balanced draft resolution that was then presented to the assembly at the beginning of its second week. After that presentation of the proposal, the assembly requested the United States to chair a working group to formalize the resolution and prepare it for adoption.

The solution, which was to create and adopt an assembly resolution by complete consensus, was considered to be the only truly workable answer for the key stakeholders. When presented to the assembly, it was adopted without any expression of concern from any delegation. Only the close cooperation of the United States, the European Union leadership, and other certain key delegations made this possible.

There are a significant number of other recent success stories, such as long-range identification and tracking, establishing “particularly sensitive sea areas,” and revision of the Standards of Training, Certification and Watchkeeping for Seafarers Convention. All of these successes follow a relatively similar formula to the other examples above. Close and early collaboration, combined with a willingness to provide leadership and work hard where it is welcome and needed, are all part of the common formula for success.

Looking Ahead

The work of the Coast Guard at the IMO remains a key centerpiece of our overall international engagement strategy. But IMO is not your father’s type of international organization. It has evolved over time in how it functions and how the power is allocated among the delegations.

To continue to be successful at IMO, the United States and the Coast Guard must also evolve. Our method of work must focus more on intersessional consensus-building and teamwork than it ever has before. A key part of that is to be prepared to exert leadership by example, such as continuing to enthusiastically perform the resource-intensive and very challenging tasks of chairing the necessary groups within the IMO’s existing framework, as well as rolling up our sleeves and participating in groups under the leadership of others.

Such willingness to perform the hard and often thankless tasks substantially enhances our credibility and effectiveness with our fellow delegations. It is also key for us to continue to work hard to develop balanced compromises long before our delegation actually departs for the formal sessions in London.

It is merely a recipe for failure to expect to read a paper in a plenary session and have a large group of countries be persuaded on the spot and raise their cards in support. The IMO simply does not function that way in this era, nor should it.

About the author:

Mr. Darr is formally trained as a submarine nuclear engineer, merchant marine deck officer, marine inspector/casualty investigator, and attorney. His current legal practice area includes international law development and implementation across a wide range of Coast Guard mission areas. He serves on U.S. delegations to IMO and ILO at the assembly, committee, subcommittee, and working group levels, where he’s been delegation head and chairman of numerous working, drafting, and consulting groups.

Endnotes:

2. See id., Article 17, as amended.
Knowledge is Power

Sharing information maximizes the benefits of foreign partnerships.

by LT WILLIAM E. DONOHUE
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U.S. Coast Guard Office of Maritime and International Law

It has been nearly four centuries since a philosopher first coined the familiar phrase “knowledge is power,” yet this statement has renewed relevance in our post-9/11 world. U.S. government leaders and foreign partners have increasingly realized the value of gaining and sharing information to understand the environment they operate in and maximize operational effectiveness, improve situational awareness, fill resource and capability gaps, and successfully execute overarching strategic objectives. It should come as little surprise that the U.S. Coast Guard, an agency charged with guarding more than 96,000 miles of American coastline and extensive offshore areas, saving lives and property at sea, and enforcing U.S. law around the world, has aggressively sought to incorporate information sharing initiatives into its international engagement strategy.1

In the Summer 2008 issue of Proceedings, several authors explored the use of information sharing as a means to enhance the Coast Guard’s marine safety mission. This article addresses the concept of using information sharing in a different context—to improve effectiveness across a variety of Coast Guard missions, including enforcing laws and treaties in the areas of narcotics smuggling and fisheries operations.

By understanding the methods by which information can be shared with foreign partners and some of the legal authorities that may shape those methods, one will learn that what may appear to be a burdensome legal or policy constraint can be addressed through an information sharing arrangement during its formative stages.

Setting the Stage: What Are the Types of Information Sharing?
Information sharing is, in a nutshell, the collection and dissemination of information by one federal, state, local, or foreign governmental (or private sector) entity with another or, in some cases, multiple parties. From the Coast Guard’s perspective, “information” is an extremely broad term that has been shaped and refined by any number of factors. These factors include global and domestic changes in the Coast Guard’s existing missions, new authorities resulting in new missions, novel or modified partnerships, advances in technology and capabilities, and evolving realities in the Coast Guard’s operating environment.

As a result of new congressional and executive branch authorities, a host of narrower categories of information have emerged within the relatively newly created information sharing environment, such as homeland security information, terrorism information, law enforcement information, and sensitive security information.2 Because of the Coast Guard’s multi-mission character as an armed force, law enforcement agency, regulator, and life-saver, some information that is completely without value to the conduct of one mission may be critical to the successful execution of another.

In short, when contemplating sharing information with a foreign partner, it is very important to identify the type of information that will be shared as early as possible. The type of information will guide the analysis and the applicability of any legal or policy requirements.
Understanding the Legal Framework for Sharing Information

In order to effectively “close the deal” on information sharing agreements with foreign partners, one must understand the unique legal tension inherent in forming such agreements. On one hand, the federal law that implemented the recommendations of the national commission on the 9/11 attacks and other relatively recent laws, presidential directives, and interagency efforts have created a legal and operational environment that is conducive to information sharing. On the other hand, there is a continuing obligation to safeguard individual civil liberties, privacy rights, and proprietary and classified information in an age of identity theft and a world where information can be instantaneously disseminated to millions of people with one click of a mouse.

Therefore, any arrangement with a foreign government to share information should, from the outset, contemplate this tension between transparency and protecting individuals, corporations, and other entities and interests that may be implicated.

Any plan to share personally identifiable information (for example, information that can be tied to an individual such as their name and date of birth) must address the Privacy Act of 1974—particularly when it involves data on American citizens and lawful permanent residents. This law carries monetary penalties and could result in a criminal penalty against any federal employee who knowingly violates its provisions. The Department of Homeland Security has established policies to uphold the rigid requirements of the Privacy Act, as well as the E-Government Act (another federal law aimed at protecting personal information). Many of these policies are aimed at ensuring procedural compliance with the requirements under these laws.

It is important to remember that other U.S. statutes may demand careful attention when contemplating sharing non-personal information with foreign partners. For example, a foreign ally could request the technical plans and other documents for a particular asset used by the Coast Guard. While in the possession of the U.S. government, some of these documents may contain proprietary information submitted to the U.S. by private contractors that is entitled to heightened protection under the Freedom of Information and Trade Secret Acts.

Sharing Information With Foreign Partners

In some cases, U.S. officials may seek to enter into non-binding agreements with another country to state the parties’ intent to share information, such as through a memorandum of cooperation or memorandum of understanding. These agreements are often part of a broader multilateral effort to cooperate with foreign partners on a range of maritime matters and missions. Examples of these efforts include the North Atlantic Coast Guard Forum (NACGF) and the North Pacific Coast Guard Forum (NPCGF), which are informal organizations aimed at bringing together representatives from several countries to facilitate cooperation on matters related to combined operations, illegal drug trafficking, marine security, environmental protection, information exchange, fisheries enforcement, illegal migration, and search and rescue. In the late summer months of 2008, the NPCGF met and formed a working group dedicated solely to information sharing matters. At the time of this writing, initiatives to solidify cooperative agreements between the various parties were ongoing.

A second vehicle for sharing information with foreign partners is through the use of formal, binding bilateral agreements that the Department of State has negotiated.
A key to successful information sharing agreements is to identify and resolve legal, policy, and technical hurdles as early as possible. Coordination among the parties is critical to ensure that information will be shared, and this process should be consultative, involving legal counsel, to determine the best way to structure any agreement. In some cases, legal advice may be needed to eliminate or mitigate risk. For example, one way to avoid the collection or dissemination of personal information when this type of information is collected, produced, or distributed by intelligence, law enforcement, military, or other government agencies is to draft comprehensive security and confidentiality provisions in the agreement. Legal counsel can help to ensure that sensitive data is protected.

Legal, policy, and technical hurdles can be addressed through coordination among the parties. One key to successful information sharing agreements is to identify and resolve legal, policy, and technical hurdles as early as possible. Coordination among the parties is critical to ensure that information will be shared, and this process should be consultative, involving legal counsel, to determine the best way to structure any agreement. In some cases, legal advice may be needed to eliminate or mitigate risk. For example, one way to avoid the collection or dissemination of personal information when this type of information is collected, produced, or distributed by intelligence, law enforcement, military, or other government agencies is to draft comprehensive security and confidentiality provisions in the agreement. Legal counsel can help to ensure that sensitive data is protected.

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The U.S. Coast Guard has been involved in international engagement activities with the U.S. State Department for many years. Indeed, the Coast Guard has long assigned three liaison officers to work at the department’s headquarters, located at the Harry S. Truman Building (better known as “Main State”) in the Foggy Bottom neighborhood of Washington, D.C.

Within the past decade, a fourth Coast Guard officer has been detailed as a staff member of the Office of Oceans Affairs, assisting State Department experts with the oversight and coordination of international ocean policy positions. This officer also works to align U.S. government interagency policy and procedures on U.S. Coast Guard international maritime safety and security initiatives.

Coasties at State
The senior Coast Guard liaison officer (CGLO) to the Department of State serves as a maritime policy advisor for worldwide issues on Coast Guard international policy and related matters. This officer coordinates myriad issues, including those related to security assistance, international training, capacity development, and VIP visits. This officer is also the service representative for the U.S. Coast Guard to the Department of State for official functions. The current senior Coast Guard liaison officer is on detached duty from the Coast Guard’s Office of International Affairs, and is serving with the State Department’s Bureau for International Narcotics and Law Enforcement (INL).

Another officer assigned to INL is the Coast Guard liaison officer for the Office of the Americas programs. This officer serves as a law enforcement advisor on worldwide Coast Guard-related matters, concentrating on counter-narcotics and migration issues, and is the primary Department of State point of contact for coordinating real-time maritime operational threat response (MOTR) courses of action. The MOTR plan is one of eight plans supporting the National Strategy for Maritime Security, revising the interagency process formerly followed under Presidential Directive 27. This plan outlines ways to respond effectively to threats in the global maritime domain, including the protocols used to coordinate with various federal agencies.

Additionally, this CGLO is the “competent authority” for the U.S. to communicate with foreign counterparts regarding waiver of jurisdiction and other authorities listed under Article 17 of the United Nations Convention against the Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988) of the United Nations Convention for U.S. and foreign vessels.

BUREAU FOR INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT (INL)

The Department of State first established INL in 1978. Its mission is to advise the president, Secretary of State, other bureaus in the Department of State, and other departments and agencies within the U.S. government on how best to implement and carry out policies and programs to combat international narcotics and crime. INL programs support two primary goals:

- to reduce the entry of illegal drugs into the United States;
- to minimize the impact of international crime on the United States and its citizens.
Another international maritime law enforcement advisor to the State Department is the Coast Guard liaison officer for the Office of Marine Conservation within the Bureau of Oceans and International Environmental and Scientific Affairs (OES). This officer concentrates on fisheries enforcement and international cooperation efforts to conserve living marine resources.

The Office of Oceans Affairs (OA) is another office within OES that works issues closely related to the Coast Guard’s prevention missions. Established in 1974, Oceans Affairs takes the policy lead for negotiations and international cooperation for global oceans matters. In particular, the Office of Oceans Affairs develops general U.S. oceans policy and conducts bilateral and multilateral negotiations involving the UN Law of the Sea Convention, freedom of navigation and overflight, protection of the marine environment, and maritime claims and boundaries. It also develops and coordinates U.S. policy affecting polar affairs, marine mammals, and marine science affairs and coordinates U.S. participation in all international oceans agreements and conventions.

In 2000, as OA became more involved with marine safety, maritime security, and environmental protection matters, the Coast Guard offered to detail a Coast Guard officer to the OA staff. In June 2001, the first Coast Guard officer started working for OA, detailed from the Coast Guard’s Office of Maritime and International Law. This officer coordinates delivery of U.S. government interagency goals for maritime safety, security, and environmental protection at the International Maritime Organization (IMO) and monitors a broad range of maritime issues with other nations.

The timing of the decision to assign a fourth Coast Guard officer to the Department of State proved to be even more valuable when a State Department office in another bureau was no longer staffed adequately to continue coordinating many IMO issues, including the oversight of the Shipping Coordinating Committee. As an OA staff member, the Coast Guard officer detailed to OES/OA now serves as the executive secretary to the State Department’s Shipping Coordinating Committee.

As one of the four Coast Guard officers learning the ropes as a diplomat to navigate the complex maze at Foggy Bottom, I am privileged to be involved in a wide range of international engagement issues and projects. It is one of the most worthwhile, yet challenging, jobs I have ever had.

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**BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS (OES)**

Established in 1973 by an act of Congress, OES advances sustainable development internationally through leadership in oceans, environment, science, and health, and promotes transformational diplomacy through advancing environmental stewardship, encouraging economic growth, and promoting social development around the globe.

**About the author:**

CDR Skolnicki was detailed to the State Department from June 2007 to June 2009. He is a member of the Pennsylvania bar and a graduate of Duquesne University School of Law. After earning a bachelor’s degree in Business Administration from the University of Notre Dame, he served for four years in the U.S. Navy.

**THE SHIPPING COORDINATING COMMITTEE**

This federal advisory committee was established to provide a forum for interested members of the public—private citizens, members of the maritime shipping industry, non-governmental organizations, small businesses, environmental organizations, and labor groups—to participate in discussions about shipping initiatives to be considered by the International Maritime Organization.

The U.S. government, through the Shipping Coordinating Committee, solicits the views of interested members of the public on a wide range of technical issues connected with international shipping safety, security, and environmental protection. The committee and its subcommittees consider numerous IMO initiatives, generally convening prior to meetings of the IMO assembly and other international meetings as necessary to discuss and make recommendations to the Secretary of State to guide the U.S. delegations. The chairperson or U.S. government employee designated as the “head of delegation” to the IMO committees or subcommittees with jurisdiction over the agenda items (usually an officer or official of the U.S. Coast Guard) presides over these meetings.

Although created before the passage of the Federal Advisory Committee Act (FACA), the Shipping Coordinating Committee is now governed by the requirements of FACA. Accordingly, notice of meetings held by the Shipping Coordinating Committee are published in the Federal Register. Meetings of subcommittees and any related working groups of the Shipping Coordinating Committee are similarly announced.

**Endnote:**

For more information on the Shipping Coordinating Committee, go to www.facadatabase.gov and www.uscg.mil/hq/cg5/imo.
U.S. national strategy establishes important objectives for Africa, and the U.S. Coast Guard is in high demand to help meet them. We help nations to develop their own coast guards and to gain International Ship and Port Facility Security (ISPS) Code compliance. We deploy cutters, provide search and rescue and maritime law enforcement training programs, and more. The U.S. Coast Guard officers assigned to the new U.S. Africa Command leverage limited capabilities to make a positive impact on the stability, security, and economic viability of Africa in support of U.S. foreign policy.

Africa is an immense continent, with an EEZ reaching out into two oceans and two seas, and home to 14.2 percent of the world’s human population. Its sovereign states, including coastal states and states whose economies rely on Africa’s maritime transportation systems, are strongly affected by maritime issues. Maritime threats, where maritime enforcement authorities, capabilities, and resources are key, include piracy; illegal fisheries; trafficking in persons, arms, and drugs; and terrorism issues. These are complicated by resource-strapped and, in some cases, corrupt governments, and the influence of transnational organized crime syndicates.

Another factor tying the U.S. to the continent is energy. Nigeria alone supplies 11 percent of U.S. oil imports, our fifth-largest oil import source. Looking ahead, while crude oil throughput is expected to increase globally by 26 percent by 2030, African production is expected to increase by 63 percent.

The U.S. Coast Guard’s expertise in interagency and commercial industry coordination, multi-mission competence, and international engagement effectiveness make it a valued partner of choice as the U.S. government and U.S. Africa Command look for positive ways to increase the stability, security, and economic viability of the African continent. U.S. Africa Command, the newest of the Defense Department’s geographic combatant commands, has administrative responsibility for U.S. military support to U.S. foreign policy in Africa.

Driven by Strategy
U.S. Africa Command and the Coast Guard’s work in Africa support top-level national strategies and specifically the U.S. National Strategy for Maritime Security (NSMS). These lines of effort are affirmed through U.S. Africa Command’s and the Coast Guard’s own guidance.

The National Security Strategy is based on two pillars. The first requires working with all U.S. government stakeholders and our international partners to end tyranny, promote effective democracies, and extend prosperity through free and fair trade and sensible de-
velopment policies. The second pillar involves confronting the challenges of our time by leading a growing community of democracies. We directly support these goals through our many efforts to improve Africa’s security and stability.

Focusing further down, the National Defense Strategy achievements orient our efforts in Africa. These direct us to build on and expand our alliances through our support of diplomacy. They task us with preventing adversaries from acquiring or using weapons of mass destruction, which we support by strengthening African nations’ port security and maritime transportation systems (MTS). They also task us to secure U.S. strategic access and retain freedom of action, which we support through diplomacy, ship visits, and MTS development assistance.

In support of these strategies, U.S. Africa Command, Naval Forces Africa, Marine Corps Forces Africa, and the U.S. Coast Guard work to integrate, coordinate, and unify efforts to enhance international cooperation, maximize domain awareness, embed security into commercial practices, deploy layered security, and assure continuity of the maritime transportation system. Our maritime efforts in Africa also include implementing military programs that enhance stability and security on the continent of Africa and its island nations and direct, integrate, and employ credible and relevant military capability in peace and in response to crisis.

Further, the U.S. Coast Guard and U.S. Africa Command work to develop national and regional security capabilities that promote security and stability and aid development; support U.S. government departments and agencies in implementing security, diplomatic, and development policies; and strengthen existing relationships and expand our network of partners on the continent.

In addition to the Coast Guard’s role as a U.S. armed force supporting national security, the Coast Guard’s Posture Statement orients us toward the threats of transnational crime, piracy, and terrorist activity that we face in Africa and elsewhere.

Speaking in unison with the Navy and Marine Corps in the Cooperative Strategy for 21
d Century Seapower, the need for our international engagements is emphasized: “Maritime forces will be employed to build confidence and trust among nations through collective security efforts that focus on common threats and mutual interests in an open, multi-polar world.”

Coast Guard Activities in Africa
The U.S. Coast Guard, in support of U.S. Africa Command and its component commands, is helping Africa’s states better secure their MTS with a focus on port safety and security and maritime domain awareness/control. The African ports, like U.S. ports, are the main conduits for cargo into and out of the continent. Responsible for over 80 percent of the cargo transported off the continent, African ports are recognized as economic engines that provide a direct link to the

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**Building a Coast Guard**

In Liberia, years of war and neglect eliminated nearly all port security capacity and resulted in the loss of the government’s effective control over the country’s exclusive economic zone. Upon receiving a formal request from the government of Liberia, the U.S. Coast Guard, in coordination with U.S. Africa Command and the American Embassy, completed an assessment to develop the Liberian Coast Guard from the ground up.

This pending multimillion-dollar effort aims to create, organize, train, and equip a Liberian Coast Guard able to enforce maritime law and advance U.N. security sector reform, further developing and stabilizing Liberia.

The Republics of Togo and Benin are both examples of where the International Port Security Program has been successful. These initiatives further improved the throughput of the Ports of Lome and Cotonou. The result was a substantial increase in the rate of compliance with the ISPS Code within months for both ports, and a reported significant increase in cargo volume for the Port of Lome in early 2008.

There was a direct link between the U.S. Coast Guard International Port Security Program and the improvement of port security and ensuring economic gain for both countries.

**Endnote:**

1. ADM Fogan Adegnon, Director General, Port of Lome, October 2008.
The safety and security of these ports is paramount to the continued development of the African continent. Maritime domain awareness and control is critical for coastal African states to protect hundreds of millions of dollars in maritime resources and secure under-governed and porous maritime borders.

The U.S. Coast Guard is answering the call for assistance by helping to establish national coast guard capacities, helping African authorities and port stakeholders gain substantial compliance with the International Ship and Port Facility Security Code, conducting cutter deployments in support of U.S. Naval Forces Africa’s African Partnership Station, and providing extensive African maritime training programs on the continent and back in the United States.

Many African states have enthusiastically requested support from the U.S. Coast Guard to help them develop their maritime security components and national coast guard capabilities. While many African coastal states focused on building ground force capabilities, they typically have limited visibility in their maritime domain and have underdeveloped maritime law enforcement capabilities to protect their ports and vast fishing grounds. This situation is changing, as there is now a growing recognition across the African continent that maritime security forces are a critical necessity.

**ISPS Code Compliance**

Port security is a key area in which the U.S. Coast Guard has taken the lead in Africa. Personnel attached to the U.S. Coast Guard International Port Security Program have been invited by 32 African countries to observe and evaluate their compliance with the International Maritime Organization’s International Ship and Port Facility Security (ISPS) Code. Effective implementation of the ISPS Code results in better port facility risk analysis, effective port security plans, more effective communication between government agencies and port stakeholders, enhanced port organization, efficient handling of cargo, trained personnel, and interagency coordination through realistic and challenging drills and exercises.

The United States recognizes that compliance with the ISPS Code makes the global maritime transportation system more secure; this in turn helps reduce the risk of a maritime-based terrorist act in U.S. waters. Countries that fail to comply with the ISPS Code can be placed on the U.S. Coast Guard Port Security Advisory list, resulting in stricter port state control measures placed on cargo originating from non-compliant countries and potential costly delays.

Annual visits conducted by the U.S. Coast Guard International Port Security Liaison Officers (IPSLOs) help African states’ designated authorities bring attention to port concerns at the national government level. They also highlight the need to appropriately fund port security systems. African ports compete regionally for hinterland commerce and globally as trans-shipment hubs for international shippers. These IPSLO visits attract business by helping to communicate a secure port’s advantages regionally and globally.

**Law Enforcement Capacity-Building**

In an effort to conduct sustained security engagement in and around the African continent, the U.S. Coast Guard has conducted three cutter deployments since 2005, two of which supported the Africa Partnership Station. Also, U.S. Coast Guard officers on the U.S. Africa Command staff were instrumental in orchest-
trating a recent multi-national combined maritime law enforcement operation in Africa.

During the deployment of the Coast Guard Cutter Dallas to West and Central Africa, the U.S. Coast Guard conducted real-world law enforcement operations with the Cape Verde Coast Guard. Cape Verde, like many African states, recognized the U.S. Coast Guard as a good international partner, given the service’s multi-mission requirements and expertise on counter-narcotic trafficking and illegal fishing enforcement.

Training Programs

U.S. Coast Guard training programs are also in high demand by African states. This training is coordinated through U.S. Africa Command’s annual Security Cooperation Education and Training Working Group. Using regional engagement plans and input from each of the armed forces, U.S. embassies, and international partners, this process establishes priorities and training plans for each supported nation. In 2009, the U.S. Coast Guard’s mobile training teams are scheduled to conduct 15 events in 7 African states: Djibouti, Gabon, Ghana, Kenya, Morocco, Sao Tome & Principe, and Sierra Leone. The training includes law enforcement, maritime operational planning, security, basic and advanced outboard motor maintenance, search and rescue, and leadership and management.

Many African states also send students to U.S. Coast Guard schools to further their education and promote African regional cooperation. These training opportunities and reciprocal visits to the United States encourage sharing of best practices and offer a chance to see how the United States conducts port security, implements port state control measures, and utilizes maritime domain awareness and other tools in the management of MTS safety and security.

Bringing it Together

Why is the U.S. Coast Guard in Africa? We are here because Africa’s nations are important partners in economic growth, and because our national security needs are mutual in the global maritime transportation system. We are here because we bring vitally needed skills and capacities to our African partner nations through our work within the U.S. Africa Command, in support of our nation’s strategies.

About the authors:

LCDR Rob Keith serves U.S. Africa Command’s Counter-Narco Terrorism Branch. After enlisting, he graduated from the USCG Academy, class of 1993. He served with the cutter fleet; operations ashore in an interagency capacity; C-130 aircraft commander; and as an International Port Security Program IPSLO in Africa, the Balkans, and the Middle East.

CDR Benjamin Benson, U.S. Africa Command Engagement Division, started his career at boat units and as an aviation survivalman. After Officer Candidate School, he served in Port Operations, Inspections and Investigations. He earned a master’s in communications at San Diego State University, and was the First District’s public affairs officer.

Endnotes:
6. The Africa Partnership Station is the U.S. Naval Forces Europe’s international security cooperation initiative to strengthen maritime safety and security in West and Central Africa. Working with African and other nations, international and regional organizations, and private and non-governmental organizations, this ongoing program employs visiting ships, aircraft, and training teams to help increase African maritime capabilities and capacity.

Bibliography:
U.S. Coast Guard, U.S. Coast Guard Posture Statement.

HANDS-ON HELP

Currently four U.S. Coast Guard officers provide service-unique expertise in their assigned U.S. Africa Command directorates. They address maritime issues alongside their Navy and Marine Corps colleagues, provide U.S. Coast Guard perspectives, and help link U.S. Coast Guard activities to African theater security cooperation goals.

CAPT Phil Heyl serves as the senior U.S. Coast Guard/Department of Homeland Security representative. He was the chief staff officer for U.S. Africa Command’s Directorate of Operations and Logistics, and acted as the commodore for maritime interdiction capacity-building operations.

CDR Benjamin Benson serves in the Strategy, Plans, and Programs Directorate. He handles international and interagency engagement on maritime issues across Africa and leads the U.S. Africa Command Maritime Security working group. He also maintains U.S. Africa Command’s link to the USCG International Port Security Program, coordinating with the IPSLOs to tie these activities to theater security cooperation objectives.

LCDR Rob Keith serves as the Counter-Narco Terrorism, African Maritime Safety and Security program manager in the Strategy, Plans, and Programs Directorate. He is responsible for creating the Trans-Traffic Maritime Security Strategy and developing African states’ regional focus on the maritime environment.

The newest member, CDR Kathleen Duignan, joined the Office of the Legal Counsel to the Commander, U.S. Africa Command, in early December 2008. She provides U.S. Coast Guard perspectives on the legal issues relating to the command, including developing needed maritime legal regimes for African nations.
Risk is inherent in the maritime environment. Death, injury, and property loss can result from accidents or from the actions of those intent on causing harm, such as violent extremists, criminals, or other bad actors. Maritime safety and maritime security describe the actions by government, commercial, and private entities to prevent accidents or attacks and, should those efforts fail, to respond and recover from such incidents.

Maritime safety and security certainly require strong and enduring partnerships among government, industry, and the private sector. The oceans are the world’s commons, the arteries and veins that pump the lifeblood of commerce among the states to ensure their economic survival. Nations must work together to improve the safety and security of maritime transportation—within their own borders and beyond—to sustain maritime commerce. International cooperation must be based on common legal regimes and standards. Further, nations cannot act without shared knowledge and understanding of situations and risks in the maritime domain. Effective understanding requires intelligence, and intelligence must be based on awareness—international cooperation must involve sharing awareness as well.

The Coast Guard, working with other government agencies and industry, enforces U.S. and international regimes to promote maritime safety and security and collaborates with international partners to improve maritime domain awareness as part of that effort.
Maritime domain awareness (MDA) is the effective understanding of activities, events, and threats in the maritime environment that could impact global safety, security, economic activity, or the environment. International efforts to share information to enhance awareness of the maritime environment are growing, and the Coast Guard is at the forefront of many of those efforts. They are based on formal multilateral structures, informal multilateral or regional organizations, or bilateral agreements for cooperation in specific areas.

Formal Multilateralism
The International Maritime Organization (IMO), an international body established under the auspices of the United Nations, provides a formal multilateral structure and international regime for maritime safety and security. Because of its long-standing maritime expertise, the Coast Guard, in partnership with the Department of State, leads the U.S. delegation to the IMO and is responsible for negotiating and implementing the legal regimes under the various IMO conventions.

The International Convention for the Safety of Life at Sea (SOLAS), 1974, provides minimum international standards for maritime safety and enforcement regimes to promote port state enforcement of international requirements. The International Ship and Port Facilities Security (ISPS) Code, now Chapter XII-2 of SOLAS, provides required standards and measures for the security of ports, facilities, and oceangoing vessels worldwide to be executed by flag states and port states.

SOLAS and the ISPS provisions related to maritime security include several efforts and requirements that, either by intent or resulting effect, improve maritime domain awareness:

- **The Automatic Identification System**. The Automatic Identification System (AIS) regulations require ships to transmit and receive identifying and voyage information through standard global navigational positioning systems, shipboard sensors, and digital radio communication equipment. The AIS, like an aircraft transponder, corroborates and provides the identification and position of vessels, which is not always possible through voice radio communication or radar alone. The Coast Guard, along with other authorized governments and other ships and commercial/private entities, receives ship AIS signals. Although intended for safety purposes, AIS also helps to improve security by increasing the Coast Guard’s awareness of vessels in the maritime environment, especially vessels approaching U.S. ports.

- **The Ship Security Alert System (SSAS)**. The SSAS provision requires all ships to have a silent alarm system installed to transmit a ship-to-shore security alert that identifies the ship and its location and indicates that the security of the ship is under threat or has been compromised. The Coast Guard receives and coordinates ship security alert notifications and coordinates U.S. response to those alerts.

- **Long Range Identification and Tracking (LRIT)**. The LRIT provision of SOLAS requires ships to carry equipment and transmit their identity, location, and date and time of position to specific government entities authorized to receive the information. States that are party to SOLAS are authorized to receive LRIT information about ships navigating within 1,000 miles of their coasts.

