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THESIS

**UNITED STATES NATIONAL SECURITY POLICY
TOWARDS THE PANAMA CANAL IN AN ERA OF
GREAT POWER CONFLICT**

by

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March 2022

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CANAL IN AN ERA OF GREAT POWER CONFLICT**

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ABSTRACT

The Panama Canal, an asset historically under U.S. protection, is easily threatened by enterprising adversaries. A closure event of the Canal would have significant economic and strategic implications for the United States in a great power conflict (GPC) war, principally with China. Since 2017, the United States has sought to realign its *National Defense Strategy* toward a GPC, broadening the active focus of the U.S. defense strategy and reexamining U.S. policies toward its traditional backyard in Latin America, specifically the Panama Canal. The purpose of this thesis was to determine whether current U.S. national defense policies toward the Panama Canal have adequately prepared the U.S. military to cope with GPC adversaries in this new security landscape. This thesis endeavored to answer the following questions: What are the military and economic repercussions of a closure event for the United States? What is the likelihood of an attack on the Canal? What do China's current actions foretell concerning its current strategy toward the Panama Canal? Finally, what security policies can the United States undertake to ensure Canal viability in a potential GPC war?

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LIST OF ACRONYMS AND ABBREVIATIONS

CCP	Chinese Communist Party
FAC	fast attack craft
FTA	free trade agreement
GPC	great power conflict
JCS	Joint Chiefs of Staff
LNG	liquefied natural gas
LPG	liquefied petroleum gas
PDF	Panamanian Defense Force
ONI	Office of Naval Intelligence
PRC	People's Republic of China
SLOC	sea line of communication
SOUTHCOM	U.S. Southern Command
UN	United Nations

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I. INTRODUCTION

Since 2017, the United States has sought to realign its National Defense Strategy toward great power conflict (GPC). Therefore, it is necessary to broaden the active focus of the U.S. defense strategy and reexamine policies toward the country's traditional backyard—Latin America. The Panama Canal, while an asset historically under U.S. protection, is easily threatened by enterprising adversaries. A closure of the Canal would have significant geostrategic implications for the United States in a GPC war. The purpose of this thesis is to determine whether current U.S. national defense policies toward the Panama Canal have adequately prepared the U.S. military to cope in this new era of GPC. Nested questions within this theme include the following: What is the likelihood of an attack on the Canal? What are the military repercussions of a closure event? What are the economic repercussions of a closure event? Finally, what do China's actions foretell concerning its current strategy toward the Panama Canal?

Even before breaking ground on its construction in 1903, U.S. leadership understood the strategic significance of the Panama Canal. President Theodore Roosevelt—ardent scholar of naval warfare, former assistant secretary of the Navy, and architect of the Great White Fleet—devoted a significant portion of his presidency to the construction of the Canal. Alfred Thayer Mahan, the great U.S. naval strategist, wrote in 1914, the year of the Canal's opening,

If Panama be held securely, no naval enemy can threaten both our coasts at the same time, without great and undue risk to itself . . . the Canal to the Navy is that it opens a much shorter line of communication between the Atlantic and Pacific coasts, and thereby does enable a given number of ships—a given strength of fleet—to do a much greater amount of work.¹

Yet, many events throughout the 20th century generated robust debate over whether the Canal could retain significant strategic importance to the United States and whether the United States should remain committed to its defense. World War II aptly showcased the

¹ Alfred T. Mahan, "The Panama Canal and the Distribution of the Fleet," *North American Review* 200, no. 706 (1914): 406–17.

Canal's strategic value in moving military might. However, following the war, the advent of nuclear weapons led many to question whether the Canal could be counted on in a GPC war, as it could be easily destroyed. In 1977, the Carter administration agreed to transfer ownership of the Canal to the Panamanian government. This decision brought long-debated strategy positions under even greater scrutiny.

Leading up to the 1977 Carter-Torrijos treaty and for many decades thereafter, both the significance and security of the Canal were contested. Ultimately, the Carter administration decided it was in the best interest of the United States to hand over the Canal, and the debates concluded with the successful turnover in 2000. Since then, Panama has maintained the Canal and ensured its operation for the passage of U.S. military vessels and international commerce without major issue. Following the handover of the Canal, American attitudes toward it shifted. The Canal was once considered the crowning jewel of the Monroe Doctrine. It was a symbol of American dominance in the Western Hemisphere and the cause of passionate discourse. Now, however, it rarely enters the minds of American citizens and is an afterthought in American policy and strategy.

Why, then, should the security and significance of the Canal merit further investigation? What has changed to call into question the strategic calculus of past U.S. leadership? What has changed is the geostrategic landscape, specifically due to the rise of China. This new landscape alters the United States' relationship to the Panama Canal, and a significant amount of new information is available to assess U.S. security policies encompassing it. This work views the current U.S. Canal security policies through the lens of the past to assess whether they stand up to the new geostrategic situation.

Chief among the changes driving the importance of a further investigation is China's growing military and economic strength. China's strengthening is propelling an evolution of the U.S. National Defense Strategy back toward GPC. China is already capable of challenging U.S. hegemony in the Western Hemisphere. Indeed, the Chinese Navy has grown to pose the first significant naval threat to U.S. sea superiority in the Pacific since World War II. In September 2020, the Pentagon reported that China has a

larger naval fleet at 305 ships than the U.S. Navy at 293 ships.² Additionally, U.S. fleet allocation is split between the Atlantic and the Pacific Oceans, while China predominantly focuses its strength only in the Pacific, making the Canal a renewed vital link between the two U.S. fleets.

China has also made significant economic investments in Panama, specifically in telecommunication and port infrastructure. In November 2020, the U.S. Congressional Research Service reported,

The U.S. Southern Command has expressed strong concerns about China’s activities in the region. Its 2020 posture statement maintained that certain Chinese investments in the region have strategic value for future military uses and expressed special concern about China’s investments in deep ports and infrastructure on both sides of the Panama Canal. It also warned about Chinese telecommunications projects that, it argued, could allow China to monitor or intercept U.S. official information.³

Concern over both deep-water ports leads some analysts to believe that these investments and infrastructure projects are possibly a long-term soft power strategy to control traffic through the Canal.

As the security situation has evolved and the Pacific theater has become a point of contention—whereby the U.S. may find itself engaged with a large blue water navy—the strategic importance of the Panama Canal as a vital chokepoint is once again called into question. Accordingly, an investigation into current U.S. national security policy toward the Panama Canal is an important undertaking.

A. RESEARCH DESIGN

This work investigates both the peacetime and wartime uses of the Panama Canal to derive U.S. economic and military dependence on it. The investigation of the wartime use of the Canal includes an analysis of historical case studies from major U.S. conflicts,

² John Grady, “Pentagon Report: China Now Has World’s Largest Navy as Beijing Expands Military Influence,” USNI News, September 1, 2020, <https://news.usni.org/2020/09/01/pentagon-report-china-now-has-worlds-largest-navy-as-beijing-expands-military-influence>.

³ Mark P. Sullivan and Thomas Lum, *China’s Engagement with Latin America and the Caribbean*, CRS Report No. IF10982 (Washington, DC: Congressional Research Service, 2021), <https://crsreports.congress.gov/product/pdf/IF/IF10982>.

including World War II, Vietnam, and the Cold War, to move U.S. military might. This work also explores historic efforts of U.S. adversaries to disrupt or destroy the Canal to damage U.S. warfighting capacity during these engagements. This history establishes the criticality of the Canal in peacetime economic terms as well as large interhemispheric military campaigns.

Moreover, these case studies are used as a tool to analyze the potential actions and motivations of China toward the Canal. This work scrutinizes current Chinese activities and investments surrounding the Panama Canal and other two-ocean projects in Latin America to ascertain Chinese strategic motivations and intentions. Understanding China's strategy and naval capabilities enables us to draw parallels between the historical case studies to assess both the possibilities of an attack and likely motivations for an attack on the Canal. Having assessed the vulnerability of the Canal and potential of an attack by China, this work concludes with a recommendation to policymakers on current U.S. strategic policy toward the Panama Canal.

B. THESIS OVERVIEW

This thesis consists of six chapters. Following the introduction, Chapter II provides a literature review outlining the historical security policy debate concerning the Panama Canal. Chapter III analyzes the economic importance and consequences of a potential closure event of the Panama Canal. Chapter IV assesses historical case studies on the wartime use and planned attacks against the Panama Canal. Chapter V analyzes the current security environment with respect to China and assesses whether U.S. security policy is adequate to contend with these threats. Chapter VI summarizes the findings of this work and offers recommendations to U.S. policymakers to improve U.S. national security surrounding the Panama Canal in the new landscape of GPC.

II. LITERATURE REVIEW

This chapter delves into the historical policy debates over the strategic importance of the Panama Canal to the United States. The debate over U.S. security policy toward the Panama Canal has been evolving since the opening of the locks to U.S. Naval transits in 1914. The preponderance of scholars and policymakers have fallen into three distinct policy camps. The first camp argued that the Canal was of paramount strategic significance for U.S. security and should be robustly defended. The second camp maintained that the Canal was strategically important but relatively indefensible and should not be included in general military planning efforts. Finally, the third camp reasoned that the Canal lacked any real strategic importance and could largely be left to the Panamanians to service, operate, and defend.

The debate evolved linearly over time. The period from the construction of the Canal until World War II was dominated solely by proponents of the first camp. Following major shifts in the geostrategic landscape after World War II, the debate began to shift in favor of the second camp. Finally, during the Cold War after the 1977 Carter-Torrijos treaties, the debate shifted to the third camp and was reinforced by the fall of the Soviet Union. Of import, each policy shift was heralded by a major change in the status of a U.S. adversary altering the geostrategic landscape. The remainder of the literature review examines the primary arguments of the three camps and details how U.S. policy opinions have shifted over time.

