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THESIS

**SECURING SUB-SAHARAN AFRICA'S MARITIME
ENVIRONMENT: LESSONS LEARNED FROM THE
CARIBBEAN AND SOUTHEAST ASIA**

by

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June 2009

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LESSONS LEARNED FROM THE CARIBBEAN AND SOUTHEAST ASIA**

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ABSTRACT

The United States has a growing vested interest in the geopolitical status of Africa, as reflected in guiding national strategic documents. United States Africa Command (AFRICOM) was established in 2008 to effectively manage many of the key strategic issues surrounding Africa. One of AFRICOM's areas of focus is the relatively unsecured and lawless maritime environment of coastal Sub-Saharan Africa, which suffers from a myriad of security threats, including piracy and trafficking in drugs, persons, and weapons. In order to gain insight into how best to fully operationalize U.S. strategy in the African maritime environment, this thesis turns to two regions of the world where the United States has extensive experience countering maritime security threats, either directly or through significant assistance to regional states. The drug war in the Caribbean and antipiracy efforts in Southeast Asia are studied to determine the effect of two independent variables, that of coordination (both interagency and international) and maritime security capacity (the ability to man, train and equip security forces), on the flow of drugs through the Caribbean and rate of piracy in Southeast Asia. This thesis finds that while each has a positive effect on both security threats, the combination of robust coordination at the interagency and international levels and enhanced maritime security capacity was key to success in counterdrug and antipiracy operations. The implications of these findings for U.S. strategy in Sub-Saharan Africa are discussed in the conclusion.

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I. INTRODUCTION

The coastal Sub-Saharan African region is characterized by an environment in which maritime security threats such as trafficking of drugs, arms, diamonds, oil, persons endangered species and fish poaching to rage unchecked.¹ The level of threat posed is reinforced by weak state structures, political instability and rampant corruption.² In 2006, the United States recognized the “growing geo-strategic importance” of Africa in its National Security Strategy (NSS), defining drug trafficking and piracy as *irregular* challenges to U.S. national security, potentially requiring unconventional approaches to countering these threats.³ This new focus on Africa built upon earlier strategy documents, to include the National Defense Strategy (NDS) of 2005, which lists the “securing of strategic access... to the global commons,” which includes international waters, as part of its strategic objectives, and the National Military Strategy (NMS) of 2004, which states that the overseas presence posture “must also improve conditions in key regions.”⁴ The National Strategy for Maritime Security (NSMS) of 2005 highlights piracy and drug trafficking as security threats, while adding the prevention of criminal or hostile acts as one of its objectives.⁵ The Cooperative Strategy for 21st Century Seapower (CS21), signed by the heads of the United States Navy, Marine Corps and Coast Guard, asserts that “seapower will be a unifying force for building a better tomorrow,” and commits the

¹ Adekeye Adabajo, “Introduction,” in *West Africa’s Security Challenges: Building Peace in a Troubled Region* ed. Adekeye Adebajo and Ismail Rashid (Boulder: Lynne Rienner, 2004), 2; Audra K. Grant, “Smuggling and Trafficking in Africa,” in *Transnational Threats: Smuggling and Trafficking in Arms, Drugs and Human Life* ed. Kimberly L. Thachuk (Wesport: Praeger Security International, 2007), 113–116; Milan Vesely, “Plundering Africa’s Sea Wealth,” *African Business*, no.259 (November 2000), 18–19. www.proquest.com (Accessed April 2, 2009).

² Adabajo, 2; Grant, 113–116; Vesely, 18–9.

³ U.S. National Security Council, *National Security Strategy of the United States of America* (March 2006), 37, 43–4.

⁴ U.S. Department of Defense, *The National Defense Strategy of the United States of America* (March 2005), 6; U.S. Department of Defense: Office of the Joint Chiefs of Staff, *National Military Strategy of the United States of America* (2004), 22.

⁵ United States National Security Council, *National Strategy for Maritime Security*, (September 2005), 5, 8.

United States to assisting its allies in securing their own maritime environments.⁶ On October 1, 2008, the United States established U.S. Africa Command (AFRICOM), a fully funded operational geographic Combatant Commander (COCOM) whose primary area of responsibility (AOR) is the continent of Africa and its surrounding waters. AFRICOM's mission statement embodies all of these strategic tenets:

United States Africa Command, in concert with other U.S. government agencies and international partners, conducts sustained security engagement through military-to-military programs, military-sponsored activities, and other military operations as directed to promote a stable and secure African environment in support of U.S. foreign policy.⁷

However, none of this guidance establishes the means for operationalizing the strategic and mission objectives. The purpose of this thesis is to seek to fill that gap. Since the United States has little experience operating in the Sub-Saharan Africa maritime environment, this thesis turns elsewhere for lessons learned that in responding to the security threats currently faced in Africa. Although every regional maritime security situation is unique, past experience in other regions provides valuable lessons for U.S. efforts in Sub-Saharan Africa. Counterdrug operations in the Caribbean have met with significant success, as have antipiracy operations in Southeast Asia. What specific factors contributed to these successes, and how can lessons learned can be applied to the contemporary Sub-Saharan African maritime security environment?

A. BACKGROUND OF THE MARITIME SECURITY THREATS IN AFRICA

As previously stated, Sub-Saharan Africa faces a myriad of maritime security threats. For example, "Angola, Namibia and South Africa... [have long been] cocaine trafficking routes for Brazilian cartels," although in recent years, West Africa has emerged as the major stopover point for cocaine shipments between South America and

⁶ U.S. Department of Defense and Department of Homeland Security Joint Publication. "A Cooperative Strategy for 21st Century Seapower." on *The Official Webpage of the United States Navy*. (Washington, DC: October, 2007) <http://www.navy.mil/maritime/MaritimeStrategy.pdf> (Accessed 12 October 2008), 7, 13.

⁷ United States Africa Command, "About USAFRICOM," *AFRICOM Website*, <http://www.africom.mil/AboutAFRICOM.asp> (Accessed 06 June 2009).

Europe.⁸ An estimated seven million small arms and light weapons have been illegally trafficked to West Africa since the end of the Cold War.⁹ As of mid-2008, more than twenty percent of diamonds were traded illicitly, along with approximately 70,000 to 500,000 barrels of oil annually from the Niger Delta alone.¹⁰ Both the Gulf of Aden and the Gulf of Guinea have high incidences of piracy. Piracy in the area has increased exponentially, and at one time over a dozen ships were being held for ransom by Somali pirates, including one full of Soviet era tanks allegedly bound for South Sudan in violation of arms embargoes, and the first U.S. flagged ship to be captured in over 200 years.¹¹ This massive amount of smuggling and other criminal activity occurs either beyond the reach of state security apparatuses, or sometimes with the complicity of government officials, and therefore requires external assistance in curbing it.¹²

For its part, in AFRICOM, despite this formal geographic designation, all of the personnel and equipment for this newly independent command will continue to be located in Stuttgart, Germany and the majority of its operational and material support will continue to be drawn from U.S. European Command (EUCOM), which formerly had operational responsibility for most of Africa. The only presence the U.S. military currently maintains in Africa is in Djibouti, in the Horn of Africa (HOA). Naval forces operating in the AFRICOM AOR will continue to be under divided control. Those ships conducting East Africa, Gulf of Aden and Red Sea missions will be controlled by Fifth Fleet under CENTCOM, based in Bahrain; those forces operating in the Mediterranean

⁸ Grant, 117; UN Office on Drugs and Crime, "Cocaine Trafficking in Western Africa: Situation Report," on *United Nations Office on Drugs and Crime* <http://www.unodc.org/pdf/dfa/Cocaine-trafficking-Africa-en.pdf> (Accessed 13 April 2009), 9.

⁹ Comfort Ero and Angela Ndinga-Muvumba, "Small Arms, Light Weapons," in *West Africa's Security Challenges: Building Peace in a Troubled Region* eds. Adekeye Adebajo and Ismail Rashid (Boulder: Lynne Rienner, 2004), 225.

¹⁰ Grant, 121; Andrew Walker, "Blood Oil Dripping from Nigeria," BBC (27 July 2008), <http://news.bbc.co.uk/2/hi/africa/7519302.stm> (accessed 08 June 2009).

¹¹ "Somalia: UN Envoy Likens Piracy Off Somalia to 'Blood Diamonds' Trafficking," *United Nations News Service* (New York: 29 September 2008) archived on *All Africa* <http://allafrica.com/stories/200809300031.html> (Accessed 12 October 2008); "Kenya Dismisses Tanks 'Evidence'," *BBC* (London: 8 October 2008) <http://news.bbc.co.uk/2/hi/africa/7658598.stm> (Accessed 12 October 2008); Naval War College Foundation, "Workshop Examines Scourge of Piracy," *The Bridge* Volume 4 (May 2009), 20.

¹² John Bamidele, "Nigeria: Faces of Illegal Bunkering," *Daily Independent* (Lagos: 22 November 2008) <http://allafrica.com/stories/200811241096.html> (Accessed 2 June 2009).

and the Gulf of Guinea will be controlled by Sixth Fleet under EUCOM, based in Naples. The naval assets operated by AFRICOM range from surface and subsurface combatants, to amphibious ships loaded with Marines to U.S. Coast Guard Cutters. These operations mostly occur under the auspices of the Africa Partnership Station, headed by Commander Naval Forces Europe / Africa through Commander 6th Fleet. The antipiracy mission of the HOA is carried out by Task Force 151 (CTF151) under Commander 5th Fleet.

Since the United States has relatively little experience operating in Sub-Saharan Africa, this thesis turns elsewhere for lessons learned that may be applicable to the security threats currently faced in Africa. The United States has experience in securing other maritime regions against many of these same threats, whether unilaterally, with major power allies (such as Japan or the United Kingdom), or by enhancing regional states' maritime security capacity. Although every regional maritime security situation is unique, past experience in other regions can provide valuable lessons for U.S. efforts in Sub-Saharan Africa. Counterdrug operations in the Caribbean have met with significant success, as have antipiracy operations in Southeast Asia. This thesis examines the specific factors that have been associated with these successes and how they can be applied to the contemporary Sub-Saharan African maritime security environment.

B. MARITIME STRATEGY IN THE CARIBBEAN AND SOUTHEAST ASIA

The literature on general maritime strategy and operations offers little insight into the sources of success in regional maritime security. One theory posed in literature on U.S. maritime security strategy that the “Navy’s forward presence is more than likely to produce economic benefits to the United States and other major industrial economies” by securing the sea lines of communication (SLOC), a conclusion easily applied to regional and local powers when scaled to their territorial waters.¹³ The mechanics of how that naval presence works to secure maritime environments are generally not spelled out, and the focus on naval presence also tends to ignore the role played by other arms of government in maritime security assistance to weaker states. Most naval strategists

¹³ Robert E. Looney, “Market Effects of Naval Presence in a Globalized World: A Research Summary,” in *Globalization and Maritime Power* ed. Sam J. Tangredi (Washington: National Defense University Press, 2002), 128.

generally focus on the role of naval forces in wartime scenarios, with little mention of the types of security threats that affect global commerce and developing states in their maritime environments.¹⁴ Many of these same theorists, along with a few additional ones do hold that forward presence, while generally focused on affecting the behavior of state actors, has the additional benefit of securing the seas against other, lesser, criminal threats, though few expound on the operationalizing of such presence and how to effectively counter specific threats.¹⁵

The few studies that do focus on regional maritime security in peacetime also articulate general arguments, going so far as to label the overarching concepts as “maintaining good order at sea,” without producing useable lessons, only policy recommendations.¹⁶ For instance, Knight notes that “smaller Western navies learn how to fully utilize the C3I [Command, Control, Communications and Intelligence] potential available to them by virtue of their association with the U.S. Navy” and argues that the same is true for peacetime operations, and *perhaps* non-Western allies.¹⁷ He gives no specifics on how or under what conditions this transfer of capabilities can be expected to take place. Delamer also highlights the importance of inter-naval cooperation through training and combined exercises in advancing maritime security, offering no explanation

¹⁴ Norman Friedman, *Seapower as Strategy: Navies and National Interests* (Annapolis: Naval Institute Press, 2001); Harold J. Kearsley, *Maritime Power and the Twenty First Century* (Aldershot, England: Dartmouth Publishing, 1992); John B. Hattendorf, *Naval History and Maritime Strategy: Collected Essays* (Malabar, FL: Krieger Publishing Company, 2000); *The Changing Face of Maritime Power* eds. Andrew Dorman, Mike Lawrence Smith and Matthew R. H. Uttley, (New York: St. Martin’s Press, 1999); *Maritime Security and Peacekeeping: A Framework for United Nations Operations* ed. Michael Pugh (Manchester: Manchester University Press, 1994); Daniel Goure, *The Role of Seapower in U.S. National Security in the Twenty-First Century: A Consensus Report of the CSIC Working Group on Undersea Warfare*, (Washington: The Center for Strategic and International Studies, 1998).

¹⁵ James Cable, *Gunboat Diplomacy 1919–1991*, Second Edition (New York: Palgrave Macmillan 1991); Sam Bateman, *Navigational Rights and Freedoms and the New Law of the Sea* (New York: Springer, 2000.)

¹⁶ Sam Bateman, Joshua Ho and Jane Chan, “Good Order at Sea in Southeast Asia,” RSIS Policy Paper (Singapore: Nanyang Technological University, April 2009), http://www.rsis.edu.sg/publications/policy_papers/RSIS_Policy%20Paper%20-%20Good%20Order%20at%20Sea_270409.pdf (accessed 10 June 2009), 4.

¹⁷ D. W. Knight, “The Impact of Technology on Maritime Security: A User Perspective,” in *Maritime Forces in Global Security* eds. Ann L. Griffiths and Peter T. Haydon (Halifax: Dalhousie University Center for Foreign Policy Studies, 1995), 79.

of how this is accomplished, and no evidence to support the assertion.¹⁸ Till argues that the best option for a nation to secure its own waters is to develop a navy modeled on the U.S. Coast Guard, but gives no further explanation as to how to go about doing this or how the U.S. or any other power can best assist such a venture.¹⁹ Murphy's study of piracy highlights the importance of the political "will to suppress piracy" without giving explanation of variations in political will over time or space, or to how to cultivate it when it is lacking.²⁰ Boyer argues that lack of will "results in poor maritime threat awareness, land-centric approaches to policy, and the overwhelming of government authorities by the magnitude of maritime security challenges,"²¹ but again does not account for variation in levels of will or articulate a means of generating it. A RAND Corporation study on maritime security concludes that U.S. efforts could focus on increasing the coastal security and capabilities of strategic maritime states and could also develop initiatives for better ship security without examining the mechanics of such actions or how different kinds of initiatives may help or hinder efforts against various threats to maritime security.²² Finally, the 2007 National Research Council study on the 1000-Ship Navy Concept offers generally vague recommendations on maritime security strategy that tend to focus on how the U.S. can best prepare its own forces for dealing with other states.²³ In a lone exception to the rule, Coll offers a detailed argument on how to improve maritime security, focusing on language training and military to military personal engagement at the micro level and humanitarian operations at the macro level,

¹⁸ Guillermo R. Delamer, "Prospects for Multinational Cooperation at Sea in the South Atlantic," in *Maritime Forces in Global Security* eds. Ann L. Griffiths and Peter T. Haydon (Halifax: Dalhousie University Center for Foreign Policy Studies, 1995), 169–79.

¹⁹ Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (London: Frank Cass Publishers, 2004), 338–350.

²⁰ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism: The Threat to International Security* (New York: Routledge, 2007), 26.

²¹ Alan Lee Boyer, "Maritime Security Cooperation," *Naval War College Newport Papers* no. 29 ed. Derek S. Reveron ([2007]), 43–58, 48.

²² Peter Chalk, *The Maritime Dimension of International Security: Terrorism, Piracy, and Challenges for the United States*, (Santa Monica, CA: RAND Corporation, 2008), xv.

²³ *The 1,000 Ship Navy: Maritime Security Partnerships* (Washington: The National Academies Press, 2007). <http://www.nap.edu/catalog/12029.html> (Accessed 8 November 2008).

but all of the initiatives he advocates are designed to enhance the U.S. relationship with allies in the event of a war, and do not focus at all on allies' own maritime interests.²⁴

Studies that have focused on specific regions and specific maritime security threats are in general agreement on overarching principles, but are usually a dearth of attention to detail regarding specific operational and tactical level effects on the maritime security threat in question. With respect to the Caribbean maritime environment specifically, the most comprehensive work has been done by Richard J. Quirk, who offers the usual generic argument for training and cooperation, though recognizing that the U.S. must accommodate the "individual needs and financial capabilities" of Caribbean states.²⁵ Furthermore, regarding the overarching counterdrug effort, there is a consensus in this literature that "there is no War on Drugs, any more than there was actually a war on poverty" under President Johnson.²⁶ Drohan criticizes the U.S. effort as too heavily focused on the military aspect of 'the war' and instead urges a more economic based approach that deals with both the supply and demand sides of the problem.²⁷ Academic works tend to focus on the complexity of the economics and politics of the drug trade on the land side, and when the maritime environment is studied, typically the focus falls to "aspects of both the physical and social geography of the Caribbean" rather than a detailed examination of U.S. counter-narcotics strategy.²⁸ Other studies focus more on the supply side effects of drug interdiction on land.²⁹ Policy analyses by think tanks, the General Accounting Office and the Congressional Research Service tend to focus on the

²⁴ Alberto Coll, "The Role of the Naval Services in Operations Other Than War: Peacetime Engagement and Chaos Management," in *The Role of Naval Forces in 21st-Century Operations* eds. Richard H. Shultz Jr. and Robert L. Pfaltzgraff Jr. (Washington: Brassey's, 2000), 85–91.

²⁵ Richard J. Quirk, "Latin American and the Caribbean," in *The Role of Naval Forces in 21st-Century Operations* eds. Richard H. Shultz Jr. and Robert L. Pfaltzgraff Jr. (Washington: Brassey's, 2000), 132.

²⁶ William H. Drohan "Narco-Mercantilism and the War on Drugs: Is Victory an Option?" *Defense Intelligence Journal* vol. 10, no. 2 (Summer 2001) 41–52, 44.

²⁷ Ibid, 51.

²⁸ Ivelaw Lloyd Griffith *Drugs and Security in the Caribbean: Sovereignty Under Siege*, (University Park, PA: Pennsylvania State University Press, 1997), 54.

²⁹ See Colletta A Youngers and Eileen Rosin, eds., *Drugs and Democracy in Latin America: The Impact of U.S. Policy* (Boulder: Lynne Rienner, 2005); Dan Caldwell and Robert E. Williams, Jr. "Drugs and Thugs: Trafficking and International Security" Chapter 8 in *Seeking Security in an Insecure World* (Lanham, MD: Rowman and Littlefield Publishers, 2006)

effect of economic rather than military measures in reducing supply and/or harsher penalties for users and distributors to reduce demand.³⁰ The only major public study conducted by the Department of Defense reviews Caribbean operations from 1989–1997 and concludes that they were effective based on piecemeal anecdotes.³¹ Bryan claims that drug smuggling is best addressed by a broad multifaceted approach that includes “promotion of free trade... and closer cooperation with key Caribbean nations.”³² Zarickson identifies lessons learned, based on bullet points taken from the Office of National Drug Control Policy, but provides no critical analysis of how they can be more broadly applied and further operationalized elsewhere. He identifies several keys to tactical success, generally asserting that interdiction is best achieved when drug traffickers are forced into using certain routes and means of transport, and emphasizing that “intelligence is critical to successful operations” and “the interaction of government agencies and foreign governments helps increase success,” without providing any analysis or evidence in support of these assertions.³³

With respect to piracy, the literature generally focuses on the factors favoring piracy ashore without much attention given to the specific operations and tactics employed in antipiracy efforts at sea. Banlaoi’s study of Southeast Asian piracy identifies economic, geographic, and institutional causes: “pervasive poverty, the low level of economic development and the poor quality of governance” along with a “huge coastline, lax port security measures, weak maritime security forces and limited anti-piracy

³⁰ Jonathan P. Caulkins, Peter Reuter, Martin Y. Iguchi, James Chiesa, *How Goes the “War on Drugs”?*, (Santa Monica, CA: RAND Drug Policy Research Center, 2005), http://www.rand.org/pubs/occasional_papers/2005/RAND_OP121.pdf (Accessed 2 June 2009); U.S. General Accounting Office., *Drug Control: U.S. Efforts in Latin American and the Caribbean*, GAO/NSIAD-00-09R, <http://archive.gao.gov/f0302/163258.pdf> (Accessed 2 November 2008); Mark P. Sullivan, *Caribbean Region: Issues in U.S. Relations*, Congressional Research Service Report RL32160 (27 October 2006) <http://fpc.state.gov/documents/organization/76937.pdf> (Accessed 9 December 2008).

