

Security of the Panama Canal

One decade after U.S. departure

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Introduction



After years of difficult negotiations and amidst controversy, skepticism, and predictions of doom, an agreement was reached in 1977 to gradually transfer the Panama Canal from the US to Panama. This decision, reached between presidents Jimmy Carter and General Omar Torrijos, was clearly a controversial one. The US rationale for this move was based on years of pressure from the Panamanian government, as well as growing unrest in Panama. Many thought that it was an unwise decision and that Panama would be incapable of running and protecting the Canal. The withdrawal of US forces was expected to leave a huge vacuum in the security of the Panama Canal. Troop levels in and around the Canal zone varied throughout the years, ranging from 4,000 troops in 1921 to a

high of 65,000 during WWII,¹ approximately 10,000 troops from 1975 to 1989,² and then dropping back to approximately 4,000 troops by 1999.³ As Rodrigo Cigarruista, former vice-minister of government and former security specialist for the Panama Canal, notes, security was easier when the US ran the Canal because it was run as a military facility. Access to the Canal was strictly limited.⁴ The void left by the withdrawal of US troops was not easily filled, due in large part to the fact that Panama has not had its own standing military force since 1990.

The Panama Canal Authority (referred to hereafter by its Spanish acronym, ACP) is currently undertaking a \$5.25 billion expansion project. The Panama Canal Expansion Project is expected to double capacity and allow more traffic and longer, wider ships, which are often referred to as post-Panamax Vessels.

The Expansion Project involves the construction of a new set of locks, one located on the Pacific side and one on the Atlantic side of the Canal.⁵ As this expansion makes the Canal even more relevant to the US and world trade, it is important to examine how safe and secure is the Panama Canal a decade after the US departure. We examine the current threats facing the Canal as well as the current measures employed to protect the Canal. We identify potential threats and explain the mechanics of the ACP's security measures and risk assessment mechanisms, as well as the less tangible ways the Canal is safeguarded, by its neutrality and importance to the international community. We will also explore the need for increased international efforts to secure the Canal. As we assess the security of Panama and the Canal, we apply the work of Dr. Max Manwaring, Research Professor of Military Strategy at the United States Army War College and noted security analyst, who is widely respected for his work in this area. We also draw on government documents and interviews of key informants. A decade has passed since the U.S. gave up ownership of the Panama Canal; our work will provide important insight into the security of the Canal and policy recommendations that are meant to proactively safeguard this international treasure.

Background⁶

Why did the US decide to transfer such an important asset to Panama? The answer lies in unrest in Panama, as well as a changing relationship between the US and Latin America. While the US actions in building the Canal had been criticized for years, during the decades of the 50s and 60s, the US, US ownership of and sovereignty over a swath of land in the middle of Panama was becoming increasingly unacceptable, a relic of the colonial era. Panama had demanded control of the Canal Zone for years, but the riots of 1964, which resulted in approximately 27 deaths, and hundreds of injuries, both Panamanians and Americans, were a turning point.⁷ In the aftermath of those riots, Pres. Lyndon Johnson agreed to talk to Panama about a fair solution to the problems between the US and Panama.

The process was not quick. As William Jordan states, the treaties were passed after 75 “years of tension and thirteen years of negotiation.”⁸ There are two central treaties, the Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal, hereafter referred to as the Neutrality Treaty, and the Carter-Torrijos Treaty. The Carter-Torrijos Treaty, signed September 7th, 1977, terminated all previous treaties. Among other tenets, the treaty acknowledged Panama's sovereignty over the Canal Zone while simultaneously granting the US the right to continue to operate the Canal until noon, December 31st, 1999. The treaty outlined the transition process, mandating a gradual transition to Panamanian employees on all levels and an annuity paid to Panama of ten million dollars during the transition period. The Neutrality treaty ensures that Panama will not deny passage to vessels based on political leaning or

involvement in conflict (Articles I & II). All vessels of war can pass through the Canal without inspection (Art. III). The US and Panama both agree to uphold this neutrality (Art. IV); after the transition period, Panama has sole responsibility for defending the Canal (Art. V). US war vessels may transit the Canal “expeditiously.” (Art. VI)⁹. A controversial condition, known as the “Deconcini reservation” was added to the US version of the Neutrality treaty; this clause stipulates that the US can use military force in the event of the closure of the Canal. However, this amendment was never approved by Panama and is not present in their signed version of the treaty.¹⁰ Bush referenced this reservation in his rationale for the US invasion of Panama in 1989,¹¹ but the fact that Panama did not approve it makes this a very gray area.

Why the Security of the Panama Canal is so Important

The U.S. still has vital national security and economic interests in Panama. An important part of this interest is our use of the Canal to support trade, thus supporting our economy. While we might not immediately think of the economy when we think of security, the US National Defense Strategy emphasizes that our safety and security are intrinsically linked with economic well-being. The strategy states in part:

For more than sixty years, the United States has secured the global commons for the benefit of all. Global prosperity is contingent on the free flow of ideas, goods, and services. The enormous growth in trade has lifted millions of people out of poverty by making locally produced goods available on the global market... None of this is possible without a basic belief that goods shipped through air or by sea, or information transmitted under the ocean or through space, will arrive at their destination safely.¹²

International trade is inextricably intertwined with our human security. For this reason, the US assumes a certain amount of responsibility for maintaining the smooth flow of trade. The Canal carries approximately 5% of world trade¹³ and links over one hundred trade routes throughout the world.¹⁴ According to Stratfor:

If the only waterway in the Western Hemisphere that connects the Atlantic and Pacific were to be closed down for any length of time, the impact likely would be felt on stock and commodities exchanges worldwide, given the high degree of economic interdependence that now exists.¹⁵

The ACP estimates that with the Canal expansion, Canal traffic will increase from 72-106 % over 2005 numbers by 2025.¹⁶ There is a scarcely a nation untouched by trade in some way. Any closure of the Canal would be damaging worldwide; it would certainly harm the US both in economic and strategic terms. Economically, the U.S. relies on the Canal more than any

other country for commerce. In 2008, the US shipped 1,408,779 long tons of cargo through the Canal.¹⁷ Approximately 12% of U.S. trade transported by waterways goes through the Canal.¹⁸ According to the Progressive Policy Institute,¹⁹ one seventh of US exports are shipped through the Canal, or about 72 million tons in 2008. It is estimated that 65% of the cargo transiting the Canal is either going to or from US facilities.²⁰ Many US ports have been developing infrastructure or enlarging ports in anticipation of the Canal expansion.²¹ This economic interdependence makes the Canal a “soft target.” Because the Canal is critical to the economic well-being of the US, it is at risk for attack.

One has only to consider the economic impact of the terrorist attacks of September 11th on container shipping to gain an understanding of the economic fallout that would result in the event the Panama Canal closed, even if only for a few days. When the U.S. shut down its own sea and airports for one week following the 9/11 attacks, container shipping lost a billion dollars a day for months as they disentangled freight traffic.²² The economic impact of even the briefest Canal closure is undeniable.

While US forces have withdrawn from Panama, our strategic interests remain. According to a SOUTHCOM analyst,

It is vital, imperative, that the Canal remain open to shipping. It is a critical Line of Communication (LOC) for the USG, its allies and the world. The Canal is critical to US and world commerce and defense of the United States....Canal security is paramount to both the USG [U.S. government] and GOP [government of Panama]. Were there to be an interruption in shipping for any length of time, e.g., a WMD explosion that effectively shut down the Canal, the repercussions would be extraordinary and devastating... The sudden closure of the Canal would amount to commercial losses in the many millions or even billions of US dollars daily. Any permanent shutdown of the Canal would most likely result in Panama failing as a State. The economic and strategic interests of the USG would also be gravely jeopardized.²³

The Canal still plays a crucial role for US military planning. The Progressive Policy Institute (2009) estimates that US naval vessels utilize the Canal about once a week.²⁴ John Keller, editor of Military & Aerospace Electronics, notes “The Panama Canal is of the utmost strategic importance to the United States, as it enables the U.S. Navy to transfer its forces rapidly between the Pacific and Atlantic theaters. The potential for Canal disruption is of dire concern to U.S. military authorities.”²⁵ While military analysts would not reveal specific US military use of the Canal due to security concerns, Anthony Rainone, an intelligence analyst with the Department of the Army 1st Information Operations Command, noted that the Canal is “critical to U.S. defense planning.”²⁶

Global climate change may one day offer alternative routes for US vessels, but from a US security standpoint, concern about the Canal does not appear to be mitigated by the possibility of the Northeast and Northwest Passages along the Arctic becoming navigable for longer periods in coming years. Currently, the Northwest Passage is only usable a few weeks a year and ice, in the form of icebergs and “pack ice” that drops “in hundred-mile-long tongues off the northern ice cap”, continues to pose a hazard for vessels attempting passage.²⁷ In fact, a 2007 study by the NRC Canadian Hydraulics Centre (NRC-CHC) concluded that changing conditions create new dangers as melting ice causes “multi-year ice” to drift, posing a danger to vessels.²⁸ This Arctic route simply cannot be relied upon. The lack of comparable or alternative trade routes makes the security of the Panama Canal all that more important to the US and global community. So, how credible are threats to the Canal? Security analysts have the unenviable job of trying to predict the future. Below, we evaluate several potential threats, including the potential for terrorism, social instability, gang violence, narco-trafficking, and interference by foreign governments.

Terrorism

The threat of terrorism has been a concern throughout the history of the Canal. An awareness of the potential for a terrorist assault on the Canal predates the terrorist attacks on the U.S. on September 11, 2001, which so graphically demonstrated the patience, determination, creativity and unpredictability of al Qaeda. In a 1989 article outlining the history of security at the Canal, Charlie Morris, then chief of the Canal Protection Division, wrote:

Perhaps all that has not changed is the Canal's vulnerability to sabotage and terrorism. Combating these threats requires the vigilance of a trained proprietary security force and the dynamic and intertwining associations of the international community, in whose interest it is to keep the Canal an open and neutral avenue for world commerce.²⁹

A decade later, months before the Canal was transferred to Panama, Gen. Charles E. Wilhelm, in charge of United States Southern Command (hereafter referred to as SOUTHCOM) cautioned the Senate Armed Services Committee that “The Canal must always be regarded as a potential target for both conventional and unconventional forces, given its importance to global commerce and for military transits.”³⁰ According to Dr. Robert Buckman, author of a series of textbooks *on Latin America*,

It would be relatively easy for al-Qaeda terrorists to cripple one of the locks or to sink a ship in the still-narrow Gaillard Cut, closing the Canal. Although such an attack would be aimed at the United States, its effect

on the Panamanian economy—and world commerce—would be devastating.³¹

These threats are what Dr. Manwaring refers to as “Gray Area Phenomenon” or GAP. GAP includes challenges from an array of non state actors, such as trans-national criminal organizations and militant fundamentalist movements.³² U.S. government analysts are very concerned about the dangers these groups represent. An analyst from SOUTHCOM commented that

Any insertion of de-stabilizing groups: Islamic Radical Groups (IRG), gangs (MS 13, M18, Los Zetas & Drug Trafficking Organizations), Violent Extremist Organizations (VEO)—like the FARC or ELN, or other Illegal Armed Groups (IAG), will threaten the operation of the Panama Canal—hence, threaten US interests.³³

Another SOUTHCOM analyst commented: “The Panama Canal is a lucrative target for terrorist organizations...the destruction or temporary closure of the Canal, due to a terrorist incident, would cause major ramifications to the world economic system, as the effects ‘ripple out’ to the rest [of the] world.”³⁴ None of these analysts claim an imminent threat to the Canal; rather, they acknowledge that the peril exists and that an attack would be devastating.

While the Canal has not been attacked previously, Clark Kent Ervin, director of the Homeland Security Initiative at the Aspen Institute and former inspector general of the Department of Homeland Security, notes:

...terrorists are nothing if not adaptable. If it is harder to strike one kind of target than another, they will eventually strike the easier target. Indeed, it is a marvel that terrorists haven't already struck soft targets in the United States.³⁵

While Mr. Ervin is clearly referring to U.S. infrastructure, the same concept applies to the Canal, which is critical infrastructure for both the US and Panama. Mr. Ervin further makes the point that the US is too often reactive, rather than proactive, in defense, a crucial fissure in trying to prevent terrorist attacks.

According to a 2008 study by RAND, maritime terrorist attacks, which can include attacks against vessels, passengers or ports, “offer terrorists an alternate means of causing mass economic destabilization.”³⁶ The author of this study, Peter Chalk, also emphasizes that al Qaeda sees disruption of the US economy as a goal: “maritime terrorism, to the extent that it does have at least a residual disruptive economic potential, resonates with the underlying

operational and ideological rationale of al Qaeda and the wider global jihadist ‘nebula.’”³⁷ Osama Bin Laden and Ayman al-Zawahiri, al Qaeda’s ideologue, have declared an economic war against the US that began with the attack on America’s financial heart and soul.

We must be vigilant in protecting the Canal from a “Trojan horse.” This refers to a vessel transiting the Canal, ostensibly carrying cargo, but actually containing an explosive device that can be detonated remotely. If an explosion occurred while the vessel was in one of the locks, it could badly damage or even destroy the lock, disrupting passage for months or longer.³⁸ The fact that the Canal is a lock-based Canal makes the Canal particularly vulnerable.³⁹

The Potential for Social instability

Radical groups and other outside forces do not represent the only threat to the Canal; societal problems could also destabilize Panama and threaten the Canal. Feeding into GAP challengers are issues of social instability and economic deprivation. Max Manwaring notes: “The Security of Panama and the Canal... will not depend so much on conventional military strategies as it will depend on international and domestic policies that provide for political stability, economic progress and social justice.”⁴⁰ Poverty is a very real concern in Panama. The World Bank estimates that approximately 18 percent of Panamanians were living on less than \$2 per day in 2008.⁴¹ Further 32% of Panamanians are impoverished; 15% are considered to be in “extreme poverty.”⁴² Panama has the second most unequal income distribution in Latin America,⁴³ which has the most unequal distribution of wealth in the world. In 2005, the Panamanian government passed a law requiring that part of Canal revenues be earmarked for community development projects in an effort to show some benefit to the people. The ambitious program that resulted, PRODEC, went directly to communities to allow community input in assessing and meeting needs. Unfortunately, the program has suffered from clientelism, excessive costs, as well as a lack of transparency and accountability. According to reports from the director of PRODEC, Vladimir Herrera, the program is now running at a deficit.⁴⁴

The expansion project, projected to be completed in 2014, is expected to have a positive socio-economic impact on Panama’s national treasury revenues, job market, the tourism industry, and GDP. The proposal for the project, presented to the Panamanian people in 2006, predicts an improved “quality of life for all Panamanians.”⁴⁵ In the short term, the construction phase of the expansion project is expected to increase national treasury revenues through increases in import tax revenues and income taxes. Once in operation, the additional economic activities are expected to create an additional 26% GDP growth. The expansion project is expected to generate total contributions of up to \$4,190 million to the National Treasury in net tonnage fees, public service fees and surplus.⁴⁶ If used right, increased revenues generated by the

expansion project could help address some of the socio-economic problems facing Panama. However, it is not only the amount of revenue that is being allocated to address these issues that is important here. The funds must be truly, effectively, and transparently spent in the areas that are being promised. Expectations for the expansion project have been raised among the Panamanian people; failure to meet these expectations could increase feelings of relative deprivation⁴⁷ and feed growing drug and gang activity.