A. CAMP 1: PRE-WORLD WAR II—THE CANAL VITAL TO U.S. SECURITY

The first policy camp considered the Canal of paramount strategic importance and argued it merited a robust defense. This argument was most strongly rooted at the time of the Canal's construction and the 27 years leading up to World War II. However, this policy camp would continue its argument until the handover of the Canal in 2000, competing at that time with both the second and third camps.

President Theodore Roosevelt, a learned naval strategist, was convinced that the Canal's creation was the most important undertaking of his presidency. In a 1903 presidential address, he stated, "We have taken the first steps towards digging an Isthmian canal, to be under our own control, a canal which will make our Atlantic and Pacific coastlines in effect continuous, which will be of incalculable benefit to our mercantile navy, and above all to our military navy in the event of war."⁴

Alfred Thayer Mahan, considered the most important naval strategist of the 19th century, argued vehemently of the importance of a canal for the U.S. National Security Strategy.⁵ Mahan maintained that the time advantage gained by foregoing the trip around South America through the Straits of Magellan could be represented in terms of fewer ships. With the ability of Atlantic and Pacific fleets to combine quickly, both could be smaller yet swiftly joined to concentrate power where necessary to effect decisive victories. Without a canal, the Atlantic and Pacific fleets would have been vulnerable to decisively superior enemy forces.⁶

Mahan also laid out an aggressive argument for a permanent military fortification of the Canal Zone.⁷ His justifications were two-fold. First, as a mobile army, the Navy needed secure bases and sea lines of communication (SLOCs) protected from enemy threat. The fortification of the Canal would provide the Navy confidence to venture forth to fight an enemy, knowing that the critical SLOCs were properly defended. Second, while an enemy fleet would not bombard an undefended port such as the Canal, an undefended port could easily be taken. Mahan concluded that in retaking the Canal, the Navy would be forced to bombard it and possibly damage or destroy the locks. Therefore, Mahan argued fortifications were justified.⁸

⁴ Theodore Roosevelt, *Presidential Addresses and State Papers*, vol. 1, February 19, 1902, to May 13, 1903 (New York: Review of Reviews Company, 1910), <http://archive.org/details/presidentialadd13roosrich>.

⁵ John Keegan, *The American Civil War: A Military History* (New York: Alfred A. Knopf, 2009), 272.

⁶ Mahan, "The Panama Canal and the Distribution of the Fleet," 416.

⁷ Alfred T. Mahan, "Fortify the Panama Canal," *North American Review* 193, no. 664 (1911): 332.

⁸ Mahan.

Writing at the outbreak of World War II in 1941, Norman Padelford, a professor in international law and national security affairs at the Massachusetts Institute of Technology, argued in his book that the United States did not build the Canal for altruistic reasons. Padelford maintained that the United States viewed the Canal chiefly as an instrument of naval defense and secondarily an economic concern. In sum, he stated, “First and last the Panama Canal is part of the National Defense system of the United States . . . an instrument of its own national policy and defense plans during any large international conflict.”⁹

In a declassified 1973 memorandum, the U.S. assistant secretary of defense, Major General George Wallace, wrote to U.S. ambassador to Argentina, Robert C. Hill, that U.S. Southern Command (SOUTHCOM)’s “primary mission [was] the defense of the canal. . . . SOUTHCOM’s presence in Panama, directly subordinate to the JCS [Joint Chiefs of Staff], announce [d] the seriousness with which we view Canal Security.”¹⁰ To fortify this point, CIA analyst Lewis Lamb wrote in a declassified white paper that in June 1977, four former chiefs of naval operations—Admirals Thomas Moore, Robert Carney, George Anderson, and Arleigh Burke—hand-carried a letter to President Jimmy Carter, stating,

A loss of the Canal, which would be a serious setback in war, would contribute to encirclement of the United States by hostile naval forces and threaten our ability to survive. . . . Under the control of a potential adversary the Panama Canal would become an immediate crucial problem and prove a serious weakness in overall United States Defense.¹¹

Admiral Thomas Moore, former chairman of the Joint Chiefs of Staff, would remain the most outspoken of the group of admirals. In both 1978 and 1999, Admiral Moore testified to the Senate Foreign Relations Committee that “the Panama Canal is vital for our defense and . . . wrapped inextricably with the overall global strategy of the United

⁹ Norman J. Padelford, *The Panama Canal in Peace and War* (New York: Macmillan, 1942), v, 182.

¹⁰ George M. Wallace, “Memorandum for Ambassador Hill” (official memorandum, Washington, DC: Office of the Assistant Secretary of Defense, August 7, 1973), https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/International_Security_Affairs/07-M-3155_Action_Memo_Study_of_US_National_Interests_in_Panama_Canal.pdf.

¹¹ Lewis A. Tambs, *Strategy, Seapower, and Survival: The Case for Retaining the Isthmian Canal* (Washington, DC: Central Intelligence Agency, 1967), 1, Gale.

States and the security of the Free World.”¹² Admiral Moore further testified that without the Canal, the entire military apparatus would need to increase in size to fight in multiple theaters without the SLOCs’ capacity to fortify forces between the Pacific and Atlantic. Last, Admiral Moore argued that due to the potential transfer of the Canal to Panama, in a world war–level conflict, the United States would need to invade Panama for the defense of the Canal.¹³

B. CAMP 2: POST–WORLD WAR II—THE CANAL AND THE NUCLEAR PROBLEM

Evolving out of World War II as the first real challenge to the first camp, the second camp upheld that the Canal was strategically important but relatively indefensible and should not be included in general military planning efforts. This change was primarily driven by the strategic problem that nuclear weapons posed to the defense of the Canal. John Major thoroughly explored the debate in his 1980 article for the *Journal of Strategic Studies*. No longer was the strategic problem merely defending against conventional land, sea, and air forces but coping with the USSR’s ability to destroy the Canal with one well-placed nuclear warhead.¹⁴ Secretary of Defense Henry Stimson began to question the defense of the Canal against nuclear attack even before World War II ended. Stimson concluded that the only way to increase the Canal’s security would be to build a sea-level canal with no locks. He assessed that a sea-level canal could not be destroyed by a nuclear attack.¹⁵

Brigadier General Joseph Mehaffey, governor of the Canal Zone in 1946, argued aggressively for the creation of a sea-level canal. His case stated that two atomic bombs or even conventional weapons could render the existing lock-based Canal useless for up to

¹² *The Panama Canal and United States Interests: Hearing before the Committee on Foreign Relations, United States Senate Committee on Foreign Relations*, 105th Cong. 2 (1998), <https://www.govinfo.gov/content/pkg/CHRG-105shrg49528/html/CHRG-105shrg49528.htm>.

¹³ S., *Panama Canal and United States Interests*.

¹⁴ John Major, “Wasting Asset: The U.S. Re-assessment of the Panama Canal, 1945–1949,” *Journal of Strategic Studies* 3, no. 2 (1980): 125, <https://doi.org/10.1080/01402398008437043>.

¹⁵ Major, 125.

four years while a new sea-level canal would suffer only one month of degradation.¹⁶ In a General Board of the Navy hearing in 1947, Rear Admirals Dan Gallery and William Parsons expressed apathy toward either type of canal. Gallery argued that the destruction of the Japanese fleet, the insignificance of the Russian Navy, and the creation of a two-ocean U.S. Navy rendered the Canal of secondary importance. Gallery further argued that U.S. manufacturing centers and seaports made much more attractive targets for a nuclear strike. Rear Admiral Williams was simply unconvinced of the increased survivability of a sea-level canal against nuclear attack.¹⁷

Both admirals agreed that while the Canal was still strategically important, spending more on Canal defense for a negligible increase in survivability was money that could be better spent elsewhere.¹⁸ Without a significant naval threat in the Pacific since the destruction of the Japanese fleet, it was assumed that no attack was likely in the next 10 years. Because the United States had substantial global commitments in constructing the post-war balance of power, defense of the Canal became a low priority.¹⁹ The first and second camps remained embattled for the next three decades with the second camp holding the upper hand until the 1970s.

C. CAMP 3: THE COLD WAR—HANDOVER AND DEPRIORITIZATION OF THE CANAL

The 1970s ushered in a third camp, which renounced the strategic importance of the Canal and asserted that its defense should not be a priority. Panamanian nationalism had begun to assert itself with increasing protests and clashes with U.S. forces in the Canal Zone. The U.S. State Department was actively working to implement anti-colonial policies throughout the world. The Panama Canal would become a point of political contention between U.S. anti-colonial messaging and strengthening Panamanian nationalism. The Panamanians in their negotiations over ownership of the Canal threatened to air their

¹⁶ Major, 133.

¹⁷ Major, 134.

¹⁸ Major, 134.

¹⁹ Major, 140.

grievances to the United Nations (UN). The State Department, seeking to build a new world order based on anti-colonialism and democratic principles, saw the possibility of Panama raising the issue to the UN as a detriment to both sides' policy efforts and a win for the Soviet Union.²⁰

The Canal thus became the center of a fight between the State Department, which sought to turn over the Canal to prevent losing ground with its anti-colonial agenda, and the Department of Defense.²¹ The Department of Defense held that the Canal was strategically important and should remain in U.S. hands. Retired U.S. Navy Captain Paul Ryan, historian and researcher at the Hoover Institute and author of *The Panama Canal Controversy*, performed an in-depth analysis of the decision to turn over the Canal. In 1975, Ryan explains, the Ford Administration, tired of infighting between the State Department and the Department of Defense, directed the JCS to submit to the State Department's efforts and support the progress of the treaties to hand over the Canal. From this moment on, as Ryan describes, the JCS accepted the new position that "the canal was no longer 'essential' to the United States. . . . The country would not perish because the closing of the canal, no matter what future flareups—political or military—the nation faced."²²

William J. Jordan, U.S. ambassador to Panama under the Nixon administration, describes in his book *Panama Odyssey* that the Reagan administration viewed stability in Panama a much greater political asset than possession of the Canal. By acquiescing on the issue of Canal ownership, the Reagan administration could focus on communist power struggles in both Nicaragua and El Salvador. Jordan also explains that the JCS views aligned with the Reagan administration, noting that the cost to defend the Canal against an angry Panamanian population would not be worth the lessened strategic value of the Canal.²³

²⁰ Major, 142.