³¹ Alexander G. Monroe *Caribbean Barrier: U.S. Atlantic Command Support of Counterdrug Operations 1989–1997* (Norfolk, VA: U.S. Joint Forces Command Historian, 2000) 79–80.

³² Anthony Bryan, “The New Clinton Administration and the Caribbean: Trade, Security and Regional Politics,” *Journal of InterAmerican Studies and World Affairs* vol. 39, no. 1, pp. 101–120, (Spring 1997), 116. www.ebscohost.com (Accessed 4 March 2009).

³³ James L. Zackrison, “Smuggling and the Caribbean: Tainting Paradise Throughout History,” in *Transnational Threats: Smuggling and Trafficking in Arms, Drugs and Human Life* ed. Kimberly L. Thachuk (Wesport: Praeger Security International, 2007), 187.

cooperation,”³⁴ but concludes simply that major powers must enhance the capability of weaker states, without addressing the question of how to go about achieving this broad objective given the host of root causes identified.³⁵ Bradford’s study of securing Southeast Asian waterways from all variety of transnational threats identifies five factors that can enable greater cooperation: “(1) relaxing sovereignty sensitivities, (2) alignment of extra-regional power interests, (3) increasing prevalence of cooperation norms, (4) improving state resource capabilities, and (5) increasing prioritization of maritime security.”³⁶ Young reaches similar conclusions about land based factors favoring piracy and makes recommendations for combating piracy on the land side of the problem.³⁷ Virginia Lunsford analyzes historical evidence dating from the “Golden Age of Piracy” (1570–1730).³⁸ She concludes that “long-term intractable and flourishing piracy is a complex activity that relies on five integral factors: an available population of potential recruits, a secure base of operations, a sophisticated organization, some degree of outside support, and cultural bonds that engender vibrant group solidarity.”³⁹ Lunsford suggests that “activities that interfere with the smooth workings of any of these factors weaken piracy’s sustainability.”⁴⁰ However, analysis of how that disruption is best achieved is not provided. Bateman and Bates’ study of the region as a whole expands on Cable’s principle of gunboat diplomacy, wherein presence theoretically makes a positive impact on security threats, but gives no analysis of how presence translates into improved

³⁴ Rommel C. Banlaoi, “Maritime Security Outlook for Southeast Asia,” in *The Best of Times, the Worst of Times: Maritime Security in the Asia-Pacific* eds. Joshua Ho and Catherine Zara Raymond (Singapore: Institute of Defense and Strategic Studies, 2005), 62.

³⁵ Ibid, 73.

³⁶ John Bradford, “Southeast Asian Maritime Security in the Age of Terror: Threats, Opportunity, and Charting the Course Forward,” *Institute of Defense and Strategic Studies Working Paper* no. 75 (Singapore: Nanyang Technological University, 2005), 16.

³⁷ Adam J. Young, *Contemporary Maritime Piracy in Southeast Asia: History, Causes and Remedies* (Singapore: ISEAS Publishing, 2007).

³⁸ Virginia Lunsford, “What Makes Piracy Work?” *U.S. Naval Institute Proceedings* vol. 134 no. 12 (December 2008), 28–33, 28.

³⁹ Ibid, 29.

⁴⁰ Ibid, 29.

maritime security capacity. Similarly, his discussion of cooperation remains at the political as opposed the operational level.⁴¹

Because the bulk of the literature on U.S. maritime security strategy is narrowly focused on how the U.S. can better its own forces as opposed to assisting other states in securing their own waters, it is difficult to extract useable lessons to assist the U.S. Navy in applying those lessons to a new region. The general argument that the presence of naval or maritime security forces tends to curb illegal behavior is not supported by hard evidence and does not identify specific causal mechanisms, which limits its usefulness for strategy development. Therefore, this thesis analyzes the impact of increased international cooperation and maritime security capacity on Caribbean Counter Drug Operations and Southeast Asian Anti-Piracy Operations, in order to identify specific causal mechanisms as well as important antecedent conditions for effective regional maritime security strategy in those regions. The conclusion then assesses the implications of these lessons for maritime security strategy in Sub-Saharan Africa, in light of the causal mechanisms and antecedent conditions identified in the preceding chapters.

C. METHODOLOGY

The thesis consists of two process-tracing case studies of regions in which the United States and its allies have had significant experience combating a specific set of threats in order to establish more concrete lessons for possible application to Africa. Within each case study, lessons are identified based on new analysis of primary data and reconsideration of findings of existing secondary sources with a new focus on bridging the gap between the policy and operational levels. The implications of these lessons for maritime strategy in Sub-Saharan Africa are then assessed. While many maritime environments experience multiple threats, the regional analyses focus on the primary security concern in each, though allowing for conceptual overlap as appropriate, such as in a potential trend where the drug trade and piracy may be carried out by the same

⁴¹ Sam Bateman and Stephen Bates, editors, *Calming the Waters: Initiatives for Asia Pacific Maritime Cooperation*, (Canberra Australia: Australian National University, 1996).

actors. Also, since each region has tended to have different government and private stakeholders and therefore different data available, each section does not necessarily reflect another, though the final synthesis accounts for such dissonance.

Each chapter includes a regional and topical introduction that outlines international legal definitions and norms applicable to the topic. First, the Caribbean region is analyzed for U.S. and allied efforts in combating the drug trade. Second, Southeast Asia, particularly the Straits of Malacca area, is analyzed for anti-piracy efforts. The final chapter discusses the implications for U.S. maritime security strategy in Sub-Saharan Africa by establishing the geographical and political parallels between each topical regional and the applicable portion(s) of coastal Sub-Saharan African where topic specific lessons will likely apply. Finally, returning to the concept that Sub-Saharan Africa's maritime environment faces the full gamut of international maritime crime, a synthesis of all lessons learned from each regional and topical within-case studies is made to enable a whole government approach for the United States to best execute its goal of assisting local governments secure their own waters.

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II. COUNTERING DRUG TRAFFICKING IN THE CARIBBEAN

On June 1, 1971, President Richard Nixon announced a new U.S. policy against illegal drugs, dubbed the “War on Drugs” by many national newspapers.⁴² Inspired by the ease of attaining hard drugs such as heroin at relatively low prices abroad, and the consequent addiction of U.S. servicemen in Vietnam and students in Europe, the policy asserted that drug use was a “social problem” that required the full attention of the federal government.⁴³ Alongside education about the dangers of drug use, treatment for addicts, and harsh punishments for anyone involved in trafficking, a central goal of the new policy was to “stop illicit drugs at their sources.”⁴⁴ This resulted in multiple federal agencies committing significant resources to stemming the flow of illegal drugs into the United States. Since the Reagan administration, efforts have focused on the Caribbean, a route initially preferred by drug traffickers due to the close proximity of weak and/or hostile Caribbean states often unable or unwilling to control drug trafficking to the United States.⁴⁵

Clausewitz defines war as “an act of force to compel [one’s] enemy to [one’s] will.”⁴⁶ The War on Drugs connotes the application of force by military and law enforcement agencies to compel drug traffickers to desist from smuggling drugs into the United States. The effectiveness of the War on Drugs, and more specifically the maritime aspect of it, can be measured by its impact on the amount of illegal drugs flowing into the United States. The evidence shows that the War on Drugs failed to affect

⁴² Robert Young "Special Stress on GIs in Viet: Nixon Vows War on Use, Sale of Dope." *Chicago Tribune* (1963-Current file), June 2, 1971, <http://www.proquest.com/> (Accessed 2 November 2008).

⁴³ James Reston "Nixon, Drugs and the War." *New York Times* (1857-Current file), June 2, 1971, <http://www.proquest.com/> (Accessed 2 November 2008).

⁴⁴ Robert Young, "Special Stress on GIs in Viet: Nixon Vows War on Use, Sale of Dope."

⁴⁵ Alfred W. McCoy *The Politics of Heroin: CIA Complicity in the Global Drug Trade* (Chicago: Lawrence Hill Books, 2003), 443.

⁴⁶ Carl Von Clausewitz, *On War* trans. and ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 75.

the overall quantity or price of illegal drugs in the U.S.⁴⁷ However, the evidence presented in this chapter for the Caribbean theater indicates improved interdiction and a decline in the quantity of drugs reaching the U.S. market through this transit area. This means that increased interdiction in the Caribbean was more than offset by the increased use of less secure alternate shipping routes, which allowed supply to increase and price to fall in the U.S. market. This chapter seeks to explain the success in the Caribbean, with the understanding that this success was achieved through redirecting rather than reducing the overall flow of drugs. The findings show that the key to success was improved coordination and capacity. The first section considers the uncoordinated parallel efforts of the 1980s. The second section covers the period 1989 to 1994, during which U.S. interagency coordination and maritime security capacity were slowly improving, and the first vestiges of international cooperation began appearing, at a time when drug trafficking through the region was continuing to grow. The next section covers 1995 to 2001, during which interagency and international coordinated efforts were improved through formalized agreements and guidelines, and drug trafficking began shifting away from the Caribbean. The final section examines 2002 to the present, a period of rapid escalation of U.S. and international maritime security capacity within the established international coordination agreements. This chapter shows that the overall trend seen in nearly thirty years of data, despite some periods of initial setbacks, is an overall decrease in the drug flow through the Caribbean, suggesting a causal link between increased coordination and maritime security capacity and decreased drug flow through the Caribbean.

The Caribbean is defined as all of the island states in the Caribbean Sea and continental states with a Caribbean coastline. While the War on Drugs includes all methods of entry into the United States and all types of drugs, this chapter focuses specifically on the Caribbean maritime transit zone and cocaine, the primary drug moving through this region. Two indirect measures of the dependent variable, the level of drug

⁴⁷ “National Drug Control Strategy: Data Supplement 2009,” *Office of National Drug Control Policy* (January 2009)
http://www.whitehousedrugpolicy.gov/publications/policy/ndcs09/ndcs09_data_supl/09datasupplement.pdf
(Accessed 1 May 2009), 70.

flow, are used. The first is the annual number of cocaine seizures (Figure 1). The second is the quantity of cocaine seized annually (Figure 2).⁴⁸ An *increase* in the number of seizures over a given period of time is taken as an indication that drug interdiction is improving, and thus drug flow into the United States through the Caribbean is declining. However, a *decrease* in total quantity of cocaine seized over a given period of time is taken as an indication that a lower quantity of drugs is being trafficked through the area, so that the decrease indicates a decrease in the total amount of drugs flowing through the Caribbean. When examined in conjunction with each other, an increase in the number of seizures and decrease in quantity seized in the same year is taken as the clearest indication of declining drug flow through the Caribbean. The first independent variable is level of coordination of counterdrug efforts, which is consistently mentioned but poorly tested as an explanatory factor in the counterdrug literature. Coordination is measured at the national (interagency cooperation) and international (bilateral and multilateral agreements) levels. This independent variable will be analyzed qualitatively, by looking at the type and timing of various levels of interagency and international level coordination. The second independent variable, maritime security capacity to man, train and equip counterdrug security forces, is also often mentioned but poorly explained and/or tested in the literature, though it is much more quantifiable. There are also qualitative aspects of capacity, such as the timing of a new platform being utilized in counterdrug efforts.

⁴⁸ Figures for 2004–2008 include jettisoned cocaine, generally thrown overboard by traffickers being pursued by law enforcement. See: U.S. General Accounting Office. *Coast Guard: Relationship Between Resources Used and Results Achieved Needs to Be Clearer*, Report to the Subcommittee on Oceans, Fisheries, and Coast Guard, Committee on Commerce, Science and Transportation, U.S. Senate, GAO-04-432, 18. <http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=gao&docid=f:d04432.pdf> (Accessed 20 April 2009).

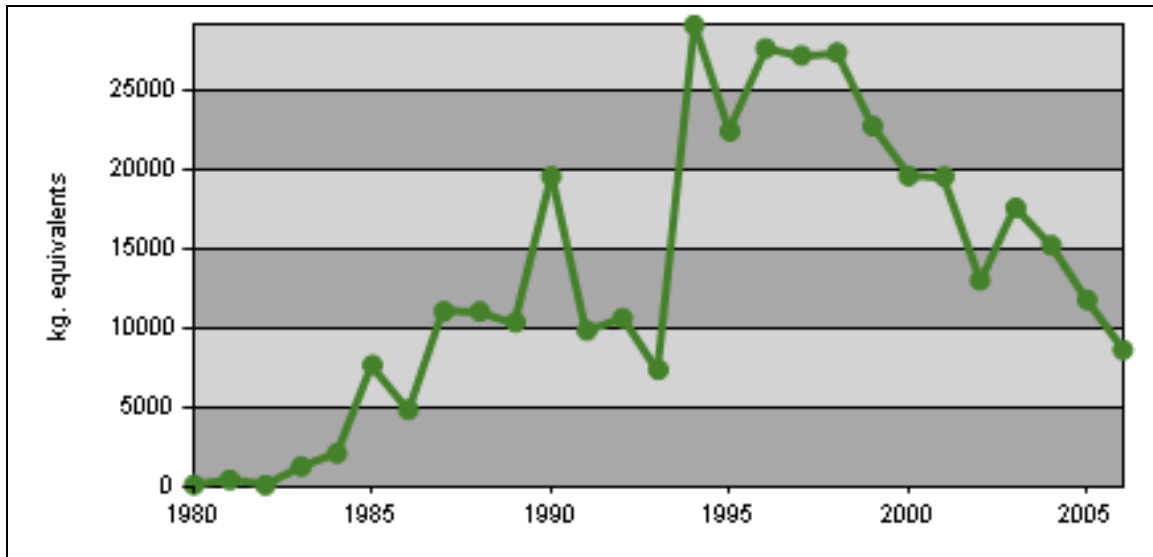


Figure 1. Kilogram Equivalents of Cocaine Seized in the Caribbean by Year⁴⁹

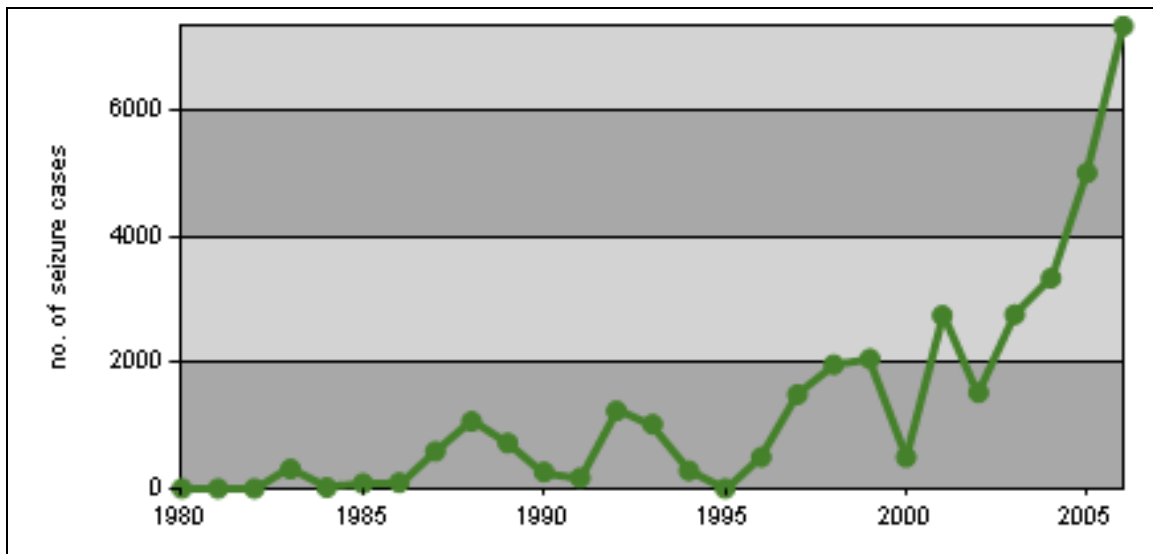


Figure 2. Number of Drug Seizures in the Caribbean per Year⁵⁰

⁴⁹ UN Office on Drugs and Crime Report Viewer
<https://ras.unodc.org/ReportServerPublic/Pages/ReportViewer.aspx?%2fSeizures%2fSeizuresChartTimeSi>
 m (Accessed 14 April 2009), [input parameters: Americas, Caribbean, Cocaine, 1980–2006].

⁵⁰ Ibid, [input parameters: Americas, Caribbean, Cocaine, 1980–2006].

It should also be noted in keeping with the literature's general focus toward the overall drug war, the duality of maritime success as described in this chapter and overall drug war failure is reinforced as seen in Figure 3. From 1981 to 1988, the street price of cocaine was decreasing while purity was increasing, and then from 1988 to the present, the purity has remained relatively constant while price continues to decrease, indicating an overall annual surplus of cocaine on the U.S. market. This is not indicative of operational level successes as described in this chapter regarding maritime counterdrug operations in the Caribbean, but does indicate an overall failed strategy to date.

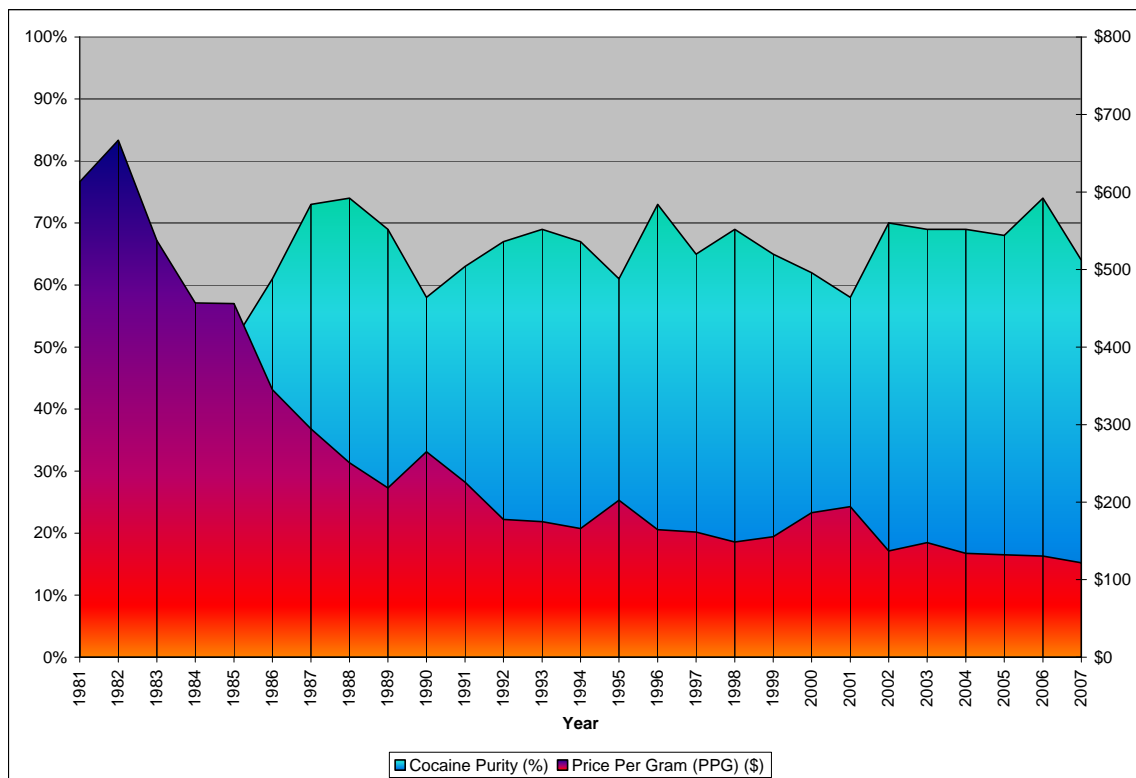


Figure 3. Price and Purity Indices of Cocaine in the U.S. by Year⁵¹

⁵¹ "National Drug Control Strategy: Data Supplement 2009," 63.

A. 1981–1988: UNCOORDINATED U.S. CAPACITY BUILDUP

After the extent of the international drug flow became understood in the late 1970s, the Reagan Administration championed the International Security and Development Act, which included funds designated for a new International Narcotics Control (INC) program. This led directly to the establishment of the first overseas Drug Enforcement Agency (DEA) field offices in 1981.⁵² Part of their mission was to provide intelligence cueing for shipments leaving ports and if able, to actually stop the shipments from departing. The U.S. Coast Guard, originally under the Department of Transportation, had been involved in counterdrug operations in the “primary maritime interdiction role” of forward deploying its cutters and patrol craft to the far reaches of the Caribbean and beyond to stem the flow of illegal drugs since 1973.⁵³ In 1982 the Department of Defense authorized Coast Guard Law Enforcement Detachments (LEDETs) to serve on U.S. Navy ships to execute boardings and arrests in support of the drug war.⁵⁴ The Anti-Drug Abuse Act of 1986 formalized the Coast Guard’s role in the air interdiction of illegal drugs, and even allowed the Coast Guard to operate U.S. Navy aircraft originally designed for a war with the Soviets.⁵⁵ The DEA was undertaking similar but uncoordinated operations with the same general mission.⁵⁶ The Department of Justice reorganized counterdrug efforts to streamline cooperation between the DEA

⁵² *Drug Enforcement Administration: A Tradition of Excellence*, Drug Enforcement Agency, *United States Department of Justice* (2003) http://www.usdoj.gov/dea/pubs/history/history_part1.pdf (Accessed 14 December 2008), 46.

⁵³ “Drug Interdiction Overview,” *United States Coast Guard*, http://www.uscg.mil/hq/cg5/cg531/drug_interdiction.asp (Accessed 2 June 2009); “United States Coast Guard: America’s Maritime Guardian,” *Coast Guard Publication 1* (1 January 2002) *United States Coast Guard* http://www.uscg.mil/top/about/doc/Chapter_Two.pdf (Accessed 14 December 2008), 34.

⁵⁴ “August: It Happened in August,” *The Foundation for Coast Guard History* http://www.fcgh.org/index.php?option=com_content&task=view&id=17&Itemid=26 (Accessed 14 December 2008).

⁵⁵ “Major Events in Coast Guard Aviation History,” *United States Coast Guard* <http://www.uscg.mil/history/uscghist/aviationchron.asp> (Accessed 14 December 2008).

⁵⁶ *Drug Enforcement Administration: A Tradition of Excellence*, 46.

and the Federal Bureau of Investigation (FBI) in 1982, marking the first true interagency cooperation in the War on Drugs, although both agencies fell under a single department, the Department of Justice.⁵⁷

Despite being generally uncoordinated and often parallel, all of these efforts had two short-term effects. First, the number of seizures increased in the late 1980s from near zero in the early 1980s as the screen created by increased patrolling netted more traffickers (Figure 2), an initial success for the maritime forces that was reversed as drug trafficking cartels adapted in the following years. Also countering this success was that the amount of cocaine seized grew from near zero in 1980 to just over 10,000 kilos annually in the late 1980s (Figure 1), indicating more drugs were flowing through the Caribbean at the end of this time period.

B. 1989–1994: ENHANCED U.S. INTERAGENCY COORDINATION AND MARITIME SECURITY CAPACITY

Improved interagency coordination of military support for counterdrug efforts began in earnest with the formalization of the Anti-drug Abuse Act of 1988 and the Defense Authorization Act of 1989, which provided the Department of Defense with specific responsibility for detecting and monitoring (D&M) suspected drug trafficking aircraft and watercraft in the Caribbean, provided for communications support to the counterdrug efforts and coordination of National Guard support.⁵⁸ Communications support was established through “a Department of Defense Law Enforcement Agency C4I network integrating all Department of Defense and civilian law enforcement agency command and control networks.”⁵⁹ The Anti-Drug Abuse Act “eliminated the NNBIS [National Narcotics Border Interdiction System] and NDPB [National Drug Policy Board], and in its stead substituted the Office of National Drug Control Policy (ONDCP) which was to create a coherent policy to unify the thirty-odd agencies whose activities

⁵⁷ *Drug Enforcement Administration: A Tradition of Excellence*, 46.

⁵⁸ Monroe, x–xi.

⁵⁹ *Ibid*, 13.

involved counter-narcotics work.”⁶⁰ The reorganization of oversight into the ONDCP was recognition of the need to formally coordinate a whole government effort between all stakeholders in the war on drugs at the domestic strategic level. The new legislation included mandates for methods and organizational changes, particularly in the Department of Justice and its relationships with other agencies, which were not formalized into law prior to 1988.⁶¹

On 10 January 1989, the U.S. Department of Defense established military Joint Task Forces Four (JTF-4), Five (JTF-5) and Six (JTF-6) to coordinate and execute its anti-drug mission.⁶² JTF-4 was charged with “interception of illicit traffic in the transit zone,” specifically the air and water space of the Caribbean.⁶³ It answers to U.S. Southern Command (SOUTHCOM), whose “focus is assisting in the training of indigenous country law enforcement agencies in eliminating the source of the problem.”⁶⁴ The establishment of the JTFs improved coordination within the military at the operational and tactical levels, formalizing procedures and communications between assets from various branches, including the army and navy. SOUTHCOM’s operations remained parallel to the uncoordinated interagency effort, so the military continued to duplicate many of the DEA’s efforts. After JTF-4’s first full year of operation, and following an unexplained spike in total drugs seized, which almost doubled from 1989 to 1990 (Figure 1), newly coordinated military and Coast Guard efforts resulted in a downward trend from 1990–1993 in the quantity of cocaine seized concurrent with a rise in cocaine seizures, indicating that over this time frame, the overall flow of drugs through the Caribbean was decreasing (Figures 1 and 2). The ebb and flow of the quantity of drugs seized and total seizures is indicative of the beginnings of a process of constant adjustment and readjustment at the tactical level by the cartels.

⁶⁰ Monroe, 15.

⁶¹ *Anti-Drug Abuse Act of 1988*, Public Law 690, 100th Cong., 2d sess. (18 November 1988) *Library of Congress Thomas Archive* <http://thomas.loc.gov/cgi-bin/bdquery/z?d100:HR05210:@@@L&summ2=m&> (Accessed 2 June 2009).

⁶² Monroe, 14.

⁶³ *Ibid.*, 14.

⁶⁴ *Ibid.*, 14.

Cocaine was trafficked primarily on commercial aircraft and ships through the Caribbean in the 1980s. One of the tactical measures taken by maritime security forces included increased vigilance and inspections at air- and sea-ports of entry in the early 1990s, which forced traffickers to shift away from commercial air and cargo ships toward small air and sea craft.⁶⁵ With this shift, the various agencies involved were faced with stepping up patrolling in the six million square mile maritime domain for vessels not subject to international protocol for electronic broadcast of their identity or location.⁶⁶ The private aircraft threat was effectively countered relatively quickly by the DEA-led and JTF-supported Operation Emerald Clipper, which began in 1991, and has been directly augmented by the deployment of three DEA-airplanes used for transportation and surveillance.⁶⁷ Emerald Clipper's mission has been to disrupt the flow of private aircraft into and out of a defined transit zone that includes the Caribbean. Supporting resources employed in the operation have included military aircraft, as well as resources from the Coast Guard, DEA, and FAA. Over the first ten years of operation, Emerald Clipper's combination of military forces and law enforcement methods allowed for the successful seizure and destruction of over 160 aircraft belonging to drug cartels, assets valued at over \$200 million.⁶⁸ Members of Operation Emerald Clipper worked with Congress through the Commerce Department to ban export of new aircraft to many cocaine source countries, showing the value of effective communications improving feedback all the way to the strategic level.⁶⁹ These combined efforts had an effect of reducing the use of private aircraft by drug cartels to a negligible level by the early-2000s.⁷⁰

In response to improved inspections of cargo ships at ports of entry, traffickers also “developed high powered Low Profile Vessels (LPVs) or ‘Jamaican war canoes,’

⁶⁵ Monroe, 29.

⁶⁶ Rachel Neild, “U.S. Police Assistance and Drug Control Policies,” in *Drugs and Democracy in Latin America: The Impact of U.S. Policy* eds. Coletta A. Youngers and Eileen Rosin, 61–98 (Boulder, CO: Lynn Reinner, 2005), 81.

⁶⁷ Donnie R. Marshall, “DEA Congressional Testimony,” *U.S. Drug Enforcement Administration* (1 May 2001) <http://www.usdoj.gov/dea/pubs/cngrtest/ct050101.htm> (Accessed 19 April 2009).

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

which relied on camouflage, stealth and high speed to evade detection and avoid capture. In time LPVs were modified in nature and acquired the sobriquet ‘go-fast’ boats, denoting a boat whose crews frustrated interdiction attempts chiefly by high speed.”⁷¹ These vessels also could make their way at night through use of Global Position System (GPS) equipment.⁷² In response, military and law enforcement agency (LEA) “forces channeled traffickers into predictable routes,” utilizing applied force to establish a maritime barrier, which affected a significant disruption in trafficking.⁷³ Although “go-fasts” could often outrun a ship, the helicopter detachment onboard could easily match their speed and hunt them down once they were confined to predictable routes. When pursued by helicopters the go-fasts would typically jettison cargo, making arrest and prosecution virtually impossible, but nevertheless reducing the supply of narcotics entering the U.S. market through the Caribbean.⁷⁴

By January 1994, JTF-4 was reporting large increases in both the amount of jettisoned cargo by traffickers and delays in the shipments of the cartels.⁷⁵ There was a temporary drop in the quantity of drugs reaching the U.S. overall, as the estimated quantity available for consumption in the U.S. dropped from 528 metric tons in 1990 to 345 in 1994.⁷⁶ This period of rudimentary informal coordination and cooperation between various government agencies left many inefficiencies in information sharing and intelligence cueing across agency lines. However, the value of such coordination was recognized by the ONDCP and Department of Defense, which then worked together in Washington to formalize the relationships between agencies, leading to the establishment of the Joint Interagency Task Forces (JIATFs) in 1995.

⁷¹ Monroe, 30 and xii.

⁷² Ibid. The sophistication and modification of a fleet of high performance speed boats may have increased shipment costs for the cartels, although speed may have increased overall deliveries and thus overall profits.

⁷³ Ibid, 28.

⁷⁴ Ibid, xiii.

⁷⁵ Ibid, 28.

⁷⁶ “National Drug Control Strategy: Data Supplement 2009,” 62.

C. 1995–2001: CONSOLIDATION OF U.S. AND INTERNATIONAL COOPERATION

The State Department and the DEA had always been closely associated with forward maritime counterdrug operations, although there had been no formal coordination. Without formal coordination guidelines, agencies were seen to be figuratively stepping on each others toes and communication paths were not in place to adequately and accurately hand off traffickers to the appropriate assets through intelligence cueing. This essentially amounted to opportunity costs while more drugs were allowed to slip past the screen before true coordination began. Recognition of the potential value of intelligence cueing from the embedded DEA country teams for U.S. maritime operations led to the inauguration of a revolutionary new organizational construct to enhance communication between various U.S. agencies and the military. Presidential Decision Directive 14 (PDD14) of 1995, together with the National Interdiction Command and Control Plan (NICC), established the Joint Interagency Task Force East (JIATFE), which replaced JTF-4.⁷⁷ JIATFE had a military commander, supported by a staff made up of all branches of the military, along with a liaison or deputy director from each of the stakeholder agencies, to include the FBI, DEA, Treasury, ATF, INS, FAA, and Coast Guard. It established a formal unity of effort, more than ten years after the first use of military assets. Figure 1, shows an overall decrease in total quantity of cocaine seized by all involved agencies from 1994–2001, indicating a success in terms of fewer drugs transiting the Caribbean over the same time frame. The improved coordination and information sharing of this time period also enabled a higher proportion of all maritime seizures to take place on the high seas, where the Coast Guard is the primary executor, as interdicted by increased Coast Guard specific seizures, which increased consistently from approximately 29,000 kilos in 1994 to well over 68,000 kilos every year, usually topping 90,000 kilos.⁷⁸

⁷⁷ Simultaneously, JIATF West replaced JTF-5 under U.S. Pacific Command (PACOM), and JIATF South replaced JTF-6, under SOUTHCOM. Monroe, 89.

⁷⁸ Converted from pounds to kilos. U.S. Coast Guard, “Coast Guard Drug Removal Statistics,” *U.S. Coast Guard Office of Law Enforcement* <http://www.uscg.mil/hq/cg5/cg531/Drugs/stats.asp> (Accessed 15 April 2009).

While national level coordination has been critical to improving maritime drug operations by the U.S., coordination and cooperation with international allies also improved, contributing to interdiction success from the mid-1990s. The Netherlands, Spain, Belgium, France, Canada and the United Kingdom have had an historic interest in the security of the Caribbean, based on colonial ties and/or economic interests. Most European states also have an interest in counterdrug efforts, since an estimated “30 percent of the drugs entering Europe from Latin America pass through the Caribbean.”⁷⁹ The relative ease of air travel between former colonies and their colonizers makes it all the more important for European powers to interdict drugs before they reach the island states of the Caribbean.⁸⁰ A Memorandum of Understanding (MOU) was signed between the United States and the Royal Netherlands Navy in June 1994, which provided for intelligence sharing and formalized cooperation, placing a Royal Netherlands Flag Officer in Curacao to provide command and control for forward deployed Dutch Naval Forces subordinate to the American led JIATFE.⁸¹ Other bilateral agreements were signed around this time between the United States and both the Netherlands and United Kingdom, allowing U.S. Coast Guard LEDETs on non-U.S. naval ships, which accounted for 58 percent of the total cocaine removed for the reporting year 2003, up from 10 percent in 2000.⁸²

Cooperation with Caribbean states improved land originated intelligence cueing from local law enforcement agents, although agreements between the U.S. and Caribbean states were often weakened by low levels of political will to engage within Caribbean governments and limited local capacity to assist counterdrug effort. By March 1997 all Caribbean states, except Cuba, had signed Maritime Anti-Drug Agreements with the United States, but engagement ranged from begrudging or reluctant participation to

⁷⁹ Jorge Rodriguez Beruff and Gerardo Cordero, “The Caribbean: The ‘Third Border’ and the War on Drugs,” in *Drugs and Democracy in Latin America: The Impact of U.S. Policy* eds. Coletta A. Youngers and Eileen Rosin, 303–338 (Boulder, CO: Lynn Reinner, 2005), 306–7.

⁸⁰ Suzette A. Haugton, “The Jamaica-Britain Border and Drug Trafficking,” *The Round Table* 96, 390 (1 June 2007), 280.

⁸¹ Monroe, 24.

⁸² James M. Loy, “The Transit Zone: Strategy and Balance,” *U.S. Senate Drug Caucus* (15 May 2001), <http://drugcaucus.senate.gov/transitloy.html> (Accessed 2 June 2009) and “Coast Guard Drug Removal Statistics.”

enthusiastic cooperation. Those countries offering the most support (Colombia, Bolivia and Jamaica) were those most affected by “the corrupting power of the drug cartel.”⁸³ This locally inspired political will to engage facilitated the development and full implementation of bilateral and multilateral treaties and agreements. Caribbean states less negatively impacted by the activities of the drug cartels were less inclined to engage fully in counterdrug efforts, despite increasing pressure from the United States. Nevertheless, improved coordination and cooperation with international elements on the ground enabled greater communication to the JIATF commanders and SOUTHCOM itself, which contributed to more participation in maritime operations by the host states, a friendlier response to U.S. and allied operations in their vicinity, and increased and improved intelligence gathering and cueing between assets and authorities. Other cooperative arrangements between the U.S. military and motivated Caribbean states, such as Operation Tradewinds, an annual exercise with Jamaica started in 1991, and Fuerzas Unidas-Counterdrug in Colombia in 1995, also increased cooperation, coordination and communication between states, facilitating the more efficient, and in some cases previously non-existent, flow, coordination and centralization of actionable counterdrug trafficking intelligence through the JTF commanders.⁸⁴

As more and more agreements were signed, as represented by a simple binary summation of total agreements in Figure 4, overall information and effort coordination and cooperation led to an increased number of seizures in numerous countries based on the increase in actionable intelligence from the late 1990s to 2001 (Figure 2). Furthermore, during the initial increase in maritime counternarcotics agreements being signed in 1994 and 1995, the overall total quantity of cocaine seized in the Caribbean spiked (Figure 1) since the United States could now conduct operations in other states territorial waters with standing permission, a major provision known as a “shiprider” cause of many of these agreements, whereas before the United States was limited in its

⁸³ Monroe, 60; Robert A. Pastor, *Exiting the Whirlpool: U.S. Foreign Policy Toward Latin American and the Caribbean*, (Boulder: Westview Press, 2001) 94.

⁸⁴ Dana Warr, “Coast Guards of the Caribbean,” *United States Coast Guard* <http://www.piersystem.com/go/doc/586/124273/> (Accessed 29 May 2009); Louis A. Arana-Barradas, “Drug Traffickers Sent Message,” *Air Force News Service (04 August 1995) Global Security* http://www.globalsecurity.org/intell/library/news/1995/n19950804_842.html (Accessed 29 May 2009).

ability to enter such areas.⁸⁵ The link between these agreements and the growing number of seizures is even clearer in country specific data. The Dominican Republic, for instance, saw a spike in the total quantity seized in 1995, the year it entered into a maritime counter-drug agreement (Figure 5).⁸⁶ Haiti shows a similar spike in 1997, the year corresponding to its maritime agreement with the U.S. (Figure 6).⁸⁷ Both states experienced a drop back to pre-agreement seizure levels in the following years, as traffickers shifted to less risky routes through less heavily patrolled waters. The United States also worked to build the capacity of its partners by providing them with much needed equipment, such as compatible communications packages and surveillance radars.⁸⁸ It transferred more than 25 decommissioned watercraft to Caribbean states between 1995 and 2001, including patrol boats, buoy-tenders and lifeboats, all of which have been used to increase patrols in their territorial waters.⁸⁹ Aside from bilateral training agreements and exercises, the U.S. footprint was often minimal, as local states “cooperated in the construction of radar facilities for monitoring airborne and water borne traffic within the Caribbean.”⁹⁰

⁸⁵ Jorge Rodriguez Beruff and Gerardo Cordero, “The Caribbean: The ‘Third Border’ and the War on Drugs,” in *Drugs and Democracy in Latin America: The Impact of US Policy* eds. Coletta A. Youngers and Eileen Rosin, 303–338 (Boulder, CO: Lynn Reinner, 2005), 322.

⁸⁶ U.S. State Department “Maritime Counter-Narcotics Bilateral Agreements,” *U.S. Department of State* <http://www.state.gov/s/l/2005/87199.htm> (Accessed 1 May 2009).

⁸⁷ Ibid.

⁸⁸ Adam Isacson, “The U.S. Military in the War on Drugs,” in *Drugs and Democracy in Latin America: The Impact of U.S. Policy* eds. Coletta A. Youngers and Eileen Rosin, 15–60 (Boulder, CO: Lynn Reinner, 2005), 39.

⁸⁹ Loy.

⁹⁰ Monroe, xii.

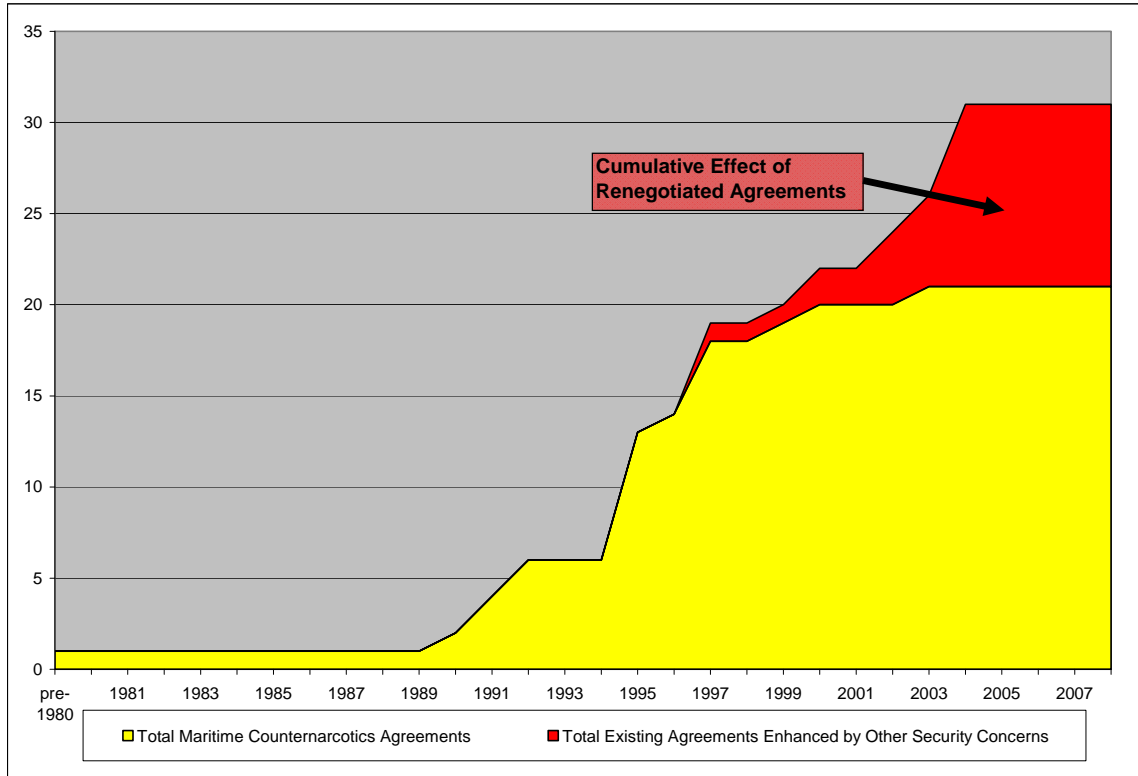


Figure 4. Quantity of Bilateral International Agreements Between Caribbean States and the United States by Year⁹¹

⁹¹ U.S. State Department “Maritime Counter-Narcotics Bilateral Agreements.” Figure 4 was built by crediting each year with the total number of maritime counterdrug agreements with Caribbean states in effect as of that year. When no agreement existed, a “0” was used. When an agreement was established, a “1” was used. The binary summation is represented by the yellow portion of the chart. In some cases, agreements were renegotiated and made more robust due to other security concerns, in particular, post-9/11. Agreements renegotiated were assigned an extra “1” and are represented by the red portion of the chart.

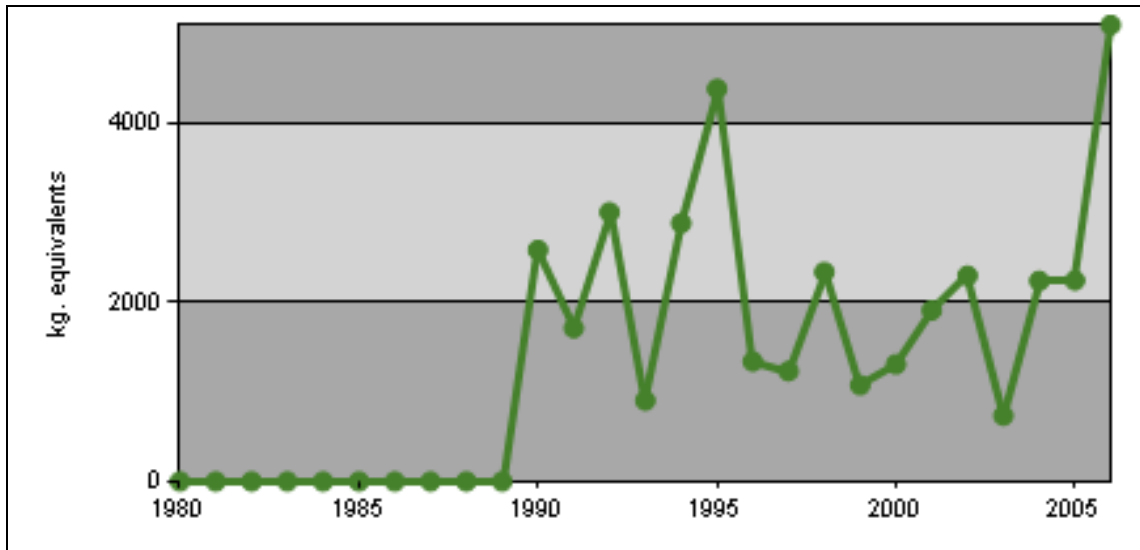


Figure 5. Cocaine Seizures by Year for the Dominican Republic⁹²

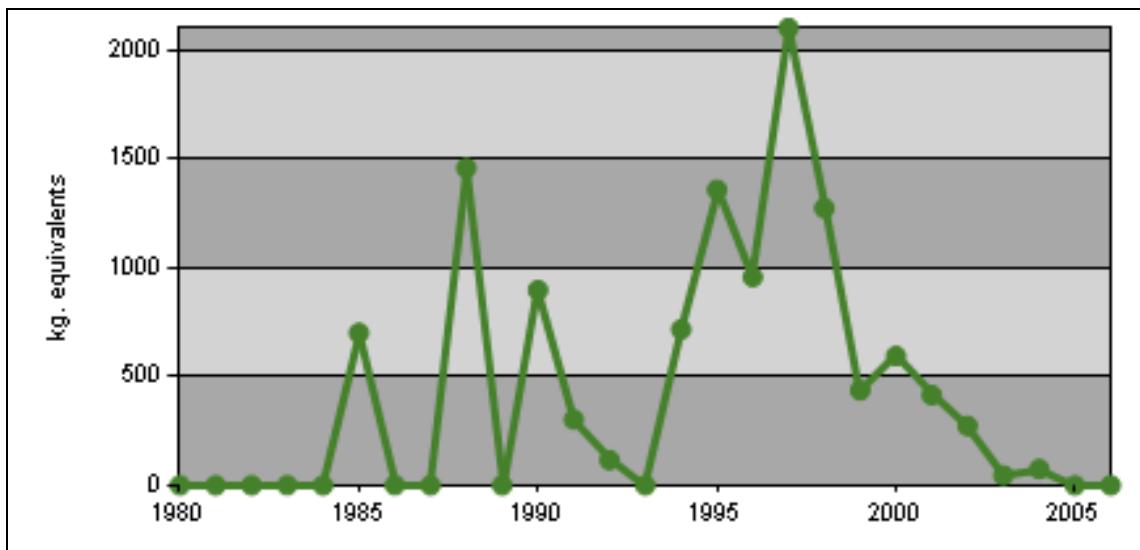


Figure 6. Cocaine Seizures by Year for Haiti⁹³

⁹² UN Office on Drugs and Crime Report Viewer [input parameters: Americas, Caribbean, Dominican Republic, Cocaine, 1980–2006].

⁹³ Ibid, [input parameters: Americas, Caribbean, , Haiti, Cocaine, 1980–2006].

The success of U.S. led maritime interdiction efforts in the Caribbean in this period is evidenced by the declining levels of cocaine seized there in conjunction with the increase in trafficking through Mexico.⁹⁴ The number of seizures was increasing, while the quantity seized was decreasing, indicating that drugs still passing through the Caribbean were being shipped on smaller boats, which were increasingly being caught in the tightening Caribbean screen. However, this success was partly a result of the relative ease of trafficking through the sanctuaries of Mexico and the Eastern Pacific, which gave the cartels a viable path of less resistance, leading them to shift operations away from the Caribbean rather than reducing them overall. Figure 7 shows cocaine passing through the Caribbean and Eastern Pacific maritime environments as a proportional total maritime trafficking (i.e., excluding Mexican land trafficking). While the Caribbean accounted for well over 50 percent of maritime trafficking in the late 1990s, since 2000 it has accounted for less than 50 percent, and often below 25 percent.

⁹⁴ “The Threat of Narco-Trafficking in the Americas,” 11.

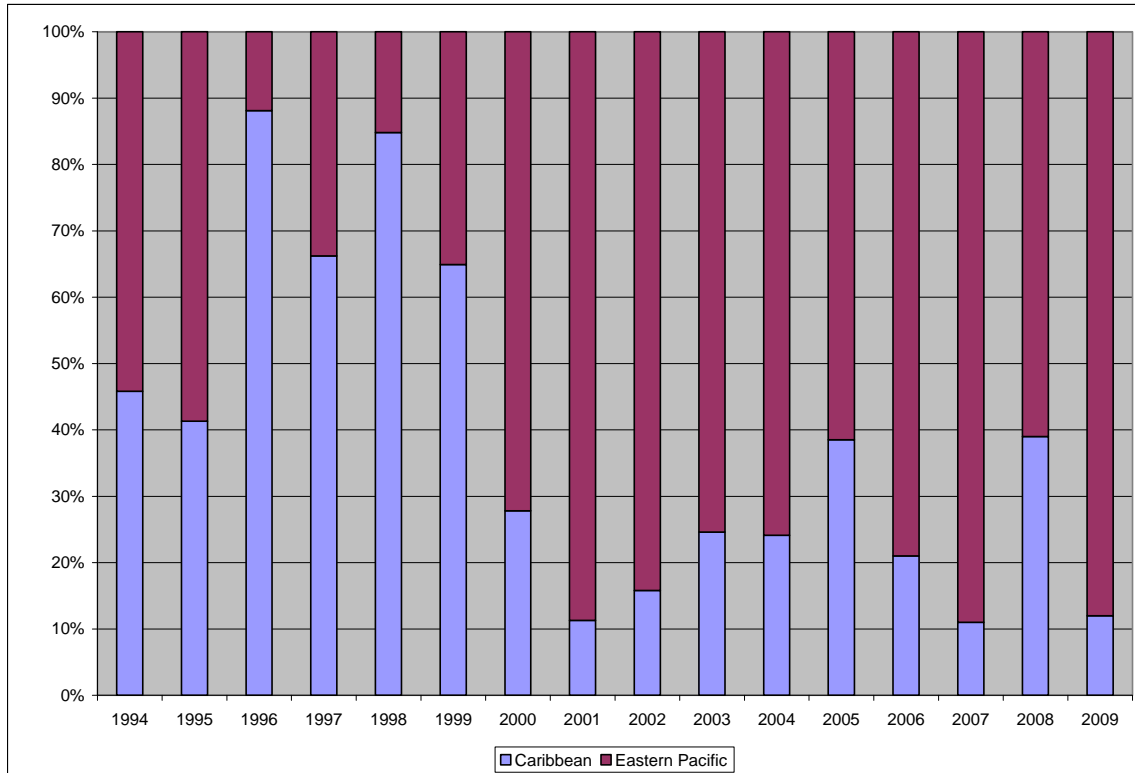


Figure 7. Percent of Maritime Interdictions Eastern Pacific vs. Caribbean by Year⁹⁵

D. 2002–2009: CAPACITY ESCALATION

The steep increase in the number of seizures beginning in 2002 was the result of an operational and strategic adjustment associated with the Patriot Act and other supporting legislation adopted in response to the terrorist attacks of September 11, 2001. Drug trafficking was now identified as a source of financial and logistical support for terrorist organizations, leading to dramatically increased resourcing as the War on Drugs became part of the Global War on Terror (GWOT). A monumental shift in operational and strategic mentality, which now viewed drug trafficking as supporting a tangible physical enemy with Clauswitzian ramifications rather than as a spectral social threat, allowed for the tactical application of previously restricted resources, including nuclear powered submarines in a clandestine intelligence gathering, cueing and monitoring,

⁹⁵ “Coast Guard Drug Removal Statistics.”

which added the tactical advantage of stealth.⁹⁶ Submarines, along with human intelligence, communications intelligence and overhead imaging resources (newly prioritized and enhanced for the counterdrug mission as a result of the linking to the GWOT) all contributed to the increase in number of seizures after 2001 (Figure 2).

Despite this increase in resources overall, the specific Coast Guard presence, measured by ship days on station, declined by approximately two thirds between 2001 and 2005 due to a reprioritization of Coast Guard specific mission assets following the September 11th attacks.⁹⁷ This means that the increase in seizures took place despite a significant decline in the number of patrol vessels, indicating an increased efficiency of patrols, brought about by the additional assistance provided to the remaining Coast Guard patrols by non-Coast Guard assets such as submarines. International cooperation in the region also improved after 2001. Treaties with Caribbean states increased by approximately 50 percent as preexisting agreements were strengthened. Some states also signed on to the U.S.-led Proliferation Security Initiative (PSI), which brought additional resource and security assistance (Figure 4).⁹⁸

One example of the benefits of the increased cooperation is Operation Kingfish, initiated in 2004 by the United States, United Kingdom and Jamaica. Within two weeks of formalizing a law enforcement and maritime cooperation pact, Jamaican and UK authorities captured three boats destined for Jamaica carrying over \$4 billion in cocaine; a seizure many authorities claim would not have been possible without Kingfish.⁹⁹ This cooperation contributed to a remarkable jump in Jamaican seizures, which had held steady at nearly zero before Operation Kingfish. After the 2004 seizure, which was

⁹⁶ William H. McMichael "Submarines Home in Time for Thanksgiving," *Navy Times* November 16, 2006, <http://www.navytimes.com/legacy/new/1-292925-2363677.php> (Accessed 2 November 2008).

⁹⁷ Data compiled from two reports by the GAO. U.S. General Accounting Office. *Coast Guard: Station Readiness Improving, but Resource Challenge and Management Concerns Remain*. Report to the Senate and House Committees on Appropriations, GAO-05-161, 13. <http://www.gao.gov/new.items/d05161.pdf> (Accessed 20 April 2009) ; U.S. General Accounting Office. *Drug Control: DOD Allocates Fewer Assets to Drug Control Efforts*. Statement of Jess T. Ford, GAO/T-NSIAD-00-77, 9. <http://www.gao.gov/archive/2000/ns00077t.pdf> (Accessed 30 April 2009).

⁹⁸ "Maritime Counter-Narcotics Bilateral Agreements"

⁹⁹ Alicia Dunkley, "Operation Kingfish Netting Big," *Jamaica Information Service* (14 December 2004), http://www.jis.gov.jm/security/html/20041213T080000-0500_4434_JIS_OPERATION_KINGFISH_NETTING_BIG.asp (Accessed 1 May 2009).

credited to the UK rather than Jamaica, Jamaican authorities stepped up efforts in its own territorial waters and airspace, landing its first major drug seizures in over twenty years in 2006.

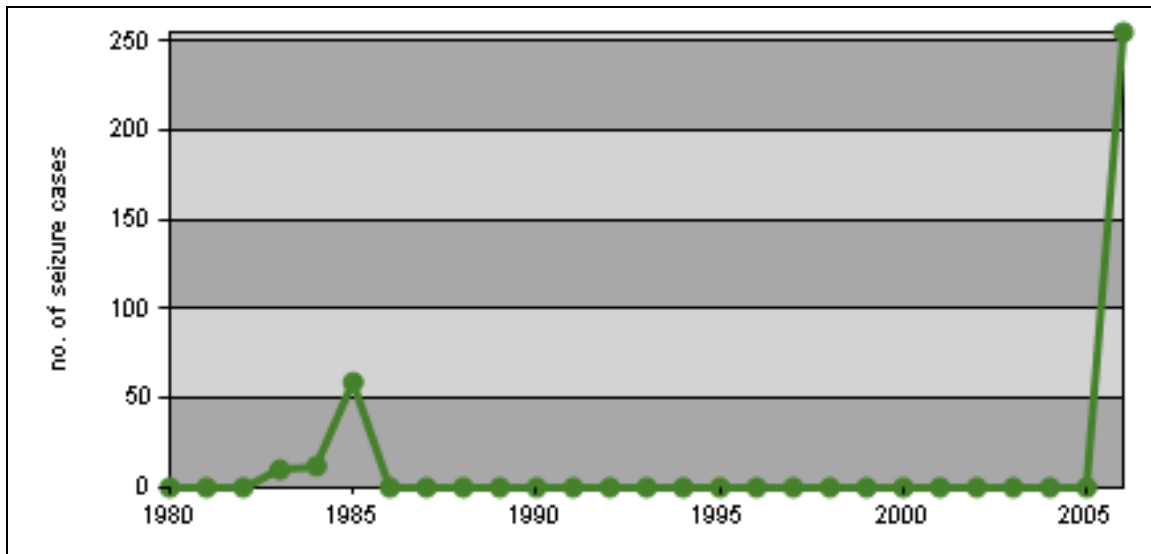


Figure 8. Total Cocaine Seized by Year for Jamaica¹⁰⁰

Traffickers responded to increasingly effective interdiction efforts by shifting to the use of semi-submersible vessels beginning in 2005. Documents seized from an alleged builder of these vessels in Colombia indicate a construction cost of \$1 million per vessel, with a carrying capacity of eight to ten tons of cocaine, with an approximate street value of \$250 million.¹⁰¹ A survey of the global boat brokerage website, Boats.com, indicates that a typical go-fast boat, approximately 50 feet long, can cost as much or more than the \$1 million dollar price tag of the semi-submersibles. The trade off is that a go-fast can typically only carry approximately one ton of cocaine and is much easier to detect, meaning that the semi-submersibles have an overall higher chance of success and

¹⁰⁰ UN Office on Drugs and Crime Report Viewer [input parameters: Americas, Caribbean, Jamaica, Cocaine, 1980–2006]

¹⁰¹ Chris Kraul, “In Colombia, They Call Him Captain Nemo,” *Los Angeles Times* (14 December 2008), <http://www.latimes.com/news/nationworld/world/la-fg-captainnemo14-2008dec14,0,1166020.story> (Accessed 15 December 2008).

result in a higher payout.¹⁰² Though the detection and subsequent loss of such a large quantity of product poses an economic risk to the cartels, the drastically increased potential profit, and the more elusive nature of this method of transport, as well as the drastically reduced requirement for a large number of attempted shipments to move the same quantity of drugs, all suggests that this method represents a tactical improvement in drug trafficking. However, despite the advent of semisubmersibles for Caribbean trafficking, the overall cocaine flow continued to shift away from Caribbean routes in response to the coordinated maritime response. In addition to the shift in maritime flow toward the Eastern Pacific (Figure 7), overland routes through Mexico saw a substantial increase in their share of the cocaine flow into the U.S., from under 60% in the late 1990s to 90% in 2006 (Figure 9).¹⁰³ Thus, the maritime strategy in the Caribbean proved effective, but because alternate shipping routes remained less secure the total flow of drugs into the U.S. was not substantially affected.¹⁰⁴ The United States is attempting to transfer the lessons learned in the Caribbean to the Pacific. In 2008, it enhanced its own maritime security capacity by establishing the Fourth Fleet, answerable to SOUTHCOM, in an attempt to replicate the success in the Caribbean in the Eastern Pacific.¹⁰⁵

¹⁰² “Iron Duke Strikes a Blow to Cocaine Smugglers,” *United Kingdom Ministry of Defence News* (02 July 2008) <http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/IronDukeStrikesABlowToCocaineSmugglers.htm> (Accessed 1 May 2009).

¹⁰³ “The Threat of Narco-Trafficking in the Americas,” *UN Office on Drugs and Crime* (October 2008) http://www.unodc.org/documents/data-and-analysis/Studies/OAS_Study_2008.pdf (Accessed 19 April 2009), 11.

¹⁰⁴ “National Drug Control Strategy: Data Supplement 2009,” 63.

¹⁰⁵ Alan Gragg, “Navy Reestablishes U.S. 4th Fleet,” *U.S. Navy* (24 April 2008) http://www.navy.mil/search/display.asp?story_id=36606 (Accessed 29 May 2009).

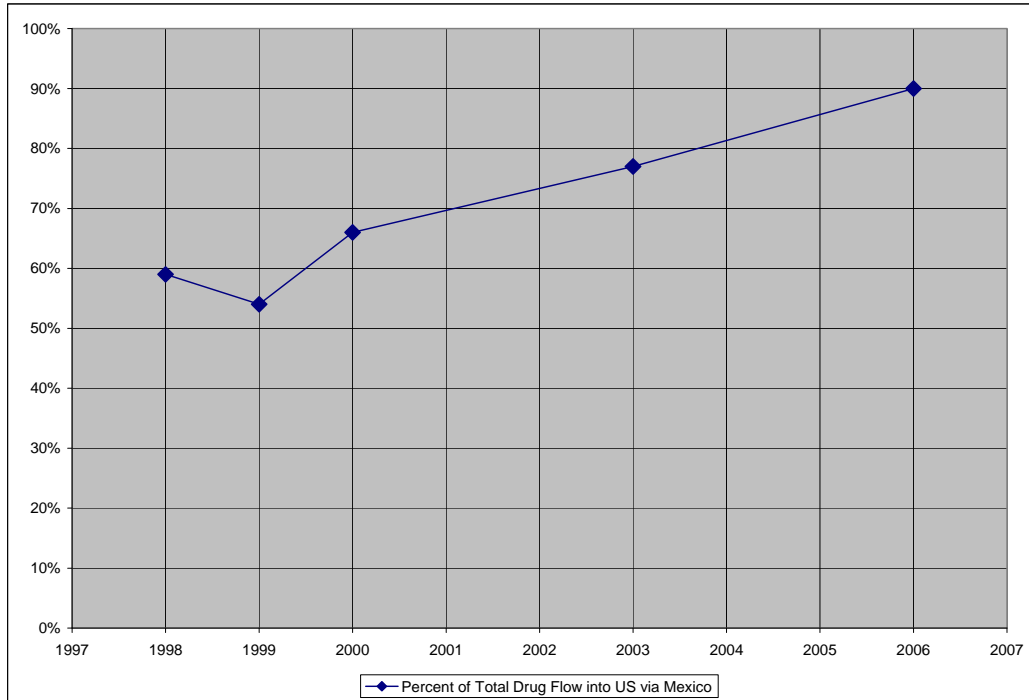


Figure 9. Percent of Total Drug Flow into U.S. via Mexico¹⁰⁶

E. LESSONS FROM MARITIME COUNTERDRUG OPERATIONS IN THE CARIBBEAN

This chapter has shown that counterdrug efforts in the Caribbean were effective after 1995 at the strategic, operational and tactical levels, and that this success was largely attributable to increased cooperation and coordination between U.S. government agencies and between the U.S. and international partners, as well as increased tactical presence. While the smugglers have eluded definitive defeat through constantly evolving tactics in response to counterdrug operations, the tactical responsiveness of counterdrug efforts provide for short term successes and long term reduction in Caribbean smuggling. The increased counterdrug presence and coordination led to reduced Caribbean trafficking at a time when trafficking along other smuggling routes grew substantially, an achievement of no small import. Unfortunately this success was also offset at the national

¹⁰⁶ “The Threat of Narco-Trafficking in the Americas,” 11.

policy level by a failure to more fully implement the counterdrug strategy, leaving gaps in the Pacific and Mexico through which traffickers continued to operate.