Gang violence and Narco-trafficking

Gangs, which have been rarities in Panama until recently, have been growing at an alarming rate. Human rights organizations report that gangs (referred to as maras in the region) are developing more complex structures in an effort to survive government crack downs on gang activity. Gangs are finding protection from police action through linkages to narco-trafficking and organized crime.⁴⁸ According to the Los Angeles Times,

The drug trade has spawned a new generation of gangs in the capital that are paid “in kind” with cocaine by the FARC and other traffickers for doing their legwork. A recent census turned up the presence of 108 gangs in the country, a revelation to authorities who thought Panama was immune to a problem that has spawned crime waves in Guatemala, El Salvador and Honduras. Many of the gangs are thought to have links to the FARC.⁴⁹

With crack downs on drug trafficking in Mexico and Colombia, and the inability of the U.S. to curb its demand for drugs, it was eventually bound to happen. But, what is brewing in Panama is a dangerous concoction of a vulnerable youth population, gangs, narco-traffickers, and organized crime.

Drug trafficking is a perpetual menace in Latin America. As drug traffickers in Mexico grow stronger and bolder, the possibility that they could represent a threat to the Canal must also be considered. Of course, Panama shares a border with Colombia, and both the FARC and Colombian paramilitary organizations have made incursions into Panama and even come into conflict with Panamanian police forces. Panama is a major transit point for drugs, as they travel from Colombia to Mexico and the US. Heavily armed rebels with the Revolutionary Armed Forces of Colombia (FARC) are appearing more frequently and penetrating more deeply into Panamanian territory, particularly in the Darien province.⁵⁰ Drug related violence has increased in tandem with these more frequent appearances. “FARC and other Colombian traffickers are shipping more drugs from Colombia overland across Panama to avoid tighter control of Pacific and Caribbean coastal waterways by the Panamanian and U.S. naval forces.”⁵¹ This has led to competition for dominance and an increase in murder rates: “The new emphasis on overland drug routes is unleashing bloody struggles for control among competing narcos

for the Panamanian corridors...Homicides in the capital are up by nearly 40% in recent years, due in part to the booming drug trade.”⁵² Freedom House reports that “90% of violent crime are drug related” in Panama.⁵³

Analysts believe that crackdown in Mexico is leading to an increase in drugs flowing through Central America.⁵⁴ Cocaine seizures have increased tremendously: “In 2007 and '08, cocaine seizures in Panama totaled 120 tons, a big increase from previous years.”⁵⁵ In 2009, in twenty days alone, 8 tons were apprehended; more than 32 tons of cocaine had been seized as of September 9, 2009. According to Don Winner, 32 tons has an estimated street value of more than \$2.9 billion,⁵⁶ an amount that would pay for more than half of the \$5.25 billion Canal expansion project! Total drugs seized in 2009 is estimated at 55.5 tons.⁵⁷ US government believes that over 90% of cocaine that enters the US comes through the “Mexico/Central America corridor.”⁵⁸

As if narco-trafficking doesn't pose a grave enough concern, Colombian military officials reportedly seized 30 kilograms (66 pounds) of uranium from FARC in March of 2008, which raises concerns of the FARC trafficking uranium.⁵⁹ There is apprehension that the FARC has tried to make a dirty bomb.⁶⁰ According to Pablo Casas, an analyst at a Bogota think-tank, "This appears to have been part of a black market operation that the guerrillas were trying to use to make money. This is new for Colombia and could bring the FARC into the major leagues of black market terrorist transactions."⁶¹ This raises three concerns: The Canal could be used to transport a dirty bomb to the US, the Canal could be held hostage to the threat of a dirty bomb, or one could be used to disrupt maritime service.

U.S. and Panamanian officials have good reason to be concerned that Panama is following in the footsteps of its neighbors and is slated to become the next battleground in the drug wars. In 1991, the US and Panama signed the Treaty Between the United States of America and the Republic of Panama on Mutual Assistance in Criminal Matters (MLA), which emphasizes cooperation in combating narco-trafficking. In 2002 and 2004, amendments were passed to broaden the aims of the mutual assistance to include searching for weapons of mass destruction. The US Dept of State 2010 International Narcotics Control Strategy Report notes that the Martinelli administration is cooperating with US agencies on drug interdiction efforts and asserts that “United States Government (USG) support to Panama's counternarcotics efforts, including developing an effective community policing model to help control a growing gang problem, is crucial to help Panama stem its increasing security problems.”⁶² SENAN, which has been described as equivalent to a coast guard, patrols and identifies any suspect activity or aircraft. SENAN also provides personnel aboard US vessels patrolling the coasts.⁶³

In addition, Panama is building five new bases on the Atlantic and Pacific coasts from which to conduct air and sea operations to combat drug

trafficking. The first base is planned for Chapera Island in the Pacific Ocean. The Panamanian government emphasizes that this is a Panamanian operation, and is not at the behest of the US. To dispel any confusion about US involvement, José Raúl Mulino, Panama's Minister of Government and Justice, commented: "These air stations are 100 percent Panamanian, and I will invite all [the media] to the installation of the first one to see if you spot a gringo in the area."⁶⁴ Mulino further added that skepticism and questions about the role of the U.S. are due to an "inferiority complex," on the part of those that believe Panama cannot carry out such initiatives on its own.⁶⁵ US Ambassador to Panama Stephenson subsequently commented that the US would provide logistical support, which sparked protests at the University of Panama.⁶⁶ Clearly, this "inferiority complex" as well as any action by the US that smacks of militarization or intervention are very sensitive subjects in Panama. Any role the U.S. takes in Panama must be one of support, forgoing our traditional dominant posture.

Panama opened a fourth base on April 23rd, 2010, located in Piña Bay in the province of Darien. According to Mulino, this base will be the most prominent in combating drug trafficking in the border area between Colombia and Panama. Panama also plans to add a fifth base in Bocas del Toro.⁶⁷ Thus, Panama is actively seeking to combat the threat of drug trafficking to Panamanian society. The effectiveness of the new bases, as well as the impact that any perceived militarization has, will have to be gauged over the next few years.

Threats to the Canal might be further mitigated by the fact that traffickers utilize the Canal for their own business, both legitimate and illegitimate. Dr. Buckman succinctly sums up the underlying interests of these groups: "I don't regard drug traffickers as a threat to the Canal for the simple reason that tons of drugs are smuggled in container ships that pass through the Canal! The drug lords have a vested interest in keeping the Canal operating smoothly."⁶⁸ While the threat from narco-traffickers to the Canal is remote, the potential exists that drug trafficking, along with the crime it brings with it, could destabilize Panama, which could in turn jeopardize the security of the Canal.

Interference by Foreign Governments

More controversial is the level of threat from China. There are two aspects to the China "threat." There has been a persistent fear in the U.S. that China will take over the Canal⁶⁹ that appears to be based on misinformation about China's role regarding the Canal. Second, there is speculation about how China could represent a threat to the US in what might be called a worst-case scenario.

Rumors and fear that China had taken over the Canal sky rocketed during the transition period when it was announced that Hutchinson Whampoa Limited (HWL) had gained valuable port concessions on both ends of the Canal. HWL is based in Hong Kong and describes itself as “world's leading port investor, developer and operator with 49 ports across Europe, the Americas, Asia-Pacific, the Middle East and Africa.”⁷⁰ US reaction was fearful and immediate, and strains continue to the present time.⁷¹

US rancor was due in part to the fact that the US company, Bechtel, lost out in the bidding process to run the port concessions in what many describe as a rather dubious bidding process.⁷² According to testimony by Admiral Thomas H. Moorer to the Senate Foreign Relations committee, “Bechtel, for instance, reportedly won the bid on four occasions, but the bids were set aside.”⁷³ Bechtel bid \$2 million per year for the contract to run Balboa, whereas HWL bid \$22 per year million, and yet HWL won out.⁷⁴ Despite the ignominious start, the port facilities are not the Canal, and the company is not involved in the business of the ACP, which is an autonomous government agency. In fact, reports from Panama indicate that HWL is managing the ports as well as, or even better than ports run by other companies.⁷⁵

While these concerns about a Chinese takeover of the Canal have quieted in recent years, they have not disappeared. As with any issue, such speculation is expected in the blogosphere; however, these concerns have also been voiced on higher levels. President Clinton was quoted at the time of the transition as saying “I would be very surprised if any adverse consequences flowed from the Chinese running the Canal.”⁷⁶ State Department spokesman James Rubin clarified that Hutchinson Whampoa “had contracts to run the ports, not the Canal, itself.”⁷⁷ Years after this apparent gaffe, in 2006, then-Senator Hillary Clinton asserted:

“There are those who say we can't [prevent foreign governments from operating U.S. ports] because look what happened in the last 20 years ... You know, we have the Chinese running the Panama Canal. We have other government-controlled entities controlling our ports.” According to the New York Observer, she then declared: “Well, just because it's been happening doesn't mean we should let it continue.”⁷⁸

Many Panamanians believe otherwise; in fact, they see intervention by the United States as a more viable possibility. Roberto Roy, former member of the Canal Board of Directors (1999-2007) and current Secretary of the Metro under President Martinelli, dismisses these ideas bluntly by saying that the allegation that the Chinese are running the Canal is “baloney, misinformation. There is no basis for these fears.”⁷⁹ These sentiments were echoed numerous times in the interviews we conducted in Panama, and the ACP continually works to dispel this myth.⁸⁰ While it can be surmised that former President Bill Clinton misspoke, then-Senator Hillary Clinton's comments are indicative of not only

the misinformation that still exists, but also of the ongoing concerns about Chinese influence in the region. John Keller corrected his false impression that China manages the Canal, but stated:

While actual Canal operations are in the hands of the Panamanian government, a Hong Kong-based company, Hutchison, Whampoa Ltd., which reportedly has ties to the government of the People's Republic of China and its military, operates the port facilities on either end of the Panama Canal. I bring up these facts out of concern for the potential disruption of Panama Canal traffic should the U.S. or its allies come into military confrontation with China. How likely is this? I couldn't say, but it would be exceedingly easy for Chinese agents working through Hutchison Whampoa to halt, slow, or otherwise disrupt Panama Canal shipping traffic if it came to that. The potential is there.⁸¹

Several analysts concur with this view of China as a credible threat. According to one SOUTHCOM analyst, China's proximity represents a risk to the US "in that an economic and military rival, or some may say, a potential adversary, could control this vital LOC of the USG. This is potentially an Achilles' heel in the strategic defense of the United States."⁸²

China is not currently in a position of controlling the Canal, nor does it seem likely to be in the immediate future. Nonetheless, Chinese presence in Panama and influence is clearly a concern to US analysts. Another analyst comments:

Foreign states that are critical and/or not friendly to the US could use companies as "front organizations" to collect intelligence on US Strategic abilities. An example can be derived from the Chinese company (Hutchison Whampoa Limited) gaining control of the two ports at both entrances of the Panama Canal (Balboa & Colon).⁸³

Although we recognize that the people we interviewed may have additional pressures or political agendas that shape their perspectives, their perspectives are important to consider because they reflect U.S. strategic priorities and concerns. These individuals are responsible for identifying security threats in this particular region and have access to important information regarding these threats that is not readily available from other sources. While fears of Chinese ownership of the Canal are completely unfounded, it is not impossible that the Chinese could disrupt or stop Canal traffic. However, in the current global state of affairs, with the U.S. and China as major trading partners and China as the second biggest user of the Canal,⁸⁴ it is extremely unlikely. Disrupting trade would be tantamount to the Chinese shooting themselves in the foot. Only if there is a dramatic change in US and Chinese interdependence and relations would this represent a threat.

Potential problems also emanate from countries closer to home. Hugo Chávez is not only a thorn in the side of the US, but a potential threat to the stability of Latin America, and thus the Canal. Chávez' overt anti-US stance and efforts to convert other countries to join him could be detrimental to US interests. While Chávez suffered a setback with the election of conservative, friendly to the US, Ricardo Martinelli, the election of a US ally in Panama could place Panama and Venezuela in an antagonistic position. Clearly, Chávez would be much more likely to attack a country that is friendly with the US than one that is not. Chávez has purchased some four billion dollars worth of arms over the past several years, including jet fighters, tanks and submarines. He recently obtained a 2 billion dollar credit line from Russia to acquire more,⁸⁵ which Rainone asserts could be used against the Canal. Putin has declared he will continue arms sales, despite the US ban on sales of munitions to Venezuela. Russia and Venezuela are also collaborating on a nuclear power project.⁸⁶ In addition, Venezuela serves as a conduit for countries such as Iran to act against US interests. The attack in Argentina on the Israeli embassy in 1992 and the Jewish Community Center in 1994, allegedly carried out by Iran, demonstrated an ability and willingness to attack Latin American targets. The Pentagon reports a growing presence of the force alleged to have carried out this attack, the Qods Force, an elite Iranian guard unit, in Venezuela.⁸⁷ Rainone believes "It is absolutely essential that President Martinelli and his new administration understand these conventional and unconventional threats in order to safeguard the world's economic interests that transit through the Panama Canal."⁸⁸ Chavez's actions and intentions must be monitored closely. Venezuela and Iran present more immediate threats to the Canal than the business-like presence of China.

Safeguarding the Canal

Considerable efforts are being made to safeguard the Panama Canal. The ACP has made great strides in modernizing the Canal's security systems since the transfer of the Canal. The ACP continually updates procedures in place to monitor what is passing through the Canal, both the human crew and the cargo they carry. First, documentation of each ship's contents and information on the crew must be submitted to the Canal at least 96 hours in advance of a transit. In 2004, the ACP switched from a paper system to a paperless Automated Data System (ADCS), which has two components, the Electronic Data Collection System (EDCS) and the Mobile Data Collection System (MDCS) or Mobile Canal Operating System (MCOS). Together, these systems expedite the application process and make it more efficient, by gathering data about crews, ports visited and origination port⁸⁹ and allowing for data to be transmitted to Customs, the Coast Guard and National Security agencies as the ships transit the Canal.⁹⁰ A key component of this process is the on-line risk assessment matrix that verifies compliance with international security regulations.⁹¹ Using this risk assessment matrix, a risk analysis group decides

on the appropriate action: allow the vessel to pass through with no response, with inspection, or escorted. Noncompliant vessels are charged delayed and might be charged fees. The PANAMAX exercises, discussed below, help test these procedures.⁹²

The National Maritime Service assists in patrolling the Canal. The ACP also has agreed to abide by the International Safety of Life at Sea agreement (SOLAS) and has worked with the U.S. Army Corps of Engineers on security studies pertaining to Canal facilities.⁹³ In addition, the ACP adopted the International Ship and Port Facility Security Code (ISPS), which took effect on July 1st of 2004. ISPS regulations include requirements for transiting vessels to have security plans. Vessels must provide Canal authorities with a complete crew list and a plan indicating its intended destination, whether a port, anchoring in Canal waters or transiting the Canal 96 hours in advance of arrival. The security level at which the vessel is operating must match that of the Canal, and vessels must confirm that any contact with other ships followed security procedures during their last ten stops. Vessels must allow ACP authorities on board and an ACP pilot takes charge of the ship during the transit through the Canal.⁹⁴ In addition, ships not transiting the Canal but conducting commerce in waters used by the Canal must provide crew lists to the ACP and be willing to allow ACP personnel on board their vessels whenever requested.⁹⁵

Background checks are conducted on crew members, but it is reasonable to expect that records are not available or reliable for every person on every ship that passes through the Canal. Similarly, there is no way to ascertain the contents of every single container of the 30-45 ships that pass through the Canal each day. For instance, when filing the required paperwork to transit the Canal, customers and their agents are given these instructions: “The customer must only include general information about the container contents. Keep in mind that this information is not required for customs declarations but for risk assessment.”⁹⁶ Thus, the risk assessment is based on the customer’s own claims of what the containers hold. While this is an imperfect process, it would not be feasible to inspect every container on every ship. A typical Panamax ship might hold anywhere from 4,500 to 5,000 containers.⁹⁷ After the Canal expansion is completed, the post-Panamax ships could carry as many as 12,000 containers.⁹⁸

A recent addition to security measures is Panama’s participation in the Container Security Initiative (CSI).⁹⁹ Two of Panama’s ports, Manzanillo International Terminal (MIT), on the Atlantic, and the Port of Balboa (operated by a subsidiary of Hutchison Port Holdings) on the Pacific, are working in conjunction with the US National Nuclear Security Administration (NNSA) to scan containers for radiation. NNSA provides the materials and training to

enable Panamanian Customs officials to detect illicit nuclear material. According to the United States Department of State, the Colón Free Trade Zone recently acquired a third scanner.¹⁰⁰ While the focus thus far has been on containers crossing Panama by railway,¹⁰¹ this process could detect nuclear materials planted by terrorists that could damage the Canal on either end. In addition, the Department of Energy's Megaports Radiation Portals are now active at the Manzanillo and Balboa ports.¹⁰² This is part of the US Megaports Initiative to detect radioactive material globally.¹⁰³

The Canal has state of the art technology, including an extensive video surveillance system. In 2002, the ACP contracted with Honeywell to provide video surveillance and closed circuit TVs to monitor the entire length of the Canal, 24 hours a day.¹⁰⁴ The Canal is also illuminated at night to allow continuous passage of vessels. In 2008, the ACP spent \$320 million on improvements, including lights for the locks.¹⁰⁵ Clearly, proper illumination combined with surveillance provides a first line to detect threats.

Of great consequence to Canal security is the Neutrality Treaty, mentioned previously. The Neutrality Treaty states in part:

The Republic of Panama declares the neutrality of the Canal in order that both in time or peace and in time of war it shall remain secure and open to peaceful transit by the vessels of all nations on terms of entire equality, so that there will be no discrimination against any nation, or its citizens or subjects, concerning the conditions or charges of transit, or for any other reason, and so that the Canal, and therefore the Isthmus of Panama, shall not be the target of reprisals in any armed conflict between other nations of the world.¹⁰⁶

The Neutrality Treaty is an essential part of Canal safety and security because it means that Panama does not make enemies by taking sides during conflicts; thus the Canal is less susceptible to repercussions.

While the Canal is afforded a certain degree of protection by its role in the international economy, it makes sense to have a protective system in place. Panama abolished its military in 1990 in the wake of the 1989 invasion of Panama by the US and now relies on a several national security forces and a security guard force for the Canal. A 1994 constitutional amendment confirms the ban on the military, but allows for special forces to combat "external aggression."¹⁰⁷ National defense is provided by the National Police Force (PNP), the National Air-Naval Service (SENAN), National Border Service (SENAFRONT) and the Civilian Intelligence Service (Servicio Nacional de Inteligencia y Seguridad - SENIS)¹⁰⁸ The tension between society's desire to have a clear departure from Panama's military legacy and the need to have adequate defense against threats is evident in controversy over recent government reforms of these services. In 2008, the Panamanian government consolidated the National Maritime Service (SMN) and the National Air Service (SAN) into a

single force, the National Aero-Naval Service (SENAN), created SENAFRONT, and changed the law to allow officers in uniform to lead these institutions.¹⁰⁹ Both SENAN and SENAFRONT have special units designated to fight kidnapping and terrorism, created in 2008 by former president Martin Torrijos.¹¹⁰ According to a report by the Department of State Office of the Coordinator for Counterterrorism, “Major investments will be required before these changes can be expected to have a serious improvement on operational capability.”¹¹¹ The public opposes acts that are perceived as re-militarization of security forces in Panama. Changing the leaders of these security forces from a “civilian” to a uniformed officer is perceived as a step toward militarization. However, the government rationale is that the reforms are needed, first, to defend against terrorist attacks and safeguard the interests of all Canal users¹¹² and, second, to patrol the border and intercept Narco-traffickers.

Another important component to the military defense of the Canal is the PANAMAX exercises. These exercises are used to test Canal procedures and to practice fighting threats against the Canal. Initiated in 2003 with the participation of three countries, it has been conducted annually since. International involvement in the exercises has increased substantially since that time. Approximately 7,000 people from 20 nations participated in the 2008 PANAMAX exercises. In 2009, 4,500 personnel from 20 countries took part in the exercise, which, according to SOUTHCOM, is “one of the largest multinational exercises in the world.”¹¹³ In addition, SOUTHCOM facilitates counterterrorism training for Panamanian forces by U.S. Navy Special Warfare South personnel.¹¹⁴

PANAMAX provides an opportunity to check the Canal’s safety procedures, forecast threats and practice reactions to them. Still, there is some question as to whether the yearly exercise by forces who then return to their respective countries is enough to protect the Canal. The area of water and ocean requiring security monitoring is four times the size of the land. The truth of the matter is, there is no way for Panama to adequately patrol this area to protect the Canal. If there were an actual threat to the Canal, how quickly could forces be mobilized to stop an attack?

According to Rodrigo Cigarruista, not quickly enough. It takes hours to fly from the US to Panama. It could take 10 days just to get approval to mobilize international forces if there were a threat to the Canal. He proposes a new defense treaty for the Canal; the parties would be those who currently participate in the PANAMAX exercise. Countries could set up an integrated air and sea defense force, using retired Chilean vessels and helicopters, which would be ready to react on short notice.¹¹⁵ It is important to note that this would have to be a Panamanian initiative; the US can support it as an ally, but there is little stomach in Panama for anything that bears resemblance to a return of US forces.

There is an interesting paradox at play here: the Canal is considered by many to be essentially indefensible, yet great effort is, and should be, made to defend it. The Canal could not be completely defended even if surrounded by US forces (and would actually become a greater target). The Panama Canal is vulnerable to attacks from land, air and sea and from the contents of the ships passing through the Canal, both human and mineral. It cannot be assumed that its role as an international asset will safeguard the Canal; appropriate measures must be taken to prepare for threat scenarios. As we have experienced over the years since 9/11, there is no sure-fire way to predict and prevent attacks. Dr. Manwaring emphasizes the importance of reliable intelligence in combating potential sabotage of the Canal.¹¹⁶ To provide the best possible defense of the Canal, a conventional military is not necessary, but both reaction forces and the highest quality of information and threat analysis are required.

The possibility of sabotage has been consistently identified as a threat over the years; and, while there is no fool-proof way to guard against sabotage and terrorism, it is prudent to use all means available to guard against these threats. Damage to the Canal would be catastrophic not only for Panama, but for the entire global community.

Conclusions

Despite all the controversy, skepticism and debate surrounding the transition, Panamanian management of the Canal has met and exceeded expectations. The expansion of the Canal will ensure that the Canal is relevant to the international community for many years to come. Panama and the international community are making efforts to ensure its security, but given the importance of the Canal, we believe that further efforts should be made to ensure its security. The Canal became simultaneously more secure with the US absence even as it became less secured militarily. The government of Panama should continue its efforts to refine and enhance its security services and should seriously consider introducing permanent international forces to safeguard the Canal. The US must not attempt to invoke the Deconcini reservation, but must only intervene in the unlikely event that US forces are specifically requested by Panama. The U.S. should continue play a quiet, but supportive role in helping to train security forces, provide personnel, aid and technical assistance upon request, participate in PANAMAX and contribute to an international rapid deployment force should one be initiated by Panama. The new administration in the US, and the even newer administration in Panama, must work together as partners. While US analysts must consider China's growing power and influence in the region, focus should shift from China to more immediate threats, such as the instability bred by drug trafficking and Hugo Chávez's machinations and growing military arsenal. Similarly, the government of Panama must not turn a blind eye to the income disparity and social instability that is brewing in their country, or the results

could be devastating for the people of Panama, for the Panama Canal, and for the entire global community. The onus is on Panama, a country which is rightfully proud of its achievements in running the Canal so successfully. Policies must be proactive; not reactive to safeguard what is not only a national patrimony for Panama, but an essential economic conduit for the world.

Notes

1. Associated Press, "Panama: 'The canal is ours:' Ceremony Precedes Official Handover on December 31," *CNN*, Dec. 14th, 1999, <http://www.latinamericanstudies.org/canal/ours.htm> (accessed October 14, 2009).
2. Charles Morris, "The Panama Canal: 75 years of security history," *Security Management* 33, no. 9, (1989): 68.
3. Allbusiness, "Panama: US Steps up Transfer of Military Bases," *NotiCen: Central American & Caribbean Affairs*, March 18 1999, <http://www.allbusiness.com/central-america/163475-1.html> (accessed October 3rd, 2009).
4. Rodrigo Cigarruista, interview with authors, Panama City, Panama, July 7th, 2009.
5. ACP, "Proposal for the Expansion of the Panama Canal Third Set of Locks Project," ACP, 2006, 3-6, <http://www.pancanal.com/eng/plan/documentos/propuesta/acp-expansion-proposal.pdf> (accessed October 19, 2009).
6. The history of this change is extensive and important, and will be the subject of another article. For an excellent history that covers from 1964- 1978 in rich detail and approximately 693 pages, see William J. Jordan's *Panama Odyssey*.
7. William Jordan, *Panama Odyssey* (Austin: University of Texas Press 1984), 63.
8. *Ibid.*, xiii.
9. "United States and Panama: Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal," September 7, 1977, *United States Treaties and Other International Agreements*, 33 UST 1; TIAS 10029; 1161 UNTS 177.
10. Robert DeV Bunn, *The Panama Canal Treaty: Its Illegality and Consequential Impacts*, (Cambridge Lighthouse Press, 2005).
11. Dennis DeConcini Papers 1944-2003, Special Collections, University of Arizona Library, Arizona, http://speccoll.library.arizona.edu/applications/deconcini/uams399_m4.html (accessed April 27, 2010)
12. United States Department of Defense, *National Defense Strategy: June 2008*, (Washington DC: Government Printing Office, 2008), 15, <http://www.defenselink.mil/news/2008%20National%20Defense%20Strategy.pdf>, (accessed May 2, 2010).
13. ACP, "This is the Canal," ACP, <http://www.pancanal.com/eng/general/asi-es-el-canal.html> (accessed April 6, 2010).
14. ACP, "Panama Canal Traffic – Fiscal Years 1993 Through 2008: Statistics and Administration Models Unit (MEEM)," ACP, 2009.
15. Stratfor, "Global Market Brief: Security on the Panama Canal," Stratfor, 2004, http://www.stratfor.com/global_market_brief_security_panama_canal (accessed Oct. 1, 2009).
16. ACP, "Proposal for the Expansion of the Panama Canal Third Set of Locks Project," ACP, 2006, 36.
17. ACP, "Top 15 by Origin and Destination of Cargo," Office of Market Research and Analysis," ACP, 2008, <http://www.pancanal.com/eng/maritime/reports/table13.pdf> (accessed Sept. 15, 2009).
18. Business Panama, "Investing in Panama: The Panama Canal," Business Panama, http://www.businesspanama.com/investing/why_invest/panama_canal.php (accessed April 25, 2010).
19. Progressive Policy Institute, "A Seventh of American Seaborne Exports Pass Through the Panama Canal," Progressive Policy Institute, May 20, 2009, http://www.ppionline.org/ppi_ci.cfm?knlgAreaID=108&subsecID=900003&contentID=254993 (accessed April 6, 2010).
20. David J. Lynch, "For Panama Canal, A New Era of Trade is Coming," *ABC News*, <http://abcnews.go.com/Business/story?id=8263628&page=1> (accessed Sept. 2, 2009).
21. ACP, "Proposal for the Expansion of the Panama Canal Third Set of Locks Project," ACP, 2006, 37.
22. United States Department of Transportation, *Executive Summary: The Economic Impacts of Bioterrorist Attacks on Freight Transport Systems in an Age of Seaport Vulnerability*, DTRS57-03-P-80130, (Cambridge MA: Abt Associates, 2003).
23. Interview with SOUTHCOM analyst, (name withheld by mutual agreement), April 30th, 2009.

-
24. Progressive Policy Institute, "A Seventh of American Seaborne Exports."
 25. John Keller, "Chinese company doesn't operate the Panama Canal ... just both ends of it," The Mil and Aero Blog, entry posted March 6, 2008, <http://www.pennwellblogs.com/mae/2008/03/chinese-company-doesnt-operate-panama.html> (accessed April 29, 2010).
 26. Anthony Rainone, e-mail message to authors, September 8th, 2009.
 27. Andrew Kramer and Andrew Revkin, "Arctic Shortcut Beckons Shippers as Ice Thaws," *New York Times*, September 10, 2009, <http://www.nytimes.com/2009/09/11/science/earth/11passage.html> (accessed Oct. 17, 2009).
 28. National Research Council Canada, "Highlights- Safe Northern Passage," January 7, 2007. <http://www.nrc-cnrc.gc.ca/eng/news/nrc/2007/01/07/northern-passage.html> (accessed May 2, 2010).
 29. Charles Morris, "The Panama Canal: 75 years of security history," (1989).
 30. Benjamin Franklin Library, "Transfer of the Panama Canal," American Embassy in Mexico, November 30, 1999, http://www.usembassy-mexico.gov/bbf/bfdossier_PanamaCanal.htm (accessed Dec. 1st, 2009).
 31. Robert Buckman, *Latin America 2008*. (Harpers Ferry, West Virginia: Stryker-Post Publications, 2008), 294.
 32. Max G. Manwaring, "The Security of Panama and the Canal Now and for the Future," *Journal of Interamerican Studies and World Affairs*, Vol. 35, No. 3, Special Issue: The Future of Panama and the Canal (Autumn, 1993), 166.
 33. Interview with SOUTHCOM analyst, (name withheld by mutual agreement), April 30th, 2009.
 34. Interview with SOUTHCOM analyst, (name withheld by mutual agreement), May 27th, 2009.
 35. Clark Kent Ervin, "Terrorism's Soft Targets." *The Washington Post*, May 7, 2006 <http://www.washingtonpost.com/wp-dyn/content/article/2006/05/05/AR2006050501754.html> (accessed April 29, 2010).
 36. Peter Chalk, *The Maritime Dimension of International Security. Terrorism, Piracy, and Challenges for the United States* (FA7014-06-C-0001). Project Air Force RAND Corporation, (2008), xiii.
 37. *Ibid.*, 24.
 38. Strafor, "Global Market Brief: Security."
 39. Gene Bigler, interview with the authors, November 24th, 2009.
 40. Manwaring, "The Security of Panama and the Canal," 1.
 41. Global Finance, "Panama Country Report," Global Finance, <http://www.gfmag.com/gdp-data-country-reports/202-panama-gdp-country-report.html> (accessed April 29, 2010).
 42. World Bank, "Panama/WB: US\$80 Million to boost poverty reduction effort," World Bank, April 21st, 2009, <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22150942~pagePK:64257043~piPK:437376~theSitePK:4607,00.html> (accessed April 29, 2010).
 43. United States Department of State. "Background Note: Panama," (Washington DC: Government Printing Office, 2009), <http://www.state.gov/r/pa/ei/bgn/2030.htm> (accessed October 15th, 2009).
 44. Prensa.com, "Prodec Director Alleges Irregularities," *Corporación La Prensa*, 12 de julio, 2009 http://mensual.prensa.com/mensual/contenido/2009/07/12/hoy/english/news_312.asp (accessed Aug 20th. 2009).
 45. ACP, "Proposal for the Expansion of the Panama Canal Third Set of Locks Project," ACP, 2006, 20.
 46. URS Holdings Inc, "Environmental Impact Study for the Panama Canal Expansion Project – Third Set of Locks," Project No. CC-07-14, 2007, ES-32.
 47. Gurr, T.R., *Why Men Rebel* (Princeton: Princeton University Press, 1970).
 48. Manuel Bermudez, "CENTRAL AMERICA: Gang Violence and Anti-Gang Death Squads," *Inter Press Service News Agency*, Sept. 6th, 2005, <http://ipsnews.net/news.asp?idnews=30163> (accessed November 2, 2009).
 49. Chris Kraul, "Panama could become next narco battleground," *Los Angeles Times*, May 24th, 2009, <http://articles.latimes.com/2009/may/24/world/fg-panama-drugs24> (accessed August 15th, 2009).
 50. United States Department of State Publication Office of the Coordinator for Counterterrorism, "Country Reports on Terrorism 2008," (Washington DC: Government Printing Office, 2009), <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA501443&Location=U2&doc=GetTRDoc.pdf> (accessed April 29, 2010)
 51. Kraul, "Panama could become next narco battleground."
 52. *Ibid.*
 53. Freedom House, *Freedom in the World 2009 – Panama*, UNHCR, <http://www.unhcr.org/refworld/docid/4a64529023.html> (accessed April 30, 2010)
 54. United States Department of State, "2010 International Narcotics Control Strategy Report Volume I: Drug and Chemical Control," (Washington DC: Government Printing Office, 2010)

-
- <http://www.state.gov/p/inl/rls/nrcrpt/2010/vol1/137198.htm> (Accessed April 12, 2010)
55. Kraul, "Panama could become next narco battleground."
 56. Don Winner, "Eight Tons of Cocaine Seized In The Past 20 Days in Panama," *Panama-Guide*, Sept. 9, 2009, <http://www.panama-guide.com/article.php/20090909141731876> (accessed Oct. 15, 2009).
 57. Prensa.com, "En 2009 se han decomisado 55.5 toneladas de drogas," *Corporación La Prensa*, 26 de diciembre, 2009, http://mensual.prensa.com/mensual/contenido/2009/12/26/uhora/local_2009122610523690.asp (accessed April 29th, 2010).
 58. US Department of State, "2010 International Narcotics Control."
 59. Brodzinsky, Sibylla, "FARC Acquired Uranium, says Colombia," *Christian Science Monitor*, March 28th 2008, <http://www.csmonitor.com/2008/0328/p07s03-woam.html> (accessed April 30, 2010).
 60. Simon Romero, "Colombia Is Flashpoint in Chávez's Feud With U.S," *The New York Times*, March 5, 2008, <http://www.nytimes.com/2008/03/05/world/americas/05venez.html>, (accessed April 30, 2010) and Rodrigo Cigarruista, interview with authors, Panama City, Panama, July 7th, 2009.
 61. Reuters, "Colombia Seizes Uranium from Leftist Guerillas," *Reuters Foundation*, March 27, 2008, <http://www.alertnet.org/thenews/newsdesk/N26278599.htm> (accessed April 30, 2010).
 62. US Department of State, "2010 International Narcotics Control."
 63. Ibid.
 64. LaPrensa.com. "Government: Air-naval bases will be 100% Panamanian," *Corporación La Prensa*, 2009, www.laprensa.com, (accessed November, 2009)
 65. Ibid.
 66. "University of Panama closed after disturbances," *Latin American Herald Tribune*, November 18th, 2009, <http://laht.com/article.asp?CategoryId=14088&ArticleId=347644> (Accessed April 30, 2010).
 67. LaPrensa.com, "New Naval base set to open next week," 2010 15 de abril, *Corporación La Prensa*, www.laprensa.com (accessed April 15, 2010).
 68. Robert Buckman, e-mail to the author, August 24th, 2009.
 69. See, e.g. Senate Foreign Relations Committee, "Admiral Thomas H. Moorer, Senate Hearing Testimony before the Senate Foreign Relations Committee," 105th Congress, 2nd sess., June 16th 1998, <http://www.eagleforum.org/topics/panama/info/Moorer.html> (accessed May 2, 2010); Bill Rice, "China's Moves in Panama," By Dawn's Early Light Blog, entry posted November 19th, 2005, http://dawnsearlylight.blogspot.com/del/2005/11/chinas_moves_in.html (accessed May 2, 2010); NewsMax, "Hillary Clinton Rips Bill's Panama Ports Deal," *Newsmax.com*, February 27th, 2006, <http://archive.newsmax.com/archives/ic/2006/2/27/185817.shtml> (accessed May 2, 2010).
 70. Hutchison-Whampoa Limited, "About HWL," 2003, <http://www.hutchison-whampoa.com/eng/about/overview.htm#> (accessed September 1, 2009).
 71. American Defense Center, "China's stranglehold on the Panama Canal: A Geopolitical Assessment of the United States' Legitimate Security Interests and Sovereign Rights in Exercising the Neutrality Treaty to Reassert
 72. Berta Ramona Thayer, July 5th, 2009, and Milton Henriquez, July 7th, 2009, interviews with the authors, Panama City, Panama.
 73. Senate Foreign Relations Committee, "Admiral Thomas H. Moorer, Senate."
 74. Ibid.
 75. Thayer, interview; Henriquez, interview.
 76. Associated Press. "Panama: 'The canal is ours.'"
 77. Ibid.
 78. NewsMax, "Hillary Clinton Rips Bill's Panama Ports Deal," *NewsMax.com*, February 27th, 2006, <http://archive.newsmax.com/archives/ic/2006/2/27/185817.shtml>
 79. Roberto Roy, interview with authors, July 6th, 2009 Panama City, Panama.
 80. Teresa Arosemena, interview with authors, July 9th, 2009 Panama City, Panama.
 81. Keller, "Chinese company doesn't operate."
 82. E-mail to the authors, (name withheld by mutual agreement), April 30th, 2009.
 83. E-mail to the authors, (name withheld by mutual agreement), May 27th, 2009
 84. ACP, "Top 15 by Origin and Destination of Cargo," ACP, 2008.

-
85. Sara Miller Llana, (2009). "South America: Will defense spending trigger an arms race?" *Christian Science Monitor*, October 2nd, 2009, <http://www.csmonitor.com/World/Americas/2009/1002/p06s22-woam.html>
 86. Associated Press, "Russia Offers Venezuela Nuclear Help, Chávez Says," *NPR*, April 2, 2010, <http://www.npr.org/templates/story/story.php?storyId=125496048> (Accessed April 27th, 2010).
 87. Mercopress, "Revolutionary Guards Pentagon Says Iran's Revolutionary Guards Operating in Latinamerica," *Mercopress*, April 24th, 2010, <http://en.mercopress.com/2010/04/24/pentagon-says-iran-s-revolutionary-guards-operating-in-latinamerica>, (accessed April 27, 2010).
 88. Anthony Rainone, e-mail to author, September 2, 2009.
 89. ACP "Modernization & Improvements," ACP, 2004, <http://www.pancanal.com/eng/projects/overview.html> (accessed September 14th, 2009).
 90. Crimson Logic, "International Consulting: Panama City," Crimson Logic Pte, Ltd., 2006 <http://www.crimsonlogic.ca/intlconstng.htm> (accessed May 1, 2010).
 91. ACP, "Top 15 by Origin and Destination."
 92. Cigarruista, interview.
 93. ACP "Modernization & Improvements."
 94. ACP, "MR Notice to Shipping No-13-2007 Implementation of ISPS Code Requirements at the Panama Canal," ACP, 2007, <http://www.pancanal.com/eng/maritime/notices/2007/n13-2007.pdf> (accessed September 15th, 2009).
 95. Ibid.
 96. ACP, "Automated Data Collection System (ADCS) FAQ," ACP, http://www.apl.com/security/documents/panama_adcs.pdf (accessed September 15 2009).
 97. Global Security, "Container Ship Types," 2006 <http://www.globalsecurity.org/military/systems/ship/container-types.htm> (accessed October 4, 2009).
The number of containers a ship can hold is measured in Twenty-foot Equivalent Units (TEUs), which refers to how many 20' x 8' x 8'6" containers a ship is capable of carrying.
 98. Ibid.
 99. CSI is part of NNSA's Second Line of Defense Program's Megaports Initiative. The goals of the program is to equip foreign governments to "deter, detect, and interdict illicit trafficking in nuclear and other radioactive materials across international borders and through the global maritime shipping system." National Nuclear Security Administration, "Panama Begins Radiation Detection Efforts at Two Ports," *Partnership Aimed at Detecting Smuggled Nuclear Material*, 2008, <http://nnsa.energy.gov/2243.htm> (accessed October 14th, 2009).
 100. United States Department of State Publication Office of the Coordinator for Counterterrorism, "Country Reports on Terrorism 2008."
 101. NNSA "Panama Begins Radiation Detection."
 102. United States Department of State Publication Office of the Coordinator for Counterterrorism, "Country Reports on Terrorism 2008."
 103. Jane's, "US Megaports Initiative to Prevent Nuclear Smuggling," June 8th, 2005 <http://www.andyoppenheimer.com/articles/Jane's%20CB%20Web%20Megaports.htm> (accessed November 30th, 2009).
 104. Business Wire, "Panama Canal Authority Selects Honeywell For Canal Security Solutions," *Allbusiness.com Inc.*, 2002, <http://www.allbusiness.com/company-activities-management/management-personal-business/5881204-1.html> (accessed September 29th, 2009).
 105. ACP "Panama Canal Invests \$320 Million in Upgrading Current Canal," 2009, <http://www.pancanal.com/eng/pr/press-releases/2009/05/29/pr335.html> (accessed October 14th, 2009).
 106. "United States and Panama: Treaty Concerning the Permanent Neutrality."
 107. Central Intelligence Agency, "The World Factbook," 2009, <https://www.cia.gov/library/publications/the-world-factbook/geos/pm.html> (accessed November 2, 2009).
 108. United States Department of State, "Background Note: Panama, 2009" (Washington DC: Government Printing Office, 2010) <http://www.state.gov/r/pa/ei/bgn/2030.htm> (accessed November 2, 2009).
 109. United States Department of State Publication Office of the Coordinator for Counterterrorism, "Country Reports on Terrorism 2008."
 110. Rafael Pérez, Rafael, "Crean 'unidad especial' en Senan y Senafront," *Corporacion La Prensa*, 20 de mayo

2009, <http://mensual.prensa.com/mensual/contenido/2009/05/20/hoy/panorama/1792617.asp> (accessed October 5, 2009).

111. United States Department of State Publication Office of the Coordinator for Counterterrorism “Country Reports on Terrorism 2008.”

112. Ibid.

113. SOUTHCOM, “FA PANAMAX 2009 Concludes Successfully,” 2009, <http://www.southcom.mil/appssc/news.php?storyId=1962> (accessed November 2, 2009). According to SOUTHCOM, Argentina, Belize, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, France, Guatemala, Netherlands, Nicaragua, Mexico, Panama, Paraguay, Peru, the United States, Uruguay, along with Conference of Central American Armies participated in 2009, under the guidance of the UN. SOUTHCOM reported that Honduras withdrew from participation in August, but other sources, such as the Council on Hemispheric Affairs, say they did have limited participation.

114. United States Department of State Publication Office of the Coordinator for Counterterrorism “Country Reports on Terrorism 2008.”

115. Cigarruista, interview.

116. Max Manwaring, e-mail to author, September 30th, 2009.

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