²¹ Major, 142.

²² Paul B. Ryan, *The Panama Canal Controversy: U.S. Diplomacy and Defense Interests*, Hoover International Studies (Stanford, CA: Hoover Institution Press, 1977), 140.

²³ William J. Jordan, *Panama Odyssey* (Austin: University of Texas Press, 1984).

In 1999, Mark Falcoff, resident fellow of the American Enterprise Institute for Policy Research and author of *Panama's Canal*, testified in a Senate Foreign Relations Committee hearing. Falcoff argued that the Canal was no longer strategically significant due to changes in U.S. infrastructure and technology. He argued, first, that both air shipments and improvements in the U.S. rail system had devalued the significance of the Canal. Falcoff explained that the balance of products such as oil between the Pacific and Atlantic coasts had almost eliminated the need for the Canal. Second, he explained that the Carter-Torrijos treaty gave the United States the right to intervene in defense of the Canal. Last, he argued that the United States had had no significant security rivals since the collapse of the USSR and that the security environment surrounding the Canal had been exceptionally favorable. Panama had a significant interest in maintaining the neutrality of the Canal and ensuring its functioning. He illuminated that the facilities had experienced no shutdowns except during the 1988 U.S. invasion of Panama.²⁴

In a more recent analysis, Carlos Guevara Mann, associate professor of political science and director of Florida State University's Panamanian graduate program in international affairs, agreed with Falcoff and Jordan. In 2011, Guevara Mann wrote, the "waterway's strategic value . . . diminished with the shift to a two-ocean fleet during World War II."²⁵ Citing a 1999 work by national security analyst Ivan Eland, Guevara Mann argued that the Atlantic and Pacific fleets have had "overwhelming dominance in their respective regions without the necessity of rapidly swinging ships from one ocean to the other via the Canal."²⁶ Falcoff's and Guevara Mann's positions mirrored the overall sentiments of the Department of Defense and State Department. The policy debate has remained stable in the third camp since the handover of the Canal.

²⁴ Mark Falcoff, *Panama's Canal: What Happens When the United States Gives a Small Country What It Wants* (Washington, DC: AEI Press, 1998); S., *Panama Canal and United States Interests*.

²⁵ Carlos Guevara Mann, "National Security or Special Interests? U.S. Support for the Panama Canal Expansion Program," *Global Society* 25, no. 2 (2011): 181–204, <https://doi.org/10.1080/13600826.2011.553529>.

²⁶ Ivan Eland, "Panama Canal Stirs Cold Warriors," Independent Institute, October 19, 1999, <https://www.independent.org/news/article.asp?id=1067>.

D. CONCLUSION

The linear progression of the three policy camps shows that U.S. strategic policy toward the Canal has undergone a major evolutionary change every time a great power shift has occurred among U.S. rivals. Yet, the geopolitical landscape has experienced another monumental change since China's entry to the World Trade Organization in 2001 and its subsequent military build-up. U.S. security policy, as laid out in the National Security Strategy, began focusing on GPC in 2017.²⁷ Why, then, has U.S. security policy toward the Panama Canal not also evolved with this shift toward GPC? Is the Canal still strategically insignificant as argued by the third camp in this new security environment?

I hypothesize that the Canal has dramatically increased in strategic importance, returning to similar strategic value as it had leading up to World War II. Consequently, I argue that the United States does indeed need to consider a major realignment of its national security policy toward the Canal. I assess that the United States needs to take a more proactive, permeant defensive posture of the Canal to adapt to the new threat presented by China.

For the last two decades, the United States has largely focused on the Middle East in fighting the war on terror. This effort has left little room for concern over the Canal. Furthermore, U.S. strategic policy toward Panama and Latin America as a whole has been dominantly focused on the war on drugs since the Reagan administration. Only recently has U.S. strategic policy begun to consider the ramifications of a new great power—China—in relation to the Western Hemisphere. I infer that the Panama Canal has been largely taken for granted and has been an afterthought in the minds of national security policy planners.

This disinterest was justifiable in the relatively stable post-Cold War security environment. However, now it is pertinent to broaden our assessment in GPC as China rises as a new great naval power in the Pacific. The remaining chapters explore this new threat and reopen the strategy debate surrounding the Canal using a lens of the past to

²⁷ Donald J. Trump, *Statement on the 2017 National Security Strategy* (Washington, DC: White House, 2017), ProQuest.

interpret current events. The following chapters add to the academic literature on the debate surrounding the economic and strategic significance of the Panama Canal to the United States. In reopening the debate, this work modernizes the investigation beyond the three policy camps and casts it in the shadow of the new Chinese threat to assess the growing gap in U.S. policy toward the Canal.

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III. U.S. ECONOMIC RELIANCE ON THE PANAMA CANAL

The Panama Canal, as one of the seven critical maritime chokepoints in the world, is vital to global trade. Moreover, the Canal is indispensable to U.S. maritime trade. The United States is the single largest user of Canal transits by a nearly 700 percent margin over the next highest user—China.²⁸ The Canal has not suffered a complete blockage or stoppage since the United States invaded Panama in 1989 during the first Bush administration. Yet, recent events provide an analytical foundation to assess the potential economic consequences and follow-on strategic repercussions of a blockage or closure event. The blockage of the Suez Canal in March 2021 by the MV *Ever Given* halted 12 percent of global maritime trade for six days. More recently, the COVID-19 pandemic caused significant delays in transit times through the Panama Canal.

These blockages provide a lens through which to assess a possible future closure event of the Panama Canal either by catastrophe or attack. China, as a growing competitor and threat to the United States, undoubtedly realizes the United States' economic dependence on the Panama Canal. China would have significant strategic motivation to attack the Canal in a GPC war to cripple U.S. economic security. This chapter clearly details the U.S. economic dependence on the Canal, the economic repercussions of a potential closure event, and the ways in which China could profit from such an event.

A. THE PANAMA CANAL'S ECONOMIC IMPORTANCE AND SECOND-ORDER SECURITY IMPLICATIONS

The Panama Canal's throughput encompasses approximately 6 percent of global maritime trade.²⁹ That fact in and of itself is not stirring. However, 69.8 percent of all traffic transiting the Canal either originates from a U.S. port or arrives at a U.S. port.³⁰

²⁸ "Traffic through the Panama Canal by Lock Type and Market Segment: Fiscal Years 2021–2020," Panama Canal Authority, accessed January 13, 2022, <https://www.pancanal.com/eng/op/transit-stats/index.html>.

²⁹ "US-China Trade War Has Had 'Minimal' Impact on Panama Canal," *CE Noticias Financieras*, July 6, 2019, ProQuest.

³⁰ Panama Canal Authority, "Traffic through the Panama Canal."

That statistic significantly changes the U.S. relationship to the 6 percent of global trade passing through the Canal. The widening of the locks, completed in 2016, caused an unprecedented increase in Canal transits and tonnage throughput by 23 percent.³¹ Specifically, this was due to the ability to handle larger neopanamax class cargo ships. Of note, much of this increase in traffic was diverted from the Suez Canal. Nearly 18 percent of Suez traffic was redirected through the Panama Canal.³² U.S. markets have grown to rely heavily on the Panama Canal for three key trade routes: the East Coast of the United States to the west coast of South America, the West Coast of the United States to Europe, and most critically, the Gulf Coast and East Coast of the United States to Asian markets.³³ These three trade routes serve as a critical backbone for the U.S. economy, particularly in strategic assets such as grain, coal, minerals and metals, crude oil and fuel, and containerized cargo. These assets make up the top five categories of commodities passing through the Canal.³⁴

Since the widening of the locks in 2016, petroleum products from U.S. shale have seen a significant increase in Canal transits. According to Gaurav Sharma, an oil and gas industry market analyst with *Forbes*, Panama Canal Authority data suggest that “vessels loaded with the proceeds of U.S. shale—be it Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG), condensates and limited volumes of crude oil—are crossing the maritime artery on their way to East Asia in ever greater numbers.”³⁵ Sharma goes on to say, “The state of Texas is the Panama Canal’s top trading partner via its petrochemical and gas exports.”³⁶ Jorge Quijano, administrator for the Panama Canal Authority, explains

³¹ “Panama’s New Canal and the Midwest,” *Chicago Tribune*, December 28, 2017, ProQuest.

³² Costas Paris, “The Panama Canal’s Big Bet Is Paying Off; Ocean Operators Switch Some Sailings from Suez as Bigger Ships Can Cross New Panama Locks to Reach U.S. East Coast,” *Wall Street Journal*, October 8, 2017, ProQuest.

³³ “Panama Canal Statistics,” Georgia Tech Panama Logistics Innovation and Research Center, accessed October 24, 2021, <https://logistics.gatech.pa/en/assets/panama-canal/statistics>.

³⁴ Georgia Tech Panama Logistics Innovation and Research Center.

³⁵ Gaurav Sharma, “Expanded Panama Canal Feels Benign Impact of U.S. Oil and Gas Exports to Asia,” *Forbes*, April 16, 2018, <https://www.forbes.com/sites/gauravsharma/2018/04/16/expanded-panama-canal-feels-benign-impact-of-u-s-oil-and-gas-exports-to-asia/>.

³⁶ Sharma.