The overarching lessons learned from the War on Drugs in the Caribbean are the value and positive impact of coordinated operations and increased maritime presence, but also the adaptability of the traffickers to new U.S. and allied tactics. The evidence has shown that presence alone, even by the most capable state on the planet, is not enough to form an adequate screen without both internal and international cooperation and coordination in a maritime environment as vast as the Caribbean. Furthermore, traffickers rapidly adapt to any tactical challenge presented by the U.S., its allies and their available technology. Therefore, the U.S. and its allies have had to remain vigilant and adaptive.

Increased international cooperation and coordination proved a valuable facet of the drug war in the Caribbean. Leveraging existing political will to engage, as is the case with extraregional allies such as the UK and Netherlands, or cultivating it through partnerships, such as those with Columbia and Jamaica, serves to enhance counterdrug operations across the region. The Caribbean states also have an important role to play in the effectiveness of coordination and cooperation at the operational and tactical levels and specific country comparisons have shown that increased political coordination and interaction serve to facilitate tactical level reductions in drug trafficking and an increase in drug seizures.

Advocates of the current strategy suggest that with more resources tactical success could lead to strategic success by making the maritime screen tighter and denser, and extending it to the Pacific. The successes in the Caribbean suggest that if such a strategy were employed across all maritime (and overland) smuggling routes, a more permanent and overarching victory might be achieved. Yet the dedication of so many agencies and resources to such an effort, one that must be continuously maintained, almost certainly requires the sacrifice of some other aspects of U.S. national security, which may pose an even greater danger than the drug trade.

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III. ANTIPIRACY IN SOUTHEAST ASIA

Piracy has long been a scourge of maritime nations. References may be found as far back as Herodotus' warning of their fatal exploits and the need for civilized people to act against them. In Roman times, the perpetrators of piracy were known as "*hostis humani generis*," or an "enemy against all mankind."¹⁰⁷ Great Britain, at the height of its imperial strength, battled pirates in every ocean it sailed.¹⁰⁸ The first international military operation conducted by the United States was against piracy on the Barbary Coast of Tripoli in 1801–1805.¹⁰⁹ While the pirates of the past were concentrated on the major trade routes of the Caribbean, Mediterranean, and Southeast Asia, the latter experienced exceptional international attention beginning in the 1990s as global trade grew significantly and the region became host to an ever increasing quantity of global shipping.¹¹⁰

This chapter analyzes recent antipiracy operations in Southeast Asia at the strategic, operational and tactical levels from 1991 through the present. As in the counterdrug analysis, it identifies two primary contributors to effectiveness: coordination, at both the national (interagency cooperation) and international levels (bilateral and multilateral agreements), and maritime security capacity to conduct antipiracy operations, including the ability to man, train and equip antipiracy security forces. Each of these factors is again found to be dependent upon the emergence or creation of the political will to engage, in this case in serious antipiracy measures. This chapter shows that the values of these two independent variables increased throughout the 1990s, peaking in 2001 when Southeast Asian antipiracy efforts, previously regional in nature, expanded to include extra-regional involvement. This is shown to have had an immediate and

¹⁰⁷ "Hostis Humanis Generis," *Dictionary of War*
http://dictionaryofwar.org/concepts/Hostis_Humani_Generis (Accessed 19 May 2009).

¹⁰⁸ David J. Starkey, "The Origins and Regulation of Eighteenth Century British Privateering," in *Bandits at Sea: A Pirates Reader*, ed. C.R. Pennel, (New York: New York University Press, 2001), 69–81.

¹⁰⁹ Craig L. Symonds, *Historical Atlas of the U.S. Navy*, (Annapolis: Naval Institute Press, 1995), 28–31.

¹¹⁰ Adam Young, 1–2.

sustained impact on the dependent variable, level of piracy in the region. While the explanatory factors are the same for counter-drug efforts in the Caribbean and counter-piracy operations in Southeast Asia, this chapter shows that whereas the maritime security capacity to conduct operations in the Caribbean increased prior to international cooperation, the inverse is true for Southeast Asia, where international coordination and cooperation increased prior to increases in maritime security capacity.

Southeast Asia includes the Indo-China Peninsula (Vietnam, Thailand, Cambodia, Myanmar, West Malaysia, and Singapore) and the surrounding South China Sea, Gulf of Thailand, Strait of Malacca and Indian Ocean. The thousands of islands in the Indonesian Archipelago (17,508) and the Philippines (7,107) are also part of the Southeast Asian maritime region, providing numerous safe havens for shallow draft pirate watercraft.¹¹¹ The Strait of Malacca is a strategic sea lane of communication (SLOC), along which approximately 15 million barrels of crude oil and many other key items of global commerce are transported each day on the estimated fifty thousand vessels that transit this 1.7 mile wide body of water each year.¹¹² The area of analysis in this chapter includes the Straits of Malacca, along with the territorial waters of Singapore, Malaysia and Indonesia, from 1991, when robust data was first collected, through 2008.

The dependent variable is measured by the number of piracy attacks. This chapter uses the definition of a piracy attack as set by the International Maritime Bureau (IMB), specifically, “an act of boarding any vessel with the intent to commit theft or other crime and with the capability to use force in the furtherance of the act.”¹¹³ This definition enhances the UN Convention on the Law of the Sea (UNCLOS) definition by including not only classical piracy that occurs on the high seas but all maritime crime with the

¹¹¹ “Indonesia,” *CIA World Fact Book*, <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html> (Accessed 05 December 2008); “Philippines,” *CIA World Fact Book*, <https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html> (Accessed 5 December 2008).

¹¹² “World Oil Transit Chokepoints: Malacca,” *Energy Information Administration*, http://www.eia.doe.gov/cabs/World_Oil_Transit_Chokepoints/Malacca.html (Accessed 5 December 2008).

¹¹³ International Maritime Bureau, *Piracy Report 1992*, (Kuala Lumpur, 2 February 1993), 4.

exception of unarmed petty theft.¹¹⁴ It should be noted as well that the IMB's statistics include all attempted attacks, whether or not they succeeded. A decrease in the number of attacks indicates a reduction in piracy.

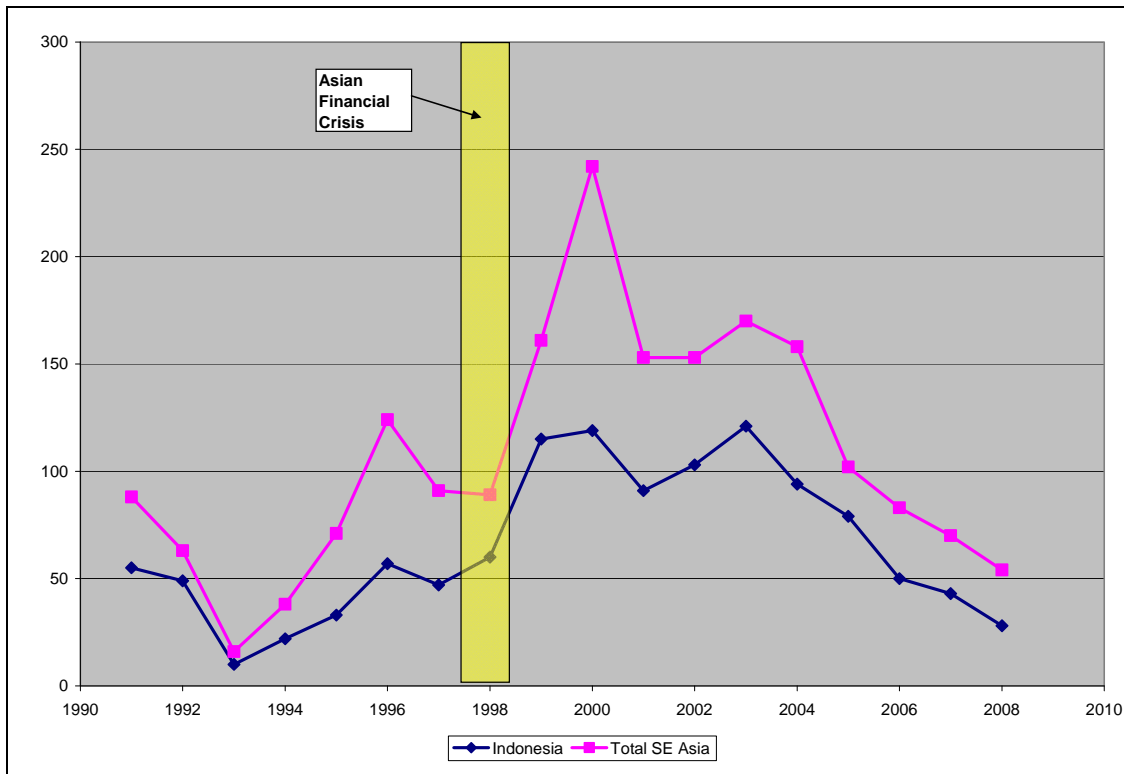


Figure 10. Piracy Attacks in Indonesia and South East Asia ¹¹⁵

One indicator of the independent variable maritime security capacity is the number of maritime craft available for antipiracy patrols and operations *per 100 miles* of coastline. Figure 11 shows the number of patrol craft for the three countries of study, while Figure 12 shows the relative maritime security capacity of each state over time based on patrol craft per 100 miles of coastline. Indonesia has one watercraft per 100 miles of its coastline, while Malaysia has hovered between three and six, and Singapore has 100, dwarfing the other two countries in capacity to patrol its own territorial waters.

¹¹⁴ International Maritime Bureau, *Piracy Report 1992*, (Kuala Lumpur, 2 February 1993), 4; International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January – 31 December 2008)*, (Kuala Lumpur, January 2009), 5.

¹¹⁵ Data compiled from International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Reports [1992–2008]* (Kuala Lumpur).

This chapter uses the same expanded concept of maritime security capacity as the counterdrug chapter by giving credence to training, interoperability equipment and exercise experience, all of which enhance the ability of the limited resources to perform their functions more effectively. Due to the relatively constant level of maritime security capacity in terms of assets available to combat piracy, as illustrated in Figures 11 and 12, this chapter focuses more heavily on the incidences of training exercises and programs as the main source of capacity building than the counterdrug chapter does.

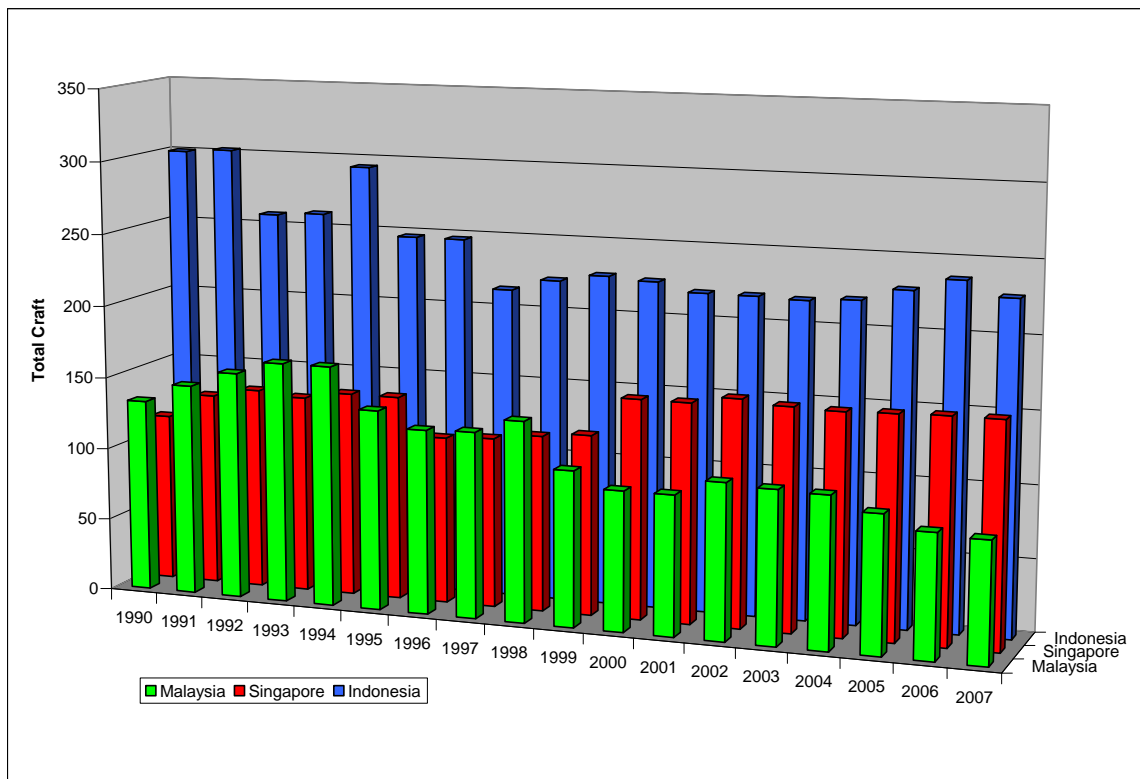


Figure 11. Total Maritime Security Craft per Country by Year¹¹⁶

¹¹⁶ Data compiled from *Jane's Fighting Ships* 1990 through 2008 editions.

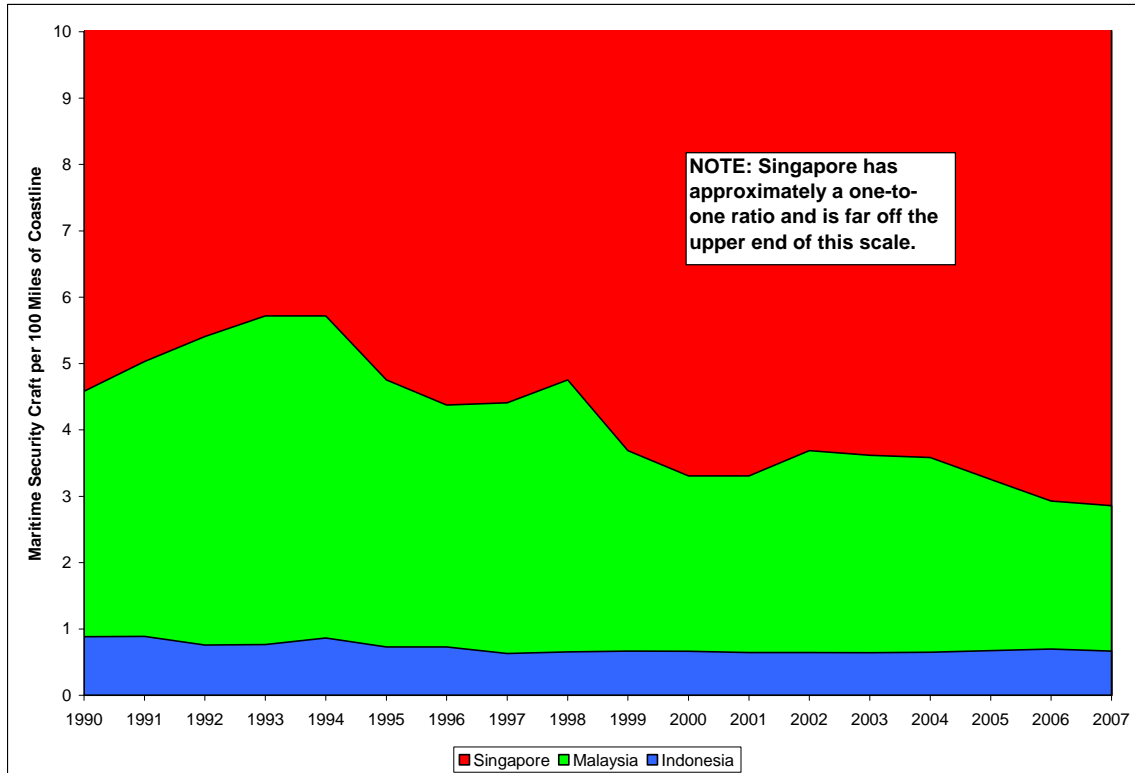


Figure 12. Maritime Security Craft per 100 Miles of Coastline by Year¹¹⁷

Whereas drug trafficking primarily targets the United States in the Caribbean, this chapter shows that because piracy directly threatens each state in the region, national level actions do reduce piracy. Nevertheless, to be truly effective across an entire region, cooperation and maritime security capacity building must extend beyond the individual stakeholder countries to the region as a whole. Furthermore, regional antipiracy operations are shown to be further enhanced when cooperation and maritime security capacity building are extended to the international levels.

A. ECONOMIC FACTORS

It is well understood that the level of piracy is significantly affected by economic forces on land, which are treated as a condition variable and not studied directly here. Although piracy was already growing rapidly during the economic expansion of the mid-

¹¹⁷ Data compiled from *Jane's Fighting Ships* 1990 through 2008 editions.

1990s, it spiked in 1998–2000 as “a result of the Asian financial crisis that began in Thailand in late 1997 and political instability in Indonesia, which led to underemployment and unemployment of thousands of people” (Figure 10).¹¹⁸ With increased incentives for piracy on land, antipiracy efforts at sea had to be stepped up to increase disincentives, mainly the risk of doing pirate business. Thus antipiracy efforts at sea push back against economic incentives generated on land, and as a result any analysis of antipiracy must remain cognizant of the effects of economic forces.

Piracy attacks in Indonesian waters grew from 47 in 1997, at the start of the financial crisis, to 119 in 2000, as the financial crisis acutely affected the general population in the country.¹¹⁹ Economic pressures aggravated civil unrest and government violence in Indonesia, further contributing to the spike in piracy, which spilled over into Malaysian, Singaporean and international waters, leading to a nearly three-fold increase in Southeast Asia as a whole during the same time period.¹²⁰ This economic dynamic exposed the inadequacy of existing antipiracy operations. In the aftermath of the Asian financial crisis, as regional economies began to recover, piracy rates as a whole dropped off from a peak of 242 attacks in 2000 to 54 attacks in 2008, an overall decrease of over 75 percent.¹²¹ The percentage of ships targeted by pirates while transited the Strait of Malacca also fell from 37 to 10 attacks per 10,000 ships, also a decrease of approximately 75 percent (Table 1).¹²²

¹¹⁸ Dana Robert Dillon, “Piracy in Asia: a Growing Barrier to Maritime Trade,” *The Heritage Foundation* (22 June 2000), <http://www.heritage.org/research/asiaandthepacific/bg1379.cfm> (Accessed 7 December 2008).

¹¹⁹ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report* (1 January—31 December 2005), (Kuala Lumpur, 31 January 2006), 5.

¹²⁰ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report* (1 January—31 December 2005), (Kuala Lumpur, 31 January 2006), 5.

¹²¹ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report* (1 January—31 December 2008), (Kuala Lumpur, 31 January 2009), 5.

¹²² Shipping data not available for 2008 as of this writing.

Year	Attacks	Shipping	Percent	per 10K
1999	161	43965	0.366	36.6
2007	70	70718	0.098	9.8

Table 1. Total Piracy Rate in Southeast Asia vs. Traffic¹²³

These drastic reductions in total attacks and piracy rates occurred while regional per capita Gross National Incomes (adjusted for Purchasing Power Parity) was growing at an average annual rate of about seven percent (Table 2). Since piracy was increasing, but at a slower rate, during the economic expansion of the early and middle 1990s, the sustained reductions in piracy after 2000 cannot be fully attributable to economic forces. This remainder of this chapter argues that while the economic recovery surely reduced the incentives for piracy, the increased cooperation and maritime security capacity building in antipiracy efforts were also significant contributing factors to the reduction in piracy incidents to well below immediate pre-financial crisis levels by 2008, which, given the growth of shipping in the intervening years, constituted an even greater reduction in the piracy rate.

Country	2000	2007	Percent Change
Indonesia	2,240	3,570	59
Singapore	32,740	47,950	46
Malaysia	8,350	13,230	58

Table 2. GNI (PPP) per capita by Year¹²⁴

¹²³ Raman Iyer, "Malaysia Proposes Capping Number of Ships at Malacca Strait," *TopNews Law* (Kuala Lumpur: 21 October 2008), <http://www.topnews.in/law/malaysia-proposes-capping-number-ships-malacca-strait> (Accessed 3 June 2009); International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January—31 December 1997)*, (Kuala Lumpur, January 1998), 3; International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January—31 December 2008)*, (Kuala Lumpur, January 2009), 9.

¹²⁴ World Bank Group, "Indonesia Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VI EWADVANCED (Accessed 27 May 2009); World Bank Group, "Singapore Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VI EWADVANCED (Accessed 27 May 2009); World Bank Group, "Malaysia Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VI EWADVANCED (Accessed 27 May 2009).

B. 1991–1997: INITIAL EFFORTS AT COMBATING PIRACY

Singapore, Malaysia, and Indonesia responded to increasing levels of piracy with different levels of domestic political will to engage the piracy threat and with different maritime security capacities to do so (Figures 11 and 12). On one end of the spectrum was Singapore, whose minimal coastline and comparatively large economy enabled it to more easily step up policing and patrols as the political will to engage emerged. However, that same small coastline, and thus limited territorial waters, limited its operational reach, since it very quickly ran into other states' territorial waters. Malaysia was in the middle of the spectrum, with less political will to engage as indicated by ease of response than Singapore but more than Indonesia, and with less maritime security capacity relative to its longer coastline (and facing two oceans) than Singapore but more than Indonesia. At the other end of the spectrum, is Indonesia, with little political will to engage in this period, and “a coastline twice as long as the circumference of the earth, and with no more than a few dozen operating vessels to patrol its territorial waters.”¹²⁵

Domestically or internationally, demands for action against piracy always come primarily from the commercial sector, whose large transport ships make up the vast majority of pirate targets worldwide.¹²⁶ The International Maritime Organization (IMO), a professional association of commercial shippers and government representatives worked in conjunction with the UN to establish the International Maritime Bureau in 1981 under the International Chamber of Commerce to serve as an informational and best practices clearing house for all interested parties.¹²⁷ While the IMB provided little value in antipiracy operations during the 1980s, the establishment of the Regional Piracy Center (RPC) in 1992 did begin to have a noticeable effect. “The RPC’s operational brief is to act as an information and broadcasting center, liaising with regional law

¹²⁵ David Rosenberg and Christopher Chung, “Maritime Security in the South China Sea: Coordinating Coastal and User State Priorities,” *Ocean Development and International Law* 39, 1 (2008), 60.

¹²⁶ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Reports* [1992–2008] (Kuala Lumpur).

¹²⁷ International Chamber of Commerce Commercial Crime Services, “International Maritime Bureau,” *International Chamber of Commerce*, http://www.icc-ccs.org/index.php?option=com_content&view=article&id=27&Itemid=16 (Accessed 27 May 2009).

enforcement agencies”¹²⁸ to increase maritime domain awareness. It morphed into the Piracy Reporting Center (PRC) in 1992, chartered with the same tasks on a global scale. One of the first major indications that regional information sharing was contributing to improved antipiracy operations was the role played by the PRC’s information sharing across international jurisdictions, which led to the location and recovery of the hijacked MV ANNA SIERRA and its cargo and arrest of the pirates involved in 1995.¹²⁹

By the mid-1990s, the growing interdependence of Southeast Asian economies formed a nexus for state security cooperation. The varying degrees of ease of response to political pressure and state economy resulted in each state participating in regional and international cooperation efforts in different ways and at different times, though the overall trend for all three states was increasing over this time period. Eventually, however, piracy came to be viewed as a common threat to the interdependent regional economy, and Southeast Asian states began to cooperate and share information following the establishment of the RPC in 1992.¹³⁰ Joint patrolling and information sharing between Malaysia, Indonesia and Singapore (generally limited to sharing information via radio on unfolding incidents of piracy to “hand off” the incident to the applicable sovereign state) led to the substantial drop in piracy attacks between 1992 and 1993 (Figure 13).¹³¹

¹²⁸ Peter Chalk, “Contemporary Maritime Piracy in Southeast Asia,” *Studies in Conflict & Terrorism* 21, 1 (January 1998), 100.

¹²⁹ International Maritime Bureau, *Piracy Annual Report (1 January—31 December 1995)*, (Kuala Lumpur, January 1996), 4–5.

¹³⁰ Rosenberg and Chung, 60.

¹³¹ Victor Huang, “Building Maritime Security in Southeast Asia,” *Naval War College Review*, vol. 61, no. 1, pp. 87–105 (Winter 2008), www.proquest.com (Accessed 17 October 2008), 97.

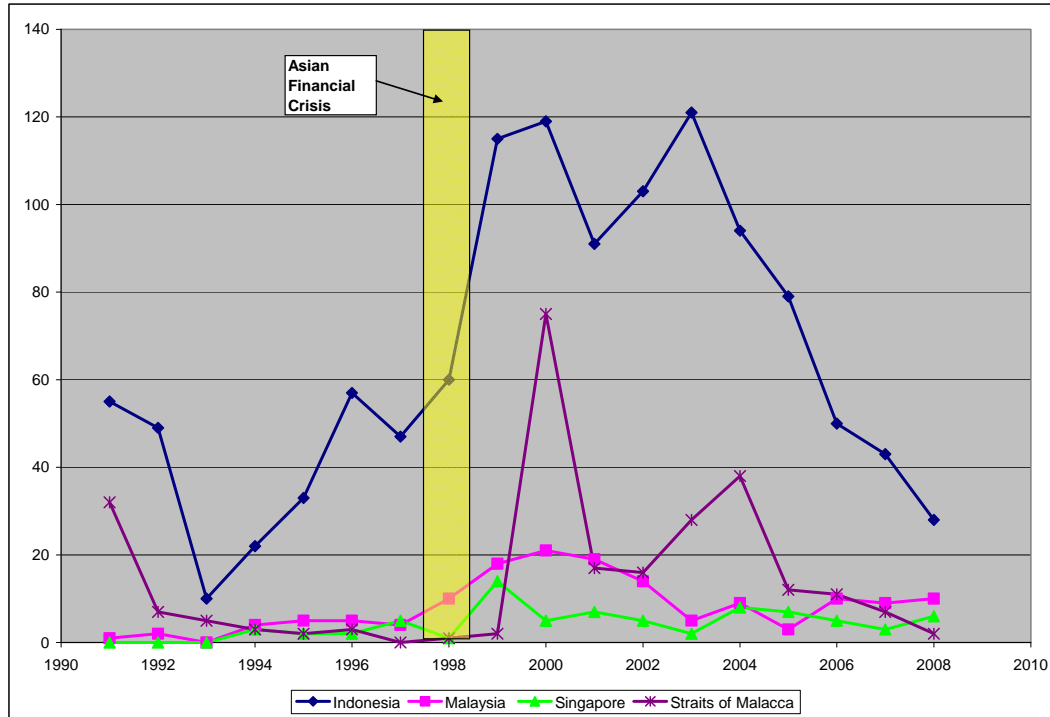


Figure 13. Total Piracy Attacks and Attempts in Southeast Asia per Country¹³²

The Singapore government, responding to demands of relatively powerful economic actors, such as the Singapore National Shipowners Association (SNSA), took the lead in regional cooperation in the early 1990s.¹³³ Since Singapore flagged vessels travel throughout the region, SNSA pressure resulted in Singapore contributing to regional maritime intelligence services, through a vessel traffic information system consisting of radars, navigational charts, and data recording, in order to better protect their interests when sailing outside their own territorial waters.¹³⁴ During this timeframe, Indonesia and Malaysia simply reaped the benefits of the rudimentary information systems developed by Singapore.

¹³² Data compiled from International Maritime Bureau Annual Reports on Piracy and Armed Robbery Against Ships 1991–2008 (Kuala Lumpur)

¹³³ SNSA became the Singapore Shipowners Association (SSA) in 2003.

¹³⁴ Huang, 89–90.

Indonesia was actually more involved in some forms of maritime security capacity building from extraregional sources than other states in the region. While all three states began personnel exchanges amongst themselves in the 1990s, Indonesia was the only one to include U.S. personnel in the exchange program, participating in Cooperation Afloat Readiness and Training (CARAT) exercises, whose scope “broadened to build understanding and interoperability further.”¹³⁵ Neither Malaysia nor Singapore was involved in this program during this timeframe. Despite such efforts, the training to more effectively employ their limited state maritime security assets proved ineffective in reversing the trend in piracy in Indonesia, as state resources were directed towards combating and containing land based internal threats against the Suharto dictatorship, despite the continually improving coordination and cooperation amongst the three states.

Following the initial drop in piracy from 1992 to 1993, piracy rates in Singapore, Malaysia, and the Straits of Malacca remained flat, indicating a sustained reduction in those areas through 1997. However, Indonesia saw a dramatic trend toward increasing piracy that continued right through the Asian Financial Crisis, driven by increasing lawlessness on land, political unrest and relatively weak state capacity to respond to these developments.¹³⁶ Because most Southeast Asian piracy occurs in Indonesia, this produced an upward trend in the piracy data for the region as a whole.

C. 1998–2001: INADEQUACIES EXPOSED

The more rapid and broad based upswing in the regional piracy rate driven by the financial crisis provoked step up responses to piracy within and outside Southeast Asia, including numerous initiatives at the national, regional and international levels that both enhanced and added to coordination and cooperation agreements and maritime security capacity through increased manning, training and equipping of antipiracy forces. National level coordination in Singapore continued to be pushed by the SNSA. Its initial response

¹³⁵ Huang, 91–2.

¹³⁶ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1998)*, (Kuala Lumpur, January 1999), 19.

to the growing threat was to lobby the Singapore government to respond more effectively to the pirates' actions. However, it soon assumed direct responsibility for making official recommendations to constituent private shipping companies as well as to governments about how to better protect the crew, goods and ships, along with increasing maritime domain awareness (MDA), both through the IMB and other means of public communication.¹³⁷

Absent a lobbying force on the scale the SNSA, the Malaysian government felt less pressure from the commercial sector than did Singapore to engage in antipiracy operations, and more challenged by its limited maritime security capacity, which was actually decreasing during this time frame (Figures 11 and 12). Before the Asian Financial Crisis, Malaysia's maritime security capacity deficit had been partly balanced by the benefits that accrued from the activities of the (PRC), which is located in its capital, Kuala Lumpur. For example, PRC authorities noted in 1999 that the majority of attacks in Malaysian territorial waters were armed robberies and hijackings of fishing vessels.¹³⁸ After being alerted to this trend, the Malaysian government increased the number and types of patrols in their territorial fisheries, added law enforcement helicopters, and placed all antipiracy assets under a newly created Eastern Police Command dedicated to addressing this piracy prone area.¹³⁹ The Malaysian authorities also advised fishermen to operate in close vicinity and large groups so that they could act as early warning for each other.¹⁴⁰ By redirecting and coordinating its limited maritime security capacity, Malaysian efforts led to a drop in attacks against fishermen, though this was offset by increases in other types of piracy elsewhere in Malaysian territorial waters, leaving the overall piracy rate unchanged (Figure 13). This shows how regional coordination can have a direct effect tactically, but also illustrates that limited capacity can only be applied to a finite number of piracy missions. Even after this demonstration

¹³⁷ Chalk, "Contemporary Maritime Piracy in Southeast Asia," 96–7.

¹³⁸ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 20.

¹³⁹ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 20.

¹⁴⁰ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 20.

of the inadequacy of its maritime security capacity, in 2001 Malaysia took no steps to augment its fleet of 52 patrol craft – only 10 of which were operational at any given time.¹⁴¹ A further illustration of weak maritime security capacity occurred when the Malaysian Navy, recognizing the value that training and exercises with extraregional actors could bring to their limited forces, agreed to take part in such exercises with Japan, but only after Japan paid for the fuel required by the participating Malaysian ship.¹⁴²

In contrast to both Singapore and Malaysia, Indonesia demonstrated no political will to engage beyond the national level in this period. Even though President Abdurrahman Wahid came to power in 1998 with a stated goal of expanding the Indonesian Navy to enhance maritime security, he was initially unable to pursue this goal due to limited state resources and continuing domestic political turmoil.¹⁴³ In the same way that Malaysia drew upon the PRC to compensate for its lack of capacity, Indonesia drew upon extra-regional assistance. While Singapore and Malaysia had piracy largely under control by 2002, and resisted extra-regional patrols of their waters (and still do), Indonesia embraced external assistance, including extraregional patrols.¹⁴⁴ It began accepting foreign military assistance and sales from the United States and Australia, along with financial aid from Japan, in 2000.¹⁴⁵ By qualitatively improving its quantitatively fixed capacity with training, exercises and operating cost assistance, Indonesia was able to achieve a substantial reduction in piracy from 119 in 2000 to 91 in 2001, though the level increase again in 2002 and 2003 in response to internal political disarray.¹⁴⁶ Such a relationship, where coordination and cooperation in engaging in

¹⁴¹ Rohan Sullivan, “Southeast Asian Economic Ills Encourage a Plague of Piracy,” *Los Angeles Times* (13 May 2001), www.proquest.com (Accessed 21 May 2009).

¹⁴² John F. Bradford, “Japanese Anti-Piracy Initiatives in Southeast Asia; Policy Formulation and the Coastal State Responses,” *Contemporary Southeast Asia*, vol. 26, no. 3, 480–505, www.proquest.com (Accessed 17 October 2008), 501.

¹⁴³ Angel Rabassa and John Haseman, *The Military and Democracy in Indonesia: Challenges, Politics and Power*, (Santa Monica, CA: RAND, 2003) *RAND Corporation Website* http://www.rand.org/pubs/monograph_reports/MR1599/ (Accessed 20 May 2009), 12–4.

¹⁴⁴ Rosenberg and Chung, 55; International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2000)*, (Kuala Lumpur, January 2001), 12.

¹⁴⁵ Huang, 91–2.

¹⁴⁶ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2005)*, (Kuala Lumpur, 31 January 2006), 5.

antipiracy are all sound in Indonesia, but the capacity is lacking is the exact inverse of the Malaysian case discussed above, where coordination was based on simply utilizing the PRC information resources and exercises relied on donated fuel, despite Malaysia having a relative ships per 100 mile advantage over Indonesia.

At the regional level, the pressure for cooperation increased in 1999, when the “chairman of the Federation of ASEAN Shipowners Association (FASA) issued a strong call for immediate action from ASEAN member governments to combat piracy.”¹⁴⁷ One result was the development of Singapore’s \$840 million satellite-based ship identification system, which was made available to other states in the region.¹⁴⁸ This system fed the PRC, acting as an information conduit for patrol vessels without intelligence cueing, which was insufficient to contain the growing level of piracy. At the same time, regional and international business interests continued to act directly in support of regional cooperation. The PRC established new information sharing and cooperation agreements, and established Surface Picture (SURPIC), “a technical system that allows information sharing between Singapore and Indonesian command and control (C2) centers in order to achieve a common operating picture in the Singapore Strait, facilitating communication and enforcement” in 1997¹⁴⁹ In 1998, the IMB (parent organization to the PRC) deployed a satellite based ship tracking system called SHIPLOC.¹⁵⁰ In 1999 the IMB began a weekly piracy reporting summary service on its website to provide more actionable data to the international community and shipping companies.¹⁵¹

Anecdotal evidence suggests that such intelligence and information gathering and sharing initiatives had an immediate impact. It led to the arrest of Chew Cheng Kiat, a

¹⁴⁷ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 20.

¹⁴⁸ P. T. Bangsberg, “Singapore, Indonesia Step Up Anti-piracy Measures,” *Journal of Commerce* (22 December 2003), www.proquest.com (Accessed 21 May 2009).

¹⁴⁹ Huang, 97.

¹⁵⁰ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 16.

¹⁵¹ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 22.

Singaporean ship hijacking mastermind, in Indonesia in 1998.¹⁵² Indonesian authorities who conducted the arrest credited “rapid and well organized intelligence” for the capture of Kiat’s phantom ship, the MT PULAU MAS.¹⁵³ Rapid dissemination of actionable intelligence also led to the recovery of the MV ALONDRA RAINBOW and arrest of its hijackers in 1999. After the ship went missing, the IMB Piracy Reporting Centre sent out a description of the vessel to regional agencies, militaries and shipmasters in the area. Over the course of a month, numerous ships sighted the MV ALONDRA RAINBOW and passed her location to the IMB Centre. After comparing information it was realized the pirates had flown a deceptive Belize flag, which did not match any registry. Ultimately, the Indian Coastguard was able to detain the ship and arrest the pirates for prosecution.¹⁵⁴ Events such as these highlight the growing importance of robust communication and coordination amongst a regional group of states where the whole, becomes much greater than the sum of its parts in terms of individual state maritime security capacity. Nevertheless, overall piracy continued to balloon.

D. 2001–2008: ADVENT OF EXTRAREGIONAL COORDINATION

The limited impact of increased cooperation within Southeast Asia on piracy led to requests for outside support in increasing maritime security capacity, through aid, purchases from foreign military suppliers, and external assistance in patrolling regional waters. The initiation of bilateral and multilateral exercises and patrols with extraregional partners improved the interoperability and communications between all participants after Japan and India became directly involved in 2000 and 2001, respectively. Over the course of the 2001–2005, the Japanese Coast Guard established routine bilateral exercises with India, Malaysia, the Philippines, Thailand, Brunei, Indonesia and Singapore, with an emphasis on law enforcement and coordination, as opposed to military patrols, because of

¹⁵² International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1998)*, (Kuala Lumpur, January 1999), 18–9.

¹⁵³ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1998)*, (Kuala Lumpur, January 1999), 18–9.

¹⁵⁴ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 1999)*, [Revised Report] (Kuala Lumpur, 20 May 2000), 12–3.

political sensitivities about deployment of Japanese forces outside its territorial waters.¹⁵⁵ Japan also conducted personnel exchanges with all of these states for immersion style training and exposure to how other forces operate in an anti-piracy posture.¹⁵⁶ Other existing exercises founded for unrelated purposes also began including antipiracy training. The Japanese led Maritime Pollution Exercise (MARPOLEX), which commenced in 1988 to improve interoperability between Japan, Indonesia and the Philippines in combating natural disasters, added a focus on antipiracy in 2001.¹⁵⁷ Following Japanese calls throughout 2000–2003 for combined international anti-piracy exercises in Southeast Asia at regional conferences, other regional and international organizations began a series of anti-piracy training exercises in 2004 and 2005. Through the Five Power Defense Arrangement (FPDA), Australia, New Zealand and the UK committed themselves to the common defense of former crown colonies Malaysia and Singapore, which included antipiracy training in routine military exercises starting in 2004.¹⁵⁸ India's presence in the region increased with the Coordinated Patrol (CORPAT) agreement between it and Indonesia in 2002, which focuses on antipiracy among other maritime security issues.¹⁵⁹

While these training exchanges and exercises enhanced the effects of military and law enforcement assets by both bolstering regional forces and maintaining extraregional presence that could respond to reports of pirate attacks in a timely manner, the largest paradigm shift occurred after the terrorist attacks of September 11, 2001, when the U.S. presence in the region expanded from humanitarian aid to direct military assistance based on the particular needs of each individual state. Military sales, donations and training, through the International Military Education and Training (IMET) program and

¹⁵⁵ Bradford, "Japanese Anti-Piracy Initiatives in Southeast Asia; Policy Formulation and the Coastal State Responses," 491–2.

¹⁵⁶ Bradford, 499–500.

¹⁵⁷ Jovito Tamayo, "PCG Hosts Marine Pollution and Anti-Piracy Exercises," *Tinig ng Marino* (March April 2003), <http://www.ufs.ph/tinig/marapr03/03040318.html> (Accessed 4 June 2009).

¹⁵⁸ Rosenberg and Chung, 57.

¹⁵⁹ Amit Sengupta, "India and Southeast Asia: Strategic Engagement and Trade Enhancement," *Institute of Peace and Conflict Studies* (25 April 2008), http://www.ipcs.org/article_details.php?articleNo=2551 (Accessed 4 June 2009).

coordinated exercises increased the maritime security capacity of Southeast Asian states to act against piracy improving their ability to efficiently and effectively use the limited resources at their disposal. The United States added counter-piracy to its existing Cobra Gold exercises in the South China Sea in 2005.¹⁶⁰ The United States also established numerous new bilateral and multilateral counterterrorism exercises, such as Operation Deep Sabre in 2005, which developed tactics with crossover value in the realm of antipiracy at sea.¹⁶¹ The United States sponsored Container Security Initiative (CSI) and Proliferation Security Initiative (PSI) of 2003 prompted Singapore, one of the first signatories, to consolidate its port security, establish small craft tracking in its territorial waters and place private security firm personnel on Singaporean flagged vessels.¹⁶² Malaysia, with two major ports, became a signatory in mid 2004, though it has yet to sign on to the PSI.¹⁶³

In conjunction with increased extra-regional assistance, cooperation and coordination, states and regional bodies continued to improve their own maritime security capacity qualitatively. Regional measures included expanded promulgation of best practices for shipping companies by the IMB, along with new defense and coordination systems. SHIPLOC, which was formally adopted and made a requirement of all ships registered with the IMO in 2002, includes a concealable transmitter that communicates with the ship owner and regional and international authorities by providing multiple position reports per day, as well as a security alert feature for when a ship comes under attack.¹⁶⁴ Building on its always strong military presence, Singapore established the interagency Maritime and Port Security Working Group in 2003, linking its navy, coast guard and law enforcement efforts at port and sea lane security.¹⁶⁵ Singapore also

¹⁶⁰ Rosenberg and Chung, 55.

¹⁶¹ Ibid, 60.

¹⁶² Ibid, 60.

¹⁶³ "Fact Sheet," *U.S. Customs and Border Protection: Container Security Initiative* (02 October 2007) http://www.cbp.gov/linkhandler/cgov/trade/cargo_security/csi/csi_fact_sheet.ctt/csi_fact_sheet.doc (Accessed 20 May 2009), 2.

¹⁶⁴ "About SHIPLOC," *SHIPLOC* http://www.shiploc.com/html/about_shiploc.html (Accessed 12 May 2009).

¹⁶⁵ Huang, 89–90.

“install[ed] tracking devices on all Singapore-registered small boats that identify location, course and speed” as part of its participation in the U.S.-led Container Security Initiative.¹⁶⁶ In 2004, the IMB reporting system and improved Indonesian aircraft and patrol boat capabilities led to a hijacked Singaporean tug being recovered two days later.¹⁶⁷ In 2005, the IMB sponsored the “Eyes in the Sky initiative to enhance surveillance by combined maritime air patrols.”¹⁶⁸ “Previously, each state had conducted air surveillance patrols only within its own airspace. This new program allows combined air patrols across territorial boundaries, allowing for better effectiveness in the narrow straits as well as promoting operational cooperation.”¹⁶⁹ All of these initiatives show the increasing level of cooperation and coordination between agencies, regional and international partners.

Indonesia, recovering from the fall of the Suharto regime and the resulting civil war, was focused on internal development and so lacked the political will to engage to combat the spread of piracy until 2003. Emerging from internal disarray, the newly established and empowered national government charged its maritime security apparatus to focus its sights on piracy. After a lag to reorganize and refocus the limited maritime security forces, the first significant unilateral push by Indonesia to curb piracy was a “full scale maritime operation code named Gurita 2005, which ... increased naval and air patrols in the straits.”¹⁷⁰ This increase in naval and air presence contributed to decreasing incidents of piracy in Indonesian territorial waters from 94 in 2004 to 79 attacks in 2005, to 50 attacks in 2006, a two year drop of almost 50%.¹⁷¹

At the national level, Indonesia finally found the political will to engage in 2003, having recovered from the fall of the Suharto regime and the resulting civil war.

¹⁶⁶ Rosenberg and Chung, 60.

¹⁶⁷ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 Januar –31 December 2004)*, [Revised Report] (Kuala Lumpur, 1 August 2005), 25–7.

¹⁶⁸ Huang, 97.

¹⁶⁹ Ibid, 97.

¹⁷⁰ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2005)*, (Kuala Lumpur, 31 January 2006), 32.

¹⁷¹ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2008)*, (Kuala Lumpur, January 2009), 5.

Emerging from internal disarray, the new government charged its maritime security apparatus to focus its sights on piracy. After a lag to reorganize and refocus, it launched its first significant unilateral antipiracy push, a “full scale maritime operation code named Gurita 2005, which ... increased naval and air patrols in the straits.”¹⁷² This increase in naval and air presence contributed to decreasing incidents of piracy in Indonesian territorial waters from 94 in 2004 to 79 in 2005 and 50 in 2006, a two year drop of almost 50%.¹⁷³ Indonesia also received, and accepted, special attention starting in 2004, given its extraordinarily high incidence of piracy. It was the only country in the region to accept U.S. International Military Education and Training (IMET) training to enhance security and readiness for all types of operations, including piracy.¹⁷⁴ It also received \$700,000 to improve the marine security training center in Jakarta, the installation of twelve coastal radar stations in 2004, and the donation of fifteen high-end patrol craft to the Indonesian coastal police, which restored Indonesia’s maritime security capacity to its 1999 levels, an increase of almost 8 percent (Figures 11 and 12).¹⁷⁵ While incidents of piracy in Indonesia remain high compared to other states, piracy in Indonesia declined at a higher rate than other states in the region from 2002 to 2008, demonstrating that Indonesia’s embrace of international assistance, and the resulting cooperation and coordination, has had a more direct impact on piracy than in Malaysia or Singapore, where local and regional efforts were largely sufficient to contain the threat. The overall impact of increased international involvement through exercises, training and maritime security capacity building is clearly visible in Figure 10 as total incidents of piracy begin a constant decline in 2004, which correlates with the increased international presence, coordination and cooperation in the region.

¹⁷² International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2005)*, (Kuala Lumpur, 31 January 2006), 32.

¹⁷³ International Maritime Bureau, *Piracy and Armed Robbery Against Ships Annual Report (1 January–31 December 2008)*, (Kuala Lumpur, January 2009), 5.

¹⁷⁴ Huang, 91–2.

¹⁷⁵ Ian Storey, “Securing Southeast Asia’s Sea Lanes: A Work in Progress,” *Asia Policy* no. 6, pp. 95–127, (July 2008) http://www.nbr.org/publications/asia_policy/AP6/AP6_E_Storey.pdf (Accessed 4 June 2009), 122.

E. LESSONS FROM ANTIPIRACY EFFORTS IN SOUTHEAST ASIA

The cumulative effect of all of the interagency and international cooperation and coordination in Southeast Asian waters can be seen in the overall downward trend from the piracy peak in 1999 following the Asian Economic crisis, and the consistent downward trend since 2004. Relatively vast direct and indirect ant-piracy efforts have been in place in the Southeast Asia region since the 1990s, but the evidence indicates that the most significant and sustainable declines in piracy occurred in Indonesia, as a result of increased maritime security capacity drawn from international involvement in the region as well as continually increasing and improving regional cooperation and coordination since 2004. While the findings indicate the maritime security operations had a significant effect on the rate of piracy in Southeast Asia, it should be remembered that economic conditions were also improving during this period, and the balance between the economic and security effects cannot be precisely determined based on existing evidence.

IV. CONCLUSION

A. LESSONS FROM COUNTERDRUG AND ANTIPIRACY OPERATIONS

The preceding chapters examined international efforts at combating the illegal flow of drugs through the Caribbean and maritime piracy in Southeast Asia. Each showed that years of learning and building national and international coordination and capacity eventually led to reductions in drug trafficking and piracy, respectively, in the two regions. In both cases, effectiveness of maritime efforts improved significantly only when capacity and coordination both reached levels that allowed for a systemic, whole government, multilateral approach and more importantly were applied in conjunction with each other.

Counterdrug efforts were initially U.S. dominated, and largely uncoordinated among the U.S. agencies involved. A slight improvement in effectiveness immediately after the U.S. formalized internal coordination in 1989, was swamped in following years by the explosive growth of the drug trade indicating a large setback as the cartels adapted their methods. Only when systematic interagency and international coordination was established in 1995, through the JIATFs and the advent of numerous international agreements, was the maritime counterdrug capacity more fully realized and ushered in a sustained period of increasing successes. The combination of interagency and international coordination interacted with the preexisting capabilities in the area to increase the number of seizures and decrease the weight of cocaine seized, as drug trafficking shifted to Mexico and the Pacific to avoid the tighter net that had been cast as a maritime screen in the Caribbean. With the increase in maritime counterdrug capacity after 2001, including deployment of nuclear powered submarines and more international training and exercises, seizures increased at a fast pace, while weight seized continued its downward trend. This suggests that the dragnet was catching more vessels with smaller loads, further indicating the decline of the region as a major trafficking route.

Antipiracy efforts in Southeast Asia developed in an inverse way compared to the counterdrug effort in the Caribbean. Regional coordination came before an appreciable

increase in maritime security capacity, and coordination without capacity proved as ineffective as maritime security capacity without coordination had in the Caribbean. Over the timeframe of 1997–2000, the region saw a three-fold increase in piracy, a spike that held steady in Indonesia, even as the rest of the region began to get a hold on the newly aggravated threat by improving its own maritime security coordination and capacity. With mechanisms already in place to effectively share information and provide intelligence cueing, each state in the region was faced with improving their own capacity through purchase and donation of equipment from extraregional allies, accepting aid in the form of training and exercises, and establishing more robust systems, such as radar and satellite communications, to support the cooperation and coordination. Though Indonesia initially lagged Malaysia and Singapore, by 2004, even it had come around, embracing extraregional assistance to compensate for its meager capacity leading to a faster decline in piracy than in the region as a whole.

Taken together, the two cases suggest that coordination and capacity are both necessary but not sufficient factors in effectively combating maritime security threats. Both must be present at sufficient levels for effective operations against drug traffickers and pirates. Political will to engage in counterdrug and/or antipiracy operations was shown to be a necessary condition for both increased cooperation and increased capacity building. That will developed in each state's government as it came to feel that its own interests were directly threatened, motivating the increase in capacity and cooperation. In the counterdrug case, only the U.S. had the political will to engage until the mid-1990s, when it was joined by Caribbean states that recognized threats from the drug to their own national interests. Hence, U.S. capacity increased significantly before formal cooperation and coordination agreements, which had to await the emergence of political will elsewhere. At the strategic level, the law of unintended consequences is very applicable to the successful counterdrug efforts in the Caribbean maritime domain, for as the percentage of drugs entering the United States through Mexico, that state began to destabilize, which in turn could turn out to be a greater threat to U.S. national security.

In the piracy case, national and regional ship owner associations provided the initial motivation for developing regional information sharing and cooperation

agreements, as well as the political pressure that generated the political will to engage. Yet, economic conditions had an appreciable effect in Southeast Asia as well, where the Asian Financial Crisis exacerbated the weaknesses of the existing state and regional maritime security capacity to combat piracy at the time. Even following the piracy spike, the states in the region placed an emphasis on retaining their sovereign independence in the face of coordinated operations with their neighbors and at the prospect of extraregional patrols by states like the U.S. or Japan. The regional states did, however, accept aid, foreign military sales and training in various forms, all of which increased their maritime security capacity, which, as it converged with the existent regional cooperation and coordination, led to the dramatic decline in recent years of piracy in Southeast Asia.

B. APPLICATION OF LESSONS TO COASTAL SUB-SAHARAN AFRICA

The United States has a growing vested interest in the security of African states, and especially their maritime security, as outlined in the National Security Strategy and other guiding strategic documents. Some of the threats directly affect U.S. interests, such as oil infrastructure in the Gulf of Guinea and global trade routes like the Gulf of Aden off the Horn of Africa. Extraregional allies of the United States, such as the European Union, have similar interests, and are also more directly affected by the trafficking of drugs, persons and weapons. The threat of piracy looms large off of the Horn of Africa and to a lesser extent in the Gulf of Guinea. The various forms of trafficking, particularly that of drugs, are prevalent in the Gulf of Guinea and West Africa. All of these factors explain why there is a growing international political will to engage these maritime security threats, and generally, when a global actor like the United States or European Union become involved, they can provide a short term bolstering effect to maritime security capacity in the region by supplying their own ships and personnel to the fight.

African states themselves can be directly affected by lawlessness at sea, through lost revenues and an unattractive security environment for international businesses that rely on the maritime domain. African states are further affected by other forms of lawlessness that involve fish poaching and environmental degradation. The governments

are generally affected by various levels of corruption and theft associated with the shore based enterprises of these maritime crimes. Sub-Saharan African maritime security capacity is severely lacking, even compared with Southeast Asia or the Caribbean and if their political will to engage is both cultivated *and* translated to action in the near term, they will be heavily reliant on extraregional forces to patrol their waters, as is the case with Somalia, which lacks both capacity and a government. Essentially, the majority of Sub-Saharan African states a combination of the same initial political conditions as Indonesia of the 1990s in the antipiracy fight and Caribbean states that have not felt threatened by the corrupting influence of the drug trade. So, in order to apply the lessons learned from the Caribbean and Southeast Asia, existing arrangements must be examined as an entering argument for the United States to build upon in order to best assist Sub-Saharan African states secure their own waters ultimately.

First, as both the Caribbean and Southeast Asia have shown, robust international cooperative agreements and operations could have a positive impact on the maritime security environment in Sub-Saharan Africa. Regional security cooperation is almost non-existent. The African Union (AU), the Economic Community of West African States (ECOWAS), the Southern African Development (SADC) and the Intergovernmental Authority on Development (IGAC) all have some form of security apparatus subordinate to their overarching economic development goals, but actual capacity and coordination is minimal, and there is no focus on maritime aspects of state security. The recently formed Gulf of Guinea Commission has done nothing to face maritime security challenges other than hold a few public conferences. So, while the political framework exists in the form of regional economic forums, the United States and its allies would have to foster an expanded role and authority within each of these frameworks that moves all interested parties toward an internationally coordinated solution.

At the operational level, basic steps have been taken regarding piracy off the Horn of Africa, with a regional piracy reporting center in the initial stages of setup and

operation in Kenya.¹⁷⁶ Numerous global powers have sent ships to the area to ensure safe passage of global shipping, and are coordinating loosely with each other, including a few interested African states, reinforcing the entering assumption that generally, African states do not view these incidents as a threat to their own government, in a manner similar to the Caribbean states of the 1980s and early 1990s. Furthermore, the United Nations has moved for the first time in its history to allow entry into Somali territorial waters by international security forces when in hot pursuit. Therefore, if the United States or its allies felt the same political or economic interest to counter threats in the Gulf of Guinea, they could build upon this momentum and work to establish similar procedural and institutional infrastructure in the Gulf of Guinea.

However, since, according to guiding strategic documents, the United States would ideally like African states to secure their own waters, supporting national and regional capacity and cooperation building is critical. Furthermore, the generally low economic capacity of African states means the expense of manning, training and equipping an adequately sized maritime security force is beyond their reach. Therefore, if the political will to engage in maritime security operations can be generated, the capacity to do so will have to be outsourced for the foreseeable near term. Such measures as a permanent forward operating naval base may be necessary in the Gulf of Guinea, to house at least a JIATF, or potentially a new numbered fleet, such as in SOUTHCOM, depending on how long analysts think the United States would have to coordinate allied operations in the sub-region. It should be understood that every amount of effort and capacity the United States adds to the fight takes away from its ability to meet other commitments around the globe.

On top of extraregional allies actually patrolling the waters, the manning training and equipping of African states can essentially be outsourced to these same allies. In a similar fashion to Southeast Asia, the United States and its global partners could easily provide ships and aircraft, along with the training to operate them. Also, drawing the experience in the Caribbean, extraregional powers could provide coastal radars and

¹⁷⁶ Staff Reporter, "Anti-piracy centre opens in Kenya," BBC (5 May 2006), <http://news.bbc.co.uk/2/hi/africa/4978506.stm> (Accessed 10 June 2009).

communications infrastructure to willing countries in order to not only enhance individual state's maritime security capacity, but also bolster international coordination and cooperation effectiveness. Furthermore, military training exercises and personnel exchanges could increase the effectiveness of African states' their limited maritime security capacity to combat drug trafficking and piracy, along with all their other maritime security threats.

While this thesis shows that an ideal mix of high levels of international coordination, exemplified through cooperative and information sharing agreements, exercises and capacity building, along with high levels of maritime security capacity, either homegrown or provided by extraregional outsiders, can bring about dramatic positive results in both countering drug trafficking and antipiracy efforts, it cannot be forgotten that there are other factors continuously affecting the maritime security environment worldwide. While the United States proved effective at interdicting maritime shipments of cocaine through the Caribbean, the same amount made it across the border through Mexico, while at the same time destabilizing that country. The economic factors affecting the rate of piracy in Southeast Asia are not completely understood either, in terms of how much of both the upswing in 1998 and the following downswing truly affected the piracy rate, particularly in Indonesia.

Were the United States or its global allies to recognize a need to raise the priority of assisting regional states in securing the maritime environment in Sub-Saharan Africa, this thesis provides general guidelines for how to establish an effective internationally coordinated maritime security force of adequate capacity to counter the threats facing all peaceful states.

LIST OF REFERENCES

- Adabajo, Adekeye. 2004. "Introduction," in *West Africa's Security Challenges: Building Peace in a Troubled Region*. edited by Adekeye Adebajo and Ismail Rashid. Boulder: Lynne Reinner.
- Antal, James G. and John Vanden Berghe. 2004. *On Mamba Station: U.S. Marines in West Africa, 1990–2003*. U.S. Marines in Humanitarian Operations Series. Washington: History and Museums Division—United States Marine Corps.
- Anti-Drug Abuse Act of 1988*. Public Law 690, 100th Cong., 2d sess. 18 November 1988. *Library of Congress Thomas Archive* <http://thomas.loc.gov/cgi-bin/bdquery/z?d100:HR05210:@@L&summ2=m&> (Accessed 2 June 2009).
- "August: It Happened in August," *The Foundation for Coast Guard History* http://www.fcgh.org/index.php?option=com_content&task=view&id=17&Itemid=26 (Accessed 14 December 2008).
- Arana-Barradas, Louis A. "Drug Traffickers Sent Message," *Air Force News Service* (04 August 1995) *Global Security* http://www.globalsecurity.org/intell/library/news/1995/n19950804_842.html (Accessed 29 May 2009).
- Axiak, Frank C, R. Brian Crosby, Jennifer M. Delany, Brian E. Hans, Christian A. Hansen, Justin R. Jomoto, Matthew A. McKenna, John T. Montonye, Kathryn J. Ottersberg, John P. Rummer, Nagel B. Sullivan and Shipor Tsui. "A Systems Engineering Approach for Global Fleet Station Alternatives in the Gulf of Guinea." Technical Report, Naval Postgraduate School, 2007.
- Bamidele, John. "Nigeria: Faces of Illegal Bunkering," *Daily Independent* (Lagos: 22 November 2008) <http://allafrica.com/stories/200811241096.html> (Accessed 2 June 2009).
- Bangsberg, P. T. "Singapore, Indonesia Step Up Anti-piracy Measures," *Journal of Commerce* (22 December 2003), www.proquest.com (Accessed 21 May 2009).
- Banlaoi, Rommel C. "Maritime Security Outlook for Southeast Asia," in *The Best of Times, the Worst of Times: Maritime Security in the Asia-Pacific* eds. Joshua Ho and Catherine Zara Raymond (Singapore: Institute of Defense and Strategic Studies, 2005).
- Bateman, Sam and Stephen Bates, editors. 1996. *Calming the Waters: Initiatives for Asia Pacific Maritime Cooperation*. Canberra Australia: Australian National University.

- Bateman, Sam, Joshua Ho and Jane Chan, "Good Order at Sea in Southeast Asia," RSIS Policy Paper (Singapore: Nanyang Technological University, April 2009). http://www.rsis.edu.sg/publications/policy_papers/RSIS_Policy%20Paper%20-%20Good%20Order%20at%20Sea_270409.pdf (Accessed 10 June 2009).
- Bauer, Gretchen and Scott D. Taylor. *Politics in Southern Africa: State and Society in Transition*. Boulder: Lynne Rienner, 2005.
- Beruff, Jorge Rodriguez and Gerardo Cordero. "The Caribbean: The 'Third Border' and the War on Drugs," in *Drugs and Democracy in Latin America: The Impact of U.S. Policy*. Edited by Coletta A. Youngers and Eileen Rosin, 303–338. Boulder, CO: Lynn Rienner, 2005.
- Boyer, Alan Lee. "Maritime Security Cooperation," *Naval War College Newport Papers* no. 29 ed. Derek S. Reveron ([2007]), 43–58.
- Bradford, John F. "Japanese Anti-Piracy Initiatives in Southeast Asia; Policy Formulation and the Coastal State Responses," *Contemporary Southeast Asia*, vol. 26, no. 3, pp: 480–505, www.proquest.com (Accessed 17 October 2008).
- . "Southeast Asian Maritime Security in the Age of Terror: Threats, Opportunity, and Charting the Course Forward," *Institute of Defence and Strategic Studies Working Paper* no. 75 (Singapore: Nanyang Technological University, 2005).
- Bryan, Anthony. "The New Clinton Administration and the Caribbean: Trade, Security and Regional Politics," *Journal of InterAmerican Studies and World Affairs* vol. 39, no. 1, pp. 101–120, (Spring 1997), 116. www.ebscohost.com (Accessed 4 March 2009).
- Caldwell, Dan and Robert E. Williams, Jr. *Seeking Security in an Insecure World*. Lanham, MD: Rowman and Littlefield Publishers, 2006.
- Caulkins, Jonathan P., Peter Reuter, Martin Y. Iguchi, James Chiesa. *How Goes the "War on Drugs"?*, Santa Monica, CA: RAND Drug Policy Research Center, 2005., http://www.rand.org/pubs/occasional_papers/2005/RAND_OP121.pdf (Accessed 2 June 2009)
- Central Intelligence Agency World Factbook "Indonesia." *CIA World Fact Book*, <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html> (Accessed 5 December 2008); "Philippines," *CIA World Fact Book* <https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html> (Accessed 5 December 2008).
- Chalk, Peter. "Contemporary Maritime Piracy in Southeast Asia," *Studies in Conflict & Terrorism* 21, 1 (January 1998).

- . *The Maritime Dimension of International Security: Terrorism, Piracy, and Challenges for the United States*, (Santa Monica, CA: RAND Corporation, 2008), xv.
- Clapham, Christopher. *Africa and the International System: The Politics of State Survival*. London: Cambridge University Press, 2004.
- Clausewitz, Carl von. *On War* Translated and Edited by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976).
- Coll, Alberto. 2000. "The Role of the Naval Services in Operations Other Than War: Peacetime Engagement and Chaos Management," in *The Role of Naval Forces in 21st Century Operations* Edited by Richard H. Shultz Jr. and Robert L. Pfaltzgraff Jr. Washington: Brassey's.
- de Oliveira, Ricardo Soares. 2007. *Oil and Politics in the Gulf of Guinea*. New York: Columbia University Press.
- Delamer, Guillermo R. 1995. "Prospects for Multinational Cooperation at Sea in the South Atlantic," in *Maritime Forces in Global Security* eds. Ann L. Griffiths and Peter T. Haydon. Halifax: Dalhousie University Center for Foreign Policy Studies.
- Dillon, Dana Robert. "Piracy in Asia: a Growing Barrier to Maritime Trade," *The Heritage Foundation* (22 June 2000), <http://www.heritage.org/research/asiaandthepacific/bg1379.cfm> (Accessed 7 December 2008).
- Dorman, Andrew, Mike Lawrence Smith and Matthew R. H. Uttley. 1999. *The Changing Face of Maritime Power*. New York: St. Martin's Press.
- Drohan, William H. "Narco-Mercantilism and the War on Drugs: Is Victory an Option?" *Defense Intelligence Journal* vol. 10, no. 2 (Summer 2001) 41–52.
- Drug Enforcement Agency. 2003. *Drug Enforcement Administration: A Tradition of Excellence*, Drug Enforcement Agency, United States Department of Justice http://www.usdoj.gov/dea/pubs/history/history_part1.pdf (Accessed 14 December 2008).
- Dunkley, Alicia. "Operation Kingfish Netting Big," *Jamaica Information Service* (14 December 2004), http://www.jis.gov.jm/security/html/20041213T080000-0500_4434_JIS_OPERATION_KINGFISH_NETTING_BIG.asp (Accessed 1 May 2009).

- Ero, Comfort and Angela Ndinga-Muvumba. 2004 "Small Arms, Light Weapons," in *West Africa's Security Challenges: Building Peace in a Troubled Region*. edited by. Adekeye Adebajo and Ismail Rashid. Boulder: Lynne Reinner.
- Evans, Fred. *Maritime and Port Security*. 2004. Securing the Nation: Issues in National Security Since 9/11. Edited by Larry C. Johnson. Philadelphia: Chelsea House Publishers.
- Forest, James J. F. and Matthew V. Sousa. 2006. *Oil and Terrorism in the New Gulf: Framing U.S. Energy and Security Policies for the Gulf of Guinea*. Lanham, MD: Lexington Books.
- Friedman, Norman. 2001. *Seapower as Strategy: Navies and National Interests*. Annapolis: Naval Institute Press, 2001.
- Gilbert, Marie V. 2007. *Monitoring a Region in Crisis: The European Union in West Africa in the Chailiot Paper Series N'96*. Paris: European Union Institute of Security Studies.
- Griffith, Ivelaw Lloyd. 1997. *Drugs and Security in the Caribbean: Sovereignty Under Siege*. University Park, PA: Pennsylvania State University Press.
- Goure, Daniel. 1998. *The Role of Seapower in U.S. National Security in the Twenty-First Century: A Consensus Report of the CSIC Working Group on Undersea Warfare*. Washington: The Center for Strategic and International Studies.
- Gragg, Alan. "Navy Reestablishes U.S. 4th Fleet," *U.S. Navy* (24 April 2008) http://www.navy.mil/search/display.asp?story_id=36606 (Accessed 29 May 2009).
- Grant, Audra K. 2007. "Smuggling and Trafficking in Africa," in *Transnational Threats: Smuggling and Trafficking in Arms, Drugs and Human Life*. Edited by Kimberly L. Thachuk. Westport: Praeger Security International.
- Gray, Colin S. 1986. *Maritime Strategy, Geopolitics, and the Defense of the West*. New York: Ramapo Press.
- Hattendorf, John B. 2000. *Naval History and Maritime Strategy: Collected Essays*. Malabar, FL: Krieger Publishing Company.
- Haugton, Suzette A. "The Jamaica-Britain Border and Drug Trafficking," *The Round Table* vol. 96, no. 390 (1 June 2007).

- “Hostis Humanis Generis.” *Dictionary of War*
http://dictionaryofwar.org/concepts/Hostis_Humani_Generis (Accessed 19 May 2009).
- Huang, Victor. “Building Maritime Security in Southeast Asia,” *Naval War College Review*, vol. 61, no. 1, pp. 87–105 (Winter 2008), www.proquest.com (Accessed 17 October 2008).
- International Chamber of Commerce Commercial Crime Services. “International Maritime Bureau,” *International Chamber of Commerce*, http://www.icc-ccs.org/index.php?option=com_content&view=article&id=27&Itemid=16 (Accessed 27 May 2009).
- International Maritime Bureau. Annual Reports 1992–2008. *Annual Report on Piracy and Armed Robbery Against Ships*, Kuala Lumpur.
- “Iron Duke Strikes a Blow to Cocaine Smugglers.” *United Kingdom Ministry of Defence News* (02 July 2008)
<http://www.mod.uk/DefenceInternet/DefenceNews/MilitaryOperations/IronDukeStrikesABlowToCocaineSmugglers.htm> (Accessed 1 May 2009).
- Isacson, Adam. 2005. “The U.S. Military in the War on Drugs,” in *Drugs and Democracy in Latin America: The Impact of U.S. Policy*. Edited by Coletta A. Youngers and Eileen Rosin, 15–60. Boulder, CO: Lynn Reinner.
- Iyer, Raman. “Malaysia Proposes Capping Number of Ships at Malacca Strait,” *TopNews Law* (Kuala Lumpur: 21 October 2008), <http://www.topnews.in/law/malaysia-proposes-capping-number-ships-malacca-strait> (Accessed 3 June 2009);
- Kearsley, Harold J. 1992. *Maritime Power and the Twenty First Century*. Aldershot, England: Dartmouth Publishing.
- Knight, D. W. 1995. “The Impact of Technology on Maritime Security: A User Perspective,” in *Maritime Forces in Global Security*. Edited by Ann L. Griffiths and Peter T. Haydon. Halifax: Dalhousie University Center for Foreign Policy Studies.
- Kraul, Chris. “In Colombia, They Call Him Captain Nemo,” *Los Angeles Times* (14 December 2008), <http://www.latimes.com/news/nationworld/world/la-fg-captainnemo14-2008dec14,0,1166020.story> (Accessed 15 December 2008).
- Kruzel, John J. “Africa Partnership Station Aims to Boost Maritime Security” *American Forces Press Service, United States Department of Defense* (January 15, 2008)
<http://www.defenselink.mil/news/newsarticle.aspx?id=48679> (Accessed August 15, 2008)

- Kugler, Richard L. 2002. "Naval Overseas Presence in the New U.S. Defense Strategy," in *Globalization and Maritime Power*. Edited by Sam J. Tangredi. Washington: National Defense University Press.
- Looney, Robert E. 2002. "Market Effects of Naval Presence in a Globalized World: A Research Summary," in *Globalization and Maritime Power*. Edited by Sam J. Tangredi. Washington: National Defense University Press.
- Loy, James M. "The Transit Zone: Strategy and Balance," *U.S. Senate Drug Caucus* (15 May 2001), <http://drugcaucus.senate.gov/transitloy.html> (Accessed 2 June 2009).
- Lunsford, Virginia. "What Makes Piracy Work?," *U.S. Naval Institute Proceedings* vol. 134 no. 12 (December 2008), 28–33.
- Marshall, Donnie R. "DEA Congressional Testimony," *U.S. Drug Enforcement Administration* (1 May 2001) <http://www.usdoj.gov/dea/pubs/cngrtest/ct050101.htm> (Accessed 19 April 2009).
- "Major Events in Coast Guard Aviation History." *United States Coast Guard* <http://www.uscg.mil/history/uscghist/aviationchron.asp> (Accessed 14 December 2008).
- McCoy, Alfred W. 2003. *The Politics of Heroin: CIA Complicity in the Global Drug Trade*. Chicago: Lawrence Hill Books.
- McMichael, William H. "Submarines Home in Time for Thanksgiving," *Navy Times* November 16, 2006, <http://www.navytimes.com/legacy/new/1-292925-2363677.php> (Accessed 2 November 2008).
- Monroe, Alexander G. 2000. *Caribbean Barrier: U.S. Atlantic Command Support of Counterdrug Operations 1989–1997*. Norfolk, VA: U.S. Joint Forces Command Historian.
- Murphy, Martin N. 2007. *Contemporary Piracy and Maritime Terrorism: The Threat to International Security*. New York: Routledge.
- Neild, Rachel. 2005. "U.S. Police Assistance and Drug Control Policies," in *Drugs and Democracy in Latin America: The Impact of U.S. Policy*. Edited by Coletta A. Youngers and Eileen Rosin, 61–98. Boulder, CO: Lynn Reinner.
- Nincic, Donna J. 2002. "Sea Lane Security and U.S. Maritime Trade: Chokepoints as Scare Resources," in *Globalization and Maritime Power*. Edited by Sam J. Tangredi. Washington: National Defense University Press.

- Office of National Drug Control Policy. "National Drug Control Strategy: Data Supplement 2009," *Office of National Drug Control Policy* (January 2009) http://www.whitehousedrugpolicy.gov/publications/policy/ndcs09/ndcs09_data_supl/09datasupplement.pdf (Accessed 1 May 2009).
- The 1,000 Ship Navy: Maritime Security Partnerships* (Washington: The National Academies Press, 2007). <http://www.nap.edu/catalog/12029.html> (Accessed 8 November 2008).
- Pastor, Robert A. 2001. *Exiting the Whirlpool: U.S. Foreign Policy Toward Latin American and the Caribbean*. Boulder: Westview Press.
- Pempel, T.J. 1999. "Regional Ups, Regional Downs," in *The Politics of the Asian Economic Crisis*. Edited by T.J. Pempel. Ithaca: Cornell University Press.
- Potter, Lawrence G. and Gary G. Sick. 1997. "Introduction" in *The Persian Gulf at the Millennium: Essays in Politics, Economy, Security and Religion* Edited by Gary G. Sick and Lawrence G. Potter. New York: St. Martin's Press.
- Pugh, Michael. Editor. 1994. *Maritime Security and Peacekeeping: A Framework for United Nations Operations*. Manchester: Manchester University Press.
- Quirk, Richard J. 2000. "Latin American and the Caribbean," in *The Role of Naval Forces in 21st-Century Operations* Edited by Richard H. Shultz Jr. and Robert L. Pfaltzgraff Jr. Washington: Brassey's.
- Rabassa, Angel and John Haseman. 2003. *The Military and Democracy in Indonesia: Challenges, Politics and Power*. Santa Monica, CA:RAND. RAND Corporation Website http://www.rand.org/pubs/monograph_reports/MR1599/ (Accessed 20 My 2009).
- Reston, James. "Nixon, Drugs and the War." *New York Times* (1857-Current file), June 2, 1971, <http://www.proquest.com/> (Accessed 2 November 2008).
- Rosenberg, David and Christopher Chung. "Maritime Security in the South China Sea: Coordinating Coastal and User State Priorities," *Ocean Development and International Law* vol. 39, no. 1 (2008).
- Rothchild, Donald and Edmond J. Keller. 2006. *Africa-U.S. Relations: Strategic Encounters*. Boulder: Lynne Reinner.
- Saunders, Stephen. Editor. Annual Editions 2001–2007. *Jane's Fighting Ships*. Alexandria, Virginia: Jane's Information Group.

- Sengupta, Amit. "India and Southeast Asia: Strategic Engagement and Trade Enhancement," *Institute of Peace and Conflict Studies* (25 April 2008), http://www.ipcs.org/article_details.php?articleNo=2551 (Accessed 4 June 2009).
- Sharpe, Richard M. Editor. Annual Editions 1990–2000. *Jane's Fighting Ships*. Alexandria, Virginia: Jane's Information Group.
- Shaxson, Nicholas. 2007. *Poisoned Wells: The Dirty Politics of African Oil*. New York: Palgrave MacMillan.
- SHIPLOC. "About SHIPLOC," *SHIPLOC* http://www.shiploc.com/html/about_shiploc.html (Accessed 12 May 2009).
- Smith, Adam M. "At Last Unto the Breach: The Logic of a U.S. Military Command in West Africa," *Orbis* (Spring 2004), pp 305–319.
- Spitz, Greta J. "Mission Resource Allocation in the Gulf of Guinea" Master's thesis, Naval Postgraduate School, March 2007.
- Staff Reporter, "Anti-piracy centre opens in Kenya," *BBC*. (London: 5 May 2006). <http://news.bbc.co.uk/2/hi/africa/4978506.stm> (Accessed 10 June 2009).
- . "Kenya Dismisses Tanks 'Evidence'," *BBC* (London: 8 October 2008) <http://news.bbc.co.uk/2/hi/africa/7658598.stm> (Accessed 12 October 2008).
- . "Somalia: UN Envoy Likens Piracy Off Somalia to 'Blood Diamonds' Trafficking," *United Nations News Service* (New York: 29 September 2008) archived on *All Africa* <http://allafrica.com/stories/200809300031.html> (Accessed 12 October 2008).
- Starkey, David J. "The Origins and Regulation of Eighteenth Century British Privateering," in *Bandits at Sea: A Pirates Reader*, Edited by C.R. Pennel. New York: New York University Press, 2001.
- Storey, Ian. "Securing Southeast Asia's Sea Lanes: A Work in Progress," *Asia Policy* no. 6, pp. 95–127, (July 2008) http://www.nbr.org/publications/asia_policy/AP6/AP6_E_Storey.pdf (Accessed 4 June 2009).
- Sullivan, Mark P. *Caribbean Region: Issues in U.S. Relations*, Congressional Research Service Report RL32160 (27 October 2006) <http://fpc.state.gov/documents/organization/76937.pdf> (Accessed 9 December 2008).

- Sullivan, Rohan. "Southeast Asian Economic Ills Encourage a Plague of Piracy," *Los Angeles Times* (13 May 2001), www.proquest.com (Accessed 21 May 2009).
- Symonds, Craig L. 1995. *Historical Atlas of the U.S. Navy*. Annapolis: Naval Institute Press.
- Tamayo, Jovito. "PCG Hosts Marine Pollution and Anti-Piracy Exercises," *Tinig ng Marino* (March April 2003), <http://www.ufs.ph/tinig/marapr03/03040318.html> (Accessed 4 June 2009).
- Till, Geoffrey. 2004. *Seapower: A Guide for the Twenty First Century*. London: Frank Cass.
- Vesely, Milan. "Plundering Africa's Sea Wealth," *African Business*, no.259 (November 2000), 18–19. www.proquest.com (Accessed April 2, 2009).
- United Nations Office on Drugs and Crime. "Cocaine Trafficking in Western Africa: Situation Report," on *United Nations Office on Drugs and Crime* <http://www.unodc.org/pdf/dfa/Cocaine-trafficking-Africa-en.pdf> (Accessed 13 April 2009)
- . *Report Viewer* <https://ras.unodc.org/ReportServerPublic/Pages/ReportViewer.aspx?%2fSeizures%2fSeizuresChartTimeSim> (Accessed 14 April 2009).
- . "The Threat of Narco-Trafficking in the Americas," *UN Office on Drugs and Crime* (October 2008) http://www.unodc.org/documents/data-and-analysis/Studies/OAS_Study_2008.pdf (Accessed 19 April 2009).
- United States Africa Command. "About USAFRICOM," *AFRICOM Website*, <http://www.africom.mil/AboutAFRICOM.asp> (accessed 06 June 2009).
- United States Coast Guard. "Drug Interdiction Overview," http://www.uscg.mil/hq/cg5/cg531/drug_interdiction.asp (Accessed 2 June 2009); "United States Coast Guard: America's Maritime Guardian," Coast Guard Publication 1 (1 January 2002) United States Coast Guard http://www.uscg.mil/top/about/doc/Chapter_Two.pdf (Accessed 14 December 2008).
- . "Coast Guard Drug Removal Statistics," *U.S. Coast Guard Office of Law Enforcement* <http://www.uscg.mil/hq/cg5/cg531/Drugs/stats.asp> (Accessed 15 April 2009).

U.S. Customs and Border Protection Agency. "Fact Sheet," *U.S. Customs and Border Protection: Container Security Initiative* (02 October 2007) http://www.cbp.gov/linkhandler/cgov/trade/cargo_security/csi/csi_fact_sheet.ctt/csi_fact_sheet.doc (Accessed 20 May 2009).

U.S. Department of Defense. *The National Defense Strategy of the United States of America* March 2005.

———. Office of the Joint Chiefs of Staff. *National Military Strategy of the United States of America*. 2004.

U.S. Department of Defense and Department of Homeland Security Joint Publication. "A Cooperative Strategy for 21st Century Seapower," on *The Official Webpage of the United States Navy*. (Washington, DC: October, 2007) <http://www.navy.mil/maritime/MaritimeStrategy.pdf> (Accessed 12 October 2008).

U. S. Energy Information Administration. "World Oil Transit Chokepoints: Malacca," *Energy Information Administration* http://www.eia.doe.gov/cabs/World_Oil_Transit_Chokepoints/Malacca.html (Accessed 05 December 2008).

U.S. National Security Council. *The National Security Strategy of the United States of America*. March 2006.

———. *National Strategy for Maritime Security*. September 2005.

U.S. State Department "Maritime Counter-Narcotics Bilateral Agreements," *U.S. Department of State* <http://www.state.gov/s/l/2005/87199.htm> (Accessed 1 May 2009).

U.S. General Accounting Office. *Coast Guard: Relationship Between Resources Used and Results Achieved Needs to Be Clearer*, Report to the Subcommittee on Oceans, Fisheries, and Coast Guard, Committee on Commerce, Science and Transportation, U.S. Senate, GAO-04-432. <http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=gao&docid=f:d04432.pdf> (Accessed 20 April 2009).

———. *Coast Guard: Station Readiness Improving, but Resource Challenge and Management Concerns Remain*. Report to the Senate and House Committees on Appropriations, GAO-05-161., <http://www.gao.gov/new.items/d05161.pdf> (Accessed 20 April 2009).

———. *Drug Control: DOD Allocates Fewer Assets to Drug Control Efforts*. Statement of Jess T. Ford, GAO/T-NSIAD-00-77. <http://www.gao.gov/archive/2000/ns00077t.pdf> (Accessed 30 April 2009).

- . *Drug Control: U.S. Efforts in Latin American and the Caribbean*, GAO/NSIAD-00-09R, <http://archive.gao.gov/f0302/163258.pdf> (Accessed 2 November 2008)
- Walker, Andrew. "Blood Oil Dripping from Nigeria," BBC (27 July 2008), <http://news.bbc.co.uk/2/hi/africa/7519302.stm> (Accessed 08 June 2009).
- Warr, Dana. "Coast Guards of the Caribbean," *United States Coast Guard* <http://www.piersystem.com/go/doc/586/124273/> (Accessed 29 May 2009).
- Woodward, Susan L. "Failed States: Warlordism and "Tribal" Warfare," in *The Roles of Naval Forces in 21st-Century Operations*. edited by Richard H. Shultz Jr. and Robert L. Pfaltzgraf Jr. Washington: Brassey's, 2000.
- "Workshop Examines Scourge of Piracy," *The Bridge Naval War College Foundation*, Volume 4 (May 2009)
- World Bank Group. "Indonesia Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VIEWADVANCED (Accessed 27 May 2009).
- . "Malaysia Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VIEWADVANCED (Accessed 27 May 2009)
- . "Singapore Country Page," *World Bank* http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=&REPORT_ID=9147&REQUEST_TYPE=VIEWADVANCED (Accessed 27 May 2009)
- Young, Adam J. 2007. *Contemporary Maritime Piracy in Southeast Asia: History, Causes and Remedies*. Singapore: ISEAS Publishing.
- Young, Robert. "Special Stress on GIs in Viet: Nixon Vows War on Use, Sale of Dope." *Chicago Tribune (1963-Current file)*, June 2, 1971, <http://www.proquest.com/> (Accessed November 2, 2008).
- Youngers, Colletta A. and Eileen Rosin. Editors. 2005. *Drugs and Democracy in Latin America: The Impact of U.S. Policy*. Boulder: Lynne Rienner.
- Zackrison, James L. 2007. "Smuggling and the Caribbean: Tainting Paradise Throughout History," in *Transnational Threats: Smuggling and Trafficking in Arms, Drugs and Human Life* Edited by Kimberly L. Thachuk. Westport: Praeger Security International.

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