- **The Global Maritime Distress and Safety System (GMDSS)**. SOLAS class vessels are required to carry equipment designed to improve the chances of rescue following an accident, including satellite emergency position indicating radio beacons and search and rescue transponders. The Coast Guard has primary authority to conduct maritime search and rescue for the U.S. Although GMDSS is intended for response to maritime emergencies, it enables effective response to save lives based on information and domain awareness to alert and coordinate response assets.

- **ISPS port facility assessments**. The ISPS provisions of SOLAS require that participating states conduct assessments of port facility security and report the status of those assessments to the IMO.
U.S. law also requires the Coast Guard to conduct port facility assessments in foreign ports from which U.S. vessels or other foreign vessels depart en route to the U.S., in order to detect security risks far from U.S. shores. Based on these requirements, the Coast Guard has engaged in bilateral discussions with foreign trading partners to share best practices information on port facility security. Coast Guard international port security liaison officers travel to foreign countries and ports worldwide to assess port security and exchange information with foreign governments and gain a better understanding of foreign port conditions and potential vulnerabilities to the global transportation system. In return, foreign partners visit U.S. ports to observe our security practices and share best practices to improve awareness and security.

Informal Multilateral Organizations
The Coast Guard increasingly participates in a variety of informal multilateral forums to build relationships and share information to enhance maritime domain awareness.

The North Pacific Coast Guard Forum (NPCGF), started in 2000, provides a venue for the Coast Guard and its counterparts from Canada, China, Japan, Korea, and Russia to interact and to share information. The Coast Guard meets with agencies from the six countries semi-annually and conducts combined exercises and operations for SAR, combating transnational maritime crime, and responding to terrorism. At the summit held in San Francisco in September 2008, the six agencies signed a memorandum of cooperation to establish common goals and protocols among the participating services, including provisions to improve maritime domain awareness.3

Drawing on the success of the NPCGF, the Coast Guard and 18 civil maritime agencies of countries bordering the North Atlantic established the North Atlantic Coast Guard Forum in October 2007. This body also focuses on multilateral cooperation to improve maritime safety and security by building trust and stronger relationships that serve as the foundation for increased information sharing and operational cooperation among member services.

Beyond these regional efforts, the Coast Guard is a key participant in global security efforts, including the U.S.-sponsored Proliferation Security Initiative (PSI). The PSI, initiated by the U.S. in 2003, is not a treaty, but an informal consortium of states that agree to certain fundamental principles on nonproliferation of weapons of mass destruction (WMD) and exhibit the willingness and ability to take measures to stop the flow of WMD by sea, air, and land. The PSI also involves participation by states whose vessels, ports, flags, territorial waters, airspace, or land territory could be used to transfer weapons of mass destruction. PSI participants exchange best practices for information sharing and operations, conduct regular multilateral interdiction exercises, and complete bilateral agreements to facilitate boarding of each other’s vessels under appropriate circumstances. By August 2007, the original core 15 PSI participant states had been joined by more than 80 additional states committed to PSI activities on an ad hoc basis, including Russia.4

As the primary U.S. agency responsible for maritime security, the Coast Guard has played a central role representing the U.S. in PSI efforts. The Coast Guard has also participated in frequent meetings of international multilateral experts and joined other U.S. government agencies and international partners in planning and conducting 26 practical interdiction exercises as of August 2007.5
Finally, the Coast Guard led negotiations to complete bilateral boarding agreements with six flag states of convenience to facilitate flag state consent for rapid boarding of suspected vessels of interest.\(^6\)

The Coast Guard also relies on bilateral agreements with partner states to share information to improve awareness in combating specific threats to maritime safety and security. For example, the Coast Guard relies on a series of bilateral agreements prepared under an international treaty framework between the U.S. and Latin American states to combat illegal drug transshipment.\(^7\)

The Coast Guard, which plays a key role in negotiation and completion of these counterdrug agreements, relies on them for operational coordination, shipriding, technical assistance, and exchange of information to combat maritime drug smuggling. The Coast Guard employs other bilateral agreements with international partners in the western hemisphere and around the globe to improve operational collaboration and information sharing to promote maritime safety and security.

**Sharing Intelligence**

How does intelligence relate to the broader concept of maritime domain awareness? Intelligence is not distinct from MDA, it is the keystone. The growing glut of available information can be overwhelming, and real understanding of the vast expanse of the maritime environment is often obscured and elusive. Governments must have a means to not only effectively share, process, and manage information about the maritime domain, but to comprehend what that information means.

Without discipline to govern maritime domain awareness efforts, governments may drown in the waves of information washing over them, missing critical information needed to address specific risks. Intelligence applies a professional discipline, methodologies, and processes to determine requirements; collect, fuse, and analyze information; and produce and share intelligence in a timely manner to specifically meet requirements of policy makers and operators. Sharing MDA-specific information may include classified and sensitive diplomatic, military, law enforcement, and homeland security information directly related to MDA, such as vessel port calls and passport information. Measures governing the categorization and release of U.S. government information are regulated by law (Executive Order 13292, Freedom of Information Act, Privacy act of 1974), memoranda of understanding, or agency-level counterpart agreements of a less formal nature.\(^8\) Additionally, consideration to how intelligence is shared is equally as important as what is shared. Advances in information technology provide tremendous capability to immediately dispense critical information; however, increased awareness and innovative methods to safeguard sensitive information will be required to prevent exploitation by bad actors.

The Coast Guard is not only a military, humanitarian, and law enforcement service, but a member of the U.S. intelligence community. As such, the Coast Guard plays a key role in bringing the intelligence discipline to maritime domain awareness efforts. The Coast Guard also provides a more comprehensive situational view through timely all-source information analysis. Further, it participates in bilateral and multilateral efforts within the intelligence community to appropriately collaborate and share intelligence with allied military and intelligence services.

While most of the details of U.S. intelligence sharing efforts are not public, the process and the information it develops are vital to national security. Cooperative global information sharing efforts will be key to successfully integrating and tasking organic and technological assets to effectively focus limited operational resources for effective mission execution.

**Challenges to Improving Information and Intelligence Sharing**

Improving maritime domain awareness through information and intelligence sharing brings inherent tensions among important national interests. Cooperation with
international partners is imperative, but the U.S. and international partners must strike the appropriate balance among sharing information for maritime safety and security with the need to safeguard their own national security information from public disclosure and to protect the personal privacy of their citizens and nationals.

The U.S. National Strategy for Information Sharing reaffirms the importance of this challenge and the obligation of the Coast Guard and other government agencies to ensure the protection of classified and sensitive U.S. national security information shared with international partners from public or other unauthorized disclosure. This is accomplished by a body of national policy governing disclosure of information to foreign governments and required text that is incorporated in international agreements. Further, the Coast Guard ensures that any information shared with foreign governments appropriately protects the personal information of U.S. persons as required by U.S. law, including the Privacy Act of 1974.

A Look to the Horizon

Today, the Coast Guard is broadening its focus to include geographic areas seldom considered, such as the growing navigable regions of the Arctic. As the opportunities and likelihood for maritime transportation in the Arctic increase, the service will need better understanding of the domain there to ensure safety and security in areas under U.S. jurisdiction. The Coast Guard will continue to rely on key efforts such as those at the IMO and within the North Pacific and North Atlantic Coast Guard forums.

The future holds only greater demands for increased awareness of activities and events in the maritime domain to ensure the safety and security of commerce and transportation. As the Coast Guard gains a better understanding of the marine environment, there will be more need to focus on specific areas of potential risk.

Put simply, appetites for valuable intelligence and other information will only continue to grow. The Coast Guard must continue to pursue international engagement, building trust and relationships with international partners to share information to improve maritime safety and security throughout the world. The national security of the U.S. depends on it.

COAST GUARD LIAISON OFFICERS ABROAD

In addition to the IPSLO program, the Coast Guard permanently stations officers and petty officers as liaisons at U.S. embassies and consulates around the world to focus on building relationships and trust to improve maritime safety and security. Coast Guard liaison officers not only represent Coast Guard equities as part of the U.S. mission, but support efforts to improve information sharing with international partners.

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Bibliography:
Mr. Joe Call, “Taking a Risk-Based Approach to Maritime Domain Awareness,” USCG Proceedings, Fall 2006.


Endnotes:
2 www.imo.org.
5 Ibid.
Coast Guard Boardings

Same authorities, new threats …
same tactics, new technologies.

by Captain Gary C. Rasicot (USCG, Ret.)
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In recent times there have been media reports implying that the U.S. Coast Guard has developed new boarding and interdiction techniques. Often these reports characterize these techniques as “excessive” or “unnecessary.” But, since its founding in the early days of our republic, the Coast Guard has boarded vessels to conduct inspections, enforce the law, and defend the nation.

Our nation has always required (and the Coast Guard has always provided) advanced interdiction capabilities and competencies. What was true in 1790 is still true today. Only the level of threat and technology and techniques employed to counter the threat have changed.

Legal Authority

Under Coast Guard doctrine, a “boarding” is an armed intervention aboard a vessel to detect and/or suppress violations of applicable law. Congress has seen fit to give the Coast Guard and its predecessor services the authority to board virtually any vessel within U.S. waters to enforce the law. Our first maritime law enforcement authorities were passed in the Revenue Service Act of 1790. Section 31 of the act provided:

“That it shall be lawful for all collectors, naval officers, surveyors, inspectors, and the officers of the revenue cutters … to go on board of ships or vessels in any part of the United States, or within four leagues of the coast thereof, if bound to the United States, whether in or out of their respective districts, for the purposes of demanding the manifests aforesaid, and of examining and searching the said ships or vessels; and the said officers respectively shall have free access to the cabin, and every other part of a ship or vessel. ...”

This statute was passed by the first Congress, the same Congress that enacted the Bill of Rights, including the Fourth Amendment with its guarantees for citizens to be secure against unreasonable searches and seizures. By enacting the Revenue Service Act, the first Congress showed unequivocally that the Coast Guard’s significant law enforcement authorities to board and search a U.S. flag vessel anywhere in the world, as well as vessels intending to call on U.S. ports, were consistent with the Fourth Amendment.

Over the years this law enforcement remained, promulgated under different laws, evolving beyond geographic limitations, until finally Congress passed our current maritime law enforcement authorities. Congress re-promulgated the Coast Guard’s current maritime law enforcement authority in 1949. 14 U.S. Code § 89 authorizes, in part:

“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 operations 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 interdict-and-board authority can be applied to virtually any vessel over which the United States has jurisdiction, especially vessels intending to arrive at a U.S. port. As we shall see with boarding tactics and techniques, while Coast Guard authorities have evolved, they have not fundamentally changed.

Boarding Techniques in the Age of Sail
In the age of sail there were two main techniques to board a vessel—either with permission, or without. Both were relatively simple in concept. Both were variations of a vessel-to-vessel boarding. In the first technique one ship came alongside another; lines and grappling hooks would then be used to make the ship fast to the target vessel. After securing itself to the target, gangplanks and ladders were run from the “attacker” to the “target” vessel so the boarding party could then cross over. This method was primarily used for at-sea combat.

The second main technique for boarding vessels in the age of sail was the use of small boats, both for combat and for law enforcement. Small boats, such as dories, whaleboats, and other small craft would be launched from one vessel, rowed to the target vessel, and personnel would either board with the assistance of the target vessel crew by climbing up ladders or nets, or board in opposition by using grappling hooks and lines.

Weapons in the age of sail were swords and firearms. Boarding officers would usually carry flintlocks. A flintlock was any pistol, rifle, or small firearm that used a piece of flint to strike a small piece of steel, causing a small spark. This spark ignited a small amount of black powder, and the flame would then ignite the main powder in the barrel, firing the weapon. Flintlocks were preferred in the maritime environment over other types of firing mechanisms such as the matchlock. The matchlock used a slow-burning match to ignite the priming powder which would then in turn light the main powder. In the maritime environment, a burning match had a much higher risk of causing a disastrous fire, as compared to the flintlock.

Sailors making up a boarding party also carried any number of edged weapons, such as knives and cutlasses. A cutlass is a short, thick sword with a single cutting edge and a hilt. The cutlass was the standard naval sword for centuries because its thickness made it useful for cutting through lines, canvas, or other obstacles. Its short length also lent it well to close-quarters combat, which was the norm on sailing vessels. Given the prevalence of swords and other edged weapons in boardings, it’s not surprising that nicknames earned in the age of sail live today. For example, U.S. Marines are often called “Leathernecks,” which refers to the high
leather collar worn by marines during the age of sail to ward off sword blows.

**Modern Boarding Techniques**

Today, rarely, if ever, does one vessel lash itself alongside another to deliver a boarding party. Instead, Coast Guard boarding parties still routinely board targeted vessels from small boats. These boardings are most often done with the assistance of the target vessel. But the Coast Guard has the capacity, and on occasion finds it necessary, to use “hook and climb” techniques reminiscent of grappling hooks and lines. A “hook and climb” boarding is often conducted when the vessel does not cooperate or there is a need to board without the knowledge of the target vessel.

Today we also have additional boarding methods that include aircraft. The Coast Guard can use helicopters either to vertically deliver (land on a target vessel and discharge a boarding party) or vertically insert (hover low over a target vessel, lower a rope, and then the boarding party slides down the rope to the target vessel) a boarding team.

Weapons have also evolved. Coast Guard boarding officers no longer carry edged weapons such as the cutlass, except for an optional six-inch folding knife. But, of course, they still carry firearms. Instead of a flintlock pistol, however, we’ve advanced to firearms such as the 9-mm pistol, shotguns, and automatic rifles such as the M-16 or M-4.

Further, Coast Guard vessels are capable of carrying mounted automatic weapons, such as the M-240 and M-2 machine guns. These weapons are primarily for suppressive fire—fire on or about another weapon system to prevent its use. Regardless of the weapon, their use is always governed by either the Coast Guard Use of Force Policy or the standing rules of engagement. These documents mandate that any force used must be reasonable (necessary and proportional) based on the facts and circumstances of any particular situation, whether it be law enforcement or combat.

**The More Things Change …**

Rumrunners and swashbuckling buccaneers have given way to drug smugglers, terrorists, and pirates with automatic weapons. Whaleboats rowed by oarsmen have given way to water jet response boats powered by twin 825-horsepower turbocharged diesel engines. What has not changed, however, are the fundamental authorities the Coast Guard has relied on since the early days of our republic. What has not changed are the fundamental tactics by which one vessel puts a boarding party aboard another.

The threats have changed, but our authorities have not. The technologies change, but our tactics haven’t. Despite the years, Alexander Hamilton’s first instructions to the Revenue Cutter Service are applied today whenever the Coast Guard conducts a boarding anywhere in the world.

Hamilton wrote, “While I recommend in the strongest terms to the respective officers, activity, vigilance and firmness, I feel no less solicitude, that their deportment may be marked with prudence, moderation, and good temper … They will always keep in mind that their countrymen are freemen, and, as such, are impatient of everything that bears the least mark of a domineering spirit. They will, therefore, refrain, with the most guarded circumspection, from whatever has the semblance of haughtiness, rudeness, or insult.”

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**About the authors:**

Captain Rasicot recently retired after more than 24 years of service in the Coast Guard. He is a 1984 graduate of the Coast Guard Academy. He has served in numerous leadership assignments, notably as commanding officer of a Medium Endurance Cutter, as the chief of the Coast Guard’s Drug Interdiction Program, and as director of Maritime Security on the Homeland Security Council.

CDR Cunningham has served in the Coast Guard for 19 years. Before graduating magna cum laude from the Seattle University School of Law, CDR Cunningham served with various operational units. As a judge advocate he has served in various legal offices and as the Coast Guard’s Port Security legal advisor.

**Endnotes:**

1. 1 Stat. 164 (1790).
2. Despite its brevity, the Fourth Amendment is one of the fundamental protections provided by our Constitution. It reads, in its entirety: “The right of the people to be secure in their persons, houses, paper, and effects, against unreasonable searches and seizures shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.”
The increasing global reliance on the maritime domain far outstrips any one nation’s capacity and capability to govern it. Effective maritime governance depends largely on international partnership, cooperation, and coordination. The United States, like most maritime states, closely relies on international partners and organizations within the maritime community to identify and address common threats in an effective and comprehensive manner.

Consequentially, international maritime law and the requirements and rights it imposes on individual states are constantly evolving in response to emerging threats and international efforts to secure and protect our oceans. It is imperative that maritime states develop adequate laws and capable maritime forces to enforce those laws. With these needs in mind, the U.S. Coast Guard Office of the Judge Advocate General, in coordination with the Office of International Affairs, developed the Model Maritime Service Code to assist maritime states to create or improve the infrastructures necessary to enforce laws governing the maritime domain.

The Legal Infrastructure
The Coast Guard provides training and consulting services in maritime law enforcement, marine safety and environmental protection, search and rescue, and infrastructure development to maritime forces in a number of countries around the globe. Though many states have expressed interest in establishing maritime forces with law enforcement, marine safety, and national defense functions, these states often lack the legal framework for a multi-mission maritime force.

With more than 200 years of experience serving the maritime community, the U.S. Coast Guard is in a unique position to help other nations build the regimes, awareness, and operational capabilities to improve maritime governance to protect ports, waterways, living marine resources, and the environment. The model code has now been published in five languages and has been used in more than 20 countries for training and technical assistance. Other states are using it to develop and improve their own maritime laws and procedures.

The model code provides the legal framework to address concerns related to maritime safety and security, protecting the rights of mariners, and ensuring the effective flow of global commerce, pollution prevention, preservation of the marine environment, and the protection of living marine resources. Maritime states can also utilize it to incorporate rights and obligations rec-
ognized under international law into their legal authorities.

Initial Focus
First developed in 1994, the Coast Guard created the Model Maritime Service Code to identify the fundamental legal authority a multi-mission maritime service needs to function effectively. The first edition focused on providing assistance to emerging states that were embracing the free market and new systems of government for the first time.

Recognizing that all nations are uniquely structured with distinct challenges, structures, and needs, the model code provides examples and references for states to use to develop their maritime forces and corresponding authorities. It is primarily based on some, but not all, of the laws and directives of the United States Coast Guard. Coast Guard authorities reflect the organization's long history of service to the nation and maritime community. Many of the laws and directives that the Coast Guard enforces developed from different national concerns or in response to major marine catastrophes. As a result, Coast Guard officers rely on a unique set of authorities to accomplish their many responsibilities on the water.

To this end, the Model Maritime Service Code provides a structure that endeavors to ensure the economy of forces and unity of effort to address the broad spectrum of issues facing a particular maritime state. The Coast Guard possesses a demonstrated ability to adapt to meet the changing needs and priorities of a modern state and can provide practical guidance to its international partners. We strive to share these capabilities with other states through our international engagement efforts.

Using the Model Code
The latest revision of the model code is arranged into 18 chapters. The first three chapters are dedicated to establishing a maritime force—one organized and authorized to assert maritime jurisdiction over activities, vessels, and persons in specified geographic areas. These chapters also include a general description of maritime crimes. The fourth chapter is dedicated to authorizing a maritime force to conduct investigations, assess and impose civil penalties, and refer cases for criminal prosecution. The remaining chapters address many individual missions that may be performed by a maritime force.

Each chapter begins with an introductory section that discusses the purpose of the chapter and associated maritime mission followed by a summary of relevant international law and U.S. Coast Guard efforts in the mission area. Supplemental information is provided in the guidance and implementation section to provide operational depth and practical guidance to the law.

Model legislative text can easily be adapted to fit into existing legal regimes and address the particular needs of each state. The revised code highlights issues for consideration and provides drafting guidance for consideration. The content has been cross-referenced, and related topics and relevant principles of law are listed in each chapter to assist drafters wishing to adopt particular sections to ensure that an effective legal framework is achieved. Links to relevant conventions, U.S. statutes, regulations, and resources are listed at the conclusion of each chapter.

Basis in International Law
For the most part, the statutory framework in the model code is based on the existing laws of the United States and international law. International law comes in many forms. Among these are a variety of types of agreements including conventions, treaties, memoranda of agreement, memoranda of understanding, diplomatic notes, exchanges of letters, and resolutions.

International law can also be based on customary international law, which reflects the actual practice of states that they generally recognize as binding. Specific mentions are made in the text of the Model Maritime Service Code, where appropriate, of applicable international treaty provisions. It is not necessarily consistent with all existing international conventions or treaties, since the United States is not party to some
conventions or treaties and does not consider them to be binding.

Many of the terms and jurisdictional concepts used are drawn directly from the 1982 United Nations Convention on the Law of the Sea (UNCLOS). As of January 2009, there were 157 parties to UNCLOS. Though the provisions of the convention only directly bind those states that are a party to it, UNCLOS has an important influence on all states. For all of the traditional uses of the sea, the provisions of UNCLOS have long been considered to be binding on all states as customary international law.

**Most Recent Edition**
The 2008 edition of the Model Maritime Service Code incorporated developments in domestic and international law since the first edition was published in 1995. With well over 80 percent of world trade moving through the maritime domain today, the protection and expansion of global commerce is an area of critical international concern. International laws and standards relating to maritime safety and security have been the focal point of the maritime community over the past few decades. Accordingly, a significant portion of the revision was dedicated to developing content and sample legislative text related to ship and port facility security and port state control.

Since the events of September 11, 2001, the international community has implemented several multilateral initiatives directed at maritime security. The International Maritime Organization (IMO) was the primary sponsor of these measures. In a February 2002 resolution, the United Nations encouraged its member states to fully support these efforts and those of the conference of contracting governments to the International Convention for the Safety of Life at Sea of 1974.

Collectively, these initiatives have resulted in a comprehensive security regime for international shipping, designed to prevent acts of terrorism that threaten the security of passengers and crew and the safety of ships and facilities. The model code discusses these and other relevant international initiatives. It also summarizes domestic U.S. laws addressing maritime security, including the Homeland Security Act of 2002 and the Maritime Transportation Security Act of 2002. Among other things, these statutes implemented the security provisions that IMO had developed and adopted.

The modular format of the revised model code is designed to assist states seeking guidance on a particular topic or convention without having to adopt the text in its entirety. The code covers a broad range of topics and can be adapted to fit the needs of maritime states around the world.

The Coast Guard welcomes the opportunity to collaborate with our international partners and strengthen global maritime governance. It views the Model Maritime Service Code as a tremendous success story in its efforts toward effective international engagement.

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Using Diplomacy to Promote Sustainable Port Security in Foreign Ports

by CDR Adam Shaw
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Following the terrorist acts of 9/11, the world maritime transportation sector recognized the imperative need to increase port security to reduce the risk of terrorism against the multi-billion-dollar global shipping industry. In 2002, the International Maritime Organization (IMO) created the International Ship and Port Facility Security (ISPS) Code as an amendment to the Safety of Life at Sea Convention to designate minimum security standards for ships and port facilities.

Likewise, in 2002, the U.S. Congress passed the Maritime Transportation Security Act, outlining specific actions to increase U.S. port security. The secretary of Homeland Security tasked the U.S. Coast Guard to oversee implementation. The Maritime Transportation Security Act significantly increased the responsibilities of the U.S. Coast Guard. In addition to increasing its regulatory role over U.S. ports, the secretary tasked the U.S. Coast Guard with the global responsibility of conducting assessments of foreign ports and meeting the objectives of the U.S. National Strategy for Homeland Security. To take on this vital role, the U.S. Coast Guard expanded its domestic port security program and developed the International Port Security (IPS) program.

Coast Guard International Port Security Liaison Officers
There are approximately 60 U.S. Coast Guard personnel operating in only a few U.S. Coast Guard International Port Security offices throughout the world: Washington, D.C.; Portsmouth, Va.; Alameda, Calif.; U.S. Coast Guard Far East Activities, Japan; U.S. Coast Guard Far East Activities Detachment, Singapore; and U.S. Coast Guard Activities Europe (ACTEUR) in Rotterdam, Netherlands. The U.S. Coast Guard IPS program at ACTEUR is staffed by 11 active duty international port security liaison officers (IPSLOs) who operate in Europe, Africa, and the Middle East, conducting visits to the port facilities of the 88 maritime trading partner nations within their area of responsibility. An IPSLO’s primary mission is to assess the anti-terrorism measures implemented at foreign ports. This is done through visits to evaluate compliance with the International Ship and Port Facility Security (ISPS) Code; engaging in bilateral information exchanges (including sharing of best practices); and participation in relevant conferences, meetings, seminars, and workshops in support of U.S. government strategic objectives.

As the U.S. Coast Guard IPS program evolved, and as a natural extension of their work, IPSLOs began developing and sharing methodologies that led to increased port security capacity and improved maritime governance. In addition to reviewing the port security practices of our maritime trading partners, IPSLOs are committed to increasing international awareness of maritime security and championing the use of best practices to improve maritime governance. The key to the success of the U.S. Coast Guard IPS program is effectively communicating the concept that increased security of individual ports leads to greater security in the global maritime transportation system. In addition, increased security leads to greater efficiency and provides financial incentives for countries to comply with the ISPS Code. International port security liaison officers must provide guidance to implement initiatives that are sustainable in the long run; short-term fixes that are in place solely to achieve compliance will likely fail, defeating the purpose of the program and leading to vulnerability in the global maritime transportation system.
What Happens When a Port Is Not in Compliance?
If a U.S. Coast Guard IPS team finds that a country is not in compliance with the ISPS Code and determines it is not maintaining effective anti-terrorism measures, the U.S. can initiate several different plans to mitigate the risks from vessels arriving from non-compliant countries. These actions include, but are not limited to, placing the country on a port security advisory, enforcing port state control actions, and imposing maritime sanctions in the form of conditions of entry or denial of entry on vessels arriving from non-compliant countries. These mitigating actions can have significant political, economic, and diplomatic implications and require close coordination with the U.S. Departments of Homeland Security, State, Defense, and Commerce.

When a country has not substantially implemented the ISPS Code, the international port security liaison officer is tasked with providing recommendations and sharing best security practices to help the country achieve compliance. In order for IPLSOs to affect substantial and lasting change in foreign countries, the liaison officer must first understand the port’s unique culture and infrastructure and then use best judgment and experience to share innovative practices that would achieve maximum success for that port. IPLSOs therefore must have port security technical expertise, must have knowledge of cross-cultural communications, and must utilize diplomacy to promote meaningful dialogue.

What works for one port may not necessarily work for another. For instance, using chemically treated access badges with embedded biometrics may not be a sustainable solution for a developing country, where simply using different colored laminated paper may be an appropriate solution for controlling access to restricted areas.

Achieving Compliance, Cooperation, Coordination
In addition to understanding different cultures and sharing best practices, one of the liaison officer’s most important objectives is developing relationships and building trust. IPLSOs are required to make regular visits to the countries in their portfolios. These visits not only allow the IPSLO to ensure the ports are maintaining effective security measures, but visits allow them to develop relationships with their in-country counterparts. After several visits, liaison officers and foreign port officials can begin to establish trust and create avenues for open dialogue.

In order to provide greater transparency, the U.S. Coast Guard International Port Security program offers foreign countries the opportunity to make reciprocal visits to the United States. Foreign port security officials are welcome to visit U.S. ports to examine our port security practices, discuss Maritime Transportation Security Act implementation, and gain a better understanding of how we maintain compliance with the ISPS Code.

The U.S. Coast Guard’s interaction with civil and military agencies, both foreign and domestic, is one of the IPS program’s strong points and also highlights the challenges it faces. As an armed service within the Department of Homeland Security, the U.S. Coast Guard has traditionally conducted engagements with foreign countries using military-to-military protocols coordinated through the Department of Defense and the combatant commander for the geographic region in which the country resides.

However, due to the close association with private maritime shipping agencies, the commercial and economic activities associated with ports, and interaction with governmental and non-military entities, the U.S. Coast Guard IPS program is more closely aligned with the U.S. Department of State, and IPLSOs coordinate their port visits through U.S. embassies. While this military-to-civilian partnership is unusual for most U.S. Department of Defense engagements in foreign countries, it serves the U.S. Coast Guard International Port Security program well and enhances its unique position as compared to other military agencies.

IPLSOs generally work directly with members of the political and economic sections of the U.S. embassies because they have a greater understanding of the economic issues in their countries and have already built many of the diplomatic relationships that are a cornerstone of the U.S. Coast Guard IPS program, which is very important when difficult situations arise. For instance, this level of understanding by all parties is crit-
ical when a country is found to not have substantially implemented the ISPS Code and we ask the U.S. Department of State to issue an official notification of non-compliance. In addition, developing a close relationship and maintaining an active dialogue with the political/economic section at the U.S. embassy provides the liaison officer with greater access to other U.S. government agencies that have national strategic interests in improving maritime security in foreign ports.

Considering the political and economic impact of the U.S. Coast Guard’s determination of non-compliance, especially in underdeveloped nations where the port is often the economic engine for the entire country’s prosperity, the international port security liaison officer’s role can be crucial to the national strategies of the U.S. government, as well as to the foreign country’s regional or international standings. While it is essential that IPSLOs have a strong background in port security, the ISPS Code, and the MTSA, they must also be well versed in all U.S. Coast Guard mission areas. In many cases, the only exposure a foreign government will ever have with the U.S. Coast Guard is through the international port security liaison officer.

During a port security visit, it is not uncommon for an IPSLO to field a wide range of questions—port state control detentions, boarding officer training, small boat procurement, search and rescue doctrine, response to marine environmental pollution, and more. However, an IPSLO’s most critical skills involve effective cross-cultural communications, diplomacy, and the ability to get a wide range of agencies to work together in support of a common goal. Working with the U.S. Department of Defense, Department of State, and cabinet-level members of foreign governments to resolve port security issues and negotiate sources of funding can often be an exercise of patience and determination.

Successes

ACTEUR international port security liaison officer visits to the Port of Cotonou in Benin, Africa illustrate the tangible results of our diplomatic efforts and the economic impact this program has. The IPSLOs met with officials from Benin’s Ministry of Transportation and Public Works; port security forces from the Port of Cotonou; the staff of the political/economic section from the U.S. Embassy, Benin; and a representative from the U.S. government agency, Millennium Challenge Corporation, to address significant security deficiencies in the Port of Cotonou.

Earlier that year, a U.S. Coast Guard IPS team concluded that the Port of Cotonou failed to develop adequate anti-terrorism measures. Knowing that this finding would have significant economic implications for this relatively small African country, the U.S. Department of State gave the country 90 days to resolve the port security deficiencies before imposing maritime sanctions.

Following the May 2007 IPS visit to Benin, the IPSLO to Benin spent much of the following months working to effectively resolve the port security deficiencies in the Port of Cotonou. The culmination of this effort was a three-day visit in August 2007, which included a demonstration of the improved port facility security practices, discussions with cabinet-level officials, and a personal briefing with the president of Benin.

Due to the dedication of the government of Benin to implement anti-terrorism measures and the guidance provided by the IPSLO, the U.S. Coast Guard found Benin in compliance with the ISPS Code. Had the country failed to implement the appropriate anti-terrorism measures, not only could the country of Benin suffer financial hardship due to the economic ramifications of the maritime sanctions, but it still would have been vulnerable to a terrorist attack on the maritime transportation system. Additionally, and just as important, is the fact that any actions construed as “negative” on the part of the U.S. government to the country of Benin could have had a detrimental impact on other ongoing strategic interests in the west coast region of Africa.

The U.S. Coast Guard IPS program has achieved success at many different levels. It is not only responsible for reducing the risk of terrorist attacks to U.S. ports; it has increased the security of the entire maritime transportation system. The U.S. Coast Guard IPS program has also strengthened the shipping economies of maritime nations and has built a network of trust and diplomatic relationships with our trading nations, providing a key venue for assisting other U.S. government agencies meeting national and foreign strategic goals.

Additionally, the success of the International Port Security program has given the U.S. Coast Guard a unique role in global maritime security, and has created the opportunity for the U.S. Coast Guard to have strong diplomatic and international ties with our vital maritime trading partners.

About the author

CDR Adam Shaw has served in the U.S. Coast Guard for 20 years in multiple operational units, most notably as commanding officer of several aids to navigation cutters. CDR Shaw is currently assigned as the coordinator for the U.S. Coast Guard International Port Security program in Rotterdam, Netherlands.
The Arctic

A growing search and rescue challenge.

by Mr. RICK BUTTON
Chief, Coordination Division
U.S. Coast Guard Office of Search and Rescue

The Arctic was once a nearly impassable environment; only icebreaking-capable ships were able to venture into the Arctic Ocean. Not any longer. The rapidly receding Arctic ice is opening up enough to allow summer sailing through both the Northeast and Northwest Passages. According to a recent report, a German shipping company intends to push the boundaries in Arctic shipping by transiting through the Northeast Passage without icebreaker assistance.¹

With increased transportation costs, many shipping companies are looking to cut time and costs by using these shipping routes at the top of the world. In addition to the increase in shipping, add the pursuit of the Arctic’s natural resources and the increase in transpo-

Both Routes Around Arctic Open at Summer’s End

As of the first week of September 2008, Arctic sea ice extent had not fallen below the record low observed in 2007, but the season set a new kind of record. For the first time in probably half a century—and definitely since satellite observations began about three decades ago—sea ice retreated enough to create open (but not ice-free) waters all the way around the northern ice pack.

The southern portions of the Northwest Passage through the Arctic (the western route from Europe to Asia through the islands of northern Canada) opened in early August. Then, in early September, ice scientists confirmed that the waters around the Russian coastline—the Northern Sea Route—were navigable, but still treacherous, with shifting floes of thick, multi-year ice that could coalesce rapidly.

The widest avenue through the Northwest Passage, Parry Channel, still harbored some ice, but the more circuitous, southern waterways were clear. On the other side of the Arctic Ocean, the passage around Russia’s Taymyr Peninsula, normally locked in by ice, was similarly open. According to a press release from the U.S. National Ice Center, “This is the first recorded occurrence of the Northwest Passage and Northern Sea Route both being open at the same time.”¹

Endnote:
lar commercial airline flights, and you will see a significant increase in human activity in one of the harshest environments on Earth.

As a result, northern nations responsible for aeronautical and maritime search and rescue (SAR) in the Arctic are now facing the potential for an increase in disasters, both large and small. With the enormous distances, vast barren landscapes, and harsh conditions, the challenge for Arctic nations is immense. The troubling reality is that there is very limited search and rescue response capability in the Arctic.

The lack of available resources to conduct SAR and infrastructure to launch aviation assets to support large-scale search and rescue operations make the challenge even greater. The good news, on the other hand, is that SAR authorities recognize the significance of the Arctic changes; local, regional, national, and international cooperation to support lifesaving is stronger than ever.

For the Coast Guard, the environmental changes in the Arctic region continue to expand Coast Guard missions. While other federal agencies balance Arctic development and environmental concerns, the Coast Guard will need to include maritime safety and security as key missions that must be supported in the region.

Search and Rescue Responsibilities
Responsibilities to assist people, vessels, or aircraft in distress are based on humanitarian considerations and established international practice. Specific obligations can be found in several international conventions, including:

- the Convention on International Civil Aviation,
- the International Convention on Maritime Search and Rescue,
- the International Convention for the Safety of Life at Sea,

Even if a national government is not party to these conventions, it can still be obligated to provide SAR services, especially if it has accepted responsibility for a search and rescue region.

In the United States, federal law provides that the Coast Guard may develop, establish, maintain, and operate SAR facilities, and provides for using these facilities to assist other federal and state entities. This authority is supplemented by the National Search and Rescue Plan (NSP), an interagency agreement signed at the cabinet level by seven federal departments, including the Department of Homeland Security. The NSP authorizes the Coast Guard and other federal agencies to perform or support SAR services. Pursuant to the NSP, the Coast Guard coordinates aeronautical and maritime search and rescue services in the United States maritime SAR regions.

The National Search and Rescue Plan provides for the effective use of all available resources in all types of SAR missions to enable the United States to satisfy its humanitarian, national, and international legal obligations. Under the overarching provisions of the NSP, SAR doctrine, standards, policy, and procedures are provided in:

- the International Aeronautical and Maritime Search and Rescue (IAMSAR) manual (applies worldwide);
- the U.S. National Search and Rescue Supplement (NSS) to the IAMSAR manual (applies to all federal agencies involved in SAR);
- the Coast Guard addendum to the NSS (applies only within the Coast Guard).

Coast Guard SAR Program: International Cooperation
The primary objective of the Coast Guard SAR program is to save lives at sea. The search and rescue program is highly respected within the international community, and the Coast Guard takes seriously its responsibility as an international SAR leader. As such, the
Coast Guard strives to enhance coordination and communication between operational SAR authorities and the government authorities that support this capability. Additionally, international coordination and communication helps improve the effectiveness of participating SAR systems through sharing information and practices, training personnel, and expediting delivery of SAR services.

In 1984, in recognition of the Coast Guard’s prominent international role in SAR, the Department of State granted the Coast Guard what is known as “Circular 175” authority to negotiate and conclude SAR agreements with corresponding services of foreign governments. Since then, the Coast Guard has utilized this authority to conclude a number of bilateral and multilateral agreements and memoranda of understanding. These cooperative arrangements provide the primary means of delimiting SAR regions and assigning responsibility for SAR coordination worldwide. International arrangements also facilitate the identification of vital search and rescue points of contact and serve as a means of ensuring that these countries take responsibility for coordination within their national SAR regions.

Cooperative search and rescue arrangements with other government agencies or with authorities of other nations not only fulfill domestic and international obligations and needs, but also provide many other significant benefits. In practice, such arrangements allow for more efficient SAR response communication and coordination. By identifying responsibilities and points of contact, and by delimiting national SAR regions, domestic and international search and rescue arrangements can enhance the effectiveness of SAR operations worldwide. Time has proven that these arrangements have a direct impact on preserving valuable Coast Guard resources, decreasing response time, and saving lives at sea.

Arctic SAR Cooperation

In August 2008, representatives of the Arctic nations met in Fairbanks, Alaska, for the eighth Conference of Parliamentarians of the Arctic Region. Discussions focused on maritime policy, human health, renewable energy, and adaptation to climate change in the Arctic region. In the conference statement, the representatives called upon governments to “strengthen cooperation, consultation, and coordination among nations regarding search and rescue matters in the region to ensure an adequate response from states to any accident.” The group also urged governments to support measures by Arctic nations and the maritime industry to “put appropriate resources in place to provide for emergency response capability, search and rescue capability … as the Arctic opens to marine shipping.”

In the Arctic, the U.S. SAR region (SRR) is delimited by the Russian Federation and Canada to the west and east, respectively. Through cooperative arrangements with both, the groundwork has been laid for continued cooperation in supporting SAR operations. However, in the far north, U.S. SRR responsibilities include many thousands of square miles of Arctic Ocean. In this environment, any type of large-scale SAR response will be difficult, requiring a coordinated, multi-agency (local, state, federal, military, tribal, commercial, volunteer, and scientific), and multi-national response effort with assets uniquely suited to the severe weather, uninhabited terrain, and huge distances between resources and needs.

Although the United States has non-binding search and rescue arrangements with Canada and the Russian Federation that have served well over the years, in the Arctic, development of a mutual regional cooperative arrangement among all nations with Arctic Region SAR
responsibilities is now being considered. A non-binding multilateral SAR arrangement could provide the framework for future international cooperation to save lives in the Arctic. It would also fit squarely within the guidelines of the IMO International Convention on Search and Rescue and the ICAO Convention of International Civil Aviation, which call for cooperative arrangements to be established by countries in order to further international maritime and aeronautical SAR cooperation.

Specifically, a multilateral search and rescue arrangement for the Arctic region could:

- identify key basic coordination and cooperation arrangements among the participating nations;
- provide the points of contacts for each participating nation for use in coordinating potential assistance in ongoing and future Arctic SAR operations;
- set the stage for nations to meet periodically to discuss SAR coordination and cooperation issues, providing an understanding of the unique SAR challenges each nation faces in the Arctic;
- provide the impetus for multi-national exercises that could be implemented on a periodic basis to allow national SAR agencies to practice communication, coordination, and the practical challenges associated with Arctic SAR operations;
- formally identify each nation’s maritime and aeronautical SAR regions in the Arctic.

**Arctic Exercises**

Based on priorities outlined in the National Security Council’s interagency review of Arctic policy, it is anticipated that the Coast Guard’s role and missions in the Arctic will continue to expand. In preparation for its increasing responsibilities, the Coast Guard has been conducting various exercises while patrolling in the Arctic Ocean, determining which assets are best capable of operating in the icy climate.

For example, during July and August 2008, the Coast Guard conducted its first series of arctic exercises off Barrows, Alaska. The primary objective was to determine the Coast Guard’s arctic requirements and capabilities. As part of Operation Salliq, units in the 17th District tested the operational capabilities of various assets. The 16-day operation included two HH-65 Dolphin helicopters and two 25-foot response boats from Station Valdez. The exercise also included a successful rescue swimmer operation conducted by members of Coast Guard Air Station Kodiak.

After the initial exercise, on August 29, 2008, the Coast Guard conducted its first Arctic search and rescue exercise to better understand the challenges of executing a mass rescue operation in the harsh environment. The Kodiak-based, 225-foot buoy tender Coast Guard Cutter Spar and the San Diego-based, 378-foot high-endurance Coast Guard Cutter Hamilton, together with aircraft from Coast Guard Air Station Kodiak, were the principal players.
Demand on Coast Guard Polar Icebreakers

Coast Guard icebreakers are essential for operating in the Arctic. By statute and executive order, the Coast Guard is authorized to carry out icebreaking operations and maintain icebreaking facilities to support its missions. Domestically, the icebreakers support federal, state, and local agencies to maintain open waterways to ensure the continuous flow of commerce. They also patrol waterways to enforce our laws and are available to assist mariners in distress. The medium and heavy icebreakers also operate in international waters, primarily in support of U.S. research interests in the Arctic region and maintaining re-supply routes to Antarctica’s McMurdo Station.

Presently, the Coast Guard has three polar icebreakers in varying states of readiness, the cutters Polar Sea, Polar Star, and Healy. The polar-class icebreakers Polar Sea and Polar Star have both reached the end of their designed service life and have experienced mechanical problems requiring extensive repair. Polar Sea went through extensive repairs and is now used for the National Science Foundation’s re-supply of Antarctica’s McMurdo Station as well as science missions. Polar Star was laid up in 2006 for repairs and still requires significant work before it will be operational. Healy, the newest cutter, has been able to routinely fulfill its primary mission of supporting Arctic scientific research. It has only medium icebreaking abilities, and its operational time is almost exclusively devoted to direct tasking from other agencies.

The demand on the polar icebreakers is extending well beyond the primary missions to include commerce, ecotourism, search and rescue, and other missions of national interest. As expressed by ADM Thad Allen, U.S. Coast Guard Commandant, “demand is increasing while [Coast Guard] capacity is decreasing.” Adequate icebreaking capability is necessary in order for the United States to assert a more active and influential presence in the Arctic region.

Endnote:
1 Statement of ADM Thad W. Allen, USCG Commandant, on Coast Guard Icebreaking, before the Subcommittee on Transportation and Infrastructure Subcommittee on Coast Guard and Maritime Transportation, H. Rep., July 16, 2008.

On the Horizon

If current ice trends and advances in technology continue as expected, human activity in the Arctic region could escalate dramatically. Continued expansion in shipping and vessel traffic in turn increases risks to mariners and the environment while challenging law enforcement regimes, operational capabilities, and conventional notions of sovereignty.

In view of this, cooperation between the United States and other Arctic nations will become increasingly necessary to ensure effective search and rescue response coordination. The United States and the Coast Guard will need to partner with national and international agencies and organizations to develop an effective SAR response capability in the Arctic.

The Coast Guard Search and Rescue program is committed to maintaining a world leadership position in maritime SAR and minimizing the loss of life, injury, and property loss and damage in the maritime environment. Bearing these objectives in mind, the Coast Guard will continue to work toward meeting the challenge of providing critical rescue assistance in one of Earth’s most extreme environments.

About the authors:

Mr. Button conducts SAR policy, outreach, and education, both nationally and internationally. He also currently serves as the secretary of the National Search and Rescue Committee. In 2006, Mr. Button retired from the Coast Guard after 22 years, having served on several cutters and twice as cutter commanding officer. Mr. Button is a 1984 graduate of the Coast Guard Academy and a licensed Coast Guard master mariner.

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Endnotes:
1 “If an oil tanker crashed in the Arctic,” BarentsObserver.com, Sept. 25, 2008.
2 14 U.S.C. §§ 2, 88 and 141.
3 The origin of “Circular 175” was a 1955 Department of State circular prescribing a process for prior coordination and approval of treaties and international agreements. The “Circular 175” title has been retained, while the applicable procedures are now referenced at 22 CFR 181.4.

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Christopher Columbus left Spain in 1492 in search of a shorter route to and from the riches of Southeast Asia. Instead of finding that route, he found a new world. Yet Columbus’s discovery did not end the search for a viable route between east and west; it still continues today. Modern-day explorers believe they have found that shorter route—the Northwest Passage, a sea route through the waters along the northern coast of North America. First navigated by famed Norwegian explorer Roald Amundsen in the early 20th century, the Northwest Passage was not seen as a viable navigational route for maritime shipping until the shrinking of the polar ice caps over the past half-century.

The passage has traditionally been almost completely ice-covered, presenting arduous, if not impossible, circumstances for navigation, which is why it took Amundsen three years to find his way through. As the Earth gradually warms and the Arctic ice packs recede, it becomes clearer that the Northwest Passage will eventually be ice-free, at least in summer months, sometime this century. The idea of an ice-free Northwest Passage has brought to the forefront a dispute between Canada and other nation states, including the United States and the European Union, over the legal status of the waterway. Canada claims the Northwest Passage as part of its internal waters and thus subject to its regulation, whereas the United States, the European Union, and several other major maritime states contend that the Northwest Passage is an international strait, and thus subject only to international regulations.

The dispute is based on different interpretations of customary international law and the 1982 United Nations Convention on the Law of the Sea (UNCLOS). While the nations currently agree to disagree on this issue, a determination of the waterway’s legal status must be made at some point. Both sides make legitimate claims and can point to interpretations of the law that support their claims, making it difficult to discern what the status of the Northwest Passage will be. Regardless of the ultimate determination, it will have a large impact on the
international maritime community and the U.S. Coast Guard as the world moves toward an ice-free Arctic.

The Northwest Passage has a sparse navigational history. Despite its discovery more than a century ago, there have only been approximately 100 surface transits of the Northwest Passage, and the majority of those transits have been by smaller ships and yachts. The first deep-draft vessels to navigate the waterway were United States Coast Guard Cutters Storis, Spar, and Bramble in 1957. The Coast Guard informed the Canadian government of its intention on this voyage—to collect hydrographic data in search of a deep-draft channel through the Arctic. The first international transit of the passage that was not sanctioned by the Canadian government was the 1969 transit of the SS Manhattan. This voyage tested the viability of the route for shipping oil from Alaska’s North Slope. Although the Manhattan’s voyage showed that the route was not commercially workable at the time, it opened the eyes of the world, and, more specifically, those of Canada, to the threat of an environmental disaster in the area.

Not in My Backyard
Canada responded to that threat by passing the Arctic Waters Pollution Prevention Act, in which it claimed jurisdiction out to 100 miles from the coast for pollution prevention purposes and essentially claimed control over all shipping through the Northwest Passage. The United States protested Canada’s unilateral assertion of sovereignty at the time, but did not physically challenge it until 1985, when United States Coast Guard Cutter Polar Sea transited the Northwest Passage without requesting Canadian permission.

Canada responded to this incursion by claiming straight baselines in the Arctic under the criteria contained in customary international law. This provided a stronger basis for its ability to regulate shipping in the region. The U.S. State Department again objected, and the ensuing discussions between the nations resulted in a 1988 agreement to continue disagreeing about whether the passage was an international strait or Canada’s internal waterways. Although neither side was willing to recognize the other’s claim, the United States did agree to notify Canada of any future transit by a U.S. icebreaker within waters that Canada claimed as internal, based on the understanding that it would also engage in marine scientific research.

Since 1988, the U.S. and Canada have continued to disagree about the status of the Northwest Passage. However, as the pace of ice melting has increased, so has Canada’s vigorous defense of its claim. James Overland, the division leader of the Coastal and Arctic Research Division at the National Oceanic and Atmospheric Administration’s Pacific Marine Environmental Laboratory, predicts that the Arctic will contain 40 percent less sea ice in the summer of 2050 than currently exists. Such predictions, along with indications that the strait is already becoming passable, as evidenced by the passage by a Russian icebreaker towing two floating dry docks in 1999, bode well for the future navigability of the Northwest Passage. Additionally, several smaller vessels have transited the passage in recent years; large cruise vessels capable of carrying more than 150 passengers and 100 crew have also transited through the passage with Canada’s permission.

This may be only the beginning of the commercial traffic that the Northwest Passage will see, as the route cuts 3,000-4,000 miles from the transit between Europe and Asia, allowing for significant savings of both fuel and time. Knowing the potential benefits that international shippers stand to gain and fearing the environmental and security risks that would accompany a large increase in maritime traffic through the Northwest Passage, Canada has recently stepped up its efforts to assert the claim that the passage is part of its internal waters.

In 2007, Canadian Prime Minister Stephen Harper announced plans to build at least six armed icebreakers to patrol the Arctic, as well as to construct a warfare training center and deep-water port in the Arctic to enforce this claim. The Canadian military no longer refers to the waterway the Northwest Passage, but instead refers to it as the “Canadian Internal Waters.”

Why Does the Legal Status of the Northwest Passage Matter?
The validation of Canada’s claim that the Northwest Passage is its internal waters could have a large impact on its use for international navigation. Canada would be able to enact legislation to protect the waterway, regulate traffic, and could even prevent marine traffic from entering the passage if it chooses to do so. Canada has repeatedly stated that it does not wish to prevent traffic from using the waterway, but instead wants to be able to protect the fragile Arctic environment, ensure the
The country is secure, and promote other domestic interests. Even if Canada vows not to close the Northwest Passage to marine traffic, the additional regulations could greatly affect the amount of international shipping traffic that takes advantage of transiting the passage.

Such impact could greatly affect U.S. Coast Guard operations as the Northwest Passage becomes more navigable. An ice-free passage could change the present perception that using a northerly route is not feasible for oil tankers, and could provide an alternative to continued upkeep of the Alaska Pipeline. The addition of tanker traffic through the passage and north of Alaska would provide many challenges for the Coast Guard in Arctic waters within U.S. jurisdiction, including protecting the vessels from terrorist attack, ensuring the waterways are suitable for transit, and maintaining readiness to respond to an oil spill or environmental emergency. A successful claim by the Canadians that the Northwest Passage is part of their internal waters could also have a more direct effect on the U.S. Coast Guard—Coast Guard cutters could be subject to the same Canadian regulations as all other traffic wishing to transit. The cutters would also have to request Canadian permission to enter the Northwest Passage, as there would be no right of innocent passage or of transit passage through the waterway.

If the Northwest Passage were found to be an international strait, there would be a right of transit passage through the waterway requiring that all vessels be allowed to transit without impediment. The Canadian government would then only be able to enforce international regulations. Unless the vessel was planning to call on a Canadian port, Canada could not add any specific regulations to protect its national security, the surrounding areas, or other interests. However, there is a possibility that Canada would still be able to enact and enforce additional regulations for the prevention, reduction, and control of marine pollution from vessels. UNCLOS Article 234 gives coastal states the ability to enact such regulations “where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the environment could cause major harm to or irreversible disturbance of the ecological balance.”

Under this provision, Canada could enforce environmental regulations on vessels transiting through the passage, but military and government ships would not be directly subject to them. It seems that UNCLOS Article 234 would fit the Northwest Passage and the Arctic approaches to it. However, if the passage is navigable for international shipping on a large-scale basis it may no longer be ice-covered for a majority of the year. Such a condition could mean that Canada would only be able to enforce international regulations, as Article 234 would no longer apply.

The U.S. seeks that the Northwest Passage be recognized as an international strait with a right of transit passage; the success of this claim would have multiple effects on U.S. maritime interests. For example, U.S. Coast Guard cutters could freely transit the Northwest Passage without receiving the consent of or being subject to regulation by the Canadian government. Of course, they would have to comply with Canadian re-
The strongest and most frequent argument for Canadian sovereignty over the Northwest Passage is the establishment in the mid-1980s of straight baselines. Such an increase would create the need for an increased U.S. Coast Guard presence off the north coast of Alaska to respond to emergencies, safely regulate traffic, and protect the environment. Whether the passage will be recognized as Canada’s internal waters or an international strait, and how that finding could come about, remains unclear for several reasons.

Canada Claims the Northwest Passage as Internal Waters

Canada claims the Northwest Passage as its internal waters under Article 8 of the 1982 UNCLOS, which states “waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State.” Over the past century, Canada has put forth at least three theories as to why these waters are internal: a sector claim, a historic basis, and straight baselines. The “sector” claim was first made in 1907 by Canadian Senator P. Poirier asserting “that Canada’s Arctic claim should extend from the mainland of Canada up to the North Pole, bounded by sector lines—the 141st meridian of west longitude to the west and the 60th meridian of west longitude to the east—which would form an apex at the North Pole.” Although that claim is not regularly put forth today, it has never been abandoned by Canada. This claim is very weak, because it has never been recognized internationally and does not comport to any current international conventions or views of sovereignty, but Canada may use it as background for other claims.

Canada has also made a claim of historic title. This claim is based on the idea that since an 1880 deed transfer of the Arctic Islands from Great Britain to Canada, the waters of the Arctic Archipelago have been Canada’s internal waters. Canada also claims to have established sovereignty over the waters (in addition to the lands) of the Arctic through historic, effective occupation and control. Such a claim is not unprecedented, but the manner in which Canada has enforced the claim leads to doubts as to its viability. This claim is much stronger than the sector claim, but it still relies on a historic view that may or may not be recognized, without any reliance on current international law.

The strongest and most frequent argument for Canadian sovereignty over the Northwest Passage is the establishment in the mid-1980s of straight baselines between mainland Canada and the islands of the Arctic Archipelago. Straight baselines are authorized by UNCLOS Article 7 for use “in localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity.” The convoluted coast of Norway is one example of an area where straight baselines have been authorized and internationally recognized.

On the other hand, the straight baselines drawn by Canada may not be valid because UNCLOS specifies “the drawing of straight baselines must not depart to any appreciable extent from the general direction of the coast, and the sea area lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters.” The length of Canada’s straight baselines in the Arctic have been the focus of much criticism, as some of the legs are in excess of 90 nautical miles long. Moreover, they seem to depart markedly from the general direction of the coast. Such baselines are not unprecedented, as Canada has other straight baselines of comparable length that are undisputed between Vancouver Island and the Queen Charlotte Islands, and Burma, Colombia, Vietnam, and several other states have drawn straight baselines that are much longer than those Canada has drawn in the Arctic.

However, many argue that such long baselines cannot possibly conform to the general direction of the coast, as was required by the International Court of Justice in the Anglo-Norwegian Fisheries Case, the seminal case regarding the drawing of straight baselines and the basis for the UNCLOS articles regarding straight baselines. The maximum length of any baseline in that case was 44 nautical miles. Moreover, UNCLOS Article 7 requires straight baselines not to depart from the “general direction of the coast.” Several of Canada’s baseline segments go off at sharp angles. Finally, the sea areas landward of the baseline must be “closely linked to the land domain.”

Claims That the Northwest Passage is an International Strait

In direct conflict with the Canadian claim, the United States and other maritime powers maintain that the Northwest Passage is an international strait, defined in Part III of UNCLOS as “straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone.” There is a two-part test that must be applied to determine if a waterway is an international strait; the test consists of geographic and functional components. The geographic component is clear in that it requires that an in-
International strait must connect two parts of the high seas or exclusive economic zones.

The functional component is less clear. The test for the functional component is based on the Corfu Channel Case decided by the International Court of Justice (ICJ) in 1949. The Corfu Channel is a small body of water between the Greek island of Corfu and the Albanian mainland, which United Kingdom vessels transited through without the permission of the Albanian government. Albania protested that the transit by the ships was an attack on Albanian sovereignty. The ICJ found that the strait was an international strait because it connected two parts of the high seas and was used for international navigation by over 2,800 vessels in less than two years. Like the Corfu Channel, the Northwest Passage fits the geographic requirements because it provides a navigational link between the Atlantic and Pacific Oceans.

It is less clear as to whether the Northwest Passage would be considered as having been used for international navigation, therefore meeting the functional test. The strait has been transited very few times, and most of those times have been with Canada’s consent. Despite the transits of the Manhattan and the Polar Sea, it may be disputed whether the few known unsanctioned transits of the passage could establish it as an international strait. One argument in support of the transit history meeting the functional test is because of the location and nature of the waterway (ice-covered), the small number of transits should be sufficient. It is unknown how strong of an argument this is, and there is no way to know how much weight it would be given in determining the status of the waterway.

One other significant difference between the Corfu Channel and the Northwest Passage is that the Corfu Channel cuts between Greece and Albania, while the Northwest Passage cuts only between Canadian land masses. The ICJ relied heavily on the fact that the channel was made up of not just Albanian waters, and that Greece relied on it for vessel traffic to and from the port of Corfu. Not only is the Northwest Passage made up entirely of Canadian waters, but no nation, including the U.S., has any ports that require accessibility through the passage. However, if there was a move toward shipping oil from northern Alaska through the Northwest Passage, the U.S. may be able to make an argument that using the passage is necessary or significantly more convenient, and thus should be viewed as an international strait.

**A Determination May Be Difficult to Reach**

There are many ways that a determination of the status of the Northwest Passage could come about. The international community could come together and sign an international agreement that would be recognized by the International Maritime Organization (IMO), but such an agreement is unlikely to occur because of the multitude of views and interests that would have to be represented. The United States and Canada could enter into a bilateral agreement regarding the status of the Northwest Passage and then that agreement could, over time, become recognized as customary international law. However, such an agreement is also unlikely because neither side is likely to fully capitulate to the other’s viewpoint.

Another possible way for a determination to come about is that the two nations will continue to disagree until one decides to dispute the status in some type of international court or arbitral tribunal. It seems most likely that Canada would take the initiative to do this because the Canadian government is more engaged in the topic and it is Canada that views its sovereignty as being at risk. If Canada chooses not to bring the issue before a court, it would be left to try to enforce the claim by telling vessels not to transit and taking actions to prevent them from transiting.

No matter how the dispute is settled, the resolution will have a wide-ranging effect on international maritime law. There are several straits and waterways that have similar characteristics to the Northwest Passage, which could potentially become international straits or internal waters; Australia’s Torres Strait, the Strait of Malacca, and Iran’s claims regarding the Strait of Hormuz all may be affected by a determination (no matter what that determination is) as to the status of the Northwest Passage.

A determination of the status of the Northwest Passage could also begin the process of interpreting UNCLOS Article 234, including when it applies. If the Northwest Passage is found not to fall under the regulating authority of Article 234 because of its ice-free status and navigability during a portion of the year, it could be a precedent dangerous to the interests of Arctic countries. On the other hand, a decision that Article 234 does apply to the Northwest Passage, even though it is ice-free for up to half the year, would solidify the abilities of Arctic countries to enact environmental protections that could possibly stifle the economic and navigational interests of other nations, including the United States.
What the Future Holds
As routine navigability of the fabled Northwest Passage nears, questions about the waterway’s status will continue. The disagreement between Canada and the United States is not likely to be resolved on its own. Recent mock negotiations between experts from both nations (including former U.S. Ambassador to Canada Paul Cellucci and former Commander of the Canadian Forces Northern Area Colonel Pierre Leblanc) resulted in several recommendations, but the two sides could not resolve the ultimate question. Despite that failure, perhaps the best solution for both countries would be to follow the recommendations that did come out of those negotiations and work together in enacting and enforcing a broad regulatory scheme to protect the Arctic, in turn protecting the environment and the security of both nations.

Each argument has some merit, but neither nation is certain enough that its claim will succeed to push the issue at this time. Questions still linger regarding whether the straight baselines drawn by Canada will meet the standards of the Anglo-Norwegian Fisheries Case and whether the transits of the passage will be sufficient to meet the standards set up in the Corfu Channel Case.

Whatever the ultimate determination, it will have a large impact on the international maritime community and the U.S. Coast Guard as the world moves toward an ice-free Arctic. A joint effort to protect the Arctic, promote safe and secure international navigation, and in turn protect the national security and other interests of both nations could be the best recourse in this situation.

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LT Luke Petersen has served aboard two Coast Guard cutters, most recently as executive officer of Coast Guard Cutter Pea Island, and is now attending law school in the J.D. program at the University of Washington School of Law. He has received three Coast Guard Achievement Medals, and one Letter of Commendation. He wrote this article while serving as a legal intern at the Thirteenth Coast Guard District Legal Office in Seattle, Wash.

Bibliography:

Donald McRae, “Arctic Sovereignty? What is at Stake? Behind the Headlines,” Hearing Before the Canadian Senate Standing Committee on Fisheries and Oceans, 39th Parliament (May 6, 2008).


The Coast Guard in Canada’s Arctic: Interim Report, Standing Committee on Fisheries and Oceans, June 2008.


Endnotes:
7 McRae (see endnote 5).
8 The negotiations resulted in the following recommendations:
   1 “That the two countries collaborate in the development of parallel rules and standards and cooperative enforcement mechanisms with respect to notification and interdiction zones in the northern waters of Alaska and Canada;
   2 The implementation of the 2005 expansion of the NORAD agreement, which includes the sharing of all maritime surveillance in the area covered by that agreement, and that the two countries cooperate in the development of further surveillance capabilities;
   3 Building from the Arctic Waters Pollution Prevention Act, that the two countries develop common navigation, safety, and ship operation and construction standards;
   4 That the two countries cooperate on the establishment of shipping lanes, traffic management schemes, and oil spill response in the northern waters of Alaska and Canada;
   5 That the two countries cooperate with respect to immigration and search and rescue concerns related to cruise ships;
   6 That the two countries accelerate the acquisition of new icebreakers. The two countries should maximize burden sharing opportunities, following the models of the U.S.-Canada icebreaker agreement on the Great Lakes and the agreement on the resupply of Thule Air Base;
   7 That the two countries step up their efforts to develop safety infrastructure, including search and rescue, in support of increased shipping in the northern waters of Alaska and Canada;
   8 That the two countries make maximum use of their existing port state and flag state authority to promote safe, secure, and environmentally responsible shipping;
   9 That the two countries consider establishing a U.S.-Canada Arctic Navigation Commission to address their common interests in navigation, environmental protection, security, safety, and sustainable economic development. This Commission should include representation from indigenous groups directly affected by navigation. This Commission would follow the model of the International Joint Commission by acting as a recommendatory body. This Commission should operate within the framework of the already legislated bi-national research body, the Arctic Institute of North America.”
Search and Rescue Engagement

A great return on investment.

by MR. DAVID L. EDWARDS
U.S. Coast Guard Office of Search and Rescue

What do we mean by “engagement”? It does require commitment, but we are not talking about the step typically taken before marriage. A key goal of search and rescue (SAR) engagement is to work with others to advance SAR capability and capacity so that lives and property are saved.

In the hectic pace of normal work, we may forget that personal contact makes a difference—that the job often gets done because there is personal awareness or a face to go with the work and decision. However, it is becoming common to neglect this personal contact in the rush to complete a task and move on to the next demand on our time.

The Personal Touch
Implementing change or building trust and competency in others typically requires perseverance and a dedication to sustain that effort. Engagement helps this process by building a sense of personal awareness, commitment, and appreciation. For the U.S. Coast Guard, SAR engagement occurs on many levels: internal, local, national, and international, and with a wide range of public, commercial, and private organizations.

Though quiet in nature, engagement is a vital part of the U.S. Coast Guard’s Search and Rescue program. Reaching out and planning ahead with our neighbors—including other countries, responders, commercial enterprises, national, and private and international organizations—ensures that the best use is made of all available resources to competently assist all persons, vessels, or aircraft in distress. In the process of engaging to save lives, we also help advance larger U.S. government goals and promote stability and the rule of law in many regions around the globe. Our Coast Guard has a global impact, and international SAR engagement is a key component.

What’s in it For Us?
Search and rescue, as a Coast Guard core competency and mission, epitomizes the value of engagement. In the recent past there may have been the misperception that SAR was a legacy mission of reduced stature. There is also periodic concern from those who ask, “What is the return on investment for SAR engagement in lands far away from our coasts?”

One fact supporting international SAR engagement is that U.S. citizens by the millions travel around the globe. Our citizens have come to expect U.S. government support to some extent when they get into a crisis away from home. We need to manage these expectations.

Additionally, many U.S. agencies, other countries, and international organizations continue to seek out the U.S. Coast Guard to learn from our search and rescue competency. No one should assume that the SAR system and its responsiveness within the U.S. are common capabilities for countries in other parts of the world. There is a “global SAR system,” but the majority of the world has great difficulty in providing competent search and rescue response on a routine basis. It is this void—where search and rescue services are weak and U.S. SAR capability cannot reach—that SAR engagement aims the majority of its energy. The U.S. cannot conduct search and rescue everywhere, but we can certainly promote the growth of search and rescue capability and capacity in other parts of the world.
SAR engagement also supports three strategic objectives that guide and shape the Coast Guard’s international engagement priorities:

- Build and leverage force-multiplying international partnerships.
- Shape international regulations and standards.
- Support U.S. national security, homeland security, and foreign policy.

**Soft Power and Hard Power**

The U.S. Coast Guard enjoys a reputation of being invited in by many countries that may not want to “talk” to other parts of the U.S. government. As a unique instrument of U.S. foreign policy by virtue of our multi-mission character and broad statutory authorities, we can leverage this professional reputation to the benefit of the U.S. Coast Guard, the United States, and the international community.

International engagement for SAR can clear away the perception held by too many countries that the U.S. has been overly focused on its security at the expense of other vital activities. International SAR engagement can be thought of as a form of “soft power.”

Those who objectively assess results in the international arena typically find that it takes a blend of soft and hard power. For example, a leading reason the U.S. can promote search and rescue is because we are secure at home. But we also must realize that someone who is perceived as being the neighborhood bully, whether doing good or bad things, will often unite the disparate neighbors into a force opposing that bully. International SAR engagement is one way to sustain the positive U.S. position in this increasingly interdependent world.

Although this may not necessarily elicit immediate results that drive senior management and budget support, soft power can have dramatic staying power. Many nations, especially developing countries, realize that demonstrating competency in search and rescue is an indicator of their national status. More and more of these nations invite in agencies such as the U.S. Coast Guard to improve their government services for the benefit of their citizens and visitors.

Also, the U.S. Coast Guard, in support of other U.S. agencies, nations, or international organizations, has provided its search and rescue expertise as a confidence-building measure to reduce regional tensions by bringing neighboring nations together on a topic of mutual concern. For example, the recent regional SAR

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The author, bottom right, and Anthony Patterson of the Fisheries and Marine Institute (Newfoundland, Canada), bottom left, engage with the senior management of the Russian Rescue Coordination Center Astrakhan (back row) on the Caspian Sea during the SAR Workshop for the Caspian Sea. U.S. Coast Guard photo courtesy of Mr. Dave Edwards.

The ongoing modernization of the U.S. Coast Guard provides a golden opportunity for advancing SAR within the organization and as part of a broader U.S. engagement with the global community. We must proactively engage with the international community to inform the players of our intentions and to prepare them for the changes that modernization will bring. An e-mail, letter, memo, or no contact at all should not be the routine method to introduce significant change. Engagement requires continual personal and professional relationships.

**Speaking of Change**

Policy, standards, procedures, and practices always seem to be changing, hopefully for the better. That is a critical reason for the U.S. Coast Guard to stay fully engaged with international organizations and their forums, where these ideas are discussed and decisions are made. Lack of U.S. presence or lack of preparation will typically lead to decisions contrary to U.S. views. Fortunately, the U.S. SAR program has been successful in maintaining its presence in these key forums.

The Coast Guard has recently fielded the Search and Rescue Optimal Planning System (SAROPS) for use by all U.S. Coast Guard joint rescue coordination centers (JRCCs) and sectors. This is a state-of-the-art search planning tool developed by the U.S. Coast Guard in a collaborative effort with other nations. SAROPS was
designed to become the international standard for search planning, and many nations have shown high interest in obtaining this SAR tool. Such a standard technique is of particular value to our joint rescue coordination centers, which conduct SAR operations with many other nations surrounding our SAR regions as well as those distant regions (such as the Indian Ocean or off of Antarctica) that call upon our JRCCs.

SAROPS has the capability to export the file of an active search and rescue case to the next responsible rescue coordination center (yes, maritime SAR cases do drift), but this will require advance effort, such as training and practice in the field. To this end, Coast Guard headquarters’ Office of SAR and the Office of International Affairs and Foreign Policy developed a comprehensive package to manage U.S. and international expectations on use of SAROPS (cost, equipment needed, how to obtain, training plan, etc.). In short, to make best use of this technology, we need to engage other nations to inform them of its existence and how best to use it.

As the world changes and the Coast Guard continues to modernize, so must the process we use to engage. The Coast Guard must strive to minimize the common practice of a one-time visit to one nation. There will be occasions where this one-time effort is the only opportunity or may be appropriate, but other engagement paths can be considered:

- Implement a “packaged deal” like that being used for SAROPS international implementation. Use a coordinated approach for in-country assessment, training, and use of technical assistance teams including the International Training Division at Training Center Yorktown. This could be followed with a search and rescue agreement and periodic field activities, such as exercises and visits.

- Sustain ongoing participation of SAR subject matter experts in recurring regional forums that have (or could be adjusted to include) search and rescue on the agenda. The North Atlantic Coast Guard Forum and the re-emerging Asia-Pacific Heads of Maritime Safety Agencies Forum provide recurring opportunities to engage nations with developed and developing SAR systems. Recurring forums would also include those organized by international organizations such as the International Maritime Organization, the International Civil Aviation Organization, and Cospas-Sarsat. The participation of the same experts on a periodic basis not only builds credibility and partnerships, it raises expectations to build upon the progress from the last session.

Field Impact

The purpose of international engagement conducted by the SAR program office at Coast Guard headquarters is to support field-level search and rescue mission execution. Engagement helps to transform our neighboring nations into force multipliers for search and rescue, rather than a possible drain on U.S. resources.

Coast Guard headquarters staffs work at the strategic and policy levels with other government officials and international organizations to improve global standards as well as to convince nations to improve their SAR services where needed. Coast Guard field units routinely engage tactically as they handle SAR cases near and afar.

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You Do Not Have to Be Friends to Engage

Just before then-Secretary of State Condoleezza Rice visited Libya in September 2008, the leader of Libya, Colonel Qaddafi, stated that “the United States and Libya are not friends, but we are not enemies.” As this event marked the most senior U.S. representative to visit Libya in decades, there was a good deal of behind-the-scenes engagement, where the U.S. Coast Guard played a prominent role.

In July 2008, at the invitation of the Libyan government, the U.S. Coast Guard led a team that exchanged views in Tripoli with Libyan Navy, Air Force, and merchant marine officials on establishing its own Coast Guard.

Though all attendees were focused on maritime search and rescue, they greatly appreciated that the U.S., based on open discussions with the Libyans, was able to do an ad hoc presentation on “desert” (land) SAR. Applying parts of the U.S. National SAR supplement and the U.S. Coast Guard SAR addendum in conjunction with their local knowledge, it became clear to all that search and rescue conducted over water has many common aspects with that conducted over land and over desert.
U.S. Coast Guard joint rescue coordination centers and joint rescue sub-centers (JRSCs) are renowned for developing contacts and coordinating response to distress alerts at the extremes of their SAR region, as well as in other parts of the globe where no one else answers the telephone. Several Coast Guard districts have established a type of engagement program to work with neighboring countries. JRSC/Sector San Juan and JRSC/Sector Guam have particularly notable processes for face-to-face sessions on a recurring basis with the many nations (with many languages and cultures) within and surrounding their SAR regions.

Coast Guard modernization is underway, and the standup of the Operations Command (OPCOM) is on the horizon. Among the many SAR issues to consider will be the broader tactical roles currently performed by the Coast Guard Pacific Area and the Atlantic Area JRCCs. These two joint rescue coordination centers often assumed the “first RCC” role when no other country would take the coordinating responsibility. This global duty will now become a more common operational matter for the other district JRCCs, and will require advance coordination to minimize confusion with the other foreign country. For example, off of the peninsula of Antarctica, much of the region falls jointly under the SAR regions of Argentina and Chile, but there could easily be a major role played by RCC New Zealand. Many U.S. passenger ships or vessels carrying U.S. tourists sail these waters. So which would be the most effective U.S. SAR focal point—OPCOM, or JRCC Miami, or Alameda, or Honolulu? Success at the tactical level requires strategic-level engagement.

A Parting Shot
So, what is the return on investment? For the U.S. Coast Guard, the return includes reduced operational costs; lives saved in areas traveled by U.S. citizens and others around the globe; operational efficiency and interoperability, due to international adoption of U.S. standards and practices; and respect for U.S. leadership and its position in the world. With that in mind, SAR responders can spend more time thinking about “risk management” rather than “return on investment.”

As the U.S. Coast Guard continues its modernization, so does this core competency—search and rescue. Agile and proud of its legacy past, the SAR mission is continually refining its technology, policy, standards, and practices. Proactive international SAR engagement ensures that we inform the global community as to our status for mission execution and reduces operational costs. It also advances U.S. interests, concurrent with helping to expand global SAR capability and capacity.

About the author:
Mr. David Edwards served in the U.S. Coast Guard for 23 years in a variety of at-sea and ashore assignments. He has worked in the Office of Search and Rescue at Coast Guard headquarters since 1998, handling numerous national and international SAR matters. Mr. Edwards serves as chairman of the International Civil Aviation Organization and the International Maritime Organization Joint Working Group on SAR.
Beyond the Dateline

Coast Guard challenges and opportunities in the Asia-Pacific region.

by CAPT GERALD SWANSON
Commander
U.S. Coast Guard Activities Far East

LCDR RICHTER TIPTON
International Port Security Liaison Officer
U.S. Coast Guard Activities Far East

Kon-nichi-wa (Greetings) from Tokyo, Japan. U.S. Coast Guard Activities Far East (FEACT) is a forward-deployed Coast Guard operational command co-located with Commander, United States Forces Japan at Yokota Air Base in Japan. FEACT is responsible for executing a full spectrum of Coast Guard activities and missions across a vast 41-nation Asia-Pacific region with 47 nations and territories stretching from Russia to New Zealand, and from Madagascar to French Polynesia. This area of responsibility contains the world’s largest commercial ports and strategically important shipping routes, as well as the maritime industry’s largest ship-building and repair centers.

FEACT executes the Coast Guard’s International Port Security and marine safety (inspection/certification/casualty investigation) program for all U.S. flag vessels operating in the region, including the U.S. Navy’s Military Sealift Command fleet. To meet the unique challenges of operating outside the United States in this dynamic international arena, the FEACT command cadre consists of a commander and deputy commander, located with the majority of the members at the command headquarters in Japan, with detachment supervisors at the smaller Singapore and Seoul, South Korea offices. FEACT is modeled after a Coast Guard sector and has three major departments: prevention, response/security, logistics.

The prevention department is led by Commander, Marine Inspection Zone. With staff members spread throughout three countries, gathering once a year is a critical part of communications and alignment. USCG photo.

The members of Coast Guard Activities Far East gather in Japan for annual training and orientation. With staff members spread throughout three countries, gathering once a year is a critical part of communications and alignment. USCG photo.
The response/security department is headed by the International Port Security Program coordinator, with a team of 10 international port security liaison officers (IP-SLOs) spread across the Japan, Singapore, and Seoul offices. (See related article.) In addition, FEACT must occasionally coordinate Coast Guard response operations such as stowaways on U.S. flag vessels or joint operations with visiting Coast Guard cutters. FEACT also responds to foreign assistance requests, such as the December 2007 South Korea oil spill response.

The logistics department, led by the logistics chief, is located at the Tokyo office, and deals with procurement, orders, travel, and a host of other process requirements common to administrative staffs at all units. The department also deals with issues unique to overseas missions, such as obtaining travel visas and the country clearance approvals required for all international travel, specialized training for foreign deployment, protocol with our industry and government officials, and maintaining critical relationships with our Department of Defense (DoD), the U.S. Embassy, and foreign nation hosts.

Modernization

Coast Guard modernization will likely impact the way FEACT and all forward-operating units execute operations. Modernization will streamline decision making and reduce the number of layers between the decision maker and the field.

While direct but geographically distant command structures may be new for some units, this organizational concept has been in place for FEACT since the unit was established in 1994. The existing FEACT reporting structure should further strengthen under the planned OPCOM modernization and the expansion of the 14th District commander’s role as Commander for International Engagement in the Asia-Pacific region.

The modernization initiative will likely impose time and distance challenges for U.S. mainland units that forward-deployed commands, such as FEACT, have long experienced. Depending on the complexity of the issue,

Uniquely FEACT

A unique aspect to the FEACT mission is the sheer number of cultures and various customs and traditions that must be respected if we are to be successful. Expected diplomatic behavior varies widely from country to country and region to region. At a minimum, a member of FEACT has to learn how to relate to his or her host country. To be successful, officers must be at least somewhat familiar with the cultures of all the countries they visit. One week you might be greeting a Fijian with a hearty “Bula,” and the next week it’s “Annyong haseyo” in Korea. In one country you might shake hands, while in another it is only culturally proper to bow. Keeping it all straight week after week can be a tiring and complicated process, but getting it wrong may undermine the success of the mission.

In several of the FEACT countries, the Coast Guard officer might be one of the few Americans the locals ever see. Leaving a good impression is part of being diplomatic, and part of being a diplomat is knowing at least some of the local language. This is great in theory, but how do you handle countries like India, which has more than 22 official languages? Learning that many languages is not an option for most of us. However, solid understanding of the country’s culture and the ability to identify critical factors help each of our members avoid cultural pitfalls.
seeking clarity up the chain can be a complicated affair. For example, suppose a member of FEACT needs a policy clarification at 9:00 a.m. on the ground in Mumbai, India. At that time, it would be 1 p.m. in Tokyo, 5 p.m. the previous day in Honolulu, 9 p.m. in Alameda, and midnight in Washington, DC. While modernization cannot change time zones, it will reduce and consolidate the number of stops a policy clarification requires on its way up the command structure.

The Tyranny of Time and Distance
When FEACT members get ready for work on Monday morning, they may get dressed watching the final minutes of the Sunday afternoon football game. When we finish work on Friday, many workers at headquarters are still getting ready for their Friday morning commute. In practical operational terms, asking for policy guidance from headquarters involves FEACT making late-night or very early morning phone calls. As a necessity, many issues are dealt with locally and later back-briefed.

This level of autonomy and empowerment can be a double-edged sword. On one hand, having a fully staffed unit forward deployed means the speed and confidence of actions is high; however, engagement with other governments and agencies is at a generally higher level. It is normal business for a FEACT officer in the response/security department to engage directly with the head of the Ministry of Transportation in a country on Monday, work directly with the owner and operators of multimillion-dollar port facilities from Tuesday to Thursday, and out-brief the American ambassador on Friday.

This type of access to the highest levels of multiple governments and multinational corporations has the potential to create international friction. The fact that the Coast Guard empowers the FEACT commander to engage in these activities shows the confidence Coast Guard leadership has in their people. However, international engagement has the potential to put the Coast Guard, Department of Defense, and Department of State (DoS) in a risk position for international relations. After all, what is good for the Coast Guard may not benefit or be in alignment with the DoD or U.S. Pacific Command and could be counter to DoS regional goals.

FEACT’s strategic goal for 2009-2010, in conjunction with District 14, is to develop and deploy a coordinated and strategic international engagement plan for Coast Guard missions in the Asia-Pacific region.

Mitigation and Coordination
Given the frequency of foreign government and agency interactions, one might ask, “How is it that conflict does not arise more often?” As it turns out, the same operational strengths that allow success as a forward-deployed and geographically dispersed command are fundamental to successful international engagement: communications, confidence, understanding, respect, and patience. This has been of utmost importance to the FEACT International Port Security Program in the Asia-Pacific region, where cultivation of long-term relationships has been key to our success.

Exceptional communication skill is the most important element in the internal and external success equation. Often, communications are thought to be verbal; however, much of our communications with policy makers is written. Clear and concise policy guidance from various programs within the command structure, including the Coast Guard Director of International Affairs and Foreign Policy; Assistant Commandant for Marine Safety, Security and Stewardship; Assistant Commandant for Human Resources; Pacific Area; and District 14 is necessary for FEACT to succeed. Strategic policy guidance from within the Coast Guard, as well as other agencies, helps our members understand the regional context involved in engagement with foreign governments.

Clear and concise communication and policy are critical for forward-operating commands. This effort will help unify operational command and control and place new emphasis on readiness and doctrine. Development
of doctrine and tactics, techniques, and procedures (TTP) are a must for units operating autonomously at a distance. Internally, adherence to doctrine, standard operating procedures (SOP), TTP, solid introductory training, and a good on-the-job training program help ensure that Coast Guard offices and FEACT members are in full accord on policy issues.

With a shorter command structure and greater distance from policy makers, there is less opportunity for immediate clarification. Additionally, as consequence increases, so does risk. Knowledge and experience are the best ways to manage risk in such an environment. On-the-job and indoctrination training are critical for creating confidence and consistency at the field level and within the chain of command.

Having knowledge does not necessarily equate to “understanding.” Knowing what to do is likely to be subordinate to knowing why it is done. For example, the U.S. Coast Guard international strategic guidance document contains 12 pages of regionally specific, high-level guidance complete with strategic context, goals, and measures of effectiveness that overseas personnel must be well acquainted with. Seeing the complexities of a given situation is a skill based on experience. Lessons learned and after-action analyses are integral parts of this experience and understanding. With experience comes the ability to prioritize and coordinate critical issues.

On the Horizon
Because of FEACT’s close, long-standing relationships in our Asia-Pacific region, we find ourselves in a good position to help the Coast Guard and Department of Homeland Security move forward with a consolidated and comprehensive international engagement strategy for the region. U.S. Coast Guard Commandant ADM Thad Allen wants to consolidate operational command and control while reducing layers of bureaucracy and operational friction.¹

This vision for the Coast Guard is analogous to the command structure developed for FEACT to manage issues of location, time, and distance. Having overcome the dilemma of the dateline, FEACT is already operating under the principles of modernization, and we offer this advice based on our own lessons learned.

As leaders in the Coast Guard, it is our responsibility—no matter what our rank—to help new unit members develop the confidence and understanding to operate in this changing environment. In order to be successful, we will need to stay flexible and realize that the Coast Guard is embarking on a new era.

Much of this process is still unknown. As our new organization unfolds, it is our responsibility to keep moving forward with our mission, leveraging the opportunities of our new structure to their fullest potential.

Arigato gozaimasu! (Thank you!)

About the authors:
CAPT Gerald Swanston is commander of Coast Guard Activities Far East, and has served in the U.S. Coast Guard for 29 years. He holds several titles, including activity commander, officer in charge, marine inspection; and Coast Guard liaison, U.S. Forces Japan. CAPT Swanston oversees the Coast Guard’s International Port Security Program and is responsible for the inspection, certification, and casualty investigations for all U.S. flag vessels operating in Asia, including the Military Sealift Command fleet.

LCDR Richter Tipton has served in the U.S. Coast Guard for 14 years and specializes in international affairs, training, and management. LCDR Tipton is currently an international port security liaison officer at Coast Guard Activities Far East, Tokyo, Japan.

Endnote:
¹ ADM Thad Allen, Keynote Address to the 16th Annual Florida Sterling Conference in Orlando, Fla., May 28, 2008.
Port State Control

International cooperation on marine pollution enforcement.

by LCDR DAVID O’CONNELL
U.S. Coast Guard Office of Maritime and International Law

One of the Coast Guard’s crucial missions is marine environmental protection. Because the majority of shipping in the United States involves foreign-flagged ships, the Coast Guard’s foreign vessel examination program, which enforces treaties, laws, and regulations applicable to foreign vessels operating in U.S. waters and ports, plays a key role in this mission. The main treaty for which Coast Guard port state control officers verify compliance is the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the protocol of 1978 (MARPOL).

MARPOL has provisions for port state control that were originally intended to serve as a check on flag state implementation. However, some flag states do not provide sufficient oversight or lack the resources for proper implementation. Thus, port state control has emerged as a necessary and effective way of enforcing compliance with MARPOL requirements.

One way to improve the overall effectiveness of MARPOL is through international cooperation with port state control regimes and other government officials charged with marine environmental protection. Sharing information on inspection techniques, enforcement strategies, and potential violators aids all parties in fulfilling their convention obligations and provides little room for violators to hide. In several instances, foreign port state control officials provided the United States with information crucial to the successful prosecution of ship pollution cases in U.S. waters.

In an effort to harmonize effective global compliance, the Coast Guard recently provided port state control training on MARPOL enforcement and prosecution measures to our international partners. Such cooperation can effectively combat and prevent marine pollution around the world.

Port State Control

Port state control is an internationally accepted process through which a nation exercises its authority over foreign vessels when those vessels are in waters subject to its jurisdiction. It involves an exam of a foreign ship to ensure that the vessel is in substantial compliance with national and international laws regarding safety, construction, equipment, pollution prevention, manning, security, and living and working conditions for seafar-
This authority is derived from several sources, both domestic and international.

Nations that are party to certain international conventions, such as MARPOL, the International Convention for the Safety of Life at Sea; the International Convention on Load Lines, 1966; the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers; and the International Convention of Tonnage Measurement of Ships, 1969, are empowered to verify that vessels of other nations operating within their waters substantially comply with these conventions, and to take action to bring ships into substantial compliance if they do not. While the primary responsibility of compliance with these regimes rests with the flag state and the vessel owner, port state control is a very effective way of correcting substandard compliance where the owner and flag state have failed to meet responsibilities.

The goal of the Coast Guard’s port state control program is to identify and eliminate substandard foreign merchant ships from U.S. waters. The importance of this program becomes evident when looking at the number of foreign ship arrivals to the United States. In 2007, more than 8,000 individual vessels from 84 different flag states made over 80,000 calls on U.S. ports, with the Coast Guard performing more than 10,000 port state control safety and environmental compliance exams.

This obligation includes ensuring that vessels found to be substandard are brought into compliance with the internationally accepted standards. The U.S. continually monitors and manages associated risks identified during foreign vessel examinations until company operators demonstrate they have adopted management philosophies that ensure compliance with accepted standards.

U.S. Coast Guard Enforcement of MARPOL Annex I

MARPOL Annex I is also designed to control the operational discharges of oil and oily waste that accumulate in ships as a result of normal operations. The handling of oily waste is a constant challenge for ship operators because it is continually produced, and the operation and maintenance of pollution prevention equipment takes time and effort. Additionally, shore-side disposal options can be costly. This has led some vessels to discharge oily waste overboard in direct contravention of MARPOL and APPS requirements.

Oily Waste

In general, there are two types of oily waste that accumulate on ships—oily bilge wastes and oily sludge wastes. Oily bilge wastes develop when the drippings of oil from the complex machinery aboard a ship collect and mix with seawater in the bilge (bottom) of the vessel. A thicker oily waste, often referred to as sludge, is produced as a by-product of the fuel and lube oil purification processes needed for the operation of the ship. MARPOL seeks to address how to handle these wastes. In general, there are three options:

- The oily waste can be run through pollution prevention equipment, called an oily water separator (OWS), that separates the oil from the water. If the concentration of oil is reduced by the OWS to less than 15 parts per million (ppm) oil, the resulting liquid can be discharged overboard.
- The oily waste can be burned in an incinerator.
- The oily waste can be discharged ashore to approved reception facilities.

Regardless of the method of disposal all operations must be recorded in the ship’s oil record book (ORB) to ensure that there is a record of compliance.
The Oil Record Book
Oil record books are examined regularly as part of the Coast Guard’s port state control program. The ORB captures all related pollution prevention efforts aboard the vessel, including logging of ballasting and cleaning of oil fuel tanks, the discharge of dirty ballast or cleaning water from fuel tanks, the collection and disposal of oil residues, the discharge overboard or disposal of bilge water that has accumulated in machinery spaces, bunkering of fuel and lubricating oil, fuel transfers within the vessel, accidental oily water discharges to the environment, and failure of any pollution prevention equipment.

Indications that large amounts of oily bilge waste are being discharged may indicate that there are substantial problems in the machinery space or elsewhere in the ship, caused by either excessive oil leaks or the intrusion of large amounts of sea water. Alternatively, irregular entries or a lack of entries in the oil record book may indicate that pollution prevention equipment is not being used properly and there is a potential violation. This information then can be used for a variety of Coast Guard actions, including detaining the vessel until corrective action is taken to rectify the problem, confirm the vessel no longer poses a threat to safety or the environment, and possibly issue civil or administrative penalties for minor violation. In the most serious cases involving intentional discharges of oily waste or attempts to deliberately deceive Coast Guard port state control officers, the case can be referred for criminal prosecution.

Non-compliance
A review of data obtained during Coast Guard port state control examinations over the past several years shows incidents of non-compliance with MARPOL Annex I requirements are on the rise. Investigations into these incidents have revealed that ship owners and vessel crews have concealed accidental or deliberate discharges of oily waste and sludge caused by malfunction equipment, poor maintenance programs, or as an effort to reduce operational cost. In January 2006, the Coast Guard developed guidance on procedures to detect and respond to potential MARPOL Annex I violations.

The guidance focuses on increased scrutiny of the oil record book for any irregularities, such as oily water separators processing amounts that exceed their rated capacity, dates not in order, missing pages, wrong codes, repetitive entries with the same time and amount processed, and soundings taken during the inspection that do not match the latest entries. The guidance also suggests that port state control officers look for signs of bypassing of pollution prevention equipment, such as loose bolts, blanked flanges, different color piping, chipped or fresh paint, and oil stains around pollution prevention equipment or overboard piping.

Despite the guidance being fully transparent to the marine industry and the success the Coast Guard has had in detecting and prosecuting these cases, discoveries of illegal operations continue at an alarming rate.

Why Are International Compliance Measures Needed?
Deliberate illegal operational discharges of oil in contravention of MARPOL Annex I have been estimated to cause eight times the amount of marine oil pollution each year compared to accidental spills like the Exxon Valdez. It is also estimated that such discharges have a major impact on sea birds, with one study indicating that at least 300,000 sea birds are killed every year as a result of such illegal activities just off the Atlantic coast of Canada.

While these figures are subject to debate, it is undeniable that MARPOL Annex I compliance remains a serious concern. For example, from February 2006 through April 2006, the maritime authorities of the Paris Memorandum of Understanding on Port State Control carried out a concentrated inspection campaign focusing on MARPOL Annex I compliance. In total, 4,614 ships
were inspected, with 128 ships detained for serious deficiencies. More alarming, however, was that 86 ships were found to have illegal overboard connections of sludge tanks. Additionally, authorities found 360 ships that had no evidence of discharge to port facilities or of burning sludge in incinerators. This indicates that illegal discharges at sea may well have taken place.

International Outreach and Cooperation
In an effort to strengthen MARPOL compliance internationally, the Coast Guard, the Department of Justice (DoJ), the Environmental Protection Agency (EPA), and the Department of State (DoS) have sought out opportunities to provide training on port state control and MARPOL Annex I compliance to others in the international community. Last year representatives from the EPA, DoS, DoJ, and U.S. Coast Guard traveled to Manama, Bahrain for a workshop on preventing marine oil pollution in the Arabian Gulf. Representatives from Algeria, Bahrain, Egypt, Jordan, Oman, Qatar, Saudi Arabia, the United Arab Emirates, and Yemen participated.

The goal of the training was to enhance the capacity of countries in the Middle East and North Africa to effectively implement and enforce MARPOL Annex I. U.S. Coast Guard port state control officers and investigators led training on how to detect, respond to, and investigate violations, while the DoJ representatives led training sessions on how to effectively prosecute serious violations. Topics included PSC in general, MARPOL goals and detention authority, examples of U.S. Coast Guard inspection checklists, range of enforcement authorities, technical aspects of inspections, investigations, and evidence collection. Similar training was given in Taiwan by a mix of Coast Guard, EPA, and DoJ officials. In both cases, those who received the training were enthusiastic about the program.

Additionally, Coast Guard and DoJ personnel presented an abbreviated version of this training at a regional seminar on illicit discharges from ships in Marseille, France in November of 2007. The seminar was sponsored by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea. The seminar included representatives from 24 countries bordering the Mediterranean Sea and focused on applicable international regulations to prevent pollution, implementation of the MARPOL convention, gathering evidence, prosecuting offenders, and international cooperation. Coast Guard and DoJ officials shared U.S. methods of detection, enforcement, investigation, and prosecution, focusing on the ORB and other inspection issues.

Without the fear of discovery and prosecution, polluters have no incentive to change their illegal and destructive ways. The U.S. Coast Guard, through its international training and outreach efforts, seeks to ensure that all port states can detect and prosecute violations of MARPOL, forcing polluters to take corrective action.

Endnotes:

About the author:
LCDR David O’Connell has been an attorney with the U.S. Coast Guard Office of Maritime and International Law since August 2006. He also served as a Coast Guard marine inspector and investigator at Sector Los Angeles/Long Beach.

For more information on MARPOL Annex I, see also Proceedings Winter 2008-09, p. 73-75.
You Want Authority With That?

How I learned to stop worrying and love shipriders.

by LCDR BRIAN W. ROBINSON
Chief, U.S. Coast Guard Operations Law Group

Fortunately, there is hope. The United States continues to complete bilateral agreements with partner states around the globe that extend the ability of the Coast Guard and other maritime law enforcement agencies to check illegal activity in coastal regions and on the high seas—what ADM Thad Allen has called “the last global commons.”

Shiprider agreements, by which U.S. Coast Guard personnel and foreign maritime law enforcement officers literally ride on each other’s ships, are at the core of this global maritime law enforcement strategy. Through shiprider agreements, the U.S. Coast Guard and its partners extend their legal authority, capability, and competency, and can more effectively combat illegal activity at sea worldwide.

These shiprider agreements make the seas safer for legitimate maritime traffic and help ensure that legitimate commerce is competing on a level playing field. They help to defeat criminal organizations that attempt to use the vast expanse of these global commons to violate the law with impunity.

Checking the Authority Box

The U.S. Coast Guard has served as the United States’ premier maritime law enforcement service since 1790, when its predecessor, the Revenue Cutter Service, was first established. As the nation’s lead maritime law enforcement agency, the Coast Guard has broad and multifaceted law enforcement authority.

Jurisdiction is the cornerstone of the Coast Guard’s law enforcement authority. While extensive, the Coast Guard’s authority to enforce U.S. laws on the high seas is not unlimited. In accordance with international law, the U.S. Coast Guard typically takes law enforcement action against foreign-flagged vessels with the consent of the flag state. Likewise, the Coast Guard engages in law enforcement activities in the territorial sea of another state only when that coastal state authorizes the action.

The United States is party to numerous bilateral agreements with international partners that provide authorization to stop, board, and search vessels suspected of illegal activities; authorize pursuit and entry into the partner state’s territorial sea; or provide streamlined communication procedures to quickly obtain such authorizations.

The U.S. is also party to shiprider agreements with partner states either as stand-alone agreements or as components of broader bilateral agreements. These shiprider agreements allow the Coast Guard to bring its extensive maritime law enforcement authority and experience to foreign patrol assets. More significantly, these agreements authorize embarkation of foreign maritime law enforcement officers in U.S. assets. This enables foreign partners to extend their own organic...
The United States is party to more than 30 bilateral agreements with partner nations to combat illegal drug trafficking at sea. The majority of these agreements are with South American, Central American, and Caribbean states, and two-thirds of these bilaterals contain shiprider agreements.

Beginning in the early 1990s, the Coast Guard and U.S. State Department began negotiating these bilateral agreements as part of a comprehensive strategy for maritime counterdrug enforcement. With vast ocean spaces at the disposal of drug traffickers on both sides of the Panama Canal, any effort to interdict, arrest, and prosecute maritime drug traffickers would be severely hamstrung without these bilateral agreements. The catalog of counterdrug bilateral agreements now in place allows the U.S. to quickly obtain the authorization of a flag state or coastal state to stop, board, and search vessels suspected of transporting drugs in violation of international law, including the 1988 U.N. Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, and the domestic laws of the partner nations. When a designated shiprider is embarked in a U.S. asset, he carries the ability to issue such an authorization immediately.

Shiprider operations are particularly effective in littoral waters that smugglers often exploit with “go-fast” vessels. In a typical go-fast case, there is very little time to obtain authorization from a coastal state to pursue a suspect vessel into territorial seas. Even with expedited procedures contained in many of the bilateral agreements, the master of a go-fast vessel might beach or sink the boat by the time a coastal state transmits authorization to pursue into its territorial seas.

However, when a shiprider is aboard a U.S. patrol asset, the shiprider has authority to act immediately and authorize pursuit and entry into the territorial seas of his home state. This has the practical effect of increasing the available patrol, search, and pursuit area of U.S. assets in maritime drug trafficking zones by tens of thousands of square miles. It also increases dramatically the effectiveness of the maritime counterdrug mission.

The effective use of bilateral and shiprider agreements to combat maritime drug trafficking is exemplified by the steadily increasing amount of cocaine that U.S. assets have seized or removed in the Eastern Pacific and Caribbean over the past several years.

It would be a gross oversimplification to suggest that the existence of these shiprider agreements is exclusively responsible for successful maritime drug interdictions. That success is the result of a number of factors, including the effectiveness of ongoing law enforcement investigations by U.S. agencies and foreign law enforcement partners; the use of information obtained in those investigations to detect and monitor maritime drug movements; and successful prosecutions that generate additional information for ongoing investigations. This creates a “cycle of success” in which prosecutions generate information that feeds investigations, and investigations culminate in interdictions, which result in more prosecutions, and so on.

### Table: Cocaine Seizures and Removals

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Cocaine Seizures (pounds)</th>
<th>Cocaine Removals (pounds)</th>
<th>Total</th>
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<tr>
<td>2000</td>
<td>132,480</td>
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<tr>
<td>2001</td>
<td>138,393</td>
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<td>138,393</td>
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<tr>
<td>2002</td>
<td>117,780</td>
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<tr>
<td>2003</td>
<td>136,865</td>
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<td>299,993</td>
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<td>2005</td>
<td>303,662</td>
<td>34,543</td>
<td>338,205</td>
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<tr>
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<td>234,337</td>
<td>52,698</td>
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<tr>
<td>2007</td>
<td>238,040</td>
<td>117,714</td>
<td>355,754</td>
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<tr>
<td>2008</td>
<td>172,089</td>
<td>197,744</td>
<td>369,833</td>
</tr>
</tbody>
</table>

### Endnotes

1. These agreements fulfill the obligations of states under Article 17 of the 1988 U.N. Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances to “cooperate to the fullest extent possible to suppress illicit traffic by sea…” and to “…consider entering into bilateral or regional agreements or arrangements to carry out, or to enhance the effectiveness of, the provisions of this article.”
2. Of the more than 30 bilateral agreements and operational procedures that the United States has in place with partner nations for counterdrug enforcement, shiprider agreements are included with the agreements with the following states: Antigua-Barbuda, Bahamas, Belize, Costa Rica, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The United States also has agreements with the United Kingdom, Belgium, and the Netherlands for U.S. Coast Guard shipriders to embark in U.K. and Netherlands surface assets while they are engaged in counterdrug patrols in the Caribbean.
3. Based upon criteria established by the U.S. Consolidated Counterdrug Database (CCDB), cocaine seizures included in this table are events in which U.S. Coast Guard personnel actually seized a quantity of cocaine from a vessel engaged in illicit trafficking. Cocaine removals included in this table are based on events in which a known quantity of cocaine was destroyed, abandoned, or otherwise prevented from being delivered by the drug trafficking organization as a direct result of U.S. Coast Guard operations in the maritime drug trafficking zones. CCDB did not track removal rates prior to FY2004.
Interdiction of suspect vessels is a vital part of the cycle of success, and shiprider operations are a critical tool in ensuring that interdiction efforts will be successful. By extending the legal authority of a U.S. patrol asset to quickly enter, pursue, or patrol littoral drug trafficking routes and to stop, board, and search vessels flagged in the shiprider’s state wherever located, embarked shipriders make U.S. surface assets more capable and more effective.

The success of shiprider programs in maritime counterdrug enforcement has created a template for maximizing the effectiveness of maritime law enforcement in other mission areas as well.

**Preventing Criminals From Using Sovereignty as a Shield**

The logistics of the waterways along our northern border often permit criminals on either side of the line to outrun Canadian or U.S. maritime law enforcement authorities, effectively using the sovereignty of each nation as a weapon against law enforcement. Unable to continue a pursuit into another state’s territorial seas, U.S. authorities and our Canadian counterparts are often left in a frustrating pursuit that must be broken off as the fleeing criminal escapes over a national border in a fast-moving boat. Even the best coordination between Canadian and U.S. law enforcement during a pursuit cannot close every gap that criminals can exploit along a maritime border.

Put simply, when law enforcement is required to turn a hot pursuit into a “hand off” to another law enforcement agency because of a jurisdictional limitation, the likelihood of a fleeing criminal making good his escape rises substantially. Enter the Canada–U.S. shiprider program.

During August and September 2007 the Royal Canadian Mounted Police (RCMP) and U.S. Coast Guard conducted cross-border maritime law enforcement operations in strategically selected sectors of the northern border in the vicinity of British Columbia/Blaine, Wash., and Cornwall, Ont./Massena, N.Y. The intent of this shiprider pilot program was two-fold:

- to evaluate the shiprider framework as a means to establish effective combined law enforcement operations along the northern maritime border while enhancing the level of cooperation among the USCG, RCMP, and other law enforcement agencies;
- to interdict and deter unsafe and illicit maritime activity in the designated operation areas.

During this program, U.S. Coast Guard forces composed of law enforcement personnel already operating in the areas and personnel from the Coast Guard’s Deployable Operations Group (DOG) conducted combined shiprider operations with their counterparts from the RCMP. USCG and RCMP personnel embarked on each other’s patrol vessels so that both Canadian and U.S. patrol craft had law enforcement officers from both countries aboard at all times available to enforce and assist in the enforcement of the laws of both countries.

Each participating officer/shiprider was cross-designated by Canada or the United States to exercise law enforcement authority in the waters of the other country, allowing shipriders and their vessels to operate seamlessly across the maritime boundary and in the waters subject to the jurisdiction of each country. When operating in the waters of one country, that country’s officers remained directly in charge of all operations and were assisted by the other country’s shipriders if and as needed.

The two-month Canada–U.S. shiprider pilot project concluded on September 30, 2007. Simultaneous op-
Operations were conducted on the St. Lawrence Seaway around Cornwall, Ont., and Massena, N.Y., and in the maritime border area near Blaine, Wash., and Vancouver, B.C., each with impressive results. A total of 40 cross-designated U.S. Coast Guard and RCMP shipriders conducted more than 1,200 hours of combined and integrated law enforcement patrols, and completed 187 boardings of Canadian, U.S., and other suspect vessels. Shipriders seized more than 200 pounds of marijuana, over one million contraband cigarettes, $38,000 (CAD) in illicit cash, and six vessels used in illegal smuggling operations. They also made 12 arrests.

In addition to the seizures and arrests, the shiprider operations also generated a marked increase in land seizures of contraband by shore-based law enforcement authorities on both sides of the border. These seizures included large seizures of tobacco, currency, drugs, and weapons in the Cornwall/Massena area, demonstrating the potential for residual deterrent effects and displacement of cross-border crime from shiprider operations. The RCMP-USCG shiprider teams contributed substantially to ongoing law enforcement investigations in support of their respective integrated border enforcement teams, as well as conducting several search and rescue missions, boating safety patrols, and public outreach.

During the shiprider operation, U.S. Immigration and Customs Enforcement provided investigative support and managed the U.S. cross-designation process, which is vital to the shiprider program. Customs and Border Protection contributed surface, air, and intelligence support to the operation.

The success of the pilot program has led to a preliminary agreement between Canada and the United States to develop a permanent and sustainable shiprider program that would provide for, among other things, a cadre of RCMP and USCG shipriders who participate in joint training and are readily deployable on RCMP and USCG patrol assets all along the northern maritime border. Although discussions for a permanent shiprider program are ongoing, Canadian and U.S. officials are hopeful that the permanent program can be initiated as early as fall 2009.

Fish Have Become the New Drugs
As part of its law enforcement mission, the Coast Guard advances national goals for living marine resource conservation and management. Illegal, unregulated, and unreported (IUU) fishing—illegal fishing activity that respects neither national boundaries nor efforts of the international community to govern and manage precious living resources in the world’s oceans—is a global problem. As fish stocks decline around the world, IUU fishing vessels continue to loot the living resources in the exclusive economic zones (EEZ) of nations incapable of enforcing their own fishing rights.

In addition to violating the sovereign rights of coastal states, IUU fishing vessels continue to fish the ocean clean through illegal high-seas driftnet (HSDN) practices. Driftnets, composed of monofilament lines that can extend for 30 nautical miles or more, are effective “curtains of death” that wreak havoc in the oceans. International law has outlawed driftnets in excess of 1.5 miles, but illegal fishing continues. The IUU fishing problem is massive both in terms of its geographic scope and its economic impact. The U.N. Food and Agriculture Organization (FAO) estimates that as much as 75 percent of the world’s fish stocks are fully exploited, overexploited, or depleted. The economic incentives at the core of IUU fishing are overwhelming for the coastal states involved and the IUU fishers. The FAO estimates that coastal states lose annual global revenue of up to $12.5 billion as a direct result of IUU fishing.

IUU activity also damages marine ecosystems, jeopardizes the economic survival of coastal communities that rely on fishing for their livelihood, and creates an unfair playing field in which IUU fishers use illegal activity to obtain competitive advantages over fishing fleets that play by the rules. Every coastal state has the

Petty Officer 3rd Class Damon Kizzar, Seaman Adam Walton, and Seaman Apprentice Luke Pullen pull in an abandoned driftnet. An unattended driftnet is a hazard to navigation and an indiscriminate killer. It will trap and kill marine animals until it becomes too heavy and sinks to the bottom. Once the animals decay, the net rises to the top of the water and begins killing again. Removing the net is the only way to break the cycle of death. USCG photo by PA2 Keith Alholm.
Kiribati. Additional agreements may follow as partnerships in this region mature. Each of these island nations shares a maritime border with the EEZs around a United States territorial possession in the Western Pacific. These agreements have greatly increased the ability of the United States and our partners in the region to combat IUU fishing and violations of the national sovereignty of each of these Pacific states.

The Coast Guard has also enjoyed a legacy memorandum of understanding and shiprider agreement with the People’s Republic of China (PRC) since December 1993. For several years, the U.S. Coast Guard has hosted shipriders from the PRC Fisheries Law Enforcement Command (FLEC) aboard Coast Guard surface assets during patrols in the Western, Central, and North Pacific. Because a large percentage of vessels suspected of IUU and HSDN fishing in this region are Chinese-flagged, cooperation between the U.S. and PRC is vital for consequence delivery to the fishing fleets that violate the law. As with other law enforcement missions, the embarkation of a FLEC shiprider in U.S. patrol assets greatly extends the effectiveness of the patrol by enabling the asset to conduct boarding and enforcement activity on suspect vessels that would otherwise be beyond the jurisdictional reach of the asset and the law enforcement personnel on board.

The U.S.–PRC MOU and shiprider agreement is routinely put into practice, with excellent effect. For example, USCGC Boutwell participated in a multi-national IUU fisheries enforcement patrol from July through November 2007. Boutwell spent 29 days in the HSDN high-threat area and embarked a FLEC shiprider. In cooperation with other surface assets and maritime patrol aircraft surveillance flights, Boutwell investigated targets and observed several PRC-flagged fishing vessels conducting large-scale drift net fishing operations on the high seas (see sidebar).
In addition to the latest bilateral shiprider agreements, the Coast Guard joined the Department of State, NOAA, and our Western Pacific partner nations to develop a comprehensive strategy for implementing the Western and Central Pacific Fisheries Commission’s (WCPFC) conservation and management measures for high-seas boardings and inspections. The WCPFC’s boarding and inspection procedures, which are binding on all 25 member states, including the United States, provide a streamlined mechanism for checking compliance with this international agreement.

Adoption of the boarding and inspection procedures marks the first instance of an international regional fisheries management organization implementing living marine resource management measures to employ the boarding and inspection articles of the landmark United Nations Fish Stock Agreement in actual maritime law enforcement operations among partner states. The species that the Western and Central Pacific Fisheries Commission manages yields nearly two million metric tons of tuna annually, with a value of over $2 billion dollars. The combined use of authorities available under the Western Pacific shiprider agreements and the WCPFC boarding and inspection regime have significantly enhanced the ability of the U.S. Coast Guard and NOAA to combat IUU fishing in the region.

Shippers and Africa
In June 2008, the United States and the Republic of Cape Verde completed an agreement via an exchange of diplomatic notes authorizing the USCGC Dallas to embark a law enforcement detachment (LEDET) from the Cape Verde Coast Guard and conduct combined law enforcement operations in the vicinity of Cape Verde. This operation was undertaken as part of Dallas’s deployment to the U.S. Naval Forces Europe Africa Partnership Station, an initiative to develop maritime safety and security in the region by building the operational capacity of navies and coast guards in partner states in West and Central Africa. This marked the first-ever multi-lateral combined maritime law enforcement operation in Africa.

The Cape Verde Coast Guard is well equipped with law enforcement authority, but faces significant operational challenges resulting from limited patrol assets and a lack of deepwater capability. The combination of the Cape Verde Coast Guard LEDET and the Dallas was a perfect match. Dallas provided the capable platform that Cape Verde lacked to effectively patrol its territorial seas and exclusive economic zone. The Cape Verde law enforcement detachment provided Dallas with the legal authority to patrol areas and board vessels normally beyond the jurisdictional reach of the U.S. Coast Guard.

During the brief “proof of concept” over two weeks in June 2008 the combined U.S.–Cape Verde law enforcement team conducted extensive operational familiarization, completed six law enforcement boardings of fishing and other vessels in Cape Verde waters, conducted inquiries of several other vessels, and located a suspected drug smuggler’s “station” on a small uninhabited island in the Cape Verde archipelago.

Building on the success of the first phase of this proof of concept, a Coast Guard LEDET embarked with another Cape Verde law enforcement detachment in the USS Leyte Gulf in late October–early November 2008. This represented the first maritime law operation under the direction of U.S. Africa Command and Naval Forces Africa and demonstrated the utility of U.S. Navy “greyhull” assets as platforms for combined U.S. Coast Guard and foreign LEDET operations in this theatre. During this second phase, the combined U.S.–Cape Verde law enforcement team completed another nine law enforcement boardings, including several commercial vessels, coastal freighters, and a container ship. These boardings represented a first for the Cape Verde Coast Guard. Because of limitations of its surface assets, the Cape Verde Coast Guard had never boarded a freighter or container ship prior to this operation.

Intentionally limited in duration and scope, these operations proved to be a tremendous success. The Cape Verde Coast Guard obtained a degree of maritime domain awareness in
its home waters that it had never enjoyed previously. Foreign-flagged vessels known to violate Cape Verde’s fisheries rights in its EEZ were deterred from illegal activity by the combined U.S.–Cape Verde patrols. Most significantly, the deepwater patrol capability of the Cape Verde Coast Guard was significantly augmented, and the foundation of a long-term partnership between the U.S. and Cape Verde was established. The exchange of diplomatic notes has formed the basis for negotiation of a permanent bilateral shiprider agreement between the countries and is being used as a model for U.S. engagement with other West and Central African states for maritime law enforcement.

Parting Shots
As the Coast Guard modernizes and as new Deepwater surface and air assets come progressively online, the continued development and use of shiprider programs with international partners provides the Coast Guard with a unique ability to extend its law enforcement authority and capability. It is no secret that the Coast Guard’s legacy surface assets are getting a bit long in the tooth and progressively less able to keep up with the demands of patrol time on their aging hulls. However, the Coast Guard has no similar shortage of people. The capability gap in surface assets can be offset, somewhat, by deploying Coast Guard teams to non-Coast Guard assets, filling that capability gap as much as possible while the Coast Guard waits for its long-overdue upgrade with the new Deepwater fleet. As the ability of legacy Coast Guard surface assets to conduct law enforcement patrols is continually dimin-

ished in the short term, the introduction of additional Coast Guard LEDETs to conduct combined shiprider operations with partner nations on U.S. Navy or foreign navy assets will enable the Coast Guard to effectively exercise its law enforcement authority wherever and whenever needed.

The “bang for the buck” with shiprider operations is high, and the operations are win-win situations for all participants. Indeed, as the recent Coast Guard shiprider projects have demonstrated, these operations greatly enhance and extend the authority and capabilities of both the Coast Guard and the shiprider partner and further improve the competency of our foreign partners in all law enforcement mission areas. So my advice is: Stop worrying and embrace your local shiprider. He or she is helping keep the global commons a safer place to trade, fish, and enjoy.

About the author:
LCDR Brian Robinson is currently assigned as the chief of the Operations Law Group at Coast Guard headquarters. His previous assignments include legal advisor to the chief of law enforcement, staff attorney in the Office of Claims and Litigation, and a lengthy TAD assignment as a prosecutor at the Office of the Staff Judge Advocate, Marine Corps Base Quantico. Prior to joining the Coast Guard in 2004, LCDR Robinson was a partner in the trial department of the Boston office of McDermott, Will, and Emery, where his private practice focused on commercial and intellectual property litigation. LCDR Robinson’s awards include the Coast Guard Achievement Medal (3 awards), the Marine Corps Achievement Medal, and the Commandant’s Letter of Commendation (3 awards). He also received the Founder’s Award from Alternatives for Community and Environment for his pro-bono work on behalf of over 100 families in Boston.

Endnotes:
2 United Nations Law of the Sea Convention, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter UNCLOS], Art. 92 (“ships shall sail under the flag of one State only and ... shall be subject to its exclusive jurisdiction on the high seas”). Although not yet a party to UNCLOS, the United States considers most provisions of UNCLOS to be binding customary international law. For a more comprehensive discussion of UNCLOS, see related article in this issue. In certain limited circumstances, the Coast Guard conducts boarding operations pursuant to the consent of the vessel master vice flag state consent.
3 Coast Guard personnel were designated as constables under Canadian law and RCMP personnel were designated as officers of the customs under U.S. law.
6 The agreement takes the form of a Memorandum of Understanding Between the Government of the United States of America and the Government of the People’s Republic of China on Effective Cooperation and Implementation of United Nations General Assembly Resolution 46/215 of December 20, 1991. The U.N. resolution relates to large-scale pelagic drift-net fishing and its impact on living marine resources of the world’s oceans. The MOU is currently in force through December 31, 2009, and is subject to renewal and extension per the mutual consent of the parties. The U.S.–PRC MOU provides, among other things, that “qualified official[s] of each party shall be entitled to come on board each high seas driftnet enforcement vessel [i.e. a U.S. or PRC maritime law enforcement surface asset] of the other party.”
7 This and additional data on the WCPFC and its mission are available on the organization’s web site, http://www.wcpfc.int/.
8 10 U.S.C. § 379 specifically authorizes the embarkation of U.S. Coast Guard LEDETs in U.S. surface naval assets in any drug interdiction area.
Understanding Fatty Acid Methyl Esters

by Mr. Tom Felleisen
Lead Chemical Engineer
U.S. Coast Guard Hazardous Materials Standards Division

What is it?
Fatty Acid Methyl Esters (FAME) is the product shipping name for biodiesel, which is a replacement fuel for petroleum-derived diesel oil. FAME can be produced from any sort of animal fat or vegetable oil, including waste oil from fast food retailers. Soybean oil is the most common in the United States. Since living matter is the raw material for FAME, it is a renewable fuel that, when combusted, can make only as much carbon dioxide (the predominant “greenhouse” gas) as is consumed from the atmosphere by the living matter used to produce it.

Concerns about climate change (global warming) by greenhouse gases mean that FAME is an important chemical, especially in Europe. At the same time, FAME produced from palm tree oils concerns environmentalists because planting new palm tree groves in southeastern Asia is displacing orangutans. Another concern arises because a large percentage of FAME is produced from oil seeds, and so there is competition between seed oil use as a food and its use as a fuel.

For the year 2006, the latest for which actual production figures are available, total world FAME production was about six million tons.\(^1\)

How is it shipped?
On barges, FAME can be carried as a Grade E combustible liquid (flashpoint greater than 60°C closed cup/150°F open cup). For a number of years now, three types have been considered to be “oil” for the purposes of the Oil Pollution Act of 1990. Therefore, all FAME in general is considered to be oil.

The rules for international shipping have recently been changed as a result of changes to the International Convention for the Prevention of Pollution from Ships (MARPOL). Specifically, FAME carriage must be on a Type 2 chemical carrier (double-hull), as opposed to its previous carriage, which required no special type of tanker.

Treating FAME as both oil and, for international shipping, as a MARPOL Annex II chemical mirrors the treatment of its precursor raw materials. Animal fats and vegetable oils are already treated as oils for OPA 90 and as chemicals for MARPOL.

Why should I care?

» Shipping concerns
For the past several years, FAME shipments have been increasing at a rate of 40 percent per year? This growth rate, while susceptible to economic factors, is likely to continue because FAME can be a strategically secure energy resource that has a positive impact on the nation’s trade balance. Since ongoing ships must meet MARPOL Annex II requirements, there could be a significant rise in the number of certificates of compliance as the use of chemical tankers increases incrementally in the future.

» Health concerns
There are no significant health concerns for FAME. However, the International Bulk Chemical Code does indicate that FAME has a safety hazard, but that is based on a very cautious estimate of the effect of a fine mist of FAME being accidentally inhaled. In making that safety hazard determination, there was no evidence that such a mist could be made under normal conditions, so the hazard is purely hypothetical. Further, the hazard of the mist is based on a very cautious estimate of the hazards of FAME in the liquid state.

» Fire or explosion concerns
For FAME, the concerns about fire or explosion are, in a way, the opposite what one normally considers. In particular, FAME has a flashpoint above and an energy density below those of petroleum-derived diesel. So it is safer than diesel, but in consequence engine performance parameters must be adjusted to take those differences between FAME and diesel into account. Since FAME is a combustible liquid, it does not require an inert gas system for fire protection. Nonetheless, inert gas may be needed to keep FAME from absorbing any water vapor that is in the same tank.

FAME is unusual because it will not dissolve in water (the technical term is “hydrophobic”), but it will absorb water (it is “hygroscopic”). Compensating for those properties is not too difficult when shipping by vessel, but those properties mean that FAME may not be able to reach major markets using existing oil pipelines.

What is the Coast Guard doing about it?
Current enforceable regulations for FAME need to be brought up to international standards, but overall existing methods of carriage by tank vessel already provide an excellent level of safety and environmental protection.

About the author:
Mr. Tom Felleisen is the lead chemical engineer for bulk liquids and gases in the Hazardous Materials Standards Division at U.S. Coast Guard headquarters, focusing on domestic and international regulations. He has served as alternate head of delegation for the International Maritime Organization’s subcommittee on bulk liquids and gases and is the delegate to its working group on evaluation of safety and pollution hazards of chemicals. He also represents the Coast Guard on the National Fire Protection Association technical committee for liquefied natural gas.

Endnotes:
\(^2\) Ibid.
Over the last 15 years or so, the United States has entered into a number of bilateral agreements with other nations to identify and prevent illicit transnational maritime activity. Until 2007, the focus of these agreements was typically to suppress smuggling of narcotics and illegal aliens. Beginning in 2007, however, the U.S. began entering into a series of bilateral agreements with Pacific Island nations that primarily focused on the detection and suppression of illegal, unregulated, and unreported fishing activities in the Western and Central Pacific Ocean (WCPO). This is one of the few remaining profitable fisheries in the world.

These agreements utilize a variety of strategies to improve regional enforcement of fisheries conservation laws, and at the same time ensure compliance with the law enforcement jurisdictional limitations of the law of the sea.

Fisheries Law Enforcement Legal Regime

The 1982 Law of the Sea Convention (UNCLOS) reaffirmed several long-standing principles of international law:

- A vessel has the nationality of the flag state that granted the vessel the right to fly its flag.
- Subject to very limited exceptions, vessels have the right to engage in any lawful pursuit on the high seas, and to freely navigate on the waters of the high seas.
- Subject to very limited exceptions, a vessel on the high seas is subject to the exclusive law enforcement jurisdiction of its flag state.2
- A coastal state has the right to declare a territorial sea in the waters near its shores out to a maximum breadth of 12 nautical miles. The coastal state, with limited exceptions, is sovereign over the waters of the territorial sea, the airspace above it, and of the seabed underlying it. Included within that sovereignty is ownership of—and the right to exploit—the resources, living and non-living, within the territorial sea.
- No nation other than the coastal state may assert law enforcement jurisdiction over a vessel and its crew within the territorial sea of the coastal state without the coastal state’s permission to do so. This limitation applies even to the flag state of the vessel.

UNCLOS also established some new international law that is of particular relevance to fisheries law enforcement. Part V of UNCLOS permits coastal states to establish and designate a zone known as an exclusive economic zone (EEZ) that extends from the outer edge of the coastal state’s territorial sea to a maximum distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured. In its declared EEZ, the coastal state, among other things, has sovereign rights for the purpose of exploring and exploiting, conserving, and managing the natural resources, whether living or non-living, of the waters and seabed of the zone. Article 73 permits the coastal state, “in the exercise of its sovereign rights to explore, exploit, conserve, and manage the living resources in the EEZ, [to] take such measures, including boarding, inspection, arrest, and judicial proceedings, as may be necessary” to enforce its laws in the exclusive economic zone.
Thus, under the regime established in UNCLOS, coastal states can claim limited sovereign rights over the resources in and under the waters of the EEZ. Such a claim precludes non-coastal state vessels from engaging in resource exploitation activities within the waters (and/or on the seabed) of the declared exclusive economic zone without the permission of the coastal state. Unpermitted resource extraction or any other resource-related activity would subject the vessel and those aboard it to law enforcement action by the coastal state.

It is important to note, however, that in every respect other than resources conservation, the waters of the exclusive economic zone have the same legal regime as that of the high seas. Thus, vessels are able to freely navigate in the EEZ; free to fire weapons there and launch and recover aircraft; and free to engage in any other lawful pursuit, including taking law enforcement actions. With respect to law enforcement jurisdiction, the coastal state’s law enforcement jurisdiction in the exclusive economic zone only extends to resource-related infractions. For every other type of infringement occurring in the coastal state’s EEZ, the flag state (again, subject to very limited exceptions) has exclusive law enforcement jurisdiction over its vessel and the personnel aboard it.3

The Western and Central Pacific Ocean Tuna Fishery
The fish generally referred to as tuna is pelagic (lives in the water column, not on the ocean floor) and highly migratory. The main species targeted by commercial fisheries in the Western and Central Pacific Ocean are skipjack tuna, yellowfin tuna, bigeye tuna, and albacore tuna. The main tuna fisheries are in the so-called “tuna belt” around the equator, which stretches between 20ºN and 20ºS latitude.

Tuna is being harvested at record levels in the Western and Central Pacific Ocean, and the catch trend is increasing. The provisional total WCPO tuna catch for 2007 is estimated at 2,396,815 metric tons (mt), the highest annual catch ever recorded, which is more than 120,000 metric tons higher than the previous record of 2,273,322 metric tons in 2006. Of that total catch, the purse seine fishery accounted for an estimated 1,739,859 mt (73 percent of the total catch, and a record for this fishery), with other catch methods (pole-and-line, longline, troll gear, etc.) accounting for the remainder. The WCPO tuna catch for 2007 represented 84 percent of the total Pacific Ocean catch of 2,800,740 mt, and 55 percent of the 2007 global tuna catch (provisionally estimated at just under 4.4 million mt).4

The estimated delivered value of the purse seine tuna catch—70 to 85 percent of which is skipjack—in the WCPO for 2007 is $2.3 billion, the highest level since at least 1997. This represents an increase of $743 million (or 43 percent) from the estimated value of the Western and Central Pacific Ocean purse seine catch in 2006. This increase is the product of both an increase in the landed tonnage, and also of record prices being paid for tuna on the world market.5

As can readily be imagined, the continued high yields in the Western and Central Pacific Ocean, coupled with record high prices and depleted tuna stock elsewhere in the world, are causing displaced tuna fishing fleets from the Mediterranean, Indian, and eastern Pacific Oceans to shift to the WCPO. Huge, modern purse seine vessels flagged in Latin American countries (particularly Ecuador) have been increasingly observed fishing in this area. Furthermore, European Union-flagged purse seine vessels, predominantly from Spain, are intensifying operations in WCPO EEZs.

All of this increased fishing activity presents a significant challenge not only to the viability of the targeted fish species, but also to the ability of coastal states in the region to prevent illegal, unregulated, and unreported fishing in waters in which they have sovereign resource rights.

The Western and Central Pacific Ocean
The WCPO region consists of tens of millions of square miles of ocean, dotted with thousands of islands of relatively miniscule land mass. North of the equator are the island nations of Palau, the Republic of the Marianas Islands, and the Federated States of Micronesia. These nations, together with the United States’ Commonwealth of the Northern Marianas Islands, were under U.S. trusteeship from the end of World War II until they declared independence in the 1980s and 1990s.6 Straddling the equator are the island nations of Kiribati and Nauru. South of the equator are such island nations as Tuvalu, Tonga, and Fiji, as well as territories of such countries as France (French Polynesia) and New Zealand (Cook Islands and Niue, for example).

Although their land areas are tiny, especially in relation to the surrounding ocean, these nations and territories have declared 200-nm exclusive economic zones (EEZs) around each island within the nation or territory. The U.S. has also declared a 200-nautical-mile EEZ around the islands of the Commonwealth of the Northern Mariana Islands, as well as around five possessions that
were under U.S. dominion independent of the Trust Territory of the Pacific Islands agreement. As a result of these declarations, huge swaths of water within the WCPO that were formerly high seas, whose resources could have been extracted by any nation, are now within the EEZs of the nations and territories in the WCPO. And, as previously discussed, in these EEZs, the nations and territories have the right to control all resources, both living and non-living, and to exclude others from accessing and utilizing them.

Although the tuna fishery represents a significant percentage of gross national product for numerous Pacific Island nations, and despite their “ownership” of the vast resources of their exclusive economic zones, the FAS and many other Pacific Island nations and territories are generally ill-equipped to prevent vessels from engaging in illegal, unregulated, and unreported (IUU) fishing in the waters of their EEZs. In most cases, these island nations’ maritime patrol assets consist of a patrol boat or boats provided to them by Australia in the late 1980s to mid-1990s. For example, the Republic of the Marshall Islands has one patrol boat (the RMIS Lomor), the Federated States of Micronesia has three boats (the FSS Palikir, the FSS Micronesia, and the FSS Independence), and Palau has one boat (the FSS President H. I. Remeliik). These vessels, many of which have already reached the end of their design lives, are frequently inoperative due to maintenance or repair issues and/or lack of crew, parts, or fuel.

Enter the Bilats

It should be evident that:

- there is a lot of fishing activity in the WCPO, and the amount of such activity is growing;
- there are a lot of territorial seas and EEZs to patrol;
- there are not a lot of resources with which to patrol these water areas;
- thus, there is great motive and opportunity for increased IUU activity.

What can the U.S. do to assist poor former trust territories and other resource-constrained Pacific Island nations to patrol their EEZs and prevent their natural resources from being stolen? One solution is to enter into bilateral agreements that leverage U.S. law enforcement authorities and platforms on behalf of those nations. That is precisely what the U.S. has done within the last year with the Republic of Palau, the Federated States of Micronesia, the Republic of the Marshall Islands, the Cook Islands, and Kiribati.

Although the terms of each bilateral agreement are different in certain particulars, all have two central objectives. The first is to legally empower the U.S. to assist contracting coastal states to enforce their rights in the waters of their territorial seas and exclusive economic zones. The U.S. gains no law enforcement rights in a coastal state’s EEZ upon that state’s declaration of an EEZ; the only jurisdictional effect of that declaration is that the coastal state gains the right to enforce its resource-related laws against foreign vessels that the coastal state would not be able to enforce were that vessel upon the high seas. To assist contracting coastal states to enforce their resource rights and laws, the bilateral agreements provide for an armed and uniformed officer of the contracting state (shiprider) to ride aboard a U.S. vessel or aircraft. More significantly, they provide the shiprider with the authority to permit the U.S. to assist the embarked officers in enforcing the contracting state’s law within that state’s EEZ and territorial sea, including stopping, inspecting, detaining, directing to port, and seizing vessels suspected of violating that state’s fisheries law.

The other main objective of the agreements is to empower the U.S. to assist contracting coastal states to exercise their flag state law enforcement authorities and obligations aboard vessels flying the flag of that contracting state. To this end, the bilateral agreements also permit U.S. vessels and aircraft carrying embarked shipriders from a contracting state to stop, board, and search vessels of that state.

Successes, Why Bilats Are a Good Idea, Future Developments

The WCPO bilateral agreements serve many useful functions, have already led to palpable successes, and will undoubtedly pave the way for more bilateral agreements of this nature in the WCPO, and for other international engagement initiatives that benefit both the U.S. and the newly-formed nations of the WCPO. Chief among the benefits derived from the bilateral agreements are:

- promotion of regional prosperity and stability;
- maintenance and management of an important world food supply;
- patrol and interdiction force multiplication that enables resource-challenged nations, most of which have a special relationship with the U.S., to prevent theft of their resources;
- protection of the U.S. fishing fleet through preservation of the fish stock;
- protection of U.S. fisheries within its EEZs in the WCPO;
- preservation of U.S. influence in the region;
- the fostering of relationships with law enforcement officials in contracting states that may well be useful to combat other forms of crime (such as terrorism and drug smuggling).

The initial WCPO bilateral agreements, which were ad hoc in nature (good only for the duration of a particular Coast Guard law enforcement patrol), quickly led to operational successes. This undoubtedly spurred enthusiasm for entering into the permanent bilateral agreements that are now in effect.

For example, on February 12, 2008, the crew of the Coast Guard Cutter Sequoia, with an embarked shiprider from the Federated States of Micronesia (FSM) aboard, boarded a Japanese longliner at a position 160 nautical miles south of Guam and 35 miles inside FSM’s EEZ. On the same day, crewmen from the Coast Guard Cutter Assateague, again in company with an embarked FSM shiprider, boarded another Japanese fishing vessel, which was actively fishing in FSM waters. Both fishing vessels were discovered to have committed a number of violations of FSM fisheries laws, including not having an active vessel monitoring system and not having a regional fisheries permit. One vessel was not licensed to fish in FSM waters. Both vessels were, in accordance with the terms of the bilateral agreement then in effect, escorted by the respective Coast Guard vessels to Pohnpei, the capital of the FSM.12

As should be apparent, these shiprider agreements serve a vital need. They have proven to be an effective tool to serve the purposes discussed earlier. Not only have they achieved operational successes already; the fact that they are now permanent in nature, and have been entered into with nations controlling huge swaths of EEZ in the WCPO, bode well for their successful use in the future.

Hopefully, these bilateral agreements will serve as a template for similar agreements with other nation states, and will also lay the groundwork for future bi- or multilateral agreements in this vital region that will benefit the U.S. and the other contracting state.

About the author:
CDR Andrew Norris has been a Coast Guard judge advocate since 1994, and is currently serving as the staff judge advocate for the 14th Coast Guard District in Honolulu, Hawaii. He is a graduate of the University of Virginia and the University of Florida Law School.

Endnotes:
1 For purposes of this article, the WCPO is considered to be the waters of the Pacific Ocean west of 150 degrees east longitude between 20 degrees north and 20 degrees south latitude.
2 A vessel not flagged in any state is considered to be stateless, and may be the subject of law enforcement action by any nation.
3 A coastal state’s declaration of an EEZ confers no additional law enforcement jurisdiction to a vessel or personnel of a third-party state; it only impacts the coastal state’s ability vis-a-vis the flag state to assert law enforcement jurisdiction over a vessel committing a resource-related infraction in its EEZ. Thus, for example, a U.S. Coast Guard vessel observing a Russian fishing vessel violating Canada’s resource laws in the Canadian EEZ would have no law enforcement jurisdiction over the Russian vessel and its crew based upon Canada’s declaration of an EEZ. Canada’s EEZ declaration would, however, give Canada law enforcement jurisdiction over the resource violation that, absent the EEZ legal regime, would otherwise have been reserved to the flag state (Russia).
4 Overview of Tuna Fisheries in the Western and Central Pacific Ocean, Including Economic Conditions, 11–22 August 2008, WCPOC-SC4-2008/GN WP-1.
5 Ibid. The composite delivered price for skipjack tuna increased 42 percent between 2006 and 2007.
6 During the trusteeship period, these islands were part of the Trust Territory of the Pacific Islands; after independence, they joined in a compact of association with the United States, and are now referred to as the Freely Associated States (FAS).
7 UNCLOS permits all nations, including island nations like those in the WCPO, to declare an EEZ around each island, whether inhabited or not, that is capable of sustaining human habitation or life of its own.
8 Johnson Island, Kingman Reef/Palmyra Atoll, Wake Island, Howland/Baker Island, and Jarvis Island.
9 Known as the Pacific Patrol Boat Project, this initiative was designed to provide island nations possessing “unsuitable or non-existent patrol resources” with vessels “designed for surveillance and interdiction patrols, search and rescue, and fisheries protection.” The Pacific Patrol Boat Project. Semaphore: Newsletter of the Sea Power Centre Australia, Issue 2, February 2005. Retrieved from http://www.navy.gov.au/Publication/Semaphore_-_Issue_2_2005. The program ultimately resulted in delivery of 22 vessels that have a range of 2500 nm at 12 knots, a “sprint capability” of 20 knots, and light armament that makes them well suited for EEZ patrols, among other things.
10 Agreements went into effect on March 20, 2008; May 14, 2008; August 5, 2008; July 25, 2008; and November 20, 2008, respectively.
11 Under the law of the sea, since a coastal state is sovereign over the waters of its territorial sea, a vessel of a foreign state is not allowed to enter a coastal state’s territorial sea and take law enforcement action there without the permission of the coastal state. Thus, in addition to having the authority to utilize U.S. assistance in enforcing coastal state law in the contracting party’s territorial sea, the bilateral agreement also empowers the shiprider to authorize the U.S. vessels or aircraft to enter the contracting party’s territorial sea for the purpose of engaging in law enforcement activities there.
12 The owners of one vessel settled their case with the government of FSM for $25,000. The other vessel is still being held by the FSM government in Pohnpei. Settlement negotiations are ongoing, with the matter destined for FSM court proceedings if those negotiations do not bear fruit.

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Abandonment of Seafarers

Solving the problem.

by RDM L CHARLES D. MICHEL  
Chief  
U.S. Coast Guard Office of Maritime and International Law

Despite years of unprecedented prosperity in the shipping industry and international guidelines designed to prevent the shameful practice of abandoning seafarers, crews are still being abandoned in foreign ports worldwide. Between 1990 and 2006, approximately 1,000 ships and 150,000 seafarers and fishers are believed to have been abandoned.

Just since 2004, the International Maritime Organization (IMO) and International Labor Organization (ILO) online database for tracking cases of abandonment reported more than 60 vessels were abandoned. The actual numbers are widely believed to be substantially underreported. This reflects poorly on the maritime industry, and it is vital that no more time is lost in finding a solution to the vexing problem.

Economic Value vs. Value of Human Life
Abandonment is often a calculated economic decision by a shipowner facing bankruptcy, insolvency, or arrest of its vessel by creditors. In some cases, seafarers are abandoned along with their vessel after a port state determines the vessel to be unseaworthy and detains it for necessary repairs. Rather than repair the vessel, a shipowner may choose to simply abandon it along with the crew.

At best, abandoned seafarers are often subject to cruel, inhuman, and degrading treatment, and at worst, they may find themselves in life-threatening conditions with no means of sustenance. It should be unacceptable in this modern age that crewmembers continue to be abandoned in foreign ports without food or water, the financial resources to get home, or their earned wages.

A striking aspect of abandonment cases is the complete imbalance of power. The abandoned crew may lose the ability to exercise any control over their circumstances, while the ship’s owner is able to pull strings or simply disappear. In cases where the owner maintains sporadic contact, the crew may be manipulated by a combination of vicious threats and empty promises. The vast difference in circumstances creates a grossly unfair playing field that benefits shipowners seeking competitive advantage at the expense of all other considerations, including the observance of international rules and standards.

What’s to Stop This?
Although national and international laws, industry insurance, and employment contracts exist to prevent such situations, these mechanisms frequently fail. While a small number of international conventions address abandonment to a limited extent, there is no comprehensive international instrument in place to prevent irresponsible shipowners from electively abandoning their crews. An effective legal mechanism that harnesses available market forces to require all shipowners to have financial security for their obligations would remove abandonment of ship and crew as an available business decision. These shipowners must be held responsible for their decision to simply walk away.

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Three Cases of Abandonment

In October 1998, the Coast Guard detained a Panamanian freighter off Long Beach, Calif., after finding a number of safety violations. Coast Guard and union inspectors found unsafe working conditions, overcrowded living quarters, polluted drinking water, stale food, overflowing toilets, and cockroach infestation aboard.

At the request of a seafarers union, which alleged that the owners had failed to pay the crew’s earned wages, the federal district court ordered the seizure of the vessel. Under U.S. law, vessels can be seized by authorities to recover unpaid earnings.

Several crewmembers reportedly fled into the U.S. after receiving medical attention. The remaining crew survived on donations of food and supplies. After approximately two months, the vessel was sold for scrap value, less than the amount of the pending claims against it for back wages, maritime supplies, and medical assistance for its crew.

Just weeks after the Panamanian freighter was detained, a Pakistani-flagged freighter arrived offshore Brownsville, Texas, after being abandoned in Mexico by its bankrupt owners.

The Coast Guard denied the ship entry into port, citing safety concerns and lack of proper documentation. The ship’s captain had reportedly been forced to surrender the ship’s documents to a Mexican shipping agent as collateral for credit to buy food. After being held offshore for five months, with food and water nearly gone and the crew in despair, the captain fled Mexico and made the risky voyage to the U.S. in hopes of finding haven and help.

The 22 crewmembers aboard survived on rainwater and the few small fish they could catch, and were suffering from sores and skin rashes. Many had not been paid in two years, and had not been home in nearly as long. The local community rallied around the crew, providing donations of food, fuel, and clothing. Finally, in August 1999, after being stranded at sea for months and in Texas for several more, the last of the crewmembers returned home, although still without their full wages.

In October 2008, two U.S.-flagged ships owned by the same company were abandoned in separate ports in The Netherlands. According to the U.S. crewmembers aboard, the owner ceased paying the crews their earned wages and providing for basic necessities. The crewmembers were therefore forced to rely upon a local charity for sustenance.

U.S. Coast Guard officials based in Rotterdam visited both ships, offered to provide assistance, and advised the seafarers of the availability of further potential assistance from the U.S. consulate. They also identified numerous safety deficiencies aboard and attempted to work with the shipowner to resolve crew and safety issues. As required by applicable treaty, Coast Guard headquarters staff promptly reported both cases of abandonment to the ILO.

While abandonment of U.S.-flagged vessels in foreign ports is rare, a number of foreign-flagged vessels have been abandoned in U.S. ports. These cases often arise in the wake of port state control detentions. In some cases, shipowners have threatened to abandon, or have constructively abandoned, seafarer witnesses in order to leverage the shipowner’s interest in an ongoing investigation. The U.S. has also encountered foreign seafarers who have been abandoned by a shipowner who calculated that this was the cheapest method of disposing of an economic or legal problem.
Port states, including the United States, are typically ill-equipped to handle the humanitarian situation, disposal of the derelict vessels, or the immigration issues associated with abandonment. Although most ships are insured, coverage typically ceases upon insolvency or non-payment of premiums.

Despite a customary international law right to seek redress through national legal systems, abandoned seafarers often do not have realistic access to practical and timely legal remedies because they cannot afford the litigation expenses. Even if seafarers have access to justice, the abandoned vessels are often of little value, and those who take legal action may be blacklisted from their livelihood forever.

Where ships have been detained or civilly arrested, agents may be reluctant to supply the crews with food and water—much less their back wages—and seafarers may be starved off the ships before their claims are resolved. Port chaplains and trade union organizations, which rarely have adequate resources, are often forced to step in to provide assistance.

**The Broader Impact**

While the current shipping boom and the increasing complexity of the global shipping enterprise has created an unprecedented demand for seafarers worldwide, the scourge of abandonment is a very public blight on the seafaring occupation. It serves as an indication of how, even today, seafarers can be exploited by their employers without remedy.

This reduces the attractiveness of seafaring during a time of critical shortage of qualified mariners. In addition, the continued practice of this by shipowners and toleration by certain uninvolved flag states could lead to additional port state control measures and loss of business.

**Protection and Fair Treatment of Seafarers**

Under current law, the United States' ability to assist these victims is extremely limited. With an idea of setting an example of justice and responsibility for the rest of the world, a Coast Guard legislative proposal entitled “Protection and Fair Treatment of Seafarers” is currently under consideration by Congress. The proposal would establish a special fund to pay the necessary support for an abandoned foreign seafarer in the U.S. or in conjunction with an investigation, thereby directly assisting the seafarer and neutralizing the shipowner’s leverage over its crew.

It would also require a bond from the shipowner as the means of necessary support, and would reimburse a shipowner who has willingly incurred the cost of providing necessary support of a seafarer for some or all of those costs. This legislation and the fund it would establish would be a significant achievement for deterring calculated abandonment decisions and providing assistance to seafarers abandoned in the U.S. It would also minimize the chance of seafarers being victimized by their employers during investigations.

**ILO Efforts**

The ILO’s Maritime Labor Convention (MLC), adopted in 2006, provides only limited protection for abandoned seafarers. While it obligates shipowners to pay for repatriation expenses, often they are no longer in the picture. Moreover, the MLC does not address or provide a means to recover any other costs that may arise during the period of abandonment, including payment of remuneration and contractual entitlements, necessary maintenance costs (including food, clothing, accommodation, medical care, and other basic necessities of life), or other necessary expenses incurred during the period of abandonment. Although abandonment provisions were partially drafted and negotiated, they were ultimately left out, and the convention does not even include a definition of abandonment.

The joint IMO/ILO ad hoc expert working group on liability and compensation regarding claims for death, personal injury, and abandonment (to be referred to hereafter as “group”) has developed guidelines on provision of financial security in case of abandonment of seafarers. These guidelines went into effect in January 2002. They recommend measures be implemented by shipowners to ensure an adequate financial security system for seafarers in cases of abandonment and set out the main features and scope of coverage of the financial security system. The guidelines also contain recommendations for certification of the financial security system. Though the guidelines have now been in effect for over six years, they have had only limited effect.

In February 2008, the authors were members of the U.S. delegation to the seventh session of this group, held at the ILO in Geneva, where the U.S. submitted a proposal for a possible mandatory international instrument for ensuring financial security in cases of abandonment. The notional text proposed by the U.S. would have required flag states to ensure that its ships have an adequate financial security system in place, and was designed to afford maximum flexibility in how states...
create a system of financial responsibility. As drafted, the proposed instrument would also oblige port states to ensure the same for ships entering or leaving its ports and offshore facilities, ensuring widespread compliance with the financial security system requirements, even by vessels of non-state parties.

Significantly, at the February 2008 session, shipowner and seafarer interests reached a breakthrough agreement that there should be an effective mandatory financial security system for abandonment. It was agreed that the system can be flexible in how it is delivered, but should ensure that there is a level playing field.

In view of the considerable progress made and the level of consensus within the group, an extraordinary eighth session was convened in July 2008. Representatives for the shipowner and seafarer interests met prior to the session and prepared for the group’s consideration a position paper that highlighted the areas of agreement and disagreement.

At the session, the U.S. delegation led a government drafting group that closely reviewed this position paper and recorded the group’s recommendations with respect to developing text and resolving the few remaining areas where views differed. Following the session, the U.S. and U.K. delegations jointly developed draft text used constructively by the seafarers and shipowners to bridge differences and formulate final positions on key principles and specific text.

A ninth and final session of the group was held in March 2009 under the chairmanship of a member of the U.S. delegation, Mr. Charles Darr. The group achieved historic progress by reaching consensus on the essential principles that should be embodied in a mandatory instrument, and developed a mature and comprehensive draft text that will provide a solid foundation for further development. The final report of the group and the proposed text will be forwarded to the ILO governing body and IMO legal committee with a recommendation that the principles embodied in the texts should serve as a basis for further development. Additionally, it recommended that an accelerated amendment to the Maritime Labour Convention (MLC) of 2006 would be the most successful and expeditious way to bring into force the principles encapsulated in the draft text as part of a binding instrument. In the interim, the governments were urged to continue to implement the voluntary guidelines adopted in 2001.

Although the group recommended that the ILO finalize the text, it asked the IMO legal committee to remain seized of this issue and to keep it under close consideration in the event the MLC amendment process becomes unworkable for any reason or encounters undue delay. As members of the U.S. delegation to the 95th legal committee (April 2009), we strongly encouraged all governments to join the U.S. in facilitating this extremely important matter through the ILO process with a view to approving mandatory text as soon as possible.

**Interim Efforts**

Even without a comprehensive instrument, port states can help combat the problem by unilaterally denying entry into port and/or detaining ships not in compliance with international standards. Before vessels are allowed entry into a port, they should be required to prove their financial capability to repatriate and care for their crews should a problem develop. A certificate showing insurance coverage, a bond, or a port entry tax might provide sufficient security for this purpose.

For the first time since humans first began going to sea, there is a real opportunity to provide a comprehensive, mandatory international mechanism to provide for the basic humanitarian needs of the uniquely vulnerable class of seafaring workers abandoned in foreign ports far from their homes due to no fault of their own. While we had hoped to have a solution in place before worsening economic conditions began to cause great personal hardship to abandoned seafarers, we are unfortunately behind the curve. We have already seen an increase in the number of abandonment cases during the last year, including two vessels flying the U.S. flag. Given the highly volatile nature of the current economy, we are gravely concerned that the number of cases will continue to increase in number and severity until market conditions change. We all benefit greatly from the service of seafarers who keep vital commerce flowing, and we owe it to them to terminate the existence of this shameful practice as soon as possible.

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Biometrics at Sea

Closing the revolving door.

by CAPT Mark Higgins
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In May 2004, the crew of USCG cutter Ocracoke, a 110-foot cutter with a crew of 16, patrolled the Mona Pass, a treacherous 90-mile strait that separates the western coast of Hispaniola and Puerto Rico. As the day turned to dusk, a report crackled across the radio from the cutter’s base in San Juan: A fixed-wing aircraft had spotted a grossly overloaded migrant vessel making its way eastward toward the beaches of western Puerto Rico.

The cutter rushed to the scene and interdicted the “yola,” a 30-foot wooden fishing boat with an outboard engine. The crew of the cutter removed 61 persons from the unseaworthy craft via dinghy and embarked them on the cutter’s fantail. After taking note of their names and dates of birth, the Coast Guard made the decision to repatriate the migrants to the Dominican Republic under an existing agreement that allowed for their expedited return with minimal diplomatic protocol. With several dozen migrants aboard, the cutter was incapable of effectively patrolling, and a quick and efficient migrant repatriation ensured the unit could return to its patrol area. However, the lack of consequences for both the migrants and smugglers would likely result in another illegal attempt.

A Revolving Door

During 2004 and 2005, the Coast Guard interdicted more than 9,000 migrants attempting to illegally enter Puerto Rico from the Dominican Republic on yolas. That’s nearly 40 percent of the entire number of undocumented migrants that the Coast Guard intercepted at sea in the same period of time. With few exceptions, these migrants were immediately repatriated to the Dominican Republic, usually within days of apprehension.

The cutters were able to quickly return to their patrols, but many of those interdicted were recidivists, forcing the service to question the efficacy of routine repatriation. This repeating cycle severely overburdened law enforcement units, provided little incentive for migrants to seek legal immigration avenues, and continued to enable migrant smugglers to ply their trade.

Most migrants did not possess government-issued identification. Thus, a reliable means of identifying and tracking exactly who was attempting to enter the U.S. did not exist. The Coast Guard cutters did not have access to a formalized database to cross-reference identi-
ties of individuals who possessed reliable identifying credentials, which rendered those migrants virtually anonymous.

In a resource-constrained environment, the need to quickly repatriate the migrants and return the cutter to its patrol area was of critical importance. This need, combined with the inability to quickly and accurately determine exactly who was crossing the cutters’ decks and the attendant prosecution issues, logistical and procedural, made prosecutions for migrant smuggling and illegal entry scarce.

Without clear consequences delivered to those illegally attempting to cross the Mona Pass into the U.S., the flow of migrants appeared destined to continue unabated. From a security standpoint, the U.S. did not have a clear idea of exactly who was attempting to penetrate its borders, and whether a would-be migrant was an itinerant worker, deported felon, or terrorist.

Closing the Door

In early 2006, the Coast Guard embarked on an ambitious endeavor to curb illegal attempts to enter the U.S. through the Mona Pass using biometric equipment at sea to facilitate prosecutions. Biometrics are the discrete and readily identifiable traits unique to an individual, such as a fingerprint. Rigidly applied to individuals interdicted at sea, biometrics would ideally enable the Coast Guard to systematically track individuals by ascertaining their history of attempted entries into the U.S. and screening each individual against criminal and immigration databases. Additionally, these same databases would be populated with the operational details of each attempt to illegally enter the country, creating a record for future referral by the Coast Guard and other federal agencies.

The Coast Guard hoped that this “Biometrics-at-Sea” pilot program would demonstrate the ability to leverage cost-effective off-the-shelf biometrics components and securely integrate them with existing federal databases maintained shore-side—all from the harsh environment of a pitching deck at sea. Although the concept appeared sound and the Coast Guard was optimistic that the service would make at least some progress in combating the flow of migrants, few would have predicted the dramatic success that the program has achieved.

The Key to Success

The lynchpin of the successful use of biometrics within a searchable database lies in reducing the unique identifying trait to data that can be accessed in a timely and accurate manner. The most common biometric trait currently in use by federal agencies is the fingerprint, although other biometric identifiers are used. Each fingerprint contains characteristic traits known as “minutiae” that distinguish one individual’s from all others. Minutiae may be converted into digital packets of information, enabling users to quickly store, catalog, and search through vast numbers of prints.

Ideally, fingerprints taken from migrants interdicted at sea would be cross-checked against criminal and immigration databases to allow the flexibility to make prosecutorial decisions without compromising the expediency of a scheduled repatriation. Additionally, even if the migrant had no previous immigration or criminal database record, the current interdiction would warrant enrolling the individual into the database, establishing a record.

Vetting the Current Systems

The Coast Guard needed to answer two major questions before the full-scale implementation of the Biometrics-at-Sea program could be realized:

- Which federal databases would best serve the needs of the program?
- How would the captured fingerprints be compared to that database in a timely manner while the cutter was still at sea?
There are three major federal databases that retain biometric fingerprint data: the Department of Defense (DoD)’s Automated Biometric Identification System (ABIS), the Federal Bureau of Investigation’s Integrated Automated Fingerprint Identification System (IAFIS), and the Department of Homeland Security’s United States Visitor and Immigrant Status Indicator Technology Automated Biometric Identification System (US VISIT IDENT).

ABIS
The DoD developed ABIS in 2004 to help vet foreign contractors working on U.S. bases overseas and to enroll captured insurgents and latent prints from improvised explosive device components discovered at terrorist crime scenes using portable field devices. The portability of these field devices is essential to real-time uploading of enrollment and screening data. The DoD fingerprint database is maintained by state-side technicians who oversee the query process and promulgate actionable intelligence for tactical field units and develop an international terrorist/insurgent watch list. The portability of the hand-held biometric collection units, combined with a robust communications and tactical support network, allows uploading, database screening, and reporting of results to the field unit within two hours, in most cases.

ABIS architecture—portable units that could be fielded in remote and harsh environments—and rapid query response appealed to the Coast Guard. Furthermore, the technical aspect of uploading the large biometric data packets from an at-sea platform was proven: the U.S. Navy had been successfully using the ABIS biometrics program while conducting maritime interception operations of foreign-flagged ships in the Persian and Arabian Gulfs. However, the narrowly drawn dataset of foreign nationals (mostly from the Afghanistan and Iraq areas of operations with little or no history of attempted entry into the U.S.) would provide an extremely limited dataset from which Coast Guard authorities could act upon if implemented in the Mona Pass.

IAFIS
The FBI, through its Criminal Justice Information Services Division, maintains the largest federal database of fingerprints in its Integrated Automated Fingerprint Identification System. The IAFIS dataset contains criminal master files submitted by federal, state, and local law enforcement agencies. It also contains fingerprints of federal employee applicants, U.S. military personnel, and others.

IAFIS is most often used in criminal records searches, where prints taken from crime scenes are compared to known prints available from criminal records. Thus, an IAFIS check reveals open warrants and other flagged individuals of law enforcement interest in addition to the criminal history associated with an individual’s fingerprints.

The law enforcement nature of the Integrated Automated Fingerprint Identification System and its associated queries appeared promising to the Coast Guard. Indeed, the premise behind the Biometrics-at-Sea initiative was to reduce migrant flow by increasing the prosecution rate for immigration offenses committed by those interdicted at sea, and a database centered on law enforcement seemed likely to be a natural fit.

However, certain aspects appealed less to the Coast Guard—such as the days rather than hours of turnaround time it would take to get results due to the sheer volume of law enforcement agencies’ queries. Additionally, the diverse nature of each law enforcement organization submitting input to the database raised potential compatibility issues with the Coast Guard’s Biometrics-at-Sea initiative. Also, most fingerprints that populate the system are taken via traditional ink-on-paper methods and are scanned into the database using special software, which leads to a high number of incomplete or digitally unreadable prints. Finally, the degree to which IAFIS documented immigration violations or status was limited; in only certain cases would immigration authorities populate the database with information derived from immigration encounters.

US VISIT IDENT
The DHS US VISIT IDENT database is an amalgamation of all visa-based foreign visitors’ information collected at ports of entry as well as datasets from legacy agencies that now constitute DHS entities (Immigration and Customs Enforcement, Customs and Border Protection, and Border Patrol). Deployed in 2004 to all major U.S. ports of entry, the visa-based portion of the dataset is populated with biometric and biographic data of all foreigners who request a visa to legally enter the U.S. The remaining part of the dataset is compiled of individuals who have submitted their biometric data to immigration authorities in conjunction with attempts to enter the country illegally. For example, on the southwest border of the U.S., all foreign nationals who are apprehended attempting to illegally cross the land border are processed for removal and enrolled into the US...
VISIT IDENT system by the Border Patrol. Likewise, each individual who is detained at the border is cross-checked with the database, revealing prior immigration history, wants/warrants, and inclusion on terrorism watch lists. Depending on the screening results of the detained individual, Border Patrol agents may initiate a criminal case for illegal entry by referring the matter to federal prosecutors—precisely what the Coast Guard intended to do in the Mona Pass. Likewise, the turnaround time with biometrics screening through US VISIT IDENT can be as short as two minutes.\(^6\)

The one major drawback to the Coast Guard using this database was that its collection and uploading technology framework was never intended for use from a remote location. The primary nodes of collection are situated at airports, maritime ports of entry, Border Patrol stations, and U.S. embassies, all of which have secure access to robust land-based collection and communication suites. The high-speed cycle, from uploading digital fingerprints to screening and dissemination of results back to the collecting unit, is a direct result of the connectivity infrastructure in place.

**Coast Guard-Specific Requirements**

In order to meet its objective, the Coast Guard needed to combine the field-tested portability traits of the DoD’s ABIS system with the immigration dataset and timeliness of screening results that the US VISIT IDENT system possessed. Access to the extensive depth of the criminal records of the IAFIS system would be a powerful additional feature if feasible, but the portability and immigration dataset functions of the other two databases were ultimately critical to the success of the Coast Guard’s Biometrics-at-Sea initiative.

The Coast Guard’s research and development center quickly investigated commercial off-the-shelf biometric collection products with the ability to be deployed to Coast Guard cutters operating at sea. The center identified handheld units meeting the criteria of portability and compatibility with software that could convert digital fingerprints into data packets ready for transmission and screening. The plan called for the subject to apply his or her index fingers to a digital scanner pad for collection. A digital photograph of the individual would augment the fingerprint file, and cutter personnel would then annotate the file with biographic information as well as operational details of the interdiction.

Each of these files would then be collected and stored on a laptop for transmission to the US VISIT IDENT database. The technical aspect of biometric collection was only half the battle; the larger challenge was to screen the fingerprints collected on the cutters against the shore-side database quickly enough to act upon the information.

**A Workable Solution**

The logical course of action was to implement a secure satellite conduit through which the patrol boats could directly access the DHS database. However, the research, funding, and contracting issues associated with the installation of a multi-platform satellite communications system were discouragingly time-consuming. Even a basic satellite system would take six months. Meanwhile, the migrant flow from the Dominican Republic to Puerto Rico continued unabated through the summer of 2006.

Particularly troubling were the cases in which the overloaded yolas capsized, resulting in loss of life. The Coast Guard needed to find a workable means of harnessing biometrics while a long-term connectivity solution was realized.

Coast Guard officials determined that the most expeditious means of implementing biometrics collections and screening in the Mona Pass was deploying the database to the underway cutters. The class of cutters deployed in the Caribbean typically return to port at least once a week for fuel and logistics transfers. If the US VISIT IDENT database could somehow be extracted and exported to a media storage device just before the cutter got underway, then cutter personnel could screen the biometrics data packets collected from interdictions against the database.

Any “hits” from the exported database could be confirmed via voice communications with the cutter’s base in San Juan for amplifying information on the individual. Although dated by several days, the database would be current enough to meet mission objectives within an acceptable degree of certainty. The enrollment function of the Biometrics-at-Sea program (populating the database with the newly created records of those just interdicted) could wait until the cutter returned to port following an interdiction.

**Parameters**

Coast Guard technical experts teamed up with their DHS counterparts to fashion a system whereby a fragment of the database was loaded onto laptops compatible with the biometrics collection equipment. Field testing with sample prints and a simulated dataset
search was successful, and the equipment was readied for deployment. One final obstacle remained, however: the legal issues surrounding the collection of biometric information from interdicted migrants.

The collection of biometrics from individuals can implicate the Fourth Amendment of the U.S. Constitution; the Supreme Court has considered fingerprint collection as a “seizure,” at least in some cases. In order to ensure compliance with any potential Supreme Court view on collection of biometrics, the Coast Guard has, by policy, chosen to limit the collection of fingerprints. It only collects them in cases where the individual is suspected of a crime (such as attempted illegal entry into the U.S.) or from undocumented aliens to determine if they have some type of immigration status (i.e., previously entered the U.S. either legally or illegally).

The Coast Guard received confirmation that an existing bilateral agreement forged in 2003 with the Dominican Republic government to cover migration issues was intended to authorize Coast Guard personnel to search—including the collection of biometrics—all persons aboard vessels that were registered or originated from the Dominican Republic under the terms of the agreement.

Privacy issues also factor into the use and storage of each of the federal biometric databases. The Privacy Act governs the collection, maintenance, storage, and access to databases administered by the federal government. The act generally provides an overarching mandate that any personal information collected on U.S. citizens or legal permanent residents be only for “relevant and necessary” mission accomplishment. It also sets forth strict criteria on the release and dissemination of the collected information and requires safeguards to ensure the security and confidentiality of the information.

Although explicitly applying only to U.S. citizens and legal permanent residents, the federal government has, by policy, extended many of the protections of the Privacy Act to foreign nationals. Because the US VISIT IDENT database contains information on legal permanent residents and others with legitimate immigration status in the U.S., the confidentiality, and thus, the physical integrity of the database, remains paramount. Before DHS officials consented to exportation of the database, the Coast Guard needed to convince them that the constant shuttling of portable databases from the San Juan Coast Guard base to each of the six cutters would be carried out securely.

The Coast Guard responded by implementing a plan to safeguard the material in the same manner that service personnel handle classified material such as cryptographic codes and equipment. After US VISIT IDENT officials loaded the laptops with the fragmented database, the chain of custody and physical security measures were put into place to ensure the material’s integrity.

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**The Cycle of Biometrics at Sea**

1. The cutter is on patrol in the Mona Pass.

2. The cutter intercepts illegal migrants in the Mona Pass (within 12 nautical miles of U.S. shore, potential prosecution).

3. During the processing of migrants, biometrics are collected from all interdicted.

4. The fingerprints are searched against the US VISIT IDENT database.

5. Based on any identified persons, the appropriate course of action takes place. This may involve the coordination of multiple agencies, including the U.S. attorney, CBP, ICE, and various levels of the Coast Guard.

After the appropriate course of action has been taken for each migrant, the CG cutter goes back on patrol.

U.S. Coast Guard graphic.
ures for transport, storage, and access mirrored those of standardized protocol for classified material, including using trained and certified messengers, handlers, and custodians. Once DHS officials vetted the Coast Guard’s process for the protection of the data, the final obstacle was overcome. Only deployment of the Biometrics-at-Sea program for operational field testing remained.

**Testing the System**

The Coast Guard rapidly acquired the biometrics hardware, conducted training, and made other preparations to the prototype cutter. Meanwhile, the service engaged local partner agencies in Puerto Rico including the U.S. Attorney’s Office, ICE Office of Investigations, ICE Office of Detention and Removal, CBP Office of Field Operations, and Border Patrol. The agencies came together to form the Caribbean Border Interagency Group to formulate a standard procedure for taking action in response to a biometric hit received from a Coast Guard interdiction.

The primary decision makers for each agency laid out concerns and issues impacting the interdiction, transfer, and holding of migrants and the investigation and prosecution of eligible migrants. The interagency group came to a consensus on the expectations and duties of each agency and promulgated a unified framework that each agency would follow when a hit occurred. This prosecutions standard operating procedure streamlined the myriad logistical, investigatory, and procedural issues that would normally entail a cumbersome, ad hoc coordination on a case-by-case basis. The procedure was approved by all relevant Washington-level agencies, further streamlining the prosecutions process.

In November 2006—nearly a year after the idea was first conceived—USCGC *Key Largo* got underway with the portable biometrics collection equipment and US VISIT IDENT laptop with a fragment of the database. Within days, the Coast Guard had interdicted three yolas attempting to enter the U.S. with a combined 36 migrants aboard—business as usual in the Mona Pass. Armed with the Biometrics-at-Sea equipment, cutter personnel took biometric scans using the hand-held collection apparatus. They then took a digital photo of each migrant’s face and created a data packet consisting of the fingerprint scans and photo. They annotated the data packets with biographical information as well as information regarding the circumstances surrounding the interdiction.

**Five “Hits”**

Under strict physical security protocol, the commanding officer unlocked the heavy safe within the ship reserved for the most sensitive material and equipment and removed the US VISIT IDENT laptop. A crewmember, trained and vetted to handle sensitive classified material, then ran the data packets through the fragmented database stored on the laptop. The computer churned through the millions of stored fingerprint images within the database, searching for minutiae within the complex pattern of each print that would match one of the 36 migrants’ prints. After less than an hour, the laptop emitted a telltale chime with its report: five hits.

The crew quickly notified Coast Guard authorities of the results by radio: five of the migrants had interacted in some manner with law enforcement or immigration authorities in the past. Because the portable database did not contain any amplifying information on each hit, the cutter relayed the identifying file number of each hit to its base. Shoreside Coast Guard personnel reached out to their DHS partners with each file number to determine the nature of each of the five migrants’ immigration or criminal histories. Four of the migrants were recidivists; shoreside authorities had apprehended them at least once before for attempted illegal entry. The fifth migrant’s file revealed a felony drug conviction and previous deportation.

Armed with this information, the Coast Guard convened the regional concurrence team (RCT) by telephone. The RCT is a group of decision makers from different agencies including the Coast Guard, the U.S. Attorney’s Office, Border Patrol, ICE, and others. The complex legal and logistical hurdles inherent to bringing ashore a foreign national for criminal investigation and federal prosecution would normally take days. With the RCT in place, a decision was made within hours.

The RCT decided to bring the previously deported felon ashore to face federal prosecution for felony re-entry into the U.S. The team’s quick decision to prosecute and land the migrant allowed the cutter to repatriate the remaining migrants and return to its patrol within two days of interdiction, a duration similar to pre-biometrics interdiction and repatriation cycle times. The logistical plan gave essential personnel enough lead time to effect an expeditious transfer ashore. The defendant later pled guilty, was sentenced to time in federal prison, and, after serving his sentence, was deported.
The operational field test of the Biometrics-at-Sea initiative was a stunning success. The cutter interdicted migrants illegally attempting to enter the U.S. and conducted a repatriation in a timely manner that provided for the safe and effective transit to the Dominican Republic, while also allowing the unit to return to its patrol area. The difference this time, however, was that a potentially dangerous felon would face prosecution, and the others’ illegal attempts to enter the U.S. would now be documented in the database for future referral.

Emboldened by this success, the Coast Guard quickly deployed portable collection units and fragmented databases to all five cutters based in San Juan. At the same time, the service accelerated its plan to procure a satellite communications system for the cutters. The satellite system, Fleet 55, was eventually delivered in May 2007, providing near-real-time information. The system also obviated the need for retention of the database fragment aboard cutters, which in turn reduced physical security concerns and allowed for instant data uploading.

Program Successes
From deployment of the Biometrics-at-Sea initiative in November 2006 through the end of FY 2008, the Coast Guard interdicted 1,986 migrants attempting to enter the United States. Of this group, the program revealed that 459 (more than 23 percent) were recidivist entrants, prior deportees, felons, or otherwise had some derogatory information within the US VISIT IDENT database. For each interdiction, the RCT convened, resulting in prosecution of 188 individuals. One hundred and sixty-two have been convicted as of this writing.¹⁰

These impressive metrics only tell half the story. Since the introduction of biometrics and the resulting prosecutions, the migrant flow has decreased nearly 75 percent. Although critics may contend that no empirical studies verify that biometrics were the sole reason for the dramatic decrease of migrant flow from the Dominican Republic to the U.S., the Biometrics-at-Sea program undoubtedly had a marked impact.¹¹

Looking Ahead
The success of the Biometrics-at-Sea program in the Mona Pass encouraged the Coast Guard to expand the use of biometrics. In the spring of 2008, the service introduced the Biometrics-at-Sea program to cutters patrolling the straits of Florida. Prosecutions have resulted from the program, but it remains too early to determine the impact the program will have on migrant flow in that threat vector.

The Coast Guard is continuing to monitor the program to assess application to other areas of operations. Additionally, the Coast Guard has begun a program of supporting a fledgling biometrics program for the navy of the Dominican Republic. Coast Guard authorities are confident that continued refinement of the biometrics program with their Dominican Republic counterparts will result in more domestic prosecutions by that country’s prosecutors, eventually reducing the flow of illegal migrants even further.

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Endnotes:
1. http://www.uscg.mil/hq/cg5/ cg531/AMIO/FlowStats/FY.asp. Of the 9,000 migrants intercepted by the Coast Guard at sea in 2004-2005, only 10 were prosecuted, a rate of little more than one-tenth of one percent.
2. The disparate entities involved in such an endeavor each have statutory roles to play: the Coast Guard cutter would moor in Mayaguez (on the western coast of Puerto Rico) and transfer the migrants to Customs and Border Patrol port control authorities. The migrants would then transfer to the border patrol processing station in Aguadilla (some 15 miles north of Mayaguez), where they would remain in a holding facility where ICE agents from San Juan (three hours east of Aguadilla) would conduct a criminal investigation. The ICE agents would refer the case to the U.S. Attorney’s office in San Juan, where the defendants would be charged and tried, having been transported to San Juan by ICE detention and removal officers.
3. Although fingerprints are the most widely used biometric, voice identifiers, facial recognition technology, and iris identifiers are in use, as well. S. Pankanti and A. K. Jain, “Beyond Fingerprinting,” Scientific American, Sept. 2008; available at http://biometrics.cse.msu.edu/BeyondFingerprinting5- CIAM03.pdf.
9. The Caribbean Border Interagency Group’s framework is known as the prosecutions standard operating procedure and lays out the procedures that each agency will follow post-interdiction. After each interdiction that results in a biometric hit, duty representatives convene a regional concurrence team teleconference to agree on the proposed course of action in accordance with the prosecutions standard operating procedure.
10. As of October 1, 2008, 21 of the 188 prosecuted are still awaiting trial; the rate of conviction is over 91 percent.
11. Analysis indicates that there were no significant weather, political, or economic variables that could account for the decrease in migrant flow.
The Defense Institute of International Legal Studies (DIILS) located in Newport, R.I., is the lead Department of Defense agency for providing professional legal education and training to international military officers and to international civilian government officials. Since 1994, its complement of uniformed attorneys from each of the armed forces, including the Coast Guard, has led training teams in more than 100 countries to assist, train, and educate international partners on various important topics, including human rights, the role of the military in a democracy, combating terrorism, international peacekeeping, and maritime and international law.

The Team
A typical DIILS team is comprised of four members. While the team leader is almost exclusively a JAG officer, the remaining team members are hand-picked because of their experience, background, subject matter expertise, and knowledge of the country or area of the world to be visited. Rarely, if ever, are Defense Institute of International Legal Studies teams comprised exclusively of personnel from one military service or with only JAG officers.

In most cases, DIILS teams are a combination of military officers and civilian officials selected from a cross-section of government agencies, including the State Department, the Department of Justice, and the Department of Homeland Security. It is not unusual for a DIILS team to include a college professor or a retired ambassador, or for one of the team members to be a uniformed service member from another country. The goal is to put together a team that can effectively meet the strategic objectives assigned to a particular country and to the particular mission.

Seminar Planning
The planning for a one-week DIILS overseas seminar typically begins as far as two years in advance. In many cases seminars are a continuation of an ongoing engagement program that began in that country years ago. For new programs or new countries, the process begins at the U.S. Embassy when a country officer (often a uniformed service member working at the embassy) identifies a particular training need or problem.

The embassy then coordinates through its internal State Department chain of command to confirm the strategic need for the program and to identify the funding source for the seminar. Simultaneously, the embassy begins coordinating with the respective geographic DoD combatant command to coordinate funding, to align strategic goals or objectives for the particular country with larger geographic-based goals and objectives, to coordinate timing, and to identify the correct training resource to meet the objective.
While this is taking place, the Defense Institute of International Legal Studies team of civilian resident program directors coordinate closely with both the combatant command and with the respective embassy team to ensure that DIILS is the correct organization to conduct the training, and to ensure that the curriculum, funding source, and team composition is strictly aligned with both combatant command and U.S. embassy goals. In addition, DIILS coordinates closely with its parent organization, the Defense Security Cooperation Agency (DSCA), and with the DoD Office of General Counsel. For maritime-based programs, DIILS also works closely with the U.S. Coast Guard’s Office of International Affairs.1

Onsite Training Program
In addition to mobile programs, DIILS maintains a robust domestic training program in Newport, hosting international students for training seminars that range from two to 12 weeks. Courses include legal aspects of combating terrorism, anti-corruption, international peacekeeping, international law of military operations, and new developments in military law.

In 2007, the annual legal aspects of combating terrorism course (LCT) hosted students from 28 different countries. In addition to lectures and discussions, the course challenged students with difficult real-world and hypothetical case studies similar to the scenario here.

Students are given the opportunity to examine, discuss, and work through the international, diplomatic, and operational challenges of combating international terrorism effectively. A variety of U.S. and international terrorism experts and teachers give students the opportunity to discuss various challenges and topics unique to their country or region. Students are even given the opportunity to participate in a two-day hands-on simulations exercise to help them better understand the consequences of poorly drafted and implemented use-of-force protocols for law enforcement activities designed to combat terrorist activity.

Global Efforts
In addition to standard mobile and resident programs, the Defense Institute of International Legal Studies regularly participates and contributes to international projects in support of humanitarian efforts or to other global-based initiatives. Since the inception of hostilities in Iraq and Afghanistan, it has played a key role in each country working to develop and establish rule of law initiatives and programs and helping to provide training and guidance to Iraqi and Afghan military officers and their civilian counterparts. Of recent note was DIILS’ contribution to United Nations efforts in the Democratic Republic of Congo (DRC) to help that war-torn nation develop a comprehensive military justice system in support of wider rule of law objectives.

In 2007 and 2008, Defense Institute of International Legal Studies teams composed of uniformed members from each of the five armed services traveled throughout the DRC (a country larger than all of western Europe) for extended periods. They visited and worked in each province to conduct training for their lawyers and criminal investigators to provide them with basic equipment to assist with investigations and prosecutions and to begin establishing the groundwork for restoring law and order in that country.

Also noteworthy was DIILS’ recent support for the Africa Partnership Station initiative. In support of ef-

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Scenario

Late one evening in a garment manufacturing plant located on the outskirts of Dhaka, Bangladesh, the factory manager meets secretly with several members of his local mosque, including the Imam. The Imam, a vocal supporter of radical Islam, with ties to Al-Qaeda, is trying to convince the factory manager to allow him to use the manufacturing plant in support of the jihad against the West.

Specifically, the Imam wants the plant manager to allow him to place a weapon into a shipping container that will be sealed at the factory in Dhaka, Bangladesh, and loaded onto a container ship to be eventually offloaded at Los Angeles/Long Beach, the busiest container port facility in the United States. The Imam convinces the factory manager that he has to do nothing more than to allow him to use the factory. He will provide the weapon and take care of everything else.

Fifteen hundred miles away an Al-Qaeda cell in Karachi, Pakistan, is fabricating merchant documents for two cell members and providing them with basic seamanship training so they can serve as crewmembers on a merchant vessel. The members are also being trained on how to manufacture and detonate an explosive charge made from materials available on almost any merchant vessel to effect the large-scale release of a biological agent like smallpox or anthrax.

A thousand miles further to the north, in a port city on the Caspian Sea, an Arab businessman with ties to Al-Qaeda is meeting with an ex-KGB agent who is seeking to sell a kilo of weapons-grade anthrax spores. The businessman purchases as much of the anthrax as he can afford.
forts to establish working partnerships with strategically important nations located in the Gulf of Guinea, two teams of U.S. Coast Guard judge advocates spent approximately three months aboard USS Fort McHenry along the west coast of Africa. While there, they conducted maritime law assessments; completed training seminars for members from numerous African navies and coast guards; and completed comprehensive maritime law assessments for Ghana, Cameroon, Gabon, Sao Tome, Liberia, and Senegal. These assessments were designed to establish the foundation and reference for future U.S. engagement strategies tied to maritime-based initiatives, to provide U.S. Embassy and AFRICOM planners and strategists with a template for future training needs and requirements, and as a starting point to introduce the Coast Guard’s recently updated model maritime service code. (See related article by LT Tamara Wallen in this issue.)

A Look to the Future

America’s enemies play by far different rules than any enemy we have faced before. Civilian casualties and the destruction of domestic infrastructure and systems are goals and objectives rather than mistakenly calculated consequences. To prevail, we must be able to work across international borders, share information, and foster the development of a cooperative strategy with our partners and allies. If we fail in this endeavor, plots to do massive harm to the United States, such as the ones described in the fictional scenario, will inevitably succeed.

To defeat them, organizations like the Defense Institute of International Legal Studies are attempting to bridge the gap between cultures, peoples, and partners in some of the most remote corners of the world. To learn more about its international engagement and outreach efforts, visit the website (www.dsca.mil) and click on “education.”

Acknowledgment:
The author would like to thank CDR Luke Reid, Coast Guard liaison to the Defense Institute of International Legal Studies, for his review and input.

About the author:
CAPT Tom Lennon recently completed a two-year assignment at the Defense Institute of International Legal Studies, where he served as deputy director for academics and strategy. CAPT Lennon was the fifth Coast Guard officer to serve at DIILS.

Endnote:
1 Primary funding sources for Defense Institute of International Legal Studies programs are International Military Education and Training funds and the Counter Terrorism Fellowship Program. Given the rewards, costs are reasonable. A typical one-week DIILS mobile program cost significantly less than $50,000. This includes the total price of team travel, lodging, books, supplies, renting a suitable training location, interpretation services where needed, and various miscellaneous expenses.
So … Why the Coast Guard?

The United States Coast Guard and Africa Partnership Station.

by LCDR CASSIE KITCHEN
Assistant District Legal Officer
U.S. Coast Guard 1st District

“So … Why the Coast Guard?” That was the question that CAPT Robert Wagner, commanding officer of USCGC Dallas posed to the participants of the Joint Civilian Orientation Conference as they were being briefed about the U.S. Coast Guard roles and missions in Rota, Spain.

“Why are you in Rota, Spain, to get briefed on the U.S. Coast Guard and visit a U.S. Coast Guard cutter?” Why, indeed? What business does the U.S. Coast Guard have being so far removed from, well, the U.S. coast?

The answer is: The Cooperative Strategy for 21st Century Sea Power. “This isn’t just about Coast Guard ships and operational Coast Guardsmen. We also come bearing lawyers.”

Background: The Africa Partnership Station

Part of the United States Navy’s global fleet station initiative, the Africa Partnership Station (APS) provides a platform on a regional scale by which the United States is able to engage in sustained training and collaboration with our maritime partners in West and Central Africa.

Some may ask: “If this is a Navy initiative, then why the Coast Guard?” When one looks at the majority of the world’s navies, there are striking similarities between the mission set of the United States Coast Guard and the “navies” of other nations. Coastal nations around the world face such threats to maritime security as drug trafficking, human trafficking, illegal migration, illegal fishing, and marine pollution, in addition to the potential for terrorist attacks. Moreover, the resources of other coastal nations are more akin to our Coast Guard fleet than our Navy fleet.

For years, the United States has been the global leader, with preponderant influence and authority all around the globe. By engaging in international outreach, the United States is able to use “soft power” to improve capacities and capabilities of coastal states. Weak coastal states provide potential havens for hostile actors who exploit the lack of governance in the maritime domain. By assisting these coastal states in improving their capabilities and capacities for addressing such global concerns as drug smuggling, human trafficking, piracy, illegal migration, and the movement of weapons, we are able to reduce the likelihood that these coastal states will become environments in which these hostile actors will thrive.

No one nation is able to provide and maintain maritime safety and security in the global maritime domain, which is why the United States has committed to fostering and sustaining relationships with international partners. Establishing trust and cooperation requires a persistent presence, for while we may surge resources in the event of a crisis, close and enduring relationships cannot be “surged.”

The United States Coast Guard has been an integral part of the Africa Partnership Station initiative from its
Inception. Coast Guard teams and assets deployed to the Gulf of Guinea region to provide sustained training with the maritime forces of several West African nations. As part of the international outreach efforts, Coast Guard judge advocates embarked aboard Africa Partnership Station platforms.

From February through April 2008, multiple teams comprised of a total of eight Coast Guard judge advocates led seminars focused on maritime security and law enforcement in Ghana, Cameroon, Gabon, Sao Tome, Principe, Liberia, Senegal, and Nigeria. So, why the Coast Guard and not Navy JAGs? The Coast Guard’s status as a military, multi-mission, maritime service makes its people uniquely qualified to provide training to nations in the Gulf of Guinea region.

Coast Guard judge advocates provide guidance to operational commanders on a daily basis in key mission areas, such as drug interdiction, migrant interdiction, fisheries enforcement, protection of natural resources, and port and waterways security, that joins seamlessly with the maritime needs of most developing nations.

The Partnerships
These issues of maritime governance are of significant importance in West Africa, making the Coast Guard the ideal training partner. Mid- to senior-level civilians and military members were selected by each host nation to participate in the seminars. The seminars provided a forum in which individuals of a nation could discuss dilemmas faced and the existing authorities that could be used to address the issues.

For example, members of the naval forces often did not have an opportunity to discuss the challenges faced in executing the mission and enforcing the laws of the coastal state with members of the nation’s judiciary or various ministries. By including participants from diverse governmental backgrounds, the seminars created an opportunity for internal interagency cooperation.

In Dakar, Senegal, for example, 22 attendees from a variety of backgrounds participated in the seminar. Individuals from the Ministere de la Justice, Ministere de L’Economie Maritime, and Ministere Des Affaires Etrangeres were able to sit down across the table from members of three different military branches and discuss their respective roles in maritime governance.

Chief Boatswain’s Mate James Moerls, a coxswain aboard the Coast Guard Cutter Dallas, prepares to pick up the multinational boarding team after conducting a law enforcement boarding off the coast of San Vincente, Cape Verde. Members from the Cape Verde Coast Guard, along with members from Dallas, trained in the region in support of the U.S. Navy’s Africa Partnership Station outreach. All photos by USCG PA1 Tasha Tully.
To discuss maritime law and maritime security issues their nation faces, such as illegal, unreported, and unregulated fishing and illegal oil bunkering. Interagency dialogue such as this was a rare occurrence prior to the seminar, and it enabled each participant to gain a broader perspective of the issues faced. This type of engagement by the United States is consistent with the U.S. Department of State’s International Outreach and Coordination Strategy.

By providing an environment to conduct such dialogue, nations are able to capitalize on this information exchange and initiate actions to identify deficiencies in resources or legal authorities. Identifying deficiencies is the first step in improving capabilities and capacities of these coastal states, and improved capabilities and capacities lead to improved maritime governance.

Follow-on
Our engagement did not end when the lawyers left. Not long after the U.S. Navy ships that had served as the APS platforms got underway headed for homeport, USCGC Dallas assumed the role as the next APS platform. As part of its deployment, Dallas and its crew spent 12 days in Cape Verde and conducted a groundbreaking maritime law enforcement mission: For the first time, a foreign law enforcement detachment conducted patrols and interdiction operations from a vessel of the U.S. Armed Forces in Western Africa.

Additionally, Coast Guard crewmembers were able to provide feedback and guidance to the Cape Verdeans regarding their training, tactics, and procedures, and build upon training provided by previous visits by our international training partners.

When one examines the four pillars upon which Africa Partnership Station is based—building maritime domain awareness, developing maritime professionals, building infrastructure, and bolstering response capabilities—there is little doubt that the Coast Guard is the right service for the mission. Maritime governance is our business, and international engagement enables us to enrich our partnerships for the good of the global maritime environment.

About the author:
LCDR Cassie Kitchen currently serves as an assistant district legal officer for the 1st Coast Guard District. She authored this article while serving as the Coast Guard liaison to the Naval Justice School in Newport, R.I., and was previously assigned as a staff attorney in the Coast Guard Office of Maritime and International Law, where she advised the marine safety, security, and environmental stewardship programs. LCDR Kitchen traveled to Senegal in April 2008 in support of Africa Partnership Station.

Endnotes:
Most understand the Coast Guard’s traditional missions in maritime safety and homeland security in and near the nation’s ports, coastal waters, and maritime approaches. However, the Coast Guard also performs a vital role in advancing foreign policy through engagement with international partners across a broad spectrum of missions and activities. The Coast Guard’s small but powerful international training program is a cornerstone of that effort.

International Training as an Instrument of Statecraft
The U.S. pursues national security interests abroad through formulation and execution of foreign policy, employing statecraft to achieve policy objectives. Statecraft describes the use of all means of power available—diplomatic, economic, military, legal, intelligence, media, etc. Experts and policymakers typically describe the elements of state power in terms of “hard” power (the use or threat of military force) and “soft” power (non-coercive means to influence, persuade, or deter other states, organizations, or actors). Although there is much attention given to the superiority of the U.S. military as an instrument of hard power, its utility in achieving foreign policy objectives is limited, and robust and effective soft power is essential to U.S. national security.2

Secretary of Defense Robert Gates, speaking about the wars in Afghanistan and Iraq, stated: “Military success is not sufficient to win. Economic development, institution-building, and the rule of law, promoting internal reconciliation, good governance, providing basic services to the people, training and equipping indigenous military and police forces, strategic communications, and more—these, along with security, are essential ingredients for long-term success.”

International training is an essential element of diplomatic soft power. Providing training to foreign military, police, and other government personnel promotes bilateral and multilateral cooperation and improves the capacity of states to govern themselves—to provide essential functions necessary for government stability and security of the population, establish and enforce the rule of law, and enable and sustain economic development.

Coast Guard Authority and Policy Framework for International Training
The Coast Guard provides international training and other assistance based on a number of authorities. Section 141(a) of Title 14 of the U.S. Code authorizes the Coast Guard to provide assistance in areas in which it is “especially qualified” to the Department of State and Department of Defense for their respective international assistance programs.
The Coast Guard supports the Department of State’s authority under the Foreign Assistance Act, which specifically authorizes training of foreign partners in maritime skills under the International Military Education and Training program. The Coast Guard supports the Department of Defense based on the authority of the Secretary of Defense to engage in military-to-military cooperation and provide security assistance to foreign militaries.

Most of the developing states around the world have small militaries, with constabulary navies or coast guards that have more in common with the U.S. Coast Guard than the U.S. Navy. As a result, the Coast Guard is well positioned to provide training—both within the U.S. and delivered to the host nation—in the competencies and capacity-building suited for the functions of those smaller maritime forces, such as search and rescue, maritime safety and security, law enforcement, port security, protection of natural resources, and combating non-state threats.

The Coast Guard also relies on organic authorities for international training. Section 149(b) of Title 14 of the U.S. Code authorizes the Coast Guard to provide technical assistance, including training, to foreign partners. Although this authority may only be exercised in conjunction with Coast Guard operations, and must be coordinated with the Department of State, it demonstrates Congress’s recognition of the Coast Guard’s important and growing role in international training. The Coast Guard is also authorized to train and educate foreign students at the Coast Guard Academy under 14 U.S.C. § 195.

Finally, under the Maritime Transportation and Security Act of 2002, the Coast Guard is authorized to operate and maintain a Caribbean support tender to provide technical assistance, including law enforcement training, for foreign coast guards, navies, and other maritime services.

The Coast Guard International Training Program

Coast Guard exportable training programs involve forward deployment of Coast Guard instructors and specialists to foreign nations to deliver tailored training on requested topics. Exportable training is provided by specialized teams of expert instructors or by Coast Guard operating forces. Coast Guard personnel conduct exportable training work under the direction and oversight of the U.S. Embassy country team and the cognizant combatant commander when delivered as part of military operations. This coordinated intera-

gency approach ensures unity of effort and close alignment and support of specific foreign policy and theater security objectives in the country and the region.

The Coast Guard resident training programs host foreign students at Coast Guard training and education courses at military installations within the United States. Foreign students attend Coast Guard courses lasting from several days to years in length and covering a broad range of topics, from technical skills in equipment maintenance, to senior leadership and management, to a four-year academic degree.

The Coast Guard Academy

The Coast Guard Academy in New London, Conn., accepts three to five international students each year into the four-year academic and professional military training program for commissioned officers. Students who successfully complete the program are awarded a Bachelor of Science degree before returning to their own countries for duties as maritime officers in their respective services. International cadets are full members of the Corps of Cadets, completing the same rigorous academic, athletic, and military requirements as their U.S. counterparts.

To enhance the experience of hosting international students, the Coast Guard Academy manages a rich and dynamic International Cadet Council for U.S. and international cadets. It is run by cadets under the guidance of academy faculty members, assists international cadets with adjusting to the challenging academy environment, and helps prepare U.S. cadets to serve as Coast Guard officers and interact with foreign nationals in an increasingly international community. The International Cadet Council also promotes foreign language conversation and study for cadets throughout the academy.
The duration and nature of the Coast Guard Academy experience provides an excellent foundation for international students and their U.S. counterparts to forge strong professional relationships. Built on the trust forged from those friendships, the U.S. and foreign partners are better positioned to improve bilateral and multilateral cooperation on maritime issues of common interest for years to come.

Since 1971, more than 103 cadets from 38 countries have graduated from the Coast Guard Academy. International academy graduates have served as heads of their states’ navies or coast guards and other senior leadership positions around the world.

Resident Courses
The Coast Guard hosts international students at more than 200 Coast Guard resident training courses at various locations within the U.S.:
- Training Center Yorktown, Va.
- Training Center Petaluma, Calif.
- The Leadership and Development Center at the Coast Guard Academy
- The Aviation Technical Training Center, Elizabeth City, N.C.
- The Maritime Law Enforcement Academy, Charleston, S.C.
- The Special Missions Training Center, Camp Lejeune, N.C.

Nearly all of the resident training for international students occurs through regular Coast Guard courses designed and run for Coast Guard personnel of all ranks to develop the skills and competencies necessary for their duties. These courses include basic and advanced technical training for junior enlisted personnel in their designated specialties; advanced training for commissioned officers and petty officers in specific competencies, such as maritime law enforcement and tactical boat and security operations; and leadership and management training for all students.

By hosting international students in regular Coast Guard courses that also meet the needs of foreign partners, the service is able to leverage existing training systems without the cost and commitment needed to establish and deliver dedicated international resident training courses.

The Coast Guard hosts two courses dedicated for international mid-grade and senior leaders: the International Maritime Officer Course (IMOC) and the International Maritime Senior Officer Course (IMSOC), held at Training Center Yorktown, Va. The IMOC consists of a 10-week series of seminars and classes for mid-grade officers and civilians on search and rescue, maritime law enforcement, port security, and command and incident management. IMOC also includes a session on rule of law and international law of military operations presented by visiting instructors from the Defense Institute for International Legal Studies. IMSOC is intended for senior international military and civilian officials to provide an understanding of U.S. foreign and national security policy and discuss Coast Guard strategy and policy on maritime security. The IMSOC presents a senior-level analysis of the state of maritime security today, including review of ongoing International Maritime Organization efforts to improve multilateral cooperation to set and enforce legal regimes for improved security.

International Training Division
The Coast Guard’s dedicated force for conducting exportable international training is the International Training Division (ITD) at Coast Guard Training Center Yorktown, Va. The ITD provides training by organizing into mobile education and training teams for meeting specific, short-term training needs (up to 30 days). The ITD teams provide training in all Coast Guard mission areas to more than 2,000 international students in approximately 60 countries each year.

The International Training Division delivers exportable training to small groups, multi-agency audiences, or several countries in a regional forum. Training topics include port security, safety and environmental protection, search and rescue, maritime law enforcement, small boat operations, and other planning and incident management skills. International Training Division de-
ployments typically consist of a LTJG or senior petty officer leading a small team of instructors to represent the Coast Guard and the United States. Many ITD personnel are bilingual, although primary training continues to employ interpreters to ensure fluency in communicating the training.

In 2007, ITD conducted 133 deployments in 61 countries, providing instruction to nearly 1,600 students. In 2008, International Training Division instructors participated in key Department of Defense security assistance efforts, including Africa Partnership Station deployments by U.S. Navy warships in the Gulf of Guinea and deployments in the Caribbean Sea and South American ports. The latter efforts were part of U.S. Southern Command’s Global Fleet Station initiative to promote maritime security cooperation in the region.3

Coast Guard Operating Forces

Coast Guard cutters, aircraft, and deployable specialized forces (maritime safety and security teams, law enforcement detachments, strike teams, and the Maritime Security Response Team) provide international training through maritime exercises and other exchanges in the course of regular operations. Coast Guard units regularly deploy in the western hemisphere and under Department of Defense control around the world to support bilateral and multilateral exercises and training. The Coast Guard participates in training exercises such as Operation Tradewinds in the Caribbean, PANAMAX and UNITAS in Central and South America, and the Southeast Asia Cooperation Against Terrorism and Cooperation Afloat Readiness and Training (CARAT) in the western Pacific.5

The Coast Guard’s commitment and level of participation shown by operating forces in international training continues to grow, and Department of State and Department of Defense demand for the unique talents and expertise provided by Coast Guard forces is also increasing. For example, in July 2008, U.S. Coast Guard Cutter Dallas deployed to western Africa to participate in training exercises with the Cape Verde Coast Guard and provided security assistance to several other West African states during a four-month deployment under U.S. European Command’s Africa Partnership Station initiative.

The deployment involved 12 days of dedicated training and combined operations with the Cape Verde coast guard to protect Cape Verde maritime territory from illegal activity. It was built on earlier deployable training provided by USCGC Northland to Cape Verde during a 2007 cruise. The international training delivered by Coast Guard forces has significantly improved the developing state’s capacity to protect its territory and improve governance.

Guardians in Amazing Places

International training is a growth industry. As the U.S. continues to focus efforts on the increasing use of soft power to advance foreign policy objectives, there will be a corresponding greater demand for the Coast Guard’s unique expertise in providing international training to assist developing states building their capacity for greater governance, stability, and the rule of law. As of 2008, the Coast Guard had already provided resident and deployable training to international partners from more than 118 countries.6

The Coast Guard’s international training program is only part of the service’s broader efforts in international engagement. Other complementary efforts that promote security assistance and cooperation include international port security liaison officer visits around the world to assess foreign port security effectiveness against international standards, stationing of Coast Guard officers as attachés and liaisons in U.S. embassies around the world, and participation by Coast Guard officers in military foreign exchange programs. For a service of only 40,000 people, international affairs is a remarkably large part of the Coast Guard’s daily work.

About the authors:

LCDR Michael Arnold is a reserve officer and intelligence professional with diverse experience in port security, harbor defense, and national security operations.

CAPT Kevin E. Lunday is a career judge advocate and intelligence professional with expertise in national security law and operations. He is a 2008 distinguished graduate of the National War College.

Endnotes:

3. The Caribbean support tender, USCGC Gentian, a converted buoy tender, was decommissioned in 2006 when appropriations for its continued operation failed to receive Congressional approval.
4. Interview with CDR Robert Gandolfo, chief of the International Training Division.
5. In May 2008, USCGC Morgenhau deployed to the southwest Pacific Ocean and participated in SEACAT 2008 and CARAT 2008, joining the U.S. Navy and six Asian states to provide training in Coast Guard tactics for search and rescue, boardings, and other maritime law enforcement operations.
1. What is the main function in the use of a capacitor for starting a single-phase motor?

A. Reduce radio interference.
B. Split the phase to establish a rotating magnetic field.
C. Reduce the phase angle.
D. Prolong the life of the starting contacts.

2. Which of the following statements is true concerning fire hose stations used in the engine room of a tank or cargo vessel?

A. It must be marked in red letters two inches high.
B. National Standard fire hose coupling threads shall be used, having nine threads per inch for 2½-inch hose and 7½ threads per inch for 1½-inch hose.
C. In heavy weather, the hose may be removed temporarily from the hydrant.
D. All of the above.

3. What percentage of CO₂ in a boiler flue gas analysis would indicate perfect combustion?

A. 0%
B. 3%
C. 6%
D. 12%

4. A diesel engine cylinder has a swept volume of 135 cubic inches and a clearance volume of 10 cubic inches at top dead center. What is the compression ratio of the engine cylinder?

A. 12.5 : 1
B. 13.5 : 1
C. 14.5 : 1
D. 15.5 : 1
1. Your ship received a HYDROLANT advising of a special warning to mariners from the Department of State for ships in the Persian Gulf. You are 400 miles south of, and bound for, the Persian Gulf. What action should you take?

A. Continue on course, as the warning is advisory in nature only.
B. Send an AMVER report and acknowledge receipt of the warning.
C. Remain a minimum of 500 miles outside the Persian Gulf and maintain radio silence.
D. Send a MERWARN message advising your position, course, speed, and intentions.

2. For an OSV not on an international voyage, an approved substitute for an impulse-projected-type line-throwing appliance is a __________.

A. spring-loaded line thrower
B. hand-thrown buoyant line
C. shoulder-type line-throwing gun
D. heaving line

3. A vessel sailing from Liverpool to New York puts into Boston, Mass., for emergency repairs. If no inward foreign cargo is to be discharged at that port, which of the following documents is required?

A. custom manifest
B. inward foreign manifest
C. pro forma manifest
D. traveling manifest

4. On small passenger vessels, when must watchmen patrol throughout the vessel to guard against and give alarm in case of fire or other danger?

A. at all times outside normal working hours
B. at all times when the vessel is underway
C. during the nighttime, when the vessel carries overnight passengers
D. when the rest of the crew is asleep
1. Note: A capacitor-start motor and resistor-start motor are two types of single-phase AC induction motors. The capacitor-start-type motor develops a very high starting torque, and is used for loads which are hard to start. The resistor-start-type motor develops a considerably smaller torque, and is used for moderate starting loads, or where the load is applied after the motor has obtained its operating speed.

A. Reduce radio interference. Incorrect Answer: Motors generate electrical “noise” that can interfere with radio reception. A ceramic capacitor properly connected to the motor can reduce the chance of this type of interference. This type of capacitor provides no function in starting the motor.

B. Split the phase to establish a rotating magnetic field.

Correct Answer: Induction motor action requires a rotating magnetic field. To obtain a rotating magnetic field from a single-phase system, the motor current is split into two separate windings. The capacitor-start motor uses a capacitor in series with an auxiliary (starting) winding, which causes the current in the auxiliary winding to lead the current in the main winding. Consequently, the magnetic field in the auxiliary winding will reach its maximum value before that of the magnetic field in the main winding, resulting in rotation of the motor rotor. The capacitor and auxiliary winding are disconnected from the circuit by an automatic switch when the motor reaches approximately 75 percent of its rated full load speed.

C. Reduce the phase angle. Incorrect Answer: A capacitor inserted in series with the starting winding increases the phase angle (shift), resulting in a starting torque that is greater than that developed by the resistor-start motor.

D. Prolong the life of the starting contacts. Incorrect Answer: Periodic checks and adjustment for any wear or misalignment, as well as the removal of dirt and grease from the contact faces, will help prolong the life of contacts, not the use of a capacitor.

2. A. It must be marked in red letters two inches high.

Correct Answer: 46 CFR 97.37-15 (a) states “Each fire hydrant shall be identified in red letters and figures at least two inches high ‘FIRE STATION NO. ‘1,’ ‘2,’ ‘3,’ etc. Where the hose is not stowed in the open or behind glass so as to be readily seen, this identification shall be so placed as to be readily seen from a distance.”

B. National Standard fire hose coupling threads shall be used, having nine threads per inch for 2½-inch hose and 7½ threads per inch for 1½-inch hose.

Incorrect Answer: 46 CFR 95.10-10(n)(1)(i) states “Fire hose and couplings must be as follows: Fire station hydrant connections shall be brass, bronze, or other equivalent metal. Couplings shall either: use National Standard fire hose coupling threads for the 1½-inch (38 millimeter) and 2½-inch (64 millimeter) hose sizes, i.e., 9 threads per inch for 1½-inch hose, and 7½ threads per inch for 2½-inch hose.”

C. In heavy weather, the hose may be removed temporarily from the hydrant.

Incorrect Answer: 46 CFR 95.10-10(h) states “Fire hose shall be connected to the outlets at all times. However, on open decks where no protection is afforded to the hose in heavy weather, or where the hose may be liable to damage from the handling of cargo, the hose may be temporarily removed from the hydrant and stowed in an accessible nearby location.” The engine room of a tank or cargo vessel is not located on an open deck, thus the fire station hose is not subject to damage from heavy weather or the handling of cargo, and should not be removed from the hydrant.

D. All of the above. Incorrect Answer: Choice “A” is the only correct answer.

3. Note: The complete combustion of fuel oil in a boiler furnace requires proper atomization of the fuel oil and the correct quantity of air. Too little combustion air results in incomplete combustion and less heat released from the fuel. Too much combustion air increases the flow of gases out the stack, reducing the amount of heat absorbed by the boiler generating tubes. To determine if a boiler is operating with the correct amount of combustion air, a stack gas analysis is performed to measure the amount of oxygen and/or carbon dioxide in the gases leaving the furnace.

A. 0% Incorrect Answer: Choice “D” is the only correct answer.

B. 3% Incorrect Answer: Choice “D” is the only correct answer.

C. 6% Incorrect Answer: Choice “D” is the only correct answer.

D. 12% Correct Answer: If it were possible to have perfect combustion, the percentage (by volume) of CO₂ in the flue gas stream would be maximized, and the percentage of O₂ and CO would be zero. A stack gas analysis indicating 12 percent to 14 percent CO₂ and a very low percentage of O₂ would indicate perfect combustion. Due to the incomplete mixing of the fuel and air, perfect combustion is not practically possible, so combustion control equipment is set up to have a small percentage of excess air present.

4. Note: The primary purpose for compressing the air charge during the compression stroke of a diesel engine is to raise the temperature of the air charge so that when fuel is injected into the cylinder, it will ignite and begin to burn without the need for an outside source of ignition. The compression ratio is a measure of the volume of the air charge in the cylinder when the piston is at bottom dead center to the volume of the air charge in the cylinder when the piston is at top dead center.

A. 12.5 : 1 Incorrect Answer: Choice “C” is the only correct answer.

B. 13.5 : 1 Incorrect Answer: Choice “C” is the only correct answer.

C. 14.5 : 1 Correct Answer: Solution is as follows: \( r = V_2 / V_1 \) where \( r \) = compression ratio \( V_1 \) = volume (cubic inches) of the air charge in the cylinder with the piston at bottom dead center. \( V_2 \) = swept volume + \( V_2 \). \( V_2 \) = compression volume = volume (cubic inches) of the air charge in the cylinder with the piston at top dead center \( r = 135 \text{ in}^3 + 10 \text{ in}^3 / 10 \text{ in}^3 \) \( r = 145 \text{ in}^3 / 10 \text{ in}^3 \) \( r = 14.5 = 14.5 : 1 \)

D. 15.5 : 1 Incorrect Answer: Choice “C” is the only correct answer.
1. Note: Pub. 117, Radio Navigational Aids, is a publication that provides a list of selected worldwide stations which provide electronic services to mariners. These services include radio time signals; radio navigational warnings; distress, emergency, and safety traffic messages; and emergency procedures and communication instruction for U.S. merchant ships in times of crisis, conflict, national emergency, or war.

A. Continue on course, as the warning is advisory in nature only.
   Incorrect Answer: A State Department-issued special warning for mariners would coincide with establishing full naval control of shipping (FNCS). FNCS puts all U.S. merchant ships within a declared area under naval authority. This message is mandatory, not of an advisory nature, and the master would need to follow the directions in the message to avoid the Persian Gulf.

B. Send an AMVER report and acknowledge receipt of the warning.
   Correct Answer: According to Pub. 117, upon receipt of a State Department-issued special warning, masters will immediately send an updated Automated Mutual-Assistance Vessel Rescue (AMVER) message report and contact naval authorities, as directed by the message.

C. Remain a minimum of 500 miles outside the Persian Gulf and maintain radio silence.
   Incorrect Answer: There is no predetermined mileage requirement based upon transmitted special warnings, but the master is required to follow the instructions within the special warning for diversion. Electronic emission silence (EMCON) must be maintained within defined danger zones, except when the use of electronic navigation equipment is necessary for safe navigation.

D. Send a MERWARN message advising your position, course, speed, and intentions.
   Incorrect Answer: MERWARN are NATO countries-issued warnings regarding nuclear, biological, and chemical hazards and events that may pose a risk to merchant shipping. MERWARN is not relevant in this scenario.

2. Note: 46 CFR 133.170(a) states that “each OSV must have a line-throwing appliance that is approved under approval series 160.031 (shoulder-gun type) or 160.040 (impulse-projected type).”

A. spring-loaded line thrower Incorrect Answer.

B. hand-thrown buoyant line Incorrect Answer.

C. shoulder-type line-throwing gun Correct Answer: 46 CFR 160.031-2 describes the approved shoulder-gun-type line-throwing appliance.

D. heaving line Incorrect Answer.

3. A. custom manifest Incorrect Answer: Otherwise known as a cargo manifest, a customs manifest provides information from all the bills of lading received regarding the cargo aboard a vessel. The original custom manifest and copies must be presented at each port of call.

B. inward foreign manifest Incorrect Answer: Inward foreign manifest is a general term used to describe the manifest that contains cargo or passengers from a foreign port that is being carried over beyond the first port of call in the United States. This is specifically called a traveling manifest.

C. pro forma manifest Correct Answer: If a vessel tries to clear customs from a foreign port and has not submitted all the required cargo documentation, customs may accept in lieu thereof an incomplete manifest (otherwise known as a pro forma manifest) on the vessel entrance or clearance statement. In this situation, the vessel never intended to call on Boston, and therefore never filed the necessary paperwork as required to properly clear customs.

D. traveling manifest Incorrect Answer: Every vessel calling at the first port in the United States must present the original and a copy of its cargo manifest. If the vessel will proceed to another U.S. port with inward foreign cargo or passengers, then an additional copy of the manifest will be required to be certified as the traveling manifest.

4. A. at all times outside normal working hours Incorrect Answer.

B. at all times when the vessel is underway Incorrect Answer.

C. during the nighttime, when the vessel carries overnight passengers
   Correct Answer: 46 CFR 185.410 states “the owner, charterer, master, or managing operator of a vessel carrying overnight passengers shall have a suitable number of watchmen patrol throughout the vessel during the nighttime, whether or not the vessel is underway, to guard against, and give alarm in case of, a fire, man overboard, or other dangerous situation.”

D. when the rest of the crew is asleep Incorrect Answer.