70 percent of the LNG shipments that pass through the Panama Canal sail from a single plant on the U.S. East Coast.³⁷ This increase has made the United States the largest LPG/LNG supplier to Japan and a key provider to the broader Asian markets.³⁸ To mark the importance of this trade, during the 2019 COVID crisis, reduced throughput of the Panama Canal caused a disruption in LPG/LNG supply from U.S. to Asian markets. The disruption caused a temporary parabolic spike in prices until the backlog could be cleared.³⁹ This spike is a glimpse of what could happen to the LPG/LNG supply if the Canal suffered a protracted degradation or blockage.

Japan, as one of the United States' staunchest allies, is highly dependent on U.S. LPG/LNG production for its own domestic energy security.⁴⁰ This relationship presents a key strategic link unavoidably connecting the Panama Canal, U.S. domestic petroleum production, and Japan's strategic stability. In a time of GPC, the United States relies heavily on its alliance with Japan to counter Chinese efforts in the Pacific. Thus, Japan's energy security is of great concern to U.S. strategic planners. The Panama Canal plays a pivotal role in maintaining the strategic capabilities of both nations.

In 2018, the United States became the world's top crude oil producer. Of total U.S. crude production, 71 percent is extracted from only five states: Texas, North Dakota, New Mexico, Oklahoma, and Colorado. An additional 14.6 percent of crude oil is produced offshore in the Gulf of Mexico.⁴¹ This production has created a distinctive oil watershed for the United States that flows toward the Gulf of Mexico. The bulk of U.S. oil refining capacity has consequently been centralized on the Gulf Coast to process the 84.6 percent

³⁷ "US Nat-Gas Surge Proves a Boon to Expanded Panama Canal," EFE News Service, June 26, 2017, ProQuest.

³⁸ Sharma, "Expanded Panama Canal Feels Benign Impact."

³⁹ Anne Shiryayevskaya, Inajima Tsuyoshi, and Sundria Saket, "Panama Canal Clogged with Ships, and Pandemic Is Making It Worse," Bloomberg, October 30, 2020, <https://www.bloomberg.com/news/articles/2020-10-30/lng-vessels-transiting-panama-canal-face-delays-amid-congestion>.

⁴⁰ Sharma, "Expanded Panama Canal Feels Benign Impact."

⁴¹ "Oil and Petroleum Products Explained: Where Our Oil Comes From," U.S. Energy Information Administration, accessed July 6, 2021, <https://www.eia.gov/energyexplained/oil-and-petroleum-products/where-our-oil-comes-from.php>.

of U.S. oil that comes from this watershed.⁴² Furthermore, as of January 2020, eight of the top ten U.S. oil refineries by operational capacity lie in just three states: Texas, Louisiana, and Mississippi.⁴³ Additionally, the strategic petroleum reserves of the United States are in Texas and Louisiana on the Gulf Coast.

The centralization of the flow of supply, refining capacity, and strategic reserves on the Gulf Coast has important calculated benefits. The locations offer the greatest shelter and defensive capability for the United States in wartime. The locations maintain the geographic advantage of lying deep within the pocket of the Gulf of Mexico and the territorial water and airspace of the United States. Nonetheless, this strategic placement has had a second-order impact, making the Panama Canal a critical linkage to the Pacific theater for U.S. oil in the event of a GPC war.⁴⁴ As the U.S. Department of Defense is the world's single largest institutional consumer of oil, a disruption or delay in supply caused by a blockage of the Panama Canal would cause a critical shortage in the Pacific theater during a GPC war.⁴⁵ This shortage would impact not only the United States' warfighting capacity but also that of Japan—an indispensable ally on the frontline of a potential conflict with China.

B. THE MARCH 2021 SUEZ BLOCKAGE

On March 23, 2021, the MV *Ever Given*, a 1,312 ft skyscraper-sized cargo ship, ran aground in the Suez Canal.⁴⁶ The ship became wedged sideways between the east and

⁴² U.S. Energy Information Administration, “Map of U.S. Oil Refineries,” *Petroleum, Refineries, and the Future* (blog), July 19, 2012, <https://scalar.usc.edu/works/petroleum-refineries-and-the-future/media/map-of-us-oil-refineries-1>.

⁴³ “Oil and Petroleum Products Explained: Refining Crude Oil,” U.S. Energy Information Administration, accessed July 6, 2021, <https://www.eia.gov/energyexplained/oil-and-petroleum-products/refining-crude-oil-refinery-rankings.php>.

⁴⁴ “Strategic Petroleum Reserve,” Office of Fossil Energy and Carbon Management, accessed October 24, 2021, <https://www.energy.gov/fe/services/petroleum-reserves/strategic-petroleum-reserve/spr-storage-sites>.

⁴⁵ “Pentagon Fuel Use, Climate Change, and the Costs of War,” Watson Institute for International and Public Affairs, July 1, 2019, <https://watson.brown.edu/research/2019/pentagon-fuel-use-climate-change-and-costs-war>.

⁴⁶ Matthew S. Schwartz, “Suez Canal Traffic Backlog Finally Cleared following the Ever Given Saga,” NPR, April 3, 2021, <https://www.npr.org/2021/04/03/984111501/suez-canal-traffic-backlog-finally-cleared-following-the-ever-given-saga>.

west banks, completely blocking both north and southbound traffic. What followed was a six-day immobilization of 12 percent of global merchant shipping traffic and 30 percent of all global container ships.⁴⁷ The blockage was estimated to cost global markets approximately \$400 million per hour and \$10 billion per day.⁴⁸ The Suez Canal plays annual host to 7 percent of the world's oil traffic. As a main throughfare for Middle Eastern oil, the blockage caused a temporary global spike of 6 percent in crude oil prices.⁴⁹

Ultimately, 422 vessels were delayed in a giant shipping traffic jam.⁵⁰ Major shipping companies were faced with the decision either to divert traffic an average of 6,500 extra kilometers around the southern tip of Africa's Cape of Good Hope or to anchor and wait for a resolution. The added distance caused a nine-day increase in transit times for ships that chose to circumnavigate the blockage, resulting in operating costs swelling by an average of \$30,000 per day in fuel expenditures and escalating each vessel's total overhead by \$270,000 in fuel costs alone.⁵¹

The blockage disproportionately affected European markets and had little impact on the United States. Of the 422 vessels, only 25 were of U.S. origin or destined to East Coast ports.⁵² Conversely, a single company from the United Kingdom had over 20 vessels stranded in the event. The company stated it was waiting on "food goods like coconut milk and syrups, some spare parts for motors, . . . some fork lift trucks, some Amazon goods . .

⁴⁷ Pippa Stevens, "The Ship That Blocked the Suez Canal May Be Free, but Experts Warn the Supply Chain Impact Could Last Months," CNBC, March 29, 2021, <https://www.cnbc.com/2021/03/29/suez-canal-is-moving-but-the-supply-chain-impact-could-last-months.html>; Theo Leggett, "Egypt's Suez Canal Blocked by Huge Container Ship," BBC News, March 24, 2021, <https://www.bbc.com/news/world-middle-east-56505413>.

⁴⁸ Mary-Ann Russon, "The Cost of the Suez Canal Blockage," BBC News, March 29, 2021, <https://www.bbc.com/news/business-56559073>.

⁴⁹ "A Ship Trapped in the Suez Canal Is Causing Global Trade Chaos," *Marker* (blog), March 25, 2021, <https://marker.medium.com/a-ship-trapped-in-the-suez-canal-is-causing-global-trade-chaos-38d07a3dd087>.

⁵⁰ Adel Suliman, "Suez Canal Traffic Jam 'Cleared' Days after Ever Given Cargo Ship Freed," NBC News, April 3, 2021, <https://www.nbcnews.com/news/world/suez-canal-traffic-jam-cleared-days-after-ever-given-cargo-n1262961>.

⁵¹ Nik Martin, "Suez Canal Blockage: 4 of the Biggest Trade Chokepoints," Deutsche Welle, March 27, 2021, <https://www.dw.com/en/suez-canal-blockage-4-of-the-biggest-trade-chokepoints/a-57020755>.

⁵² "Suez Canal Blockage by Ever Given Will Affect U.S. Ports, Businesses, Consumers," Bureau of Transportation Statistics, April 1, 2021, <https://www.bts.gov/data-spotlight/ever-given-suez-canal>.

. . . , all sorts.”⁵³ If the Suez blockage had become protracted, companies would have been forced to resort to air freight at a cost three times higher.⁵⁴ There are no practical mass transit air- or land-based alternatives to the Suez Canal for trade routes between Europe, the Middle East, and Asia.⁵⁵

The impact to European markets provides a window into the possible consequences of a Panama Canal closure. While the Suez blockage disproportionately affected European markets, a Panama Canal closure would have an outsized impact on U.S. markets, resulting in similar backlogs of ships and goods. Furthermore, there are no substitute land- or air-based mass transit systems with high enough efficiency to replace the throughput of the Panama Canal for U.S. trade routes. The U.S. rail systems would be the most practical solution; however, they currently lack the capacity and reliability to handle the traffic that would shift from the Panama Canal. The rail systems would need to undergo a massive restructuring, increasing their coast-to-coast capacity and infrastructure across the board.

Stephen Flynn, founding director of the Global Resilience Institute, explained that due to an increased reliance on a shipping system whereby goods arrive just-in-time, the Suez blockage caused a mass disruption of global supply chains, leaving assembly lines idle.⁵⁶ Flynn further illuminated the problem:

The disruption of a week of this size is going to continue to have cascading effects . . . it’s got to be at least 60 days before things get sorted out and appear to be a bit back to normal. . . . This level of disruption cascaded after every 24 hours. . . . It’s never been stressed this badly before, and it’s going to take a really long time, and they’re just beginning the process of sorting it out . . . you’ve essentially created this traffic jam that doesn’t allow you just to reset and restart—you have to restack and reset the system and that’s something that’s going to take a lot of choreography.⁵⁷

⁵³ Russon, “The Cost of the Suez Canal Blockage.”

⁵⁴ Russon.

⁵⁵ Richard Gardham, “Why Are the Panama and Suez Canals So Important?,” Investment Monitor, April 8, 2021, <https://investmentmonitor.ai/distribution/panama-suez-canals-important-trade>.

⁵⁶ Stevens, “Experts Warn the Supply Chain Impact Could Last Months.”

⁵⁷ Stevens.

The Suez blockage reminds us that global shipping is fragile and easily destabilized if one of the seven main maritime arteries is compromised. Despite advances in land and air freight, 90 percent of the world’s trade still moves by sea.⁵⁸ Flynn finished his interview by stating, “This conveyor belt of the maritime transportation system is what’s moved [products] all around, and we took it largely for granted until it suddenly stopped. There’s going to be a lot of these second-, third-order effects.”⁵⁹ As the Panama Canal is used predominantly by the United States, it is easy to translate the effects of the Suez blockage to U.S. markets, which the next section explores. Arguably, the United States has taken for granted the maritime transportation through the Panama Canal as it is not immune to a similar blockage event.

C. THE PROJECTED IMPACT OF A PANAMA CANAL CLOSURE

The Suez blockage provides a strong foundation for understanding the economic implications of a potential Panama Canal blockage. An earlier section of this chapter established the importance of the Panama Canal to U.S. industry and to critical strategic commodities such as oil. Comparing like factors of the Panama Canal to the Suez Canal, such as annual percent of global trade, number of transits per year, the percent of U.S. trade, and distance saved, we can effectively project the consequences of a Panama Canal closure on U.S. trade.

With the 2016 lock expansion, the Panama Canal could handle 98 percent of global shipping traffic.⁶⁰ The Panama Canal locks witness an average of 32–38 ship transits per day. Conversely, the Suez Canal averages 40–65 transits per day. The increased flow accounts for the Suez handling double the global traffic compared to the Panama Canal. In the event of a Panama Canal closure, maritime shipping would have to divert 15,000 km around South America’s Cape Horn, adding 22 days of transit.⁶¹

⁵⁸ “Ocean Shipping and Shipbuilding,” Organization for Economic Co-operation and Development, accessed July 6, 2021, <https://www.oecd.org/ocean/topics/ocean-shipping/>.

⁵⁹ Stevens, “Experts Warn the Supply Chain Impact Could Last Months.”

⁶⁰ Martin, “Suez Canal Blockage.”

⁶¹ Gardham, “Why Are the Panama and Suez Canals So Important?”

While the Panama Canal blockage and the 22-day increase would affect only half as much traffic as a Suez blockage, such a closure would triple the transit time and fuel cost. Comparatively, the six days of the Suez blockage in 2021 congested 422 ships, yet only 25 were U.S. bound. A similar six-day blockade of the Panama Canal would result in a congestion of 228 ships. Significantly, 69 percent of the ships caught in the blockage would be of U.S. origin or destination. The Panama Canal blockage would result in 185 U.S. origin/destined ships being forced either to anchor and await a resolution or to round the Cape Horn of South America. That voyage would result in shipping companies absorbing a cost three times greater than companies did during the Suez blockage.

The COVID-19 crisis also provided a glimpse into a potential Panama Canal blockage. Due to health safety precautions, the Panama Canal Authority drastically reduced staffing for the Canal, which led to vessels without a booked transit slot experiencing wait times of 10–15 days to pass the Canal.⁶² The Suez blockage lasted six days and took an additional three days to clear the backlog of ships, equaling a nine-day total delay. In the COVID-19 staffing delay of the Panama Canal, vessels with booked appointments continued to pass unabated, and only unbooked vessels were affected. Yet, the reduced staffing alone caused many unbooked vessel delays of 10–15 days compared to the entire nine-day duration of the Suez blockage.

D. CHINA’S STRATEGIC MOTIVATIONS TO TARGET THE PANAMA CANAL FOR ECONOMIC WARFARE AGAINST THE UNITED STATES

China, as the second-largest user of the Canal, has an economic incentive not to disrupt Canal traffic. Nevertheless, China possesses a significant strategic incentive to disable the Canal in the event of war with the United States. First, the geographic centralization of U.S. LPG/LNG production on the Gulf Coast stations the Panama Canal squarely between the bulk of U.S. oil production capacity and the Pacific theater. Second, it places the Panama Canal between Japan’s energy security and the bulk of U.S. LPG/LNG production. While China currently has economic interest in maintaining traffic flow through the Canal, its strategic calculus may find that closing the Canal would yield short-

⁶² Shiryayevskaya, Tsuyoshi, and Saket, “Panama Canal Clogged with Ships.”

term benefits in the event of war. Chinese strategists are acutely aware that the modern militaries of the United States and Japan rely heavily on LPG/LNG production to field their war machines. While the Canal has never been attacked or sabotaged, in 1976 Panamanian General Omar Torrijos famously said, “It is as vulnerable as a newborn baby.”⁶³ General Torrijos’s comment was made at a time when the United States still maintained a significant military presence in Panama for defense of the Canal. Yet, this is no longer the case.

The assessment of a potential Panama Canal blockage, covered in the previous sections, makes it plain that an increase of 22 days to circumnavigate the southern tip of South America would be untenable for most merchant shipping, resulting in substantial cost overruns. Most likely, U.S. seaborne traffic would redirect toward use of the Suez Canal to supply Asian markets and the Pacific theater, but such a shift would have significant strategic impacts.

In a GPC war, China may very well see the destruction of the Panama Canal as a succinct way to cripple U.S. trade immediately, but in the long term, such an attack would also serve to expose U.S. merchant fleets to interdiction and attacks on the open seas by lengthening U.S. SLOCs. Closing the Panama Canal would drastically increase the length of U.S. merchant shipping routes and SLOCs, redirecting them into some of the regions where the U.S. Navy has the least capacity to defend them. In the GPC of World War II, attacks on U.S. SLOCs to supply the British crippled the war effort until consistent convoy escorts were implemented. In a potential Panama Canal closure, with traffic redirected thousands of miles around Africa, U.S. adversaries like China would be afforded a much greater opportunity to target and harass U.S. shipping.

According to U.S. military leaders, China is attempting to establish naval bases on Africa’s west coast while simultaneously building up its naval base in Djibouti on Africa’s

⁶³ Joanne Omang, “Panama Canal: Efficient but Vulnerable,” *Washington Post*, May 17, 1976.

east coast.⁶⁴ These bases would provide excellent launching points to wage *guerre de course* (attacking merchant shipping in war) against redirected U.S. merchant shipping in the event of a Panama Canal closure. Alfred Thayer Mahan argued that the primary genesis behind the creation of a strong U.S. Navy was the need to protect commerce. He reasoned, “If navies, as all agree, exist for the protection of commerce, it inevitably follows that in war they must aim at depriving their enemy of that great resource; nor is it easy to conceive what broad military use they can subserve that at all compares with the protection and destruction of trade.”⁶⁵ A recently declassified secret 1976 memorandum from Admiral Holcomb to the deputy assistant to the president of national security affairs stated, in reference to the strategic value of the Panama Canal, “a potential threat will continue to exist to the longer alternate ocean lines of communication around Africa and South America. At the present time, the Soviet Union is considered the only nation with such capability.”⁶⁶ Arguably, China has replaced the Soviet Union as this threat. With the establishment of China’s African naval bases and the undeniable effectiveness of *guerre de course*, the Panama Canal has the economic and strategic value not only in its immediate ability to shorten U.S. SLOCs but also in its ability to reduce the long-term exposure of U.S. merchant shipping to enemy attacks, compared to alternate routes.

E. CONCLUSION

U.S. trade and strategic energy security are heavily reliant on the Panama Canal. In the event of a potential Canal closure, negative economic repercussions would mount rapidly, cascading through the U.S. economy, as demonstrated by the consequences of the Suez Canal blockage in 2021. Markedly, as the foremost user of the Canal, the United States would feel the effects of a Panama Canal blockage more than any other country. In

⁶⁴ Celine Castronuovo, “US General Warns China Is Actively Seeking to Set Up an Atlantic Naval Base,” *Hill*, May 7, 2021, <https://thehill.com/policy/defense/552331-us-general-warns-china-is-actively-seeking-to-set-up-an-atlantic-naval-base>; Sam LaGrone, “AFRICOM: Chinese Naval Base in Africa Set to Support Aircraft Carriers,” *USNI News*, April 20, 2021, <https://news.usni.org/2021/04/20/africom-chinese-naval-base-in-africa-set-to-support-aircraft-carriers>.

⁶⁵ Alfred T. Mahan, *The Influence of Sea Power upon History, 1660–1783*, 12th ed. (Boston: Little, Brown and Company, 1890), <https://www.gutenberg.org/files/13529/13529-h/13529-h.htm>.

⁶⁶ Staser Holcomb, “Strategic Military Importance of the Panama Canal Outlined” (official memorandum, Washington, DC: Department of Defense, 1976), 1, Gale.

a GPC war, China may seek to take advantage of this fact and attack the Panama Canal to disrupt U.S. shipping, lengthen U.S. SLOCs, and cripple the U.S. economy, specifically with respect to strategic commodities like the oil supply.

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IV. U.S. MILITARY RELIANCE ON THE CANAL AND PLANNED ATTACKS BY U.S. ENEMIES IN A GPC

The Panama Canal has played a strategic role in every major U.S. conflict since the opening of the Canal during World War I. As Rear Admiral M. Holcomb affirmed in a 1976 declassified secret memorandum,

The Panama Canal is a major defense asset, the use of which is necessary to enhance U.S. capability for timely reinforcement in Asia and Europe during periods of conflict. Its strategic advantage lies in the economy and flexibility it provides to accelerate the shift of military forces and logistic support by sea between the Atlantic and the Pacific Oceans and to overseas areas.⁶⁷

This strategic advantage is driven by the very geography of the United States, which uniquely spans an entire continent and possesses two massive maritime fronts on the Pacific and Atlantic coasts.

These expansive fronts present an exceptional challenge to U.S. security planners. As a 2020 Congressional Research Service report lays out, “The United States is the only country in the world that designs its military to depart one hemisphere, cross broad expanses of ocean and air space, and then conduct sustained, large-scale military operations upon arrival in another hemisphere.”⁶⁸ This difference is what lends an outsized magnitude of importance to the Panama Canal as a primary structural support of U.S. maritime strategy. The report goes on to state that “some countries, such as Russia, China, the United Kingdom, and France, have an ability to deploy forces to distant locations, but only on a much smaller scale.”⁶⁹

Due to its geography, the United States has had to develop the force structure of a two-ocean navy, highly dependent on its ability to reinforce itself between the Pacific and

⁶⁷ Holcomb, “Strategic Military Importance of the Panama Canal Outlined.”

⁶⁸ Ronald O’Rourke, *Defense Primer: Geography, Strategy, and U.S. Force Design*, CRS Report No. IF10485 (Washington, DC: Congressional Research Service, 2021), 1, <https://crsreports.congress.gov/product/pdf/IF/IF10485>.

⁶⁹ O’Rourke.

Atlantic theaters through the Panama Canal. Throughout history, U.S. adversaries have recognized the United States' strategic dependence on the Canal. Indeed, historical case studies highlight many examples of adversaries developing operational plans to destroy, cripple, or subvert U.S. influence over the Canal. These plans aimed to incapacitate or degrade the U.S. military's rapid interoceanic reinforcement capability and disrupt U.S. lines of communication in GPC.

Enemy designs on the Canal reached their zenith during World War II, as both Germany and Japan independently developed operational plans to attack the Panama Canal. Yet, modern events foretell of new threats: both Venezuelan and Chinese maritime strategies have set their sights on the Panama Canal.

To assess these new threats, this chapter investigates historical case studies of planned attacks against the Canal. While Chapter III focused on the economic importance of the Panama Canal, this chapter delves into the historical military use of the Canal by U.S. forces to clearly establish an enduring strategic dependence on it. Furthermore, this chapter explores the historical planned attacks on the Canal to establish a precedence for adversarial behavior in a GPC. Finally, this chapter projects the possible impacts of future threats to the U.S. Canal strategy, vis-à-vis a growing Chinese naval capability.

A. U.S. MILITARY RELIANCE ON THE CANAL IN WARTIME AND PROJECTED USE IN A GPC WITH CHINA

The United States has harnessed the rapid transit capability of the Panama Canal in every significant conflict since its locks were first opened in 1914. Despite modern air capabilities, the majority of U.S. warfighting capacity moves by sea. Admiral Thomas Moore, former chairman of the JCS, testified to Congress in 1998 that he had observed firsthand the criticality of the Panama Canal during several wars and that 95 percent of routine military logistics support moves by sea.⁷⁰ He explained to the Senate Foreign Relations Committee that “on several occasions . . . we have had combat action . . . we have had to transfer a tremendous amount of material back and forth from one ocean to

⁷⁰ G. Russell Evans, *Death Knell of the Panama Canal?* (Fairfax, VA: National Security Center, 1997), 7.

another. We would have to make significant increases in our military structure in terms of size if we were denied the right and the opportunity to pass back and forth” through the Canal.⁷¹ In sum, the Canal has allowed the U.S. military to maintain a smaller force size to great effect due to the reinforcement capability of the Canal.

1. Moving Military Might through the Canal in Past Conflicts

Examining U.S. military use of the Canal during times of conflict affirms Admiral Moore’s statements. Beginning in World War I, the United States began shuttling ships through the Canal for strategic movement of military might. Only 2,682 military vessels were estimated to have utilized the Canal for the war effort.⁷² However, Dennison Kitchel, former U.S. Army lieutenant colonel and associate justice to the Supreme Court, wrote in his book that after entry into World War I,

the canal was a beehive of combat vessel and military cargo transits. The Canal’s defense value became even more apparent 24 years later when the United States found its military and logistic sinews stretched to the limit in a grim, two-ocean global conflict: World War II. Even though U.S. naval forces for that involvement were organized into three fleets—Atlantic, Pacific, and Asian—there was constant interchange of fighting ships from ocean to ocean through the canal.⁷³

The single heaviest use of the Panama Canal for military transits was by far during World War II. An estimated 16,700 U.S. military vessels passed through the locks during the conflict.⁷⁴

Following World War II, U.S. military engagements began to trend away from large conventional conflicts to the smaller irregular conflicts of the Cold War. Still, the Canal maintained its strategic importance by playing a significant role in these lesser engagements.

⁷¹ S., *Panama Canal and United States Interests*.

⁷² Padelford, *The Panama Canal in Peace and War*, 155.

⁷³ Denison Kitchel, *The Truth about the Panama Canal* (New Rochelle, NY: Arlington House, 1978), 165–66.

⁷⁴ Kitchel, 166.

Following World War II, the Canal unquestionably played a substantial role during the Korean conflict.⁷⁵ Then, during the Vietnam conflict, 1,922 U.S. military vessels transited the Canal.⁷⁶ In a declassified secret CIA white paper from 1967, Lewis. A. Tambs, former U.S. ambassador to Colombia, stated,

The continuing value of this concept was proven during the Vietnam war. In 1968 at the height of the conflict 1504 U.S. Government vessels utilized the canal. Even in the relatively somnolent years of 1974 and 1975 the number totaled 248 and 170. Of the 176 combat surface ships and 75 attack submarines currently on active duty with the United States Navy, only 13 large aircraft carriers cannot transit the canal.⁷⁷

Additionally, 90 percent of all ammunition used by U.S. troops in the Vietnam conflict was moved to the theater via the Panama Canal, along with 30 percent of all routine logistics.⁷⁸

Even small crisis situations during this period necessitated substantial use of the Canal. In 1974, Stanley Meisler reported in a *Los Angeles Times* article, “During the Cuban missile crisis of 1962, the U.S. Navy was able to move 30 ships from the Pacific Ocean to the Caribbean in a day. This could not have been done without the canal.”⁷⁹ The movement of ships was necessary to poise for the possible invasion of Cuba and for the naval blockade to interdict the Soviet missiles bound for Cuba.⁸⁰

In June 1977, in a final attempt to dissuade President Jimmy Carter from handing over the Panama Canal, four distinguished admirals and former chiefs of naval operation—Admirals Thomas Moore, Robert Carney, George Anderson, and Arleigh Burke—wrote in a hand-carried letter to the president, “Our experience has been that as each crisis developed during our active service—World War Two, Korea, Vietnam, and the Cuban

⁷⁵ Kitchel, 166. The research for this thesis could not locate definitive numbers of transits during the Korean War.

⁷⁶ Tambs, *Strategy, Seapower, and Survival*.

⁷⁷ Tambs.

⁷⁸ Neal Creighton, “Panama Canal Role Fades for Military,” *Chicago Tribune*, April 13, 1998, ProQuest.

⁷⁹ Stanley Meisler, “Remnant of the Big Stick: Panama Canal: ‘Part of the American Way of Life,’” *Los Angeles Times*, February 3, 1974, ProQuest.

⁸⁰ Kitchel, *The Truth about the Panama Canal*, 166.

missile crisis—the value of the Canal was forcefully emphasized by emergency transits of our naval units and massive logistics support for the Armed Forces.”⁸¹ The admirals could not have known at the time their letter was delivered that their position would soon be validated. The Canal would come to play a considerable near-term role in the Gulf War conflict, substantiating their statement. Canal transits increased by 783 ships per year during the Gulf War before returning to the previously lower yearly transit pattern.⁸²

Capturing the Canal’s role in more recent engagements, Admiral Moore illustrated in his 1998 congressional testimony that “on several occasions where we have had combat action, in Desert Storm, in Iran, in Vietnam, and so on, we have had to transfer a tremendous amount of material back and forth from one ocean to another through the Canal.”⁸³ He also illuminated that in planning for all noteworthy conflict and crisis events of the last half century, “the figure [was] something like 94 ships . . . required to concentrate in the Atlantic or turn around and concentrate in the Pacific.”⁸⁴ Undoubtedly, the Panama Canal has supplied a vital link for U.S. forces in a significant number of strategic engagements.

2. Moving Military Might in Future Conflicts with China

In the decades following World War II, many arguments abounded against the strategic value of the Panama Canal despite the U.S. military’s reliance on it during the conflicts of those years. The primary arguments cited the absence of a major naval threat to the United States given the destruction of the Imperial Japanese fleet in the Pacific and the dissolution of the Soviet fleet in the Caribbean following the collapse of the Soviet Union. At the ratification hearing for the Carter-Torrijos treaty that would eventually handover the Canal to Panama, Colonel Max Manwaring said, “The logic of the dialogue regarding the strategic value of the Panama Canal is simple: no threat, no strategic value.

⁸¹ Ryan, *The Panama Canal Controversy*, 142.

⁸² Falcoff, *Panama’s Canal*, 53.

⁸³ S., *Panama Canal and United States Interests*.

⁸⁴ S., *Panama Canal and United States Interests*.

Even if there were a threat, however, there is no defense. Ergo, the Canal has no strategic value.”⁸⁵

However, the numbers of transits laid out in the previous section and the experiences of military leadership, such as the four admirals who addressed President Carter, paint a candidly different picture of the importance of the Canal to U.S. strategic efforts in many types of conflict—from crises, to irregular wars, to GPCs. Based on the figures of transits, one can extrapolate the possible strategic role the Canal will play in a modern GPC war with China. The transit numbers from World War II offer the best clarity from which to base a hypothesis. However, before launching into calculations and predictions about a future great war with China, it is important to point out the limitations of such calculations. This effort is limited primarily by the lack of a recent great war with modern conventional forces and weapons systems on which to base estimates. Therefore, estimates necessarily rely on the force sizes and canal transit numbers of World War II while compensating for China’s threat composition and potential for force build-up during a great war. Those limitations aside, the calculations—while rudimentary and not meant to be taken as exacting estimates—present a worthwhile departure point from which to evaluate the potential importance of the Panama Canal to the U.S. military in a GPC war with China as early as 2024.

During World War II, the Imperial Japanese fleet presented the largest naval challenge to the United States. The size of the Japanese Navy was estimated to comprise 238 capital ships at the outset of the war.⁸⁶ The U.S. fleet, by comparison, comprised 345 capital ships.⁸⁷ In 2020, the People’s Republic of China (PRC)’s Navy became the largest in the world at 360 ships, surpassing the current U.S. Navy force size by 60 vessels, though

⁸⁵ Falcoff, *Panama’s Canal*, 67.

⁸⁶ David C. Evans, *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887–1941* (Annapolis: Naval Institute Press, 1997).

⁸⁷ “US Ship Force Levels: 1886–Present,” Naval History and Heritage Command, accessed July 22, 2021, <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html>.

not in overall gross tonnage.⁸⁸ The Office of Naval Intelligence estimates that by 2024, the PRC Navy will reach 400 ships, growing in both technological advantage and blue water sustainability.⁸⁹ The PRC Navy’s size of 400 ships represents a 168 percent increase in threat size compared to the Imperial Japanese fleet in World War II. To compensate for the increase of 168 percent in threat, we can extrapolate that 28,067 U.S. warship Canal transits would be required to combat the size of the PRC Navy—on the conservative end of the spectrum. Figure 1 graphically depicts these estimates.

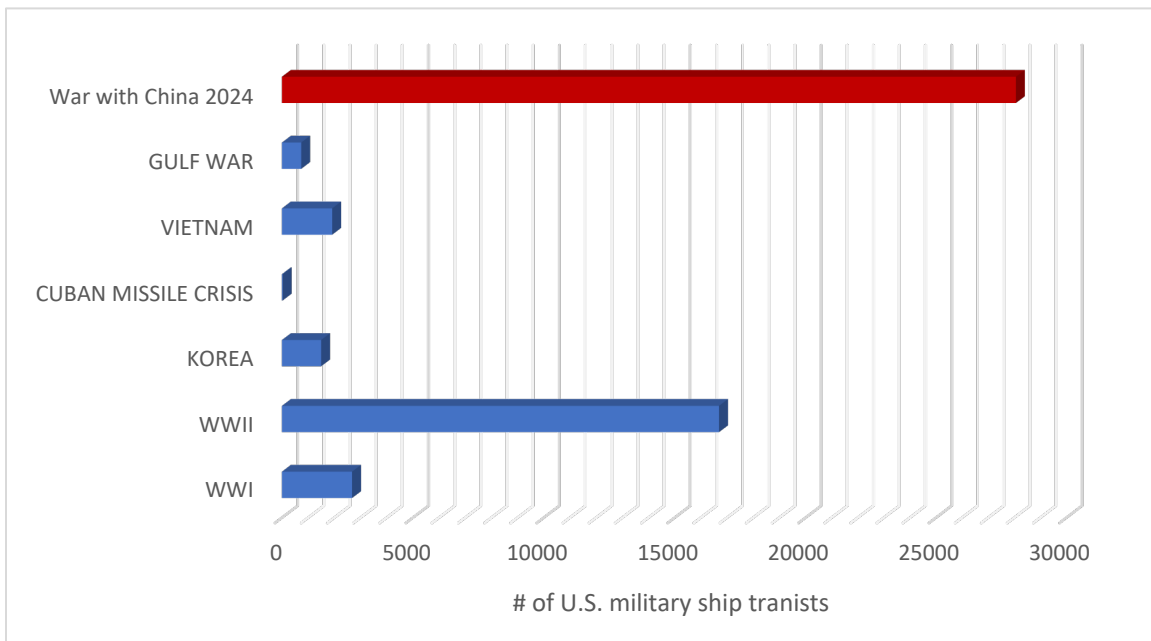


Figure 1. Number of U.S. Military Ship Transits by Conflict with Projected Transits for a 2024 GPC with China.⁹⁰

Moreover, in an actual GPC war with China, the number of required transits would likely be much higher than this rudimentary calculation. Current Chinese shipbuilding

⁸⁸ Brad Lendon, “China Has Built the World’s Largest Navy. Now What’s Beijing Going to Do with It?,” CNN, March 5, 2021, <https://www.cnn.com/2021/03/05/china/china-world-biggest-navy-intl-hnk-ml-dst/index.html>.

⁸⁹ Lendon.

⁹⁰ Adapted from Falcoff, *Panama’s Canal*, 53; Meisler, “Remnant of the Big Stick”; Tambs, *Strategy, Seapower, and Survival*; Kitchel, *The Truth about the Panama Canal*, 166; Padelford, *The Panama Canal in Peace and War*, 155.

capacity dwarfs even the highest U.S. output during the fever pitch of World War II. Brad Lendon, CNN analyst, wrote, “In 2018, China held 40% of the world’s shipbuilding market by gross tons. . . . China built more ships in one year of peace time (2019) than the U.S. did in four of war (1941–1945).”⁹¹ In a February 2021 hearing on deterring the PRC’s aggression toward Taiwan, retired U.S. Navy Captain Thomas Shugart testified before Congress,

During the emergency shipbuilding program of World War II, which supported massive, mechanized armies in two theaters of war thousands of miles from home, U.S. shipbuilding production peaked at 18.5 million tons annually, and the United States finished the war with a merchant fleet that weighed in at 39 million tons. In 2019, during peacetime, China built more than 23 million tons of shipping, and China’s merchant fleet (including Hong Kong’s) totals more than 300 million tons.⁹²

One of the deciding factors in the battle of the Pacific against the Imperial Japanese fleet was U.S. shipbuilding capacity’s outstripping Japan’s. The U.S. Navy grew from 345 ships at the outset of World War II to 790 ships by the end—an increase of 230 percent in force size at the completion of the war brought its massive industrial might to bear.

According to the China Power Project, “Between 2014 and 2018, China launched more submarines, warships, amphibious vessels, and auxiliaries than the number of ships currently serving in the individual navies of Germany, India, Spain, and the United Kingdom.”⁹³ In World War II, neither Japan nor the United States possessed as herculean a shipbuilding capacity as China’s current capability. Even by the most conservative estimates, using U.S. shipbuilding benchmarks from World War II to assess China’s possible naval growth, China would exceed 912 ships by the end of a four-year conflict. Still, these estimates fall well below what current Chinese shipbuilding capacity could bring to bear. An increase above 912 ships would correlate to an even larger requirement for U.S. military might to pass through the Canal to overcome the growth of PRC forces.

⁹¹ Lendon, “China Has Built the World’s Largest Navy.”

⁹² Thomas H. Shugart III, “Trends, Timelines, and Uncertainty: An Assessment of the State of Cross-Strait Deterrence: Testimony before the U.S. China Economic and Security Review Commission” (Washington, DC: Center for a New American Security, 2021), 16.

⁹³ Lendon, “China Has Built the World’s Largest Navy.”

From these estimates, we can feasibly draw the conclusion that during a GPC war with China, the Panama Canal would become more strategically important than at any other time in U.S. history.

B. HISTORICAL U.S. DEFENSE OF THE CANAL AND PLANNED ATTACKS BY U.S. ADVERSARIES

Today, the Panama Canal sits relatively undefended—in sharp contrast to the historical defensive efforts of the United States to protect the Canal. This section examines current U.S. defense policies toward the Canal followed by a study of the historical U.S. defense policies to demonstrate the stark difference between present and past.

1. The Current U.S. Canal Security Policy and Lack of Defense

The Panama Canal has operated without significant interruption since its opening in 1914. Except for the United States’ denying Axis belligerents transit rights during World War II, the Canal has remained politically neutral, allowing the passage of vessels flagged by any country. Many analysts argue that the neutrality itself is enough to deter aggression toward the Canal. Dr. Mark Falcoff, one of the most outspoken academic opponents of U.S. strategic Canal defense, captured a quote from Panamanian Administrator Ferando Manfredo in 1990. Manfredo declared, “I do not see any threat to the canal . . . because nobody would stand to gain by destroying it.”⁹⁴

Moreover, the defense of the Panama Canal has largely been left to the international community since the dissolution of the Panamanian Army, after the U.S. invasion in 1989.⁹⁵ Following the invasion, the United States left no forces behind in Panama to defend the Canal. Instead, the United States handed Canal security over to the Panamanian Defense Force (PDF), a country-level police force. The lack of dedicated U.S. defense of the Panama Canal reflects agreement with Manfredo’s comments—that the United States also perceives no significant threat to the Canal. A 1992 Department of Defense analysis

⁹⁴ Falcoff, *Panama’s Canal*, 68.

⁹⁵ Falcoff, 68.

listed transnational criminal groups as the largest threat to the Panama Canal due to their destabilizing effects on the country as well as possible terrorist activities.⁹⁶

U.S. defense activities currently focus on a robust Latin American coalition to respond to threats against the Panama Canal. In March 2019, Admiral Craig Fowler, commander of SOUTHCOM, indicated that the United States maintains a nonenduring presence in Panama and the greater Latin American region. Admiral Fowler described how the U.S. balances its nonenduring presence by sponsoring and participating in multinational exercises, such as PANAMAX, which simulates an international coalition defense of the Panama Canal in response to an outside threat.⁹⁷ PANAMAX has grown dramatically in size and scope since its inception in 2003, from three participating partner nations to 17 in 2018.⁹⁸ However, it remains relatively small in scope compared to other global exercise efforts, such as those surrounding defense of the Straits of Hormuz. The international coalition response practiced in PANAMAX is a rehearsal for an emergency reactionary force after a fictitious attack or aggression toward the Canal. Nevertheless, by and large, the day-to-day standing defense of the Panama Canal remains in the hands of the PDF, buttressed by the sentiment that there is no immediate threat to the Canal.

However, this was not always the case. U.S. defense policy commitment toward the Canal dramatically tapered off after World War II to almost complete attrition by the year 2000. Immediately following the war, SOUTHCOM's primary mission was the defense of the Canal, and the placement of SOUTHCOM's headquarters in the Canal Zone was a testament to the importance of this mission. In a declassified secret memorandum in 1973, Major General George Wallace stated, "SOUTHCOM's presence in Panama, directly subordinate to the JCS, announces the seriousness with which we view the Canal

⁹⁶ Falcoff, 67.

⁹⁷ "United States: Partnerships in Hemisphere Important, Southcom Commander Says," *Asia News Monitor*, March 4, 2019, ProQuest.

⁹⁸ Anna-Liesa Hussey, "PANAMAX 2018 Concludes in Mayport," *Federal Information and News Dispatch*, August 13, 2018, ProQuest.

security.”⁹⁹ Nevertheless, by 2000, all U.S. bases were closed and the defense of the Canal was handed to the PDF and the international community.

This marginal defense has left the Canal vulnerable to attack in the face of a new significant naval adversary, China. Current U.S. security policy toward the Panama Canal remains as it was established in 1989, with the PDF the primary agent responsible for Canal defense. While the security landscape has changed dramatically back toward GPC, with the rise of China, U.S. security policy toward the Panama Canal has not returned to GPC postures of the past. As the security decisions of the past decades were made against the assessment that the largest threat to the Panama Canal were transnational criminal networks, it would seem time to reconsider the U.S. defensive posture toward the Canal in light of the new strategic threat of the Chinese Navy.

2. Past U.S. Efforts to Defend the Canal and Enemy Operations Planned against the Panama Canal

Current U.S. defense efforts lie in stark contrast to the defenses of the Canal during the GPC of World War II and for many years thereafter. During World War II, the Canal was heavily defended. Lewis A. Tambs, former U.S. ambassador and CIA advisor wrote,

When the U.S. entered the war [World War II], the strategically-important Panama Canal Zone was defended by anti-torpedo nets and naval mines, chemical smoke generators, anti-aircraft gun positions, two long range radar installations (one on each coast), 634 search lights, 30 aircraft warning stations, and 11 16-inch coastal gun batteries.¹⁰⁰

Even after the war concluded, a garrison of over 9,000 U.S. troops remained in the Canal Zone to ensure its security until the draw-down nearing the handover.¹⁰¹

⁹⁹ George M. Wallace, “Study of U.S. National Interests in the Panama Canal” (official memorandum, Washington, DC: Office of the Assistant Secretary of Defense, August 7, 1973), 2, https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/International_Security_Affairs/07-M-3155_Action_Memo_Study_of_US_National_Interests_in_Panama_Canal.pdf.

¹⁰⁰ C. Peter Chen, “Panama Canal,” World War II Database, accessed January 26, 2021, https://ww2db.com/facility/Panama_Canal/.

¹⁰¹ Tambs, *Strategy, Seapower, and Survival*.

These defenses were justified. Both Japan and Germany developed operational plans to attack and disable the Canal. For Japan, the Canal was on the original menu of targets leading to the decision to bomb Pearl Harbor. This vulnerability was even predicted as far back as 1913, as revealed in a declassified confidential memorandum by Secretary of the Navy George Meyer: “If war should unfortunately break out between this country and Japan, it’s highly probable that . . . the western end of the Panama Canal, would become an object of attack by Japan before we could get adequate protection . . . , Japan would have been able to have raided it.”¹⁰² Japanese spies were detected as early as 1930, taking undercover photographs of Canal defenses.¹⁰³ In 1941, U.S. agents intercepted cables that Japanese intelligence officials had gained maps of the gunnery installations and military establishments in the Canal Zone. The maps had been acquired from the Italian ambassador, and the Japanese attempted to smuggle them into Mexico through their Mexican attaché.¹⁰⁴ Despite these early revelations, U.S. defense planners remained unaware of Japan’s specific plans to attack the Panama Canal during World War II.

It was not until after Germany surrendered in 1945 that Secretary of War Henry Stimson discovered the Japanese Navy “did in fact consider a raid by sea-planes launched from giant submarines, but the attack was switched to another target and the canal emerged from the war unscathed.”¹⁰⁵ The Japanese assuredly realized the strategic value of the Canal. An attack was not forthcoming on the Canal for many reasons, yet the organic U.S. defensive capabilities were chief among them.

Germany planned a similar attack against the Canal. According to Jason Daley with *Smithsonian Magazine*, “Recently [2017] declassified documents from Chile indicate . . .

¹⁰² Bradley Fiske, “Memorandum for the Secretary” (official memorandum, Washington, DC: Department of Defense, 1913), 1, Gale.

¹⁰³ Natalie Warner, “The Plot to Destroy the Panama Canal during World War II,” Coronado Concierge Panama, June 11, 2018, <https://coronadoconciergepanama.com/plot-destroy-panama-canal-world-war-ii/>.

¹⁰⁴ María Emilia Paz, *Strategy, Security, and Spies: Mexico and the U.S. as Allies in World War II* (University Park: Pennsylvania State University Press, 1997), 174.

¹⁰⁵ Major, “Wasting Asset,” 124.

that a cell of Nazis in the port of Valparaiso were planning to bomb the Panama Canal.”¹⁰⁶ The planned-but-not-executed attack, dubbed Operation Pelikan, involved disassembling two German bombers, transporting them via U-boat to a nearby Colombian island, reassembling them, and then launching them to bomb the Gatun Dam, thus disabling the Canal locks. The pilots would have then ditched the bombers in a nearby neutral country. To plan for the attack, a replica of the Canal was built on a deserted German island, and engineers were brought in to consult on the most effective means of permanently disabling the Canal. The Gatun Dam was selected due to its lack of military fortifications, and German pilots practiced bombing runs on the model facilities.¹⁰⁷

Notably, much like the Japanese attack plans, the organic U.S. defenses of the Canal acted as a deterrent. The defenses dramatically shaped the German’s decision in planning the operation. Nevertheless, this was not the first time that Germany had planned to attack Canal facilities. Even as far back as World War I, U.S. intelligence indicated that the Canal was a target for the Germans. In May 1917, at the outset of World War I, American authorities were notified that German agents “were endeavoring to purchase Dutch ships in various oriental ports to load with cement and sink in the canal.”¹⁰⁸ To counter these efforts, U.S. naval officers and armed guards began boarding and inspecting all transiting foreign-flagged vessels. This practice would span both World War I and World War II.¹⁰⁹

Alternatively, in the following decades, the Soviet Union chose a tactic different from that of the Japanese and Germans. The Soviets sought to control the Canal, not destroy it. Following World War II, “construction of a high seas fleet and control of the world’s sea lanes emerged as a prime objective of Soviet Policy.”¹¹⁰ As early as 1946, the Kremlin

¹⁰⁶ Jason Daley, “Documents Show Chile Foiled Nazi Plot to Attack Panama Canal,” *Smithsonian Magazine*, June 27, 2017, <https://www.smithsonianmag.com/smart-news/chile-foiled-nazi-plot-attack-panama-canal-documents-show-180963836/>.

¹⁰⁷ Warner, “Plot to Destroy the Panama Canal”; Stan Cohen, Don DeNevi, and Richard Gay, *They Came to Destroy America: The FBI Goes to War against Nazi Spies & Saboteurs before and during World War II* (Winnipeg: Pictorial Histories Publishing, 2003), 131.

¹⁰⁸ Padelford, *The Panama Canal in Peace and War*, 146.

¹⁰⁹ Norman J. Padelford, “Neutrality, Belligerency, and the Panama Canal,” *American Journal of International Law* 35, no. 1 (1941): 147, <https://doi.org/10.2307/2192598>.

¹¹⁰ Tambs, *Strategy, Seapower, and Survival*.

had penetrated Panamanian circles. Meanwhile, Soviet agents sought to foment civil unrest, encourage Panamanian independence from the United States, and prompt the handover of the Canal. In 1977, a Soviet delegation traveled to Panama to sign economic agreements with the Torrijos administration. It was the Soviets' hope and tactic to increase their soft power in Panama through economic agreements, something that until then had been unconscionable to U.S. officials.¹¹¹

In a 1976 issue of the *Naval War College Review*, naval strategists and U.S. Navy Captain Raymond Komorowski argued that Soviet planners had no reason to desire a nuclear attack on the Panama Canal. They would instead “erode U.S. military power, first, by supporting limited ‘wars of liberation’ fought by proxies, and second, by mounting political operations . . . designed to weaken the control by other states of maritime trade routes and nautical chokepoints.”¹¹² Komorowski further explained, “The Panama Canal . . . [was] among the narrow water-ways which Russia Sought to control through political-military pressure. For Moscow there was no cheaper way to cut off the United States from its allies and sources of strategic raw material.”¹¹³ Panama's importance to the Soviet Union went beyond the Canal. The geographic proximity to the U.S. mainland and undermining the U.S. military presence in Panama were central objectives for Soviet strategists in achieving their grander Latin American strategy.¹¹⁴

Fortunately for U.S. defense strategists, the Soviet Union collapsed before its Latin American designs could come to pass. Concerningly, however, in more modern terms, the Chinese seem to have adopted the Soviet playbook. Admiral Thomas Moore testified to Congress in 1998, “The Soviet Union's thinking and conclusions about the canal and their approach to gain control of this important strategically situated waterway was not lost on the Chinese Communists. They have replicated the Soviet Union's intent to the letter

¹¹¹ Ryan, *The Panama Canal Controversy*, 122.

¹¹² Ryan, 146.

¹¹³ Ryan, 146.

¹¹⁴ Kitchel, *The Truth about the Panama Canal*, 175.

quickly, silