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Ready for the Future? The U.S. Coast Guard and 21st Century Law Enforcement on the High Seas

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ILLUSTRATIONS

EXECUTIVE SUMMARY

Performing the functions of eleven agencies in one service, the Coast Guard has capably served the American public for nearly 220 years. Small, yet highly adaptive and flexible, the Coast Guard has always risen to the challenge. However, the threats and challenges presented by the future maritime security environment necessitate that the Coast Guard make some changes to its law enforcement program to continue being a viable instrument of the federal government in this area.

Following 9/11, the Coast Guard added many tactical law enforcement capabilities to its inventory. While these capabilities filled needed gaps, a majority of the Coast Guard's law enforcement work continues to be performed by regular Coast Guard personnel, often on a collateral duty basis. As vigilance atrophies and questions are raised about the long-term sustainability of the Coast Guard's high-end law enforcement capabilities, the time is right for a close examination of the Coast Guard's law enforcement program in the aggregate.

The recently released Commandant's Direction and other Coast Guard strategic planning processes have tangentially addressed future law enforcement challenges, but individual strategic plans for various aspects of Coast Guard law enforcement look at only a small slice of the law enforcement picture. Global trends and the changing nature of the maritime security environment and law enforcement threats facing this nation require a holistic and introspective look at the Coast Guard's law enforcement program to ensure that it is ready for the future environment.

A comprehensive evaluation requires an understanding of criminal behavior, the role of deterrence in law enforcement, and incorporation of an intelligence-led policing model into Coast Guard law enforcement operations. Combined with several recommended changes to the Coast Guard organizational structure and law enforcement training, technologies, and partnerships, the Coast Guard can prepare itself for the future and continue to be a highly utilitarian component of the federal government

CHAPTER ONE Introduction

The maritime environment is changing. The increasingly globalized world is heavily dependent on the maritime environment for food, resources, commerce, and transportation. Given the maritime system's openness, this dependency becomes a critical vulnerability, susceptible to elements of society that seek to utilize the maritime environment for more sinister purposes. Detecting, deterring and disrupting nefarious activities and the actors responsible for them remains vital to global security and maritime order and requires maritime forces capable of meeting these maritime security challenges.

One of these maritime forces is the United States Coast Guard. For nearly 220 years, the United States Coast Guard has played a vital role in maintaining maritime order. Like the maritime environment that it operates in, the activities of this small service are often unnoticed by the American public. Despite operating under the public's radar, the Coast Guard's unique authorities and capabilities make it an invaluable tool for the execution of the United States' foreign and domestic policies in the areas of maritime safety, maritime stewardship, and maritime security.

The preeminence of the Coast Guard in the national spotlight has increased, especially since 9/11. Notably, this small service has taken leading roles in the U.S. responses to hurricanes Katrina and Rita, the Haiti earthquake, and most recently, the Deepwater Horizon oil spill clean-up. Conversant in both Department of Defense and inter-agency lingo, the Coast Guard is one a few federal agencies that has regular interactions with both local first responders and international governments on a daily basis, making it a highly utilitarian and relatively inexpensive instrument of the U.S. government. The Coast Guard ably serves the United States government in a variety of international for a, plays a key role in the continued fight against terrorism, and implements and carries out the foreign and domestic policies of the United States in multiple venues, all while continuing to perform its daily tasks in the maritime environment.

One of these tasks is the Coast Guard's maritime law enforcement mission. In the past two decades, this mission area has expanded and become increasingly complex in response to changing maritime threats. And as the nature and types of maritime crimes and the criminal organizations that sponsor them become equally complex, more savvy Coast Guard law enforcement responses are required to counter them. Despite recent heavy investments in higher-end tactical capabilities, a majority of the daily law enforcement mission workload is conducted by multi-mission units that conduct operations on an ad-hoc or part-time basis. This current approach may not serve the Coast Guard well in the future maritime security environment. Preparing for the future maritime security environment will require the Coast Guard to develop a holistic strategy for its maritime law enforcement program.

Developing this holistic strategy requires that the Coast Guard think differently about how it conducts its law enforcement missions. Despite the moniker of "America's maritime guardians", the Coast Guard generally does not liken itself to a police force. Yet, looking at how the Coast Guard conducts its law enforcement missions, the Coast Guard is more like an ocean police force than it is a detective agency. Fulfilling its policing role requires the Coast Guard to better understand criminal behavior and deterrence. Through the study of policing, the Coast Guard can then examine global trends and how these trends may impact future criminal behavior so that the service can modify its organizational structure and processes to identify and enact needed changes to counter criminality. The process of evaluation, forecasting, and formulating responses becomes the basis of a holistic law enforcement strategy to ensure that Coast Guard law enforcement is ready and prepared for the emerging maritime security environment.

A Quick Look at the Coast Guard

Developing and implementing a holistic law enforcement strategy will be a challenge. The Coast Guard is a small service at a critical juncture, forced to keep up with a demanding pace of operations since the early 1990s. Migrant interdiction, drug smuggling, terrorist threats and national contingency responses have severely mortgaged the long-term readiness and operational availability of many Coast Guard platforms to meet the exigent needs of past responses. As a result, much service attention is being placed on recapitalizing aging assets, especially its cutters, which are at or beyond their designed service life, as shown on the following page in Figure 1. Similarly, the Coast Guard's shore infrastructure is old and in need of major reinvestment and recapitalization. In the context of the current debates on the federal deficit, these Coast Guard recapitalization efforts face major roadblocks within both the Department of Homeland Security and the United States Congress.

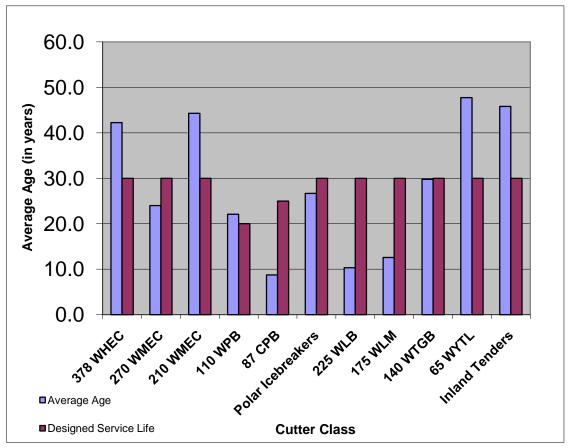


Figure 1 – Average Cutter Age Compared to Expected Service Life for Various Classes of Coast Guard Cutters

Source: U.S. Coast Guard

Yet the demand for the services of the Coast Guard continues to grow, especially as criminal enterprises become increasingly transnational, networked, and vertically integrated. More fisheries enforcement will likely be required to counter illegal, unregulated and unreported (IUU) fishing activities as food security issues emerge in conjunction with rising global populations. As the world's oceans are increasingly utilized for energy production, transportation and trade, the need and demand for Coast Guard law enforcement operations to help protect U.S. maritime interests will also increase.

The Coast Guard's relatively austere annual operating budget of approximately 8 billion dollars¹ is roughly equivalent to the total funding provided to the Afghanistan National Army by the United States during 2010.² This will challenge the Coast Guard to continue meeting the emerging demands of the future maritime security environment. As a result, the Coast Guard must be prepared to conduct its law enforcement missions with fewer cutters and fewer personnel. As part of a larger holistic strategy for Coast Guard law enforcement, this requires new thinking about Coast Guard law enforcement operations and the need to conduct them more efficiently

while simultaneously increasing their effectiveness. This begins with a basic understanding of crime and deterrence.

Notes

 ¹ United States. Department of Homeland Security. United States Coast Guard. 2010 Posture Statement with 2011 Budget in Brief. Washington: GPO, 2010. Accessed online on 20 Mar 2011at <u>http://www.uscg.mil/posturestatement/docs/2010_USCG_Posture_Statement.pdf</u>. p42.
² United States. Government Accountability Office. Afghanistan Security – Afghanistan Army Growing but Additional Trainers Needed; Long Term Costs Not Determined. GAO Report 11-66. By Charles Michael Johnson, Jr. Washington: GPO, 2011.

CHAPTER TWO *Crime and Deterrence*

Although it is a federal law enforcement agency, the Coast Guard does not typically view itself as a police organization. Based on its statutory requirements, Coast Guard law enforcement must deal with both regulatory and criminal offenses, much the way police deal with both misdemeanor traffic violations and felony crimes. Academic literature typically looks at regulatory and criminal offenses through different lenses. Although each has its individual nuances, both types of crime share a number of characteristics.

Classical criminal theory suggests three specific elements must converge simultaneously in time and space in order for a crime to occur. These elements are: one, an offender who has made the decision to commit a crime; two, a suitable target; and three, a place or setting where the crime can occur.¹ Graphically, this concept is illustrated as a 'crime triangle,' as shown in Figure 2.²



Figure 2 - Crime Triangle

Source: Felson and Boba, 2010

Remove one of these three elements and the crime does not occur. Using a terrestrial example, a bank robber (offender) can decide that he wants to rob a specific bank (target), but if he never goes the particular bank (place) to conduct the robbery, the crime does not occur. It is only when the bank robber actually enters the specific bank and makes the decision to conduct the robbery that the crime is actually committed.

In the maritime environment, it is relatively easy to apply the crime triangle to illicit activities like vessel thefts and piracy. It becomes a bit trickier to make a direct application of the crime triangle to crimes like drug smuggling. In the case of drug smuggling, the offender (smuggler) is easily identified, but the place (ocean or vessel?) and the victim (drug user?) are not always as clear. For fisheries violations, again it is easy to identify the offender (fisherman), but the place and the victim are more nebulous. Therefore, understanding and identifying specific offenders is a key component to effective Coast Guard law enforcement.

Obviously, the development and application of effective intelligence processes is one way to focus on specific offenders. However, understanding the mental calculus of offenders and how deterrence-oriented law enforcement efforts can impact the offender's mental calculus is equally important. Every offender makes a decision to commit a crime. This decision requires some amount of premeditation. In some cases, this premeditation is measured in fractions of a second. In other cases, such as drug smuggling, the premeditation is lengthy and the decision to commit a crime is planned and calculated based on observation of law enforcement and many other factors. In the case of a fishery violation, the premeditation may be shorter and the decision is more circumstantial, based for example on the ability to elude law enforcement. Additionally, both criminal and regulatory violations require illegal markets or integrated criminal enterprises to fence illicit goods and launder profits.³ While premeditation and the decision to commit a crime are internal to the offender, both are subject to external influences.

Referring back to the crime triangle, the offender's decision to commit a crime is influenced by a handler. Handlers impose a level of supervision or influence over the potential offender that can change his mental calculus and dissuade him from committing a crime, especially in criminally-prone individuals.⁴ Conversely, some handlers could also be the catalysts that persuade the offender to commit a crime, especially in the case of criminal organizations or gangs. Therefore, effective law enforcement efforts must effectively deter offenders and also account for the impact of handlers on these offenders and their criminal decisions.

Factors Influencing the Individual Decision to Commit a Crime

It is critical to understand how the factors that generally influence criminals' mental calculus specifically apply to an individual.⁵ Criminal theorists view offenders as rational actors acting in their own self-interest. According to Bruce Jacobs' 1996 study in the journal *Criminology*, the offender's decision to offend "depends on their assessment of the likelihood of getting caught combined with the magnitude of punishment if caught."⁶ In the case of criminal violators, this assessment looks at the potential punitive sanctions that may accompany a particular criminal offense, if caught. Similarly, a regulatory violator typically weighs the costs of any fines or

sanctions imposed against the economic benefits of committing the particular regulatory offense and the perceived likelihood of getting caught.⁷ It is relatively straightforward to see how a handler could downplay the potential for getting caught or even provide a financial incentive to offenders to participate in both criminal violations and regulatory crimes.

Similarly, social and normative influences can also impact handlers and offenders. Beyond simply changing perceived cost-benefit calculations of potential offenders, peer pressure, the perceived legitimacy of laws and regulations, and personal moral behavior can further influence an offender's decision to commit a crime and the actions of the handler, especially for regulatory crimes.⁸ These various influences, combined with the perceived overall effectiveness of the enforcement regime to detect and punish potential violators, impact the overall level of compliance with criminal and regulatory laws.⁹ They also help stratify offenders along a continuum.

The continuum of criminal behavior ranges from acute conformists to incorrigible offenders. On one end, acute conformists seldom, if ever, commit crimes. For those individuals, self-control and personal morals are typically sufficient to prevent them from engaging in criminal behavior. On the other end, incorrigible offenders are criminally-prone and frequent offenders. Incorrigible offenders exercise lower self-control over their actions, often engaging in criminal behavior with less thought toward the consequences of their actions. In the middle exists a broad spectrum of deterrable offenders whose decision to commit crimes is subject to varying degrees of social, normative, or moral influences as well as the deterrence-oriented activities of law enforcement.

Deterrence

Much research, starting as far back as the 1760s, has been devoted to the study and impact of deterrence on criminal behavior. Criminologists, economists, sociologists, and other academics from a wide array of disciplines have expended significant energy in researching and attempting to understand how deterrence can influence an individual offender's criminal decision. In general, this work seeks to establish a predictive or explanatory connection between the perceived or expected penalties for committing a crime and the commission of the crime itself.¹⁰

As defined by Jacobs, "Deterrence denotes a perceptual process by which wouldbe offenders calculate the cost of offending relative to the anticipated gains before deciding to offend."¹¹ Additionally, "all individuals discount future consequences to some extent, and all, to some degree, are responsive to situational contingencies."¹² The research of Wright et al. also suggests that an offender's criminal decision is an interaction between the criminal and his or her social situation.¹³ While reaffirming the role of external social and normative influences on the offender's criminal decision, this research also highlights that deterrence activities must be specific to the individual as well as situation-based; a one-size-fits-all approach will not always work.

Criminology literature describes many types of deterrence. The first type of deterrence is specific deterrence: an individual refrains from engaging in a particular criminal activity because his or her own unique experience with punishment or sanction resulting from previous engagement in the particular activity.¹⁴ The second type of deterrence is general deterrence, which causes individuals to "refrain from offending, offend less frequently, or commit less serious crimes due to the fear of being punished that is produced and sustained when others have been sanctioned for their offending."15 The third type, restrictive deterrence, is "a function of both specific and general deterrence, depending on whether the offender has been previously punished or has heard others have been sanctioned. As a combination of the two, it can have a compounding influence on behavior."¹⁶ A fourth type of deterrence is localized deterrence. This type of deterrence is generated by the presence of law enforcement, such as the presence of a Coast Guard cutter within a fleet of fishing vessels, which impacts the situational component of the criminal's compliance decision.¹⁷ Localized deterrence can cause incorrigible or chronic offenders to refrain from criminal behavior simply because law enforcement is present. However, the impact of each of these forms of deterrence on offenders' behavior varies greatly based on their past personal experiences.

An offender's experience with "punishment avoidance," which is based on past experiences with committing crimes without being caught or receiving only minor sanctions or penalties, can have a negative impact on deterrence.¹⁸ For example, if a person is able to successfully smuggle a shipment of drugs past a law enforcement team during a vessel inspection, the perception of his or her ability to successfully elude law enforcement detection is reinforced. Not only does this perception lower the deterrent impact of conducting at-sea inspections to stop drug smuggling, but it can also embolden other potential offenders to try similar tactics. Experiential effects with punishment avoidance undermine the legitimacy of law enforcement processes, institutions, and even law enforcement personnel themselves, potentially inspiring individuals to attempt more brazen or expanded criminal activities.

Therefore, understanding how the various types of deterrence and experiences with punishment avoidance can impact an offender's behavior is critical to developing and executing an effective law enforcement program. As resources available to law enforcement – typically time, money, and personnel – are generally limited, it is essential that they are directed in the most efficient and effective manner possible. This is a challenge because criminals and criminal organizations are highly adaptable entities that rapidly change their behavior in response to changes in law enforcement tactics. Unfortunately, there is generally a significant lag time between the change in law enforcement responses and the change in criminal behaviors. The development of actionable intelligence is one method to keep up with changing criminal behavior. The application of various policing models to identify the root causes of criminal behavior is another, complementary strategy.

Notes

¹ Felson, Marcos and Rachel Boba. *Crime and Everyday Life.* 4th ed. Washington, D.C.: Sage Publications, 2010. pages 118-119.

² See Felson and Boba for a full explanation of the crime triangle.

³ Felson and Boba pp35-43.

⁴ Wright, Bradley R. E., et al. "The Effects of Social Ties on Crime Vary by Criminal Propensity: A Life Course Model of Interdependence." *Criminology* 37 (2001): 175-94.

⁵ Pogarsky, Greg. "Identifying 'Deterrable' Offenders: Implications for Research on Deterrence." *Justice Quarterly* 19.3 (September 2002): 431-452.

⁶ Jacobs, Bruce. "Crack Dealers and Restrictive Deterrence." Criminology 34.3 (1996): 409-431.

⁷ Becker, G. "Crime and Punishment: An economic approach." *Journal of Political Economy* 76 (1968): 169-217. However, as stated by Pogarsky (2002), a particular nuance of regulatory crimes, more generally categorized under the umbrella of 'white collar crimes', is that the ability to commit this type of crime generally requires some form of specialized access on the part of the perpetrator to crime targets via a particular work role, profession, or organizational position.

⁸ Hatcher, A., S. Jaffry, O. Thebaud, and E. Bennett. "Normative and social influences affecting compliance with fishery regulations." *Land Economics* 76.3 (2000): 448-461.

⁹ Randall, Jeffrey K. "Improving Compliance in U.S. Federal Fisheries: An Enforcement Agency Perspective." *Ocean Development and International Law* 35 (2004): 287-317.

¹⁰ Kleck, et al. "The Missing Link in General Deterrence Research." *Criminology* 43.3 (2005): 623-660. See also Pogarsky, Greg. "Identifying "Deterrable" Offenders: Implications for Research on Deterrence." *Justice Quarterly* 19.3 (September 2002): 431-452.

¹¹ Jacobs, Bruce A. "Deterrence and Deterrability." Criminology 48.2 (2010): 417-441.

¹²Bradley, R. E. Wright, et al. "Does the Perceived Risk of Punishment Deter Criminally Prone Individuals? Rational Choice, Self-Control, and Crime." *Journal of Research in Crime and Delinquency* 41 (2004): 180-213.

13 Ibid.

¹⁴ Paternoster, Raymond and Alex Piquero. "Reconceptualizing Deterrence: An empirical test of personal and vicarious experiences." *Journal of Research in Crime and Delinquency* 32 (1995): 251-286. ¹⁵ Ibid.

¹⁶ Jacobs, p410.

¹⁷ King, Dennis M. Read D. Porter, and Elizabeth W. Price. "Reassessing the Value of U.S. Coast Guard At-Sea Fishery Enforcement." *Ocean Development and International Law* 40 (2011): 350-372.

¹⁸ Stafford, Mark and Mark Warr. "A Reconceptualization of General and Specific Deterrence." *Journal of Research in Crime and Delinquency* 30 (1993): 445-73.

CHAPTER THREE *Policing Models*

Over the past quarter century, the academic study of policing has greatly expanded. Several policing models have been arrived at, and they play a central role in the law enforcement strategy of policing organizations. The three principal models in use today are problem-oriented policing, community-oriented policing, and intelligence-led policing. Each of these models has its strengths and weaknesses and is being refined and improved with continued use as well as in response to changing criminal behavior.

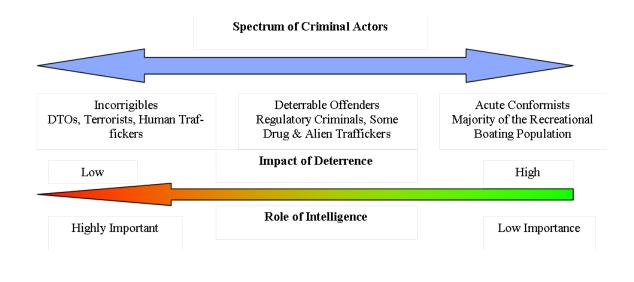
As its title suggests, problem-oriented policing focuses on the underlying problems that contribute to crime but not the crime itself. Problem-oriented policing subjects a problem to close examination in order to identify and develop tailored responses to the root social causes that manifest themselves through criminal behaviors. Through this analysis, policing efforts focus action on preventive measures that are not dependent on the use of the criminal justice system and instead engage other public agencies, the community and the private sector as needed to contribute to crime reduction efforts.¹ This model is widely employed by police forces throughout the country to deal with a broad range of issues. Use of this model also involves rigorous monitoring by crime analysts and a feedback loop to evaluate whether the new strategy is having the desired effects. Adjustments are then made to the strategy in order to improve results and achieve the desired outcomes.

Similarly, community-oriented policing models promote a philosophy of fullservice, personalized policing where collaborative partnerships between law enforcement agencies and the individuals and organizations they serve to promote solutions to problems and increase public trust in police and law enforcement.² Community-oriented policing efforts have proven quite effective at reducing both violent and property crime rates because policing efforts focus on the enablers of crime rather than solely on the detection of the crimes or apprehension of the criminals themselves.³ In community-oriented policing models, law enforcement officers are assigned to a particular neighborhood and work to foster community relationships and trust within these neighborhoods to improve information flow and reduce crime rates, social disorder, and fear of crime.⁴ Periodic analysis of community-oriented policing priorities and results are conducted and then used to make improvements. Given the success of this model, community-oriented policing is now being used to combat violent extremism and homegrown terrorism in foreign countries like Turkey.⁵ A third and newer policing model being used by law enforcement is the intelligence-led policing model. Developed after 9/11 to prevent future intelligence failures and allow law enforcement agencies to better 'connect the dots' between seemingly disparate pieces of information, this model is sometimes seen as a fusion of an intelligence function with the community-oriented policing model.⁶ This model integrates intelligence activities into law enforcement operations to focus on complex, multijurisdictional crimes and terrorism with the goal of preventing crimes before they occur and allocating law enforcement resources more deliberatively and effectively.⁷

To better understand this model, it is necessary to provide a definition of intelligence in the context of a policing model. Law enforcement intelligence is "the product of an analytic process that provides an integrated perspective to disparate information about crime, crime trends, crime and security threats, and conditions associated with criminality."⁸ This definition is useful because it requires law enforcement entities to begin thinking about how to proactively "synthesize their 'raw' pieces of information into 'actionable' intelligence."⁹ The incorporation of analyzed information into policing functions can also facilitate spatial and temporal "hot-spot analyses" to further improve resource allocation and help identify root causes of criminal behavior.¹⁰

However, some have argued that the implementation of this model will not adequately protect civil liberties and may never overcome existing barriers to interagency cooperation and information sharing.¹¹ Other scholars highlight the challenges associated with incorporating criminal analysis into policing organizations.¹² Nonetheless, improvements in efficiency in addition to the requirement that law enforcement agencies develop and incorporate tactical and strategic intelligence into their operations is beneficial because it encourages a greater reliance on outcomeoriented measures of success (crimes prevented, drugs seized, etc.) rather than the inputs (patrol hours, number of police on duty, etc.).

As criminal organizations mature, becoming more transnational and vertically integrated through legitimate activities that help launder illicitly gained proceeds of, policing these criminals will become increasingly complex. This trend will have implications for the maritime environment. To counter this increasing complexity, policing entities will have to design law enforcement responses that are tailored to the offender, utilize available intelligence, apply the most effective form of deterrence, and incorporate the best policing model for the particular situation. Moreover, this requires a good understanding of the future environment and the external influences that may impact law enforcement as well as criminals and their criminal organizations.



Notes

¹ Goldstein, Herman. Problem-Oriented Policing. Philadelphia: Temple University Press, 1990.

² Definition obtained from The Community Oriented Policing Services website found at

http://www.cops.usdoj.gov/Default.asp?Item=36

³ Biebel, Elizabeth and Gary Cordner. "Repeat Calls for People with Mental Illness: An Application of Hot Spot Analysis," *Police Forum* 13.3 (2003) : 1-8.

⁴ United States. Department of Justice. Office of Community Oriented Policing Services. *Community Oriented Policing Defined*. Washington DC: GPO, 2009. Available online at

http://www.cops.usdoj.gov/files/RIC/Publications/e030917193-CP-Defined.pdf p3.

⁵ Delice, Murat and Murat Duglar, "Alternative Tactics for Combating Terrorism: Citizens Police Academy." Working Paper No. 29, International Police Executive Symposium, Geneva Center for the Democratic Control of the Armed Forces. Geneva: March 2010.

⁶ United States. Department of Justice. Office of Community-Oriented Policing Services. *Law Enforcement Intelligence: A Guide for State for State, Local and Tribal Law Enforcement Agencies.* By David Carter. Washington: GPO, 2004. Available online at

http://www.cops.usdoj.gov/files/RIC/Publications/leintelguide.pdf. p41.

⁷ Carter, David. "The Law Enforcement Intelligence Function State Local and Tribal Agencies." *FBI Bulletin* (Jun 2005): 1-8.

⁸ Carter, David. *Law Enforcement Intelligence Operations*. 8th Edition, Tallahassee, FL: SMC Sciences Inc 2002.

⁹ Ibid, p115.

¹⁰ Ratcliffe, Jerry H. "The Hotspot Matrix: A Framework for the Spatio-Temporal Targeting or Crime Reduction." *Police Practice and Research* 5.1 (2004): 5-23.

¹¹ Jackson, Arrick L. and Michael Brown. "Ensuring Efficiency, Interagency Cooperation, and Protection of Civil Liberties: Shifting from a Traditional Model of Policing to an Intelligence-Led Policing Paradigm." *Criminal Justice Studies* 20.2 (2007): 111-129.

¹² Cope, Nina. "Intelligence Led Policing or Policing Led Intelligence? Integrating Volume Crime Analysis into Policing." *British Journal of Criminology* 44.2 (2004): 188-203.

CHAPTER FOUR *Conditions Shaping the Coast Guard*

The Future Environment for the Coast Guard

A discussion of the future global security environment could be the subject of an entire book. Certainly, there are many ideas and predictions about what the global security, economic and political environment will look like five, ten, and even fifty years down the road. With the rise of nations such as China, Brazil and India, the world is becoming increasingly multi-polar. The influence of the United States both militarily and economically – and its resulting leverage with the international community – will be impacted.¹ While predicting the future with any degree of precision is a roll of the dice given the number of variables in play, it is still possible to identify those variables likely to have the biggest impacts on the global security environment, and by association, on the U.S. Coast Guard, over the next decade.

The first major theme is the overall state of the U.S. federal deficit and spending. The second theme is the rising disparity between the 'haves' and 'have-nots', both economically and socially, throughout the world. The third and final theme is the increasing competition for aquatic resources and use of the world's oceans. Understanding how these problems impact the United States and potentially contribute to maritime disorders provides a context in which the United States Coast Guard can craft a holistic strategy for its law enforcement programs to meet these future challenges.

The Overall State of the U.S. Federal Deficit and Spending

There is certainly no end to the rhetoric and discussion of the United States' fiscal situation. The national debt currently exceeds 14 trillion dollars.² Annual federal budget deficits of more than one trillion dollars compound the problem and are the biggest deficits relative to the U.S. Gross Domestic Product (GDP) since 1945.³ This is potentially a very serious weakness for the United States, both as a nation and as an international power.⁴ With a continued focus on spending cuts instead of efforts to increase government revenues by raising taxes or restructuring entitlements, levels of future U.S. government spending are far from certain.

This financial position will have an impact on the United States' position on the world stage as well as on its foreign policy initiatives. Instead of playing a leading role as the world's policeman, primary financier of nation-building efforts in developing countries, and the largest consumer of exported goods from developing countries, the

United States' role in these areas will decrease.⁵ Additionally, as states and municipalities wrestle with their own fiscal predicaments and look to the federal government for assistance, the United States government may be forced to look inward and focus more of its resources and energies on internal issues. As foreign aid and international relations activities are curtailed, there is greater opportunity for rising nations to vie for expanded regional and international influence, ultimately reducing the United States' global stature.

For the Coast Guard, a static or declining fiscal environment in the federal government presents several risks and challenges. These fiscal challenges will coincide with the Coast Guard's ongoing recapitalization efforts and efforts to begin construction of the Offshore Patrol Cutter, the scheduled replacement for the existing medium endurance cutter fleet. For a small government agency whose work is often invisible to the majority of the American public, it will be major challenge to get Congress to continue funding the Coast Guard's recapitalization initiatives during a time of fiscal restraint.

Aside from major acquisition needs, there will be increasing pressure on Coast Guard leadership to increase efficiency and reduce costs, all while continuing to provide similar levels of service for both steady-state and contingency response operations. The constrained budget environment may give Coast Guard senior leaders pause before instituting any holistic strategy for the Coast Guard's law enforcement program. During any delay, however, criminals and their criminal organizations will not sit idly. These increasingly networked and transnational criminal organizations will only continue to expand their operations into the maritime environment, exploiting the relative anonymity of the maritime environment, especially as economic and social disparities in the world continue to increase.

Rising Disparities Between the 'Haves' and 'Have-Nots'

The second overarching trend that will impact the future maritime security environment is the rising disparity between the 'haves' and 'have-nots' of the world. A quick look around the globe reveals many indications of increasing economic and social disparities. Even in the United States, the top one percent of Americans historically only accounted for 8 percent of total income earnings; now the top one percent account for 24 percent of the total income earnings.⁶ Most recently, citizens throughout the Middle East, tired of suffering from years of dismal economic conditions, have risen up in protest against their governments. The core issue in these uprisings has been the "decades of economic imbalances that have rewarded the political elite and left many others on the margins."⁷ Furthermore,

As national income levels deteriorate, tax revenue falls, further undermining the capacity of the state to provide critical services such as education, health care and security. As the

state loses its ability to manage the economy and monopoly on violence, criminal gangs, vigilantes, or private militias are more likely to emerge in this environment of unconstraint.⁸

As a result, those left on the margins become vulnerable to the influences of organized criminal elements and violent extremist groups whose own willingness to provide for people's basic needs enables them to further undermine the legitimacy and role of the governments and their associated institutions. One only need look at recent examples of the Taliban in Afghanistan, FARC in Colombia, and warlords in Somalia for recent examples of how the legitimacy of government and its institutions have been undermined and eventually displaced by less savory actors.⁹ In the end, this can have deleterious effects on regional, not to mention U.S., national security interests.

Closely linked to, but distinct from, economic disparities is the presence of social disparities. Social disparities between ethnic groups within a nation or region can be a catalyst for instability. As an example, some of the problems the United States faced in Iraq between the Sunnis and the Shiites after removing Saddam Hussein from power demonstrate just how easily social disparities, perceived or actual, can ignite instability.

Foreign investment by individuals or businesses seeking new economic opportunities is an important component of economic growth. This type of investment can create ethnic minorities who control an economic sector of a country, especially in developing nations. When this occurs, it can result in the ethnic majority lashing out at economically dominant minorities, as seen in Thailand, Kenya, and Indonesia. In these countries, small minorities that controlled a large portion of the economic wealth became the scourge of society and ultimately a source of conflict and internal strife.¹⁰ As Jared Diamond comments, "When people can't solve their own problems, they strike out irrationally, seeking foreign scapegoats or collapsing in civil war over limited resources."¹¹ The resulting poverty and economic disparities that stem from social disparities make governments less responsive to their citizens, reducing their legitimacy in the eyes of the people and ultimately increasing the likelihood of conflict within that particular country or region.¹² In areas of instability and reduced government legitimacy, cartels, warlords, and violent extremist groups flourish and find havens from which to carry out their operations.

Unfortunately, the United States' attention span for many of these issues is short. This is problematic for several reasons. Ignoring developing problems enables these criminal enterprises to become firmly established and compounds the difficulties of trying to control or eradicate the problem in the future. The piracy problem in Somalia and the drug cartels in Mexico are just two examples of how issues that impact U.S. national security interests have been given minimal U.S. attention, allowing them to flourish. These threats now require significant investments of U.S. time and resources to dismantle and eradicate them.

Additionally, the U.S. fiscal position in the next decade may make it increasingly difficult to finance foreign assistance programs that support the legitimacy of government, promote the rule of law, help eradicate poverty, provide basic health services, and promote food security in developing or under-developed nations. Lack of support may fuel anti-American sentiments in these regions, playing into the hands of criminal elements or non-state actors that exploit such conditions. Despite the rising affluence of other nations such as Brazil, China, and India, the world still perceives the United States as a benevolent hegemonic actor. In many of the current Arab uprisings, protesters were seen asking "Where is America?" in their time of need.

This second overarching trend has significant linkages to the future challenges United States Coast Guard law enforcement will face. As economic and social disparities persist, they provide a foothold for transnational criminal organizations (TNCOs) to establish themselves in countries around the world. These TNCOs will become increasingly sophisticated, vertically integrated, and globally connected, ultimately requiring more sophisticated law enforcement efforts and capabilities to counter and prevent them from becoming overt national security threats to the United States. As some of these TNCOs will use maritime means to carry out their activities and as these activities encroach on U.S. shores, they will require more effective and efficient Coast Guard law enforcement responses.

Increasing Competition for Resources

The third major trend that will create a need for more effective and efficient Coast Guard law enforcement is the increasing competition for resources throughout the world. As states look beyond land-based resources, the Coast Guard may have an expanded role in monitoring and regulating sea-based extraction activities and uses of the coastal zone. Additionally, the increasing use of the coastal zone for energy production and other activities may add to the Coast Guard's law enforcement mandate.

As offshore energy production increases to meet the world's increasing energy demands, extraction efforts will occur further offshore and require potentially higherrisk activities to harvest resources. As a result, the appeal of these platforms, infrastructures, and activities to violent extremists and terrorist groups as targets may increase. Thus, dedicated patrols and protection from the United States Coast Guard could be required. In the Coast Guard's fiscally-constrained and risk-managed environment, there will likely be a push for industry-led solutions to these security challenges. A brief reflection on the continuing economic and ecological damage caused by the Deepwater Horizon incident highlights the potential appeal of these offshore targets for terrorists. Beyond energy resources, some coastal nations have significant mineral or fisheries resources in waters under their jurisdiction. For a variety of reasons, they lack any real capacity to patrol and prevent illegal activities from occurring in those waters. This has been the case off the coasts of Africa and is also evident in the western Pacific, where many small Pacific Island Nations (PINs) have substantial tuna fisheries. Revenues generated from fishing activity in the waters under their national jurisdiction, including the sale of licenses to foreign fishing vessels to harvest these resources, contribute substantially to the overall GDP of many PINs.¹³ However, they lack any real capacity to ensure that licensed vessels comply with the provision of their licenses, leaving fisheries vulnerable to overfishing and other illegal, unlicensed, or unreported (IUU) fishing activity. Despite efforts by the United States, Australia, New Zealand and France to help countries with this issue in the region, if even one PIN either implicitly or explicitly allows IUU fishing operations in its waters, it can negatively affect the entire region. Well-managed fisheries resources can help provide a relatively stable revenue stream to a nation's GDP and a source of jobs and economic opportunity.

Increasing food demand, combined with the potential impacts of climate change, may also create increasing competition for and exploitation of aquatic resources. World Bank estimates predict a growing world population that will increase food demand by fifty percent by 2030.¹⁴ As a result, "more food will need to be produced from the same land" and "there are no major new fishing grounds: virtually all capture fisheries are fully exploited, and most are overexploited."¹⁵ Because of ecosystem interdependencies and food webs, fishing any species to commercial extinction can create both economic and food security issues. The loss of fishing as a viable economic activity can become a security issue because displaced fishermen and their vessels can be co-opted by TNCOs. The overexploitation of fisheries resources in the Gulf of Aden may be a contributing factor to the rise of piracy in the Gulf of Aden. Similarly, many fishing vessels have been used as drug conveyances in the Eastern Pacific.

Beyond the problem of overexploitation of fisheries resources, increasing competition for the ocean's resources can also exacerbate the disparity between the 'haves' and 'have-nots.' Developing and under-developed countries with offshore mineral and fisheries resources can be exploited by developed nations through pirate fishing activities or offshore mining activities, the proceeds from which accumulate into the hands of an economic, and sometimes ethnic, minority. As discussed in the previous section, especially for states with weak governance structures, the disparities these extraction activities may create could have longer-term detrimental effects on national and regional stability.

In recent years, the Coast Guard has expanded its operations around the globe to help counter some of these challenges. Coast Guard cutters have conducted patrols with African nations and many PINs to combat illegal fishing. The Coast Guard has also implemented several reciprocal shiprider agreements with other nations for drug, fisheries and migrant interdiction operations. However, operating in far away places conducting missions whose outcomes may produce less tangible homeland security benefits puts the Coast Guard at odds with the goals of the Department of Homeland Security (DHS). In the pending era of fiscal constraint, DHS's focus on protecting the homeland and America's maritime borders may conflict with future Coast Guard efforts to conduct 'over the horizon' operations in support of other countries' interests. While the Coast Guard will certainly have to balance the need for these activities with the priorities of its other statutory missions, the unchecked exploitation of the ocean's resources would have detrimental impacts on world economies and global food security, giving rise to increasing conflict and maritime disorder.

The three trends described above must be taken into account when developing a holistic Coast Guard law enforcement strategy. The federal budget situation will force the Coast Guard to make difficult financial choices, especially given its chronic need to recapitalize its aging cutter fleet and infrastructure. The constrained fiscal environment could delay efforts to address and develop the holistic law enforcement strategy. Rising economic and social disparities may give rise to more acts of violent extremism and enable criminal organizations to undermine legitimate governments and further expand their operations into the maritime domain. Increased criminal activity will exacerbate the law enforcement problem, with the increasing use of the world's oceans and competition for its resources making the job of identifying the 'good' players from the 'bad' more challenging. These trends will also impact and possibly reshape existing maritime security threats.

Notes

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¹¹ Diamond, Jared, "Why We Must Feed the Hand that Could Bite Us." *Washington Post* 13 Jan 2002: B1. ¹² Graff, Corinne. "Poverty, Development and Violent Extremism in Weak States." *Confronting Poverty: Weak States and U.S. National Security.* Eds Susan Rice, Corinne Graff and Carlos Pascual. Washington, D.C.: Brookings Institution Press, 2010. Opinion cited p48

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¹⁵ Godfray H. Charles J., et al. "Food Security: The Challenge of Feeding 9 Billion People." *Science* 327 (12 Feb 2010): 812-817.

CHAPTER FIVE *Future Maritime Security Threats*

As previously stated, Coast Guard law enforcement missions have continued to expand over the past two decades. The changing nature of criminals and criminal organizations, the events of 9/11, and significant alterations to the regulatory environment have all contributed to this expansion. Within the context of the three trends described in the previous chapter, it is necessary to look at the Coast Guard's current maritime law enforcement missions — drug and alien smuggling, illegal fishing, piracy, and terrorism — and postulate on how they might evolve in the future maritime environment. Looking closely at each of these current maritime law enforcement threats is necessary to identify common needs that can be incorporated into a holistic strategy for Coast Guard law enforcement.

The Future Drug Threat

"Drug use is not a new concept but rather an ancient one that keeps recreating itself."¹ The evolution of drug use from marijuana to cocaine and heroin, and more recently synthetic and prescription drugs, clearly lends support to this statement. While successful solutions to the problems of drug use and abuse will require both supply and demand reduction efforts, the trafficking of illegal drugs into and within the United States remains a law enforcement challenge for the foreseeable future.

Looking specifically at the supply side of the equation, drug trafficking organizations (DTOs) are becoming increasingly transnational, networked and integrated. The presence of Mexican DTOs, in particular, can be found in all nine Organized Crime Drug Enforcement Task Force regions and all 32 High Intensity Drug Trafficking Areas in the United States, as designated by the Department of Justice.² Increasing linkages between Mexican DTOs and criminal gangs in the United States illustrate the highly complex nature of this problem. In some cases, the evolution of DTOs is viewed as beyond a law enforcement problem and instead as a more dangerous criminal insurgency.³ Like the Mexican DTOs, other non-state groups like the Taliban and their linkages to opium producers and consumers are also worrisome.

The vertical integration and broad networking of the DTOs enables them to pursue increasingly sophisticated smuggling practices to move their products. DTO money laundering efforts that legitimize illicit proceeds have likewise become more elaborate. After weaving themselves into the fabric of local and national economies, DTOs become more difficult to eradicate and can quickly adapt their operations to respond to changing law enforcement practices. This is particularly evident in the case of maritime drug traffickers, which have evolved from making bulk shipments stored on the open decks of boats to more sophisticated, high-speed 'go-fast vessels' and, more recently, fully submersible and semi-submersible vessels specifically built for smuggling drugs.

While violence in at-sea smuggling efforts has not escalated significantly, this trend cannot be expected to continue. A look at Mexico and Latin America, where drug-associated homicide rates have reached epidemic proportions, provides an example of what may occur in the near future.⁴ Violence associated with DTOs in Mexico and Latin America can be viewed through the lens of ensuring supply chain security for the movement of their product — a means to an end — rather than as simple turf battles between rival cartels. As the DTOs further strengthen supply chains from their Central and South American sources to market in the United States, they could seriously undermine current Beyond Merida Initiative capacity-building efforts in the region designed to rebuild the rule of law and improve law enforcement capacity in individual Latin America countries.⁵ At the same time, better access to land routes would diminish the need for DTOs to pursue riskier sea smuggling efforts, reducing the overall need for at-sea interdiction efforts.

A reduction in the need for at-sea interdiction efforts may be foreseeable. A recent United Nations Drug Threat Assessment report states that the demand for cocaine in the United States is declining. Though overall world supply remains relatively stable, cocaine flows to emerging powers such as Brazil are on the rise as well as to Europe through intermediary nations in West Africa.⁶ A recent drug trafficking disruption by the Coast Guard and U.S. Drug Enforcement Administration on a vessel bound for Hong Kong may reflect a growing market for cocaine in China as well.⁷

While American's use of cocaine may be trending downward, the use of methamphetamines, marijuana and heroin in the U.S. has increased.⁸ In addition, synthetic and prescription drug abuse is an increasing problem for state and local law enforcement agencies.⁹ 'Home-grown' drug use is also on the rise, as evidenced by recent news articles discussing the use of common household items such as bath salts that are smoked, injected and snorted to get high.¹⁰ Generally moved in smaller quantities, more easily disguised within legitimate shipments of other goods, and more easily obtained through 'pill mills' or home labs, these types of drugs require more intelligence and savvier law enforcement responses. Additionally, while most Coast Guard interdiction efforts focus on vessels coming into U.S. waters, the potential for waterborne trafficking within the domestic waters of the United States cannot be overlooked.

Most Coast Guard interdiction efforts are focused on maritime routes from source countries. Identifying and stopping any waterborne trafficking within internal U.S. waters requires expanded partnerships with federal, state and local law enforcement. This is because "fighting criminal networks requires 'smart' hierarchies that can quickly transcend bureaucratic boundaries, pass information and analysis rapidly to the right places, and allow maximum latitude and support to agents of other operatives in the field."¹¹ While the Coast Guard currently has many productive partnerships for drug enforcement, improving and expanding these partnerships will be necessary. These partnerships can promote better intelligence and focus the efforts of limited enforcement resources, especially as the sophistication of drug trafficking efforts increases. This increasing sophistication will also require better training and the increased proficiency of Coast Guard law enforcement personnel.

The Future Illegal Immigration Threat

Linked closely to drug trafficking is the threat posed by human smuggling and illegal immigration into the United States. Smuggling organizations, like the DTOs, "are people with a will of their own, abundant ingenuity and the capacity to get help from others."¹² As violence, conflict, natural disasters and the lack of economic opportunities provide motivations for persons to attempt to enter the United States, human smuggling operations will continue to flourish.

Despite efforts to harden the southern border with technologies such as SBInet, the U.S Border Patrol estimates that only 44 percent, or 873 miles, of the southwest border is under some level of operational control, while less optimistic estimates put the total at a mere 15 percent.¹³ While attention has been primarily focused on the southern border, a persistent threat of illegal immigration across our northern border with Canada, including maritime routes across the Great Lakes, also exists. A recent Government Accountability Office study examining DHS's efforts at securing this border found that only 32 miles of the nearly 4,000 mile long border with Canada had reached an acceptable level of security despite the known presence of "networks of illegal criminal activity and smuggling of drugs, currency, people and weapons" operating across this border.¹⁴

Estimates indicate that more than 11 million illegal immigrants currently reside in the United States.¹⁵ While this number is slightly lower than in past years due to fewer job opportunities in the United States as a result of the economic downturn, the threat of illegal immigration is not likely to diminish in the next decade.¹⁶ Escalating violence throughout Mexico and Latin America continues to motivate individuals to attempt entry into the United States. Others simply attempt to enter the United States for more economic opportunities and the chance for a better life. However, some individuals may have less altruistic motives. Though the total number of interdictions along the southwest border is decreasing, the number of apprehensions of persons from special interest countries and countries labeled as state sponsors of terrorism has remained steady and even increased in recent years.¹⁷ This trend has become especially alarming after the recent apprehension of a controversial Muslim cleric found in the trunk of a car near the southern border.¹⁸ While the cleric was not specifically a person of interest, this apprehension demonstrates how smuggling groups, likely with connections to drug cartels, are willing to assist anyone who can pay with gaining illegal entry into the United States.¹⁹

Moreover, TNCOs operating in Europe may be willing to assist persons looking to acquire false identities and forged documents to enter the United States, especially those recently displaced by popular uprisings in North Africa and the Middle East. In fact, during 2009, more than 4500 fraudulent passports and a total of 13,000 fraudulent border crossing cards were intercepted by U.S. Customs and Border Protection officers at ports of entry.²⁰ Additionally, there are many illegal aliens that may have lawfully entered the United States at some point but have now overstayed their visas. Given the heightened attention to visa overstays and unlawful residency since the 9/11 terrorist attacks, the ability to quickly identify, report, and possibly detain illegal aliens now has higher priority in law enforcement. Despite border-hardening initiatives, the entry system is not foolproof, and the use of fraudulent passports and border crossing cards highlights how determined individuals with the right resources and patience will continue to attempt illegal entry into the United States.

Coast Guard efforts at stopping illegal immigration have typically focused on atsea interdiction of smuggling into Florida, Texas, or Puerto Rico. Some 'as needed' efforts have also been directed at Chinese vessels attempting to get to the west coast of Mexico or the United States and aliens attempting to get into Guam from non-U.S. territories in the Pacific. But overall, the number of migrants interdicted at sea is relatively low in comparison to the number of illegal migrants that cross into the United States along the porous land border between the United States and Mexico.²¹ Uprisings similar to those ongoing in Libya and Tunisia, such as the coup in Haiti of the early 1990s and unrest resulting from the policies of Cuban dictator Fidel Castro, have led to mass migration events across the Straits of Florida, at times taxing the Coast Guard's capability to respond.

Like drug enforcement, efforts to increase security at one point can create a 'balloon effect,' whereby the problem is simply pushed to another area with fewer security measures in place. Efforts to harden both the northern and southern borders could create such an effect, resulting in additional small-scale, waterborne human smuggling events off the coasts of Texas, California, or even the Great Lakes. From a border integrity standpoint, responding to these events is important, but they still collectively represent only a drop in the bucket compared to the total flow of migrants coming into the country.

Improving the Coast Guard's ability to identify and process illegal aliens encountered at sea will be necessary in the future maritime security environment as it becomes more difficult to enter illegally through established ports of entry. Expanded training on fraudulent document identification and improved technologies to collect biometric information during vessel inspections to identify persons of interest or other nefarious actors will be necessary for Coast Guard law enforcement.

As with drug enforcement, efforts to improve partnerships can also result in better information sharing. This, in turn, could help support workplace investigations conducted by Immigration and Customs Enforcement agents as employment opportunities are one of the underlying drivers of illegal immigration.²² These efforts can also help with identifying and eradicating the criminal enterprises that produce fraudulent documents.

The Future Fisheries Threat

While not as glamorous or politically charged as drug smuggling or illegal immigration, ensuring the long-term viability of the ocean's fisheries resources has strategic significance. Including the contributions of aquaculture, global seafood production has remained relatively steady between 90 and 100 million metric tons annually.²³ However, nearly 85 percent of the world's major fisheries are currently exploited to their maximum yield, if not already overfished or experiencing overfishing.²⁴ This leaves little room for increased seafood production to meet the needs of the growing world population, especially for developing countries that rely on fish proteins as a major source of their animal protein intake.²⁵ The leveling off of protein production from the world's oceans presents a unique challenge to the future global food security environment, especially as demand for seafood products in developed nations has also continued to increase in recent years.

As seafood demand increases, world populations grow, and the growth rate of aquaculture production to fill this gap slows, harvesting pressures on fisheries resources will increase. As stocks decline and other seafood products cannot be substituted to replace the decreased supply, the price for particular species may increase. This demand increases incentives for non-compliance with existing harvesting regulations; the case of the Atlantic bluefin tuna is one such example. Often referred to as illegal, unreported and unregulated (IUU) fishing, such activities are major impediments to successful stock management by fisheries organizations worldwide.²⁶ Thus, preventing and detecting IUU fishing activities is important for maintaining the health of fisheries that provide substantial economic benefit to large populations.

Illegal fishing is not just an international fisheries problem. Within the United States the overall health of many fisheries is holding steady and showing slight improvement. In some cases this is due to more direct governance of fisheries by regional fisheries management councils and the federal government. In others, the abundance of a particular species has improved because of favorable oceanographic conditions. Nonetheless, non-compliance in U.S. fisheries does exist. Coast Guard

estimates of the rate of non-compliance in U.S. fisheries has typically hovered around four percent. This means that approximately four percent of the fisheries inspections conducted by the Coast Guard will result in the detection of one or more fisheries violations.²⁷

However, this estimate may be inaccurate because it looks solely at Coast Guard enforcement cases, independent of cases generated by agents of the National Marine Fisheries Service and state-level fisheries enforcement personnel conducting federal investigations under joint enforcement agreements. A more recent study estimated the levels of non-compliance in U.S. fisheries to be significantly higher, perhaps even as high as 25 percent.²⁸ If the latter number is more accurate, it is particularly distressing given the fact that U.S. Coast Guard at-sea law enforcement efforts account for more than 90 percent of all domestic fisheries enforcement expenditures²⁹ and represent nearly ten percent of the Coast Guard's operating budget for 2010.³⁰

Detecting non-compliance in both international and domestic fisheries has been and continues to be a challenge for the Coast Guard. Increasing regulatory complexity, the vast areas of ocean involved, and the lack of specialization in this mission collectively contribute to these challenges despite the creation of several region-specific fisheries training centers to improve the training of Coast Guard law enforcement personnel. Faced with increased complexity for both international and domestic fisheries, the Coast Guard may need to consider making some organizational changes to increase the specialization of its fisheries enforcement personnel.³¹

Technological solutions such as vessel monitoring systems (VMS) are not a panacea for this problem either. VMS can help improve the efficiency of at-sea enforcement operations and provide for some remote monitoring of fishing vessels for compliance with time and area closures. However, additional technologies to improve the efficiency of at-sea enforcement efforts are necessary to better direct the efforts of available law enforcement assets. As part of a holistic law enforcement strategy, these technologies could also be used to provide information which, when properly analyzed, identifies anomalistic behavior that may indicate other illegal activity such as drug or migrant smuggling or even piracy operations.

The Future Piracy Threat

Piracy is a growing problem that receives relatively little attention until a sensational event occurs, such as the hijacking of the U.S. flagged MAERSK ALABAMA or the unfortunate killing of four U.S. citizens on the sailing vessel QUEST. Since 2007, "640 ships have reported pirate attacks and Somali pirates have taken more than 3,150 hostages and…received over \$180 million in ransom payments."³² More distressing is the fact that the number of attacks has increased since 2008 to a total of 445 attacks, with 53 successful hijackings, occurring in 2010.³³ Despite the rise in attacks off the coast of

Somalia, the total number of attacks in the Gulf of Aden declined by nearly 50 percent, primarily due to the deterrent effect of the increased naval presence in this area.³⁴ Similarly, attacks in Asian countries between 2004 and 2008 declined by nearly a quarter due to improved cooperative arrangements and information exchange among Asian countries dealing with this problem.³⁵ In contrast to these numbers, acts of piracy in the Gulf of Guinea are expanding. While many shipping companies view piracy as a cost of doing business, the lucrative nature of piracy, combined with the relatively weak legal frameworks for prosecuting and adjudicating captured pirate will likely result in the scourge of piracy continuing to be an ongoing issue for the foreseeable future.

Looking specifically at the case of Somali piracy, the combination of limited state capacity on the part of Somalia to deal with the problem, unfocused international responses, and a convoluted legal framework for dealing with captured pirates has resulted in very limited success. While the implementation of industry best management practices and the use of private armed security guards about commercial merchant ships has reduced the number of ships successfully pirated, the problem of piracy stems from a lack viable economic alternatives in Somalia, especially after coastal fisheries were decimated by foreign fishermen.³⁶ However, as piracy has evolved, several classes of Somali pirates have emerged with varying levels of sophistication.³⁷ This has included the use of motherships as well as the expansion of operations far from the Somali coastlines well into the Indian Ocean. The expanding geographic range and increasing sophistication of the pirates will make combating this problem difficult, especially as solutions to the underlying socio-economic conditions that give rise to these piracy problems will take years, if not decades, to fully implement and take effect.

Coast Guard law enforcement responses to piracy have been limited as most of the counter-piracy efforts have been conducted by Combined Task Force 151, an international coalition of naval forces conducting counter-piracy operations in the region. Coast Guard law enforcement detachments and Maritime Safety and Security Teams have operated as part of this task force – mainly to conduct vessel inspections, collect evidence, and prepare case packages after taking back hijacked vessels from pirates. While resource constraints may preclude greater Coast Guard involvement in counter-piracy operations, the current efforts do provide a good training ground for opposed vessel boardings for Coast Guard teams in addition to demonstrating interoperability with international and DOD partners. Using counter-piracy operations to build proficiency in the skill sets needed to conduct opposed vessel boardings ensures that Coast Guard law enforcement teams will be ready in case they are needed to conduct an opposed boarding in a future counterterrorism scenario at a U.S. seaport.

The Future Terrorism Threat

In our increasingly globalized world, any terrorist attack can disrupt global supply chains and have negative impacts on several nations.³⁸ Most experts agree that a

future terrorist attack on U.S. soil is inevitable – it is more a matter of when than if. In fact, recent testimony by Secretary of Homeland Security Janet Napolitano suggests that the terrorist threat in the United States may be at its most "heightened state" since the terrorist attacks of 9/11.³⁹ To its credit, the United States has been relatively successful at implementing many initiatives to prevent terrorist attacks. These programs have improved transportation security and have also thwarted several recent terrorist plots. However, if the 'atrophy of vigilance' continues, it may be only a matter of time before a determined adversary is successful.

The U.S. Maritime Transportation System is relatively transparent to most Americans. Like our nation's land and air transportation systems, it is designed for "accessibility and efficiency, two characteristics that also make it vulnerable to attack."⁴⁰ Nearly 99 percent of the trade volume, worth billions of dollars to the national economy, enters or leaves the United States by water.⁴¹ Though not as sensational as attacks that involve the air transportation system, the economic impact of a terrorist attack on the U.S. maritime transportation system would have deleterious consequences. The 2002 West Coast longshoremen's strike cost upwards of \$2 billion per day due to port shutdowns, a price that could pale in comparison to the long-term damage of a terrorist attack.⁴² Simply put, U.S. seaports are vital to our national economy and their protection is crucial to the economic health of our nation.

Beyond port facilities, attacks on the ships themselves that use these ports cannot be overlooked. As demonstrated by the attack on the USS COLE and the French tanker LIMBURG, terrorist organizations also have the capability to conduct attacks on maritime targets. In fact, a recent attack on the motor vessel M. STAR was likely conducted by a remotely controlled waterborne improvised explosive device.⁴³ If this is the case, it certainly adds a new threat vector for maritime counterterrorism operations.

The number of potential maritime terrorism scenarios is large. Though riskbased decision-making may deem many of these scenarios unlikely, there will always be far too few maritime counterterrorism resources to address all threats.⁴⁴ As a result, many have downplayed or even dismissed the exigent threat of terrorist attacks on maritime targets. This rhetoric might only increase in the wake of the successful removal of several key members of the Al-Qaeda leadership. However, many also never expected that al-Qaeda would fly two jetliners into the World Trade Center and another into the Pentagon on 9/11 or that they would almost sink a United States Navy destroyer sitting pierside.

Substantial steps have been taken to improve the safety of airline travel. Though some of these measures create more inconveniences than others, securing the maritime environment has been a greater challenge. Certainly, the U.S. has hardened its port facilities with enhanced physical security measures, implemented maritime worker credentialing systems, and improved security and screening processes for vessels entering its ports – all steps in the right direction. Yet gaps remain and significant vulnerabilities still exist due to a lack of basic maritime domain awareness of all vessels moving into and within port areas, especially smaller vessels. It has been suggested that the regular users of any port would be quick to identify and report anomalistic operators within a given harbor or port area. However, given the volume of recreational boaters and the minimal requirements for boat ownership in the United States, it could be relatively easy, especially for a 'homegrown' terrorist, to execute an attack within a U.S. port.

Significant energy and attention has been directed at eliminating or reducing the threat of terrorism from countries deemed state sponsors of terrorism and in regions where terrorist cells are known to operate. However, the radicalization of U.S. citizens and their subsequent participation in acts of violent extremism is a growing threat. Since May 2009, more than half of the 43 identified homegrown terrorist plots, including the Fort Hood shooting and the attempted Times Square bombing, have originated within the United States at the behest of U.S. citizens.⁴⁵ Although the investigations of these events have uncovered key elements of the radicalization process, identifying and thwarting similar attacks presents a large and emerging challenge for law enforcement.

Since 9/11, the Coast Guard has devoted significant energy and resources to preventing acts of maritime terrorism. Passenger and cargo screenings, advance notice of arrivals, physical security improvements at port facilities, and other programs have done much to improve the overall security of the U.S. maritime transportation system. Internal studies conducted by the Coast Guard highlight the need for organizational changes to realign small boat station staffing levels and boat allowances with new maritime security requirements. Further improvements in maritime domain awareness, especially in port areas, and small vessel security strategies are also needed to better protect waterborne commerce from terrorist attacks. Each of these initiatives requires substantial political energies and funding to fully implement, a challenge in the current fiscal environment. Identifying technologies and better leveraging partnerships to counter gaps in maritime security should be part of a holistic Coast Guard law enforcement strategy to identify anomalistic behavior and deter future maritime terrorist attempts.

Notes

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http://www.dhs.gov/xlibrary/assets/statistics/publications/enforcement_ar_2009.pdf. In 2006, nearly 1.2 million individuals attempted to enter the country illegally. In 2009, this number was 613,000. See DHS 2009 Yearbook of Immigration Statistics available online at

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³⁰ United States. Department of Homeland Security. *FY 2011 Budget-in-Brief*. Washington: GPO, 2011. Accessed online 5 Apr 2011 at <u>http://www.dhs.gov/xlibrary/assets/budget_bib_fy2011.pdf</u>.

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³⁸ Napolitano, Janet. "How to Secure the Global Supply Chain." Wall Street Journal 6 Jan 2011: A17.

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CHAPTER SIX *The Way Forward*

No alarm klaxon is sounding warning the Coast Guard of the changes that need to be made to its law enforcement program. As the global environment continues to change, the Coast Guard must be forward-looking and work today for the challenges of tomorrow. While consumed "in the rush of activities, competing demands for attention, and the press of day-to-day decisions, focusing on a viable and responsive strategic agenda as the central source of direction, initiatives, and priorities is of fundamental importance."¹ Program managers must step back from daily operations and direct some energy toward longer term planning and development of the Coast Guard's law enforcement program.

Other policing entities face similar challenges. Staying in front of the changing nature of crime and criminal organizations is extremely difficult. As criminal organizations become increasingly networked and transnational, forging new alliances with other criminal organizations, law enforcement must also evolve to keep pace with the changing nature of crime. As crime evolves and public pressure on policing organizations increases, attention is drawn away from law enforcement strategic planning. Noted criminology author Herman Goldstein writes,

Police are committed to focusing on the here and now – maintaining a readiness to respond quickly to the next unpredictable crisis. That gets the highest priority. And that mindset affects the entire institution, including the chief executive whose support for any long-term planning – for the agency and for the policing field – is most crucial.²

Given the Coast Guard's multi-mission responsibilities, maintaining a strategic focus can be especially difficult. Events like Deepwater Horizon or other disaster responses tend to shift focus away from strategic planning. However, the Coast Guard's own strategy for Maritime Safety, Security and Stewardship states:

Throughout its history, the Coast Guard has provided great value to the nation as a military, multi-mission, maritime service that has quickly adapted to America's changing needs. However, most of these adaptations have come after a major catastrophe or event that highlighted gaps in the nation's ability to effectively govern the maritime domain, such as the sinking of the Titanic, the Exxon Valdez oil spill, the 9/11 terrorist attacks, and many others. The Coast Guard must strive to become less reactive, and more proactive and anticipatory in its actions. The Coast Guard must continue to act with strategic intent to address today's threats and challenges, prepare for the challenges of the future, and hedge against future uncertainties.³

Although the Coast Guard's statutory mandates preclude it from solely focusing on its law enforcement missions, developing a holistic law enforcement strategy to prepare for the future is necessary, especially given the amount of time and resources devoted to law enforcement annually. Otherwise, the Coast Guard law enforcement program may end up looking like the sheriff of Mayberry trying to police the streets of New York City.

This is not to say that the Coast Guard does not engage in strategic planning. The Coast Guard, with the U.S. Navy and Marine Corps, has produced the *Strategy for 21st Century Seapower* and the *Naval Operations Concept* strategic plans. Internally, the Coast Guard uses the Evergreen Process to create and sustain strategic intent. Individual Coast Guard law enforcement programs also have strategic plans that are reviewed and updated episodically. However, what is missing is the piece in the middle that would connect individual law enforcement program strategies to the larger Coast Guard strategic planning processes. Developing a holistic strategy would provide overall strategic direction for the law enforcement program in the areas of technology integration, partnership development, and personnel training. It could also identify needed organizational changes for the Coast Guard to remain in step or ahead of the evolution of criminal organizations.

Preparing Coast Guard Law Enforcement for the Future Maritime Threat Environment

Unfortunately, some within the federal government and even within the Coast Guard already view the Coast Guard as a second rate law enforcement agency that is only falling further behind its federal law enforcement counterparts. This does not have to be the case. Developing and implementing a holistic law enforcement strategy can reverse this trend. More importantly, it will maintain the Coast Guard's status as a relevant and integral part of the future federal law enforcement enterprise.

Reversing this trend begins with recognizing and embracing its role as a policing organization both in U.S. domestic waters and on the high seas. To do this, the Coast Guard could benefit from the application of policing models to Coast Guard law enforcement operations. Though not currently used in any systematic fashion within the Coast Guard, the use of these policing models is a necessary first step toward improving both the efficiency and effectiveness of Coast Guard law enforcement operations.

Of the three models described previously, the intelligence-led policing model is best suited to the Coast Guard. Since 9/11, the Coast Guard has dramatically expanded its intelligence staffing and infrastructure and integrated itself into the national intelligence community. Additionally, the creation of the Intelligence Specialist enlisted specialty rating is helping the Coast Guard develop the analytical capabilities needed to transform random pieces of information into the requisite actionable intelligence for intelligence-led policing. Because the intelligence-led policing model is more process driven, it may fit better into the Coast Guard's organizational climate that frequently rotates personnel and is responsible for performing multiple missions.

While there are many tangible benefits to the incorporation of this model into Coast Guard law enforcement operations, these benefits do not come without challenges. A primary challenge is information sharing across federal law enforcement agencies. Because the Coast Guard's primary law enforcement database is a standalone system, information from this database is not readily available to other law enforcement agencies. Similarly, the Coast Guard does not always have access to information collected by other law enforcement entities. Difficulties with information sharing can be an impediment to the effective implementation of the intelligence-led policing model.

Another challenge to the implementation of this model is the need to improve the connection between Coast Guard intelligence and law enforcement functions. Under the intelligence-led policing model, a greater percentage of law enforcement operations would be driven by intelligence cues across all law enforcement missions. However, this has not always been the case within the Coast Guard. Major cutter patrols are generally scheduled around 'hard events' such as drydock maintenance and refresher training instead of being threat-based, although some specific taskings on patrols are driven by intelligence cues. Annual cutter days at sea allocated to law enforcement are generally based on historical allocations rather than expected or emerging threats. While regional law enforcement operations have the flexibility to respond to emerging tactical intelligence, a majority of these operations are based on projecting a presence and not always on intelligence cues. Certainly there is some value, from a deterrence perspective, in providing some level of presence to deter potential violators in the same way a highway patrolman sitting in the center median can deter speeding on the highway. While this produces some localized deterrence effects, especially within the population of deterrable offenders, it may have less effect on incorrigible and chronic offenders. Conversely, systematically employing intelligence-cued law enforcement operations could help focus enforcement efforts on incorrigible and chronic offenders whose detection and apprehension can have exponential impacts on deterrence. This is especially important in the Coast Guard's fiscally-constrained, multi-mission environment.

Shifting to the intelligence-led policing model will also require a better partnership between the Coast Guard's intelligence and law enforcement communities, which has not always been the case. As with other policing entities, producing better analysis to focus law enforcement operations requires increased understanding, cooperation, and communication between intelligence analysts and those conducting law enforcement operations.⁴ This will require that Coast Guard law enforcement personnel better understand the informational needs of the intelligence community. Similarly, the intelligence community will need to understand how to develop the right analyses to ensure that law enforcement resources are in the right place at the right time to detect criminal activity.

Required Organizational Changes

Incorporating the intelligence-led policing model into Coast Guard operations provides a systematic construct for planning law enforcement operations. This is a good start. However, several organizational changes are needed to prepare for the future maritime security environment.

Thomas Jefferson once wrote that to expect each generation to govern itself with the laws and policies of the previous generations is to expect a man to wear the coat he wore as a lad. A parallel can be drawn to Coast Guard law enforcement, which underwent a 'generational' change after 9/11 with increased focus on and investment in the counterterrorism component of Coast Guard operations as well as significant investment in higher-end tactical law enforcement capabilities. However, making 'generational' organizational changes is probably the most difficult task an organization can undertake. It often requires long periods of time and encounters the most resistance, especially from those most affected by the change. However, organizational changes are often the most needed changes to ensure an organization's survival and vitality, especially in times of austerity.

The Coast Guard's senior leadership's view toward law enforcement spans a broad spectrum, ranging from emphatic support for the law enforcement mission and all its inherent risks to a highly risk averse viewpoint that shies away from involvement in inherently risky activities. Unfortunately, the future world environment that will create pockets of maritime disorder will necessitate risky interventions, many of which could be uniquely suited to the capabilities and competencies of the Coast Guard. With fewer cutters and personnel in the future, this puts the Coast Guard at a critical juncture that will require 'out of the box' thinking to develop creative ways to provide law enforcement services at minimal additional cost and with maximum efficiency.

The first and likely most important organizational change for the Coast Guard is a philosophical shift in personnel's attitude toward the law enforcement mission. The pre-9/11 mindset that the Coast Guard should only conduct law enforcement operations on an ad-hoc basis must be replaced. Certainly, other missions such as search and rescue responsibilities remain important. But station staffing levels have not kept pace with increasing multi-mission responsibilities, especially for Coast Guard small boat stations. While several studies have recommended realigning station staffing and boat allowances to help meet current needs, the outdated philosophy of keeping assets 'in reserve' because of fatigue standards for search and rescue must be transcended. If intelligence cues dictate, the Coast Guard must be willing to mortgage some search and rescue readiness for small boats, cutters and aircraft in order to conduct these intelligence-cued law enforcement operations.

This condition further manifests itself when reviewing law enforcement resources employment data. The data reveals that most Coast Guard law enforcement activities are fairly predictable in both time and space, mostly occurring during weekday daylight hours. But there is a noticeable and disturbing reduction in law enforcement activities occurring on nights and on weekends. Whether driven by risk aversion, staffing levels, law enforcement qualifications, crew fatigue standards, or efforts to seek balance between multi-mission demands, the current predictability of Coast Guard law enforcement efforts generally results in the detection of only low-end criminal behaviors and may do little to impact the population of chronic and incorrigible offenders. The future maritime world will require proactive, intelligencecued Coast Guard operations focused on these chronic and incorrigible offenders.

Another needed organizational change would move responsibility for law enforcement capabilities out of the Response Policy Directorate and into the Capabilities Directorate. Largely due to the rapid reorganization of Coast Guard headquarters to the numbered staff system used by the Department of Defense, responsibility for law enforcement capabilities has remained in the Response Policy Directorate. Leaving this responsibility outside of the Capabilities Directorate creates additional workload for the law enforcement policy writers and may result in uncoordinated efforts to implement new law enforcement capabilities and technologies across the various law enforcement missions. While some technology initiatives may not be applicable across all law enforcement missions, identifying and incorporating new technologies for law enforcement should be a collaborative responsibility of the Response and Capabilities Directorates, not an individual law enforcement program responsibility.

The Coast Guard should also look to expand its number of law enforcement detachments. These detachments, commonly referred to as LEDETs, provide a relatively low-cost, high impact, deployable capability to Coast Guard, Navy and even foreign naval vessels to counter a wide variety of maritime threats. With the pending decommissioning of one Coast Guard Maritime Safety and Security Team (MSST), several personnel from these units will be added to existing LEDET units. Additional personnel should also be added to existing LEDETs, enabling the Coast Guard to begin deploying Coast Guard LEDETs on its own cutters as well. Similar to the mission module construct for the Coast Guard's National Security Cutter (NSC) or the Navy's Littoral Combat Ship, LEDETs could be the 'mission modules' added to these cutters to bring expanded law enforcement capabilities, especially to medium- and high-endurance Coast Guard cutters.

These steps represent a major organizational change for the Coast Guard cutter community. Traditionally, Coast Guard cutters have sourced law enforcement teams from their own crews. However, the optimal manning constructs of both the NSC and the planned Offshore Patrol Cutter may make continuous sourcing of law enforcement personnel and maintenance of a high level of proficiency from within the crew a real challenge. Although it may still prove worthwhile to train some cutter personnel to a lower level of law enforcement proficiency so they can augment custody crews in vessel seizure cases, using LEDETs on Coast Guard cutters would enable cutters to deploy with a higher degree of law enforcement specialization and proficiency than could be maintained organically within the cutter crew. The use of LEDETs would also reduce the law enforcement training and administrative overhead for optimally-manned cutters. Cutter crews could also focus on building proficiencies in other areas, such as small boat and flight operations, essential supporting components of successful law enforcement operations.

While most LEDETs are focused on counter-drug operations, the Coast Guard should also create fisheries enforcement-focused LEDETs. Sourced from existing regional fisheries training centers and supplemented with additional personnel from decommissioned MSSTs, these LEDETs would be available for region-specific fisheries enforcement operations. Given the ever-increasing complexity of and frequent changes to U.S. and international fisheries regulations, a degree of specialization in fisheries enforcement is becoming necessary to ensure that fisheries violations occurring within the population of chronic and incorrigible violators can properly be detected and documented. Furthermore, if fisheries regulations incorporate more output controls and reduce the need for at-sea enforcement, these personnel could be retrained for other law enforcement missions.

In addition to the expanded use of LEDETs, the Coast Guard should better integrate the efforts of the Coast Guard Investigative Service (CGIS) activities into its law enforcement operations. As the Coast Guard's equivalent of a detective squad, CGIS is responsible for conducting longer-term criminal investigations, both independently and in concert with other federal law enforcement entities. Because CGIS agents are trained at the Federal Law Enforcement Training Center (FLETC), their qualifications are on par with agents from other federal law enforcement agencies. This joint training makes CGIS agents uniquely suited to serve as an effective conduit between uniformed Coast Guard personnel and other federal law enforcement agencies.

Unfortunately, the level of interaction between CGIS agents and uniformed Coast Guard personnel is minimal and often based on the specific personalities involved. Some of this disconnect is driven by the Coast Guard's organizational structure, which places law enforcement planning and operations under the Response Policy Directorate, while CGIS currently falls under the Intelligence Directorate. Additional disconnects occur at the field level because field agents are controlled by a regional agent-in-charge who does not report to Coast Guard District Commanders or local Sector Commanders even though agents may be physically co-located at a Coast Guard unit. Collectively, these disconnects often serve as barriers to information exchange between the two entities despite the fact that they share the same parent organization. If implemented, increased information exchange between Coast Guard uniformed personnel and CGIS agents might actually yield great synergies and further facilitate the utilization of an intelligence-led policing model in Coast Guard law enforcement operations.

Given the federal government's current fiscal situation and the need to reduce spending, the Coast Guard should consider pursuing even more ambitious changes. One such action would merge the aviation and maritime components of the Customs and Border Protection (CBP) Service into the Coast Guard, with the aim of adopting similar tactics, training and procedures to ensure inter-operability between sibling agencies within DHS. This step would also provide some economies of scale and better information sharing by enabling both Coast Guard and CBP operations to share one command center.

Similarly, given the recent challenges facing National Marine Fisheries Service (NMFS) Enforcement, as detailed in several Department of Commerce Office of Inspector General reports,⁵ a strong case can be made to consolidate all fisheries enforcement responsibilities under the Coast Guard. This would allow NMFS to focus on its fisheries management responsibilities. Current NOAA agents could be transferred into the Coast Guard Investigative Service and continue conducting their longer-term investigations into the illegal behaviors of the fishing industry as part of the Coast Guard. This would not only improve the consistency of fisheries enforcement activities received by the commercial and recreational fishing industries – a common complaint by the fishing industry – but would also allow for better alignment of enforcement goals and priorities. Barriers to information exchange and intelligence would be removed and redundancies in enforcement efforts could be eliminated.

Contrarians might argue that the management of state joint enforcement agreements by NMFS Enforcement and the reshuffling of the adjudication process would be too cumbersome. On the other hand, combining 22 separate federal agencies into the Department of Homeland Security was a difficult, but surmountable, problem. Merging approximately 160 agents and field enforcement officers into this mix seems comparatively minor. While a merger of these two entities would be challenging, the benefit to the larger federal and international fisheries enforcement regime would appear to outweigh the obstacles.

Required Changes to Law Enforcement Training

Linked closely to the need for organizational changes in the Coast Guard is the need for changes to its law enforcement training systems. Looking to USCG Commandant Robert Papp's recently released Commandant's Direction 2011, a top priority is "sustaining mission excellence" by making proficiency the standard to which Coast Guard forces are trained.⁶ This goal can be directly applied to Coast Guard law enforcement operations. Admiral Papp reiterated this commitment to building and sustaining proficiency in the Coast Guard's existing mission sets in the Commandant's recent State of the Coast Guard, saying, "We cannot stop at qualification. We need to change our focus. We need to train to proficiency and retain proficiency."⁷ As part of a holistic law enforcement strategy and to prepare for the future maritime security environment, training Coast Guard personnel to proficiency will be necessary.

A good starting point for training to proficiency is in the area of weapons training. To date, the Coast Guard has been fortunate not to experience many incidents necessitating the use of deadly force during law enforcement operations. However, the changing nature of transnational crime and its associated criminal organizations suggest that it may only be a matter of time before the level of violence in law enforcement operations escalates. The recent piracy case involving the M/V QUEST in which four hostages were killed and another case involving the Coast Guard Cutter ESCANABA, whose small boat was fired upon just outside of the Guatemalan territorial seas, may be indicative of this pending trend. Ensuring that Coast Guard law enforcement personnel are proficient in the use of service weapons is necessary for preparedness in any future escalation in violence.

Unfortunately, current Coast Guard policy only requires law enforcement personnel to perform weapons recertification on a semi-annual basis. For the Coast Guard's standard law enforcement pistol, this means that law enforcement personnel only fire 50 rounds twice a year. More importantly, this qualification is done in a static, terrestrial environment, not on the pitching deck of a coastal freighter or fishing vessel. Fortunately, higher-end law enforcement teams such as LEDETs, the MSST and the Coast Guard's Maritime Security Response Team (MSRT) fire thousands of rounds annually and are more proficient in the use of their service weapons.

Maintaining current qualification levels is already a challenge. Access to range facilities, competing job demands, availability of ammunition,⁸ and access to qualified range instructors are all impediments to raising the overall level of Coast Guard weapons proficiency. In addition, because a majority of the daily law enforcement work conducted by the Coast Guard is performed by 'regular' Coast Guard law enforcement personnel who are only required to qualify two times per year, the state of Coast Guard weapons proficiency remains relatively low. Addressing this problem in a fiscally constrained environment will also be a challenge. However, implementing a calculated and deliberate strategy to build weapons proficiency now is preferable to belated changes in response to a tragic or unfortunate event.

To its credit, the Coast Guard has taken several substantial steps to 'raise the bar' for its law enforcement training and qualification programs, especially after 9/11. Based upon a 'core and strand' training concept, core training courses provide general knowledge and skills training for a particular task while strand training courses provide more specialized skills to complement the skills and knowledge gained from core courses. The Coast Guard's Maritime Law Enforcement Boarding Officer course (MLEBOC), the Coast Guard equivalent of FLETC training for federal agents, is the core law enforcement training course for Coast Guard personnel. Follow-on specialized training courses, such as the region-specific fisheries law enforcement courses taught at one of the Coast Guard's five regional fisheries training centers or the new one week Drug Enforcement course taught at the Coast Guard's Maritime Law Enforcement Academy (MLEA) in Charleston, South Carolina, are examples of strand courses that develop additional skill sets based on the knowledge acquired through core training courses.

After 9/11, the Coast Guard consolidated the MLEBOC qualification process at the MLEA. This was a vast improvement compared to the previously disaggregated system, which allowed for on-the-job training-based qualification or qualification through exportable training team visits. The Coast Guard also created a new two week follow-on strand certification course to train personnel on the new law enforcement ashore authorities conveyed in the Maritime Transportation Security Act of 2002. While these are good initial steps toward the holistic improvement of Coast Guard law enforcement training, additional strand courses are needed to further enhance Coast Guard law enforcement proficiency.

Specific strand training courses are needed on adequately and accurately documenting criminal and civil infractions for adjudication in courts of law. This has long been a weakness in Coast Guard law enforcement. In fact, a study by King, et al. found that of more than 1,000 fisheries violations referred to NMFS for adjudication since 2001, only 284 resulted in one or more types of financial penalty.⁹ Of the Coast Guard initiated cases referred to NOAA, almost 17 percent were declined, dismissed or closed without penalty.¹⁰ Given the amount of time and effort required to produce this type of documentation, these abandoned cases represent a substantial waste of the Coast Guard's time and energies for little or no return. A strand course that focuses on the documentation of civil and criminal infractions needs to be developed to include statement writing, evidence collection (including photographic evidence), and witness questioning techniques. This will help ensure that the substantial resources put into detecting violations results in successful prosecutions.

Complementary courses that address case preparation and adjudication could enhance the credibility of Coast Guard witnesses. Specific certification courses on the maintenance and operation of the Smith's Detection IONSCAN, a device used for trace drug detection throughout the Coast Guard for nearly fifteen years, need to be standardized throughout the Coast Guard to ensure consistency in the certification process for using this equipment. Similar standardized training on fraudulent document identification is also necessary to ensure that law enforcement personnel can identify fraudulent passports, alien registration cards, and even driver's licenses to combat potential human trafficking and smuggling operations, or simply to identify potential aliens unlawfully residing in the United States.

To better support the implementation of the intelligence-led policing model, strand courses in law enforcement intelligence collection and reporting are also needed. This would improve the consistency of law enforcement data entry that could be used by analysts. Inconsistent and incomplete data entry is problematic for analysts.¹¹ A strand training course on standardized reporting would help with the successful implementation of the intelligence-led policing model and also promote synergistic communications between law enforcement personnel and analysts.

A final training improvement that needs to be made is the implementation of a graduate-level education program for law enforcement personnel. The Coast Guard offers numerous graduate education opportunities at private and state universities across a broad spectrum of academic disciplines to its personnel, principally within its officer corps. But with the exception of the current formal graduate education program in marine affairs, where students specialize in fisheries management and enforcement, the Coast Guard has no formal graduate education programs for criminal justice, criminology or police studies for its personnel, despite the fact that the Coast Guard spent nearly 35 percent of its total 2010 discretionary operating budget on law enforcement.¹² Instead, most staff officers in the law enforcement oversight roles are merely practitioners who apply lessons learned from field operations to program management. Undergraduate programs in these fields should also be offered to senior enlisted personnel who specialize in law enforcement.

Offering these programs would do more than simply provide an academic background in the study of law enforcement, it would develop a cadre of specialized personnel to better 'speak the language' of law enforcement. These personnel would also be able to help implement tested academic principles into actual Coast Guard operations. Collectively, this would raise the credibility of Coast Guard law enforcement within the federal law enforcement community, potentially leading to improved partnerships and information exchange with other federal law enforcement entities.

Improving Partnerships

An old adage in law enforcement is that 'successful law enforcement is all about relationships.' Over the years, this adage has proven itself true time and time again.

Maintaining good relationships and partnerships between law enforcement entities are vital to effectively counter many types of criminal behavior. Good partnerships are not only needed for information sharing, eliminating or reducing the impact of organizational stovepipes, but also to avoid conflicting investigative and policing activities, especially when enforcement responsibilities or jurisdictions overlap.

A fundamental tenet of an effective partnership is mutual trust. Based largely on the personalities of the individuals involved, trust between law enforcement professionals is built slowly and destroyed quickly. While some difficulties in building trust stem from the proverbial 'turf battles' between law enforcement entities with overlapping jurisdictions and responsibilities, the continuing need for more cooperative law enforcement efforts cannot be understated, especially given the threats presented to the United States today.

Building trust begins with working to improve basic understanding of the capabilities, capacities, and limitations between entities. From this starting point, next steps often include information and intelligence sharing which can lead to cooperative law enforcement efforts. Unfortunately, two elements often negatively impact the Coast Guard's ability to build trust: personnel rotations and the agency's organizational ability to safeguard sensitive law enforcement information.

While personnel rotations are necessary from a Coast Guard leadership capacitybuilding standpoint, rotating personnel every three or four years makes it difficult to establish the type of trust and relationships that are so vital to effective law enforcement. Furthermore, a shared blue uniform does not automatically translate into trust with other agents or enforcement officers. There is certainly a measure of law enforcement professionalism and courtesy that results in cooperation and discussion between law enforcement entities, particularly at the field level. However, this may not always be the case at higher levels where larger organizational politics can stymie cooperation.

Nonetheless, cultivating productive partnerships needs to occur at all levels within the Coast Guard. Station and patrol boat commanders and crew should cultivate relationships with local field agents, sheriff deputies, and marine police. Regional sector commands should forge relationships with locally placed assistant special agents in charge, detectives, and police chiefs. Similarly, district commands should maintain relationships with regional special agents in charge. While often difficult to foster, these relationships must be cultivated through regular interaction. Various levels within the Coast Guard can take this step to build trust and develop productive relationships that can be used to make a positive impact on common crime problems. Unfortunately, the Coast Guard's collective organizational ability to protect and safeguard sensitive law enforcement information has undermined cooperation in the past. Despite organizational policies governing the disclosure of operational security information, leaks do occur. When dealing with more 'motivated' criminal actors who utilize counter-surveillance, safeguarding information on ongoing operations is especially imperative. It only takes one blown undercover operation to destroy trust and cooperation between law enforcement entities. Understanding the importance and sensitivity of law enforcement information security depends largely on individual maturity and experience in conducting law enforcement operations. While not necessarily increasing transparent decision-making within the organization, weaving this concept into the organizational fabric of the Coast Guard is important to future law enforcement success as it reinforces the Coast Guard's credibility within the federal law enforcement community.

The Coast Guard could also gain credibility if it increased its number of liaisons with other federal law enforcement agencies. After reorganization into the Department of Homeland Security, several interagency liaison positions became DHS liaison positions, most of which involve working on policy issues with the Immigration and Customs Enforcement and Customs and Border Protection divisions of DHS. As a result, the Coast Guard currently has only one liaison billet with the FBI. Though liaison officers are not qualified federal agents, liaison officer opportunities provide unique opportunity to observe how other federal law enforcement agencies conduct their operations and identify opportunities for cooperative law enforcement efforts. In addition, liaison billets help the Coast Guard understand agency priorities, case processing requirements, and information and intelligence needs. This can bridge gaps and build connections between agencies to produce positive results.

Similarly, the Coast Guard needs to work with its federal law enforcement partners to increase the number of other law enforcement agency liaisons posted within the Coast Guard. Posting additional agents at Coast Guard District commands would provide a plug-in for other agencies into ongoing Coast Guard operations and may provide opportunities for other federal law enforcement agencies to identify areas for law enforcement cooperation. In some cases, this could enable the use of Coast Guard resources in support of other federal law enforcement agency operations. Maintaining these liaison positions within the Coast Guard has been difficult in the past, especially in lean budget times. Whether liaison agents are assigned to work with their CGIS counterparts or with uniformed Coast Guard personnel, incorporating these positions into the Coast Guard could be extremely beneficial to cultivating productive law enforcement partnerships with other federal agencies.

Improving partnerships should not be limited to only other federal law enforcement agencies. Improving partnerships at regional sector commands can result in more effective cooperation and information sharing, reducing or eliminating redundant or overlapping patrol efforts. Better partnerships with state and local law enforcement entities could improve enforcement and adjudication of boating under the influence/boating while intoxicated laws.¹³

Developing and maintaining partnerships with local and state law enforcement is also important when evidence of a federal crime is discovered. Unlike their police counterparts, Coast Guard law enforcement personnel must consult with higher level authorities before arresting an individual. While this requirement is an important safeguard against unlawful arrests, the Coast Guard needs to establish better mechanisms for arresting, detaining and arraigning persons suspected of committing federal crimes. In most cases, the Coast Guard currently seeks to transfer potential violators to other responsible agencies for arrest and prosecution. Although this reduces the administrative burden on the Coast Guard for dealing with these cases, the need to go 'agency shopping' for adjudicating federal crimes undermines the credibility of the Coast Guard as a law enforcement entity.

Improve Law Enforcement Technology

A final area for improvement is law enforcement technology. This is an area where the Coast Guard has traditionally lagged behind its federal law enforcement counterparts. To remain a viable federal law enforcement organization, the Coast Guard needs to effectively leverage technologies to improve the efficiency and effectiveness of its law enforcement operations.

First and foremost, advances in computing technology, especially devices like the iPad, could allow the Coast Guard to develop applications that facilitate data entry into law enforcement databases during at-sea inspections. Law enforcement personnel have long desired this capability. The Coast Guard began a Personal Digital Assistant (PDA)-based initiative along these lines in 2005, but due to security concerns over USB-based peripherals connected to the Coast Guard computer network, this initiative was terminated. As a result, boarding teams had to revert back to using paper forms and manual data entry, significantly increasing administrative workloads associated with law enforcement operations. For a small organization whose personnel fill multiple roles in their respective units, duplicative workloads not only dampen enthusiasm for conducting law enforcement operations, they can also reduce the quality of enforcement efforts. The lack of good technology to facilitate law enforcement data entry can dramatically impact the quality of data entry, follow-on intelligence reporting, and subsequent case package preparation. This would be especially problematic if the intelligence-led policing model were adopted.

Going one step further, it may even be possible for larger cutters to have a secure wireless network capability between the cutter and the vessel inspection team that would enable the boarding team to do real-time queries of criminal databases, biometrics collection and analysis, as well as meet law enforcement data entry requirements – all from the vessel being inspected. Law enforcement job aids, federal regulations, and other important data could be loaded onto these devices, limiting the need to conduct queries by radio transmission. There are certainly cybersecurity issues to overcome, but more effective leveraging of available computing technologies for Coast Guard law enforcement operations is sorely needed.

On a macro level, adopting other technologies can significantly increase the efficiency of our law enforcement efforts. In the expected fiscal environment, relatively low-cost technological solutions that increase the efficiency of law enforcement efforts should be utilized, especially when an hour of C-130 time or high-endurance cutter time costs over \$12,000 and \$10,000 per hour, respectively.¹⁴

Take, for example, the Coast Guard's operations in the Pacific, where it is responsible for conducting operations in an area of more than 14 million square miles. A major challenge with conducting operations in this region is narrowing down patrol areas and locating vessels within patrol areas. Despite data sharing agreements with several foreign nations for vessel monitoring system (VMS) positional data, locating vessels to ensure compliance with regional fishery agreement provisions is challenging and often problematic. One technological initiative to improve patrol efficiency in this region that has been tested with outstanding success involved a commercially available oceanographic product, known as Sea Star, to pinpoint areas where fishing activity is likely to occur. Sea Star and similar commercial products are widely used by the fishing industry to compile oceanographic data such as sea surface temperature, surface winds, chlorophyll levels, and sea current information into a composite picture to identify fishing 'hot spots.' Overlaid onto the VMS data, this composite product could be used to significantly narrow down aircraft and cutter patrol areas in the Pacific.

In fact, during 2009, Sea Star data was used to identify aircraft patrol areas in the Northern Marianas Islands. The subsequent aircraft patrol of a 'hot spot' on the northeast edge of these islands' Exclusive Economic Zones (EEZs) resulted in the location and documentation of several IUU fishing vessels fishing in prohibited areas. Sea Star was also crucial to a 2010 operation in which the Coast Guard located several foreign fishing vessels operating just outside the EEZ of the United States' Howland and Baker Islands in the Central Pacific. During these inspections, multiple violations of international shark finning regulations were discovered and successfully prosecuted.

While the Sea Star application itself is useful, this product is a valuable tool for observing and analyzing fishing vessel behavior trends. Overlaying VMS data onto the Sea Star product produces a composite picture of the location of fishing activity in relation to certain oceanographic conditions. Over time this data could produce better analyses of fishing patterns, useful information for the intelligence-led policing model. Collectively, this information could refine patrol efforts and potentially increase deterrent effects. Given the costs of the aviation and surface patrol assets described above, the \$150,000 Sea Star annual price tag promises tremendous value.

Beyond the mission of fisheries enforcement, the Sea Star could be used in the context of intelligence-led policing to identify anomalistic behavior of fishing vessels. It could prove especially valuable in the eastern Pacific, where fishing vessels have been used by drug trafficking organizations to transport and transfer drug shipments to other vessels at sea. The Sea Star product could identify anomalistic behaviors by fishing vessels that are operating or loitering in non-ideal fishing areas and prompt additional surveillance activity. Similar products could be used in the Atlantic.

Along these same lines, the Coast Guard, in concert with the international community, needs to develop methods to track and identify fish aggravating devices (FADs), commonly used by tuna purse seiners in the Pacific. Thousands of these devices drift throughout the region, creating mini-ecosystems beneath them that ultimately attract larger fish, like tuna, which are then harvested by large industrial purse seiners. FADs have locating beacons on them that can be pinged electronically by the operator to determine its location. It is conceivable that FAD technology could be used to stash drug shipments, allowing a delivery vessel to attach a load of drugs to one of these FADs, set it adrift on the ocean, and allow a second boat to recover it later in a different location. But without the ability or a legal mandate to track the vast array of FADs drifting throughout the Pacific Ocean, it is uncertain how many of these devices are being used for more than just attracting fish.

The Coast Guard needs to seriously pursue more unmanned options for law enforcement surveillance work instead of costly assets like C-130s, new C-144s and cutter-based helicopters. Efforts are underway to leverage current Navy initiatives to develop the Fire Scout unmanned aerial vehicle for use on ships. Within DHS, a more holistic strategy for the acquisition and use of UAVs must be developed to prevent duplicative spending on technologies. Whether acquired through Navy largess or as part of a larger DHS UAV acquisition strategy, the incorporation of UAVs into Coast Guard law enforcement operations is essential as UAVs offer better endurance and equal, if not better, surveillance capabilities at a lower cost than conventional manned aircraft.

A properly equipped UAV could easily conduct closed area enforcement for fisheries as well as maintain a near-continuous presence along known smuggling routes, a responsibility traditionally borne by cutters. While the bandwidth and data transfer requirements to facilitate live streaming of unmanned vehicle imagery to underway Coast Guard cutters may exceed the Coast Guard's current communications capabilities, developing and implementing these technologies now without the use of an intermediary entity should be a priority. The use of unmanned vehicles could provide a more effective presence, reduce dependence on a permanent physical cutter presence in key areas and improve the deterrent effect of these patrols, as well as facilitate a more effective response to detected threats. In some cases, UAVs could be outfitted with dye markers, life rafts, and smoke floats for search and rescue purposes, and possibly even precision guided munitions for disabling fire against smuggling vessels.

The Coast Guard needs to better leverage technologies as part of its small vessel security strategy. A recently released report by DHS describes the identification and implementation of technologies to better facilitate the identification and intentions of small vessels as one of four primary goals of the strategy.¹⁵ Whether this occurs through transponder technologies or cellular phone-based technologies, developing technologies to improve the ability of the Coast Guard to monitor small vessel traffic in port areas is imperative. Like the Sea Star product, these technologies will enable anomaly detection and could also improve the efficiency of enforcement by providing information with regard to those committing illicit activities in a particular port area. Though monitoring certainly does raise some privacy concerns, the benefits to security and even to search and rescue would outweigh the drawbacks. Many more lives could be saved in emergency situations if all recreational vessels had position transponders, similar to those used in vehicles today that would enable rescuers to quickly and accurately locate vessels.

A final asset that could be better leveraged is the Coast Guard's communications capabilities. More specifically, Coast Guard communications capabilities need to be aligned with local first responder capabilities. In a contingency response scenario, whether the result of a natural disaster or terrorist incident, it is essential that first responders have the ability to communicate in order to maintain continuity of government during any initial response phase. This is especially critical in those situations with a maritime nexus so that Coast Guard units have the ability to communicate directly with other local responders on frequencies other than highly congested standard marine frequencies.

Several of the technologies described above offer exciting possibilities for the Coast Guard. In a more austere fiscal environment with increasing criminal complexity, any technologies that help the Coast Guard improve the efficiency and effectiveness of its law enforcement efforts must be considered. Adoption of new technologies like UAVs and transponder devices for recreational vessels can also produce tangential benefits for other Coast Guard missions such as search and rescue. Other technologies stand to dramatically reduce the administrative workload requirements associated with law enforcement, requirements that often serve to reduce enthusiasm for participating in Coast Guard law enforcement operations. Collectively, incorporation of these technologies is a necessary component of a holistic law enforcement strategy.

Notes

¹ Poister and Streib. "Strategic Management in the Public Sector: Concepts, Models, and Processes." *Public Productivity and Management Review* 22.3 (1999): 308-325.

² Goldstein, Herman. "On Further Developing Problem-Oriented Policing: The Most Critical Need, the Major Impediments, and a Proposal." *Crime Prevention Studies* 15 (2003): 13-47.

³ United States. Department of Homeland Security. United States Coast Guard. *Coast Guard Strategy for Maritime Safety, Security and Stewardship*. Washington: GPO, 2007.

⁴ Cope, Nina. "Intelligence Led Policing or Policing Led Intelligence? Integrating Volume Crime Analysis into Policing." *British Journal of Criminology* 44.2 (2004): 188-203.

⁵ Two recent Department of Commerce Office of Inspector General reports have highlighted some recent challenges NMFS Enforcement has had with monitoring the use of it's Asset Forfeiture Fund and with its enforcement practices in its Northeast Region. The report on the use of the Asset Forfeiture Fund can be found at:

United States. Department of Commerce. Office of the Inspector General. *Review of NOAA Fisheries Enforcement Asset Forfeiture Fund*. Final Report No. OIG-19887-1. July 2010. Available online at http://www.oig.doc.gov/Pages/ReviewofNOAAFisheriesEnforcementAssetForfeitureFund.aspx.

The report on the enforcement problems in the Northeast Region can be found at:

United States. Department of Commerce. Office of the Inspector General. *Final Report - Review of NOAA Fisheries Enforcement Programs and Operations*. Final Report No. OIG-19887-2. Sep 2010. Available online at <u>http://www.oig.doc.gov/Pages/FinalReport –</u>

ReviewofNOAAFisheriesEnforcementProgramsandOperationsOIG-19887-2.aspx..

⁶ United States. Department of Homeland Security. United States Coast Guard. *Commandant's Direction* 2011. Washington: GPO, 2011. Available online at

http://www.uscg.mil/seniorleadership/DOCS/CCGs-Direction-2011.pdf.

⁷ Papp, Robert J. "State of the Coast Guard." Joint Base Bolling, Washington, D.C. 17 Feb. 2011. Transcript available online at <u>http://www.uscg.mil/seniorleadership/SPEECHES/2011-02-</u><u>10_State_of_the_Coast_Guard.pdf</u>.

⁸ The Coast Guard uses the DHS standard service weapon – the .40cal semi-automatic pistol. Because the Coast Guard generally purchases its ammunition through the Department of Defense, this ammunition has been purchased commercially, creating some supply and availability problems.

⁹ King, Dennis M. Read D. Porter, and Elizabeth W. Price. "Reassessing the Value of U.S. Coast Guard At-Sea Fishery Enforcement." *Ocean Development and International Law* 40 (2011): 350-372. ¹⁰ Ibid.

¹¹ Cope, Nina. "Intelligence Led Policing or Policing Led Intelligence? Integrating Volume Crime Analysis into Policing." *British Journal of Criminology* 44.2 (2004): 188-203.

¹² United States. Department of Homeland Security. *FY 2011 Budget-in-Brief*. Washington: GPO, 2011. Accessed online on 5 Apr 2011 at <u>http://www.dhs.gov/xlibrary/assets/budget_bib_fy2011.pdf</u>.

¹³ Especially in BUI/BWI cases, federal penalties for this infraction is only a civil penalty that typically carries up to a \$1000 fine. Most state and local jurisdictions treat these cases very similar to automobile DUI/DWI cases and their penalties often involve mandatory minimum prison sentences and larger fines – greater deterrent to this type of behavior on the water.

¹⁴ These per hour rates are based on the 'In Government' rates to operate these respective platforms. See Coast Guard Commandant Instruction 7310.1L at: United States. Department of Homeland Security. United States Coast Guard. *Commandant Instruction* 7310.1L. Washington: GPO, 9 April 2008. Available online at http://www.uscg.mil/directives/ci/7000-7999/CL_7310_1L.

¹⁵ United States. Department of Homeland Security. *Small Vessel Security Plan Report to the Public.* Washington: GPO, 2011.

CHAPTER SEVEN *Conclusion*

Despite many competing priorities and a pressing need for recapitalizing the existing fleet of cutters, now is the time for the Coast Guard to take an introspective look at its law enforcement program. Though the existing structure has served the Coast Guard well, staying the course is akin to Jefferson's analogy: the Coast Guard has outgrown and must shed its old coat. Global trends necessitate these changes to better respond to a complex international maritime environment exploited by legitimate actors as well as terrorist cells, drug cartels, and increasingly transnational criminal organizations. Failing to redesign some components of the Coast Guard's law enforcement program for these emerging threats puts its law enforcement program at risk of fading into obscurity.

By recognizing and embracing our role as the maritime police force of the U.S. government, the Coast Guard can become a more influential player within the federal law enforcement community. Achieving this readiness for the future maritime security environment cannot be effectively accomplished without an overarching, holistic strategic plan for the Coast Guard law enforcement program that improves the Coast Guard's law enforcement organizational structure as well as its training, technology and partnership processes. However, this making this plan will require a thorough understanding of criminal behavior and deterrence as well as the adoption of the intelligence-led policing model into Coast Guard operations.

This is certainly not a call to become heavy-handed or overzealous in Coast Guard law enforcement operations; rather, it is a call simply to become savvier. Unfortunately, the modern Coast Guardsman today is too often overburdened with inspections, reports, training requirements and personnel management to permit the desired level of focus on becoming more savvy enforcers. Nonetheless, more emphasis and energy needs to be applied to the law enforcement program to ensure that those persons performing Coast Guard law enforcement operations are prepared for the future maritime security environment. Without recognition of the need for law enforcement strategy, the Coast Guard could fail to connect the dots and ultimately put in jeopardy the safety and security of the United States and the maritime transportation system upon which the entire world relies so heavily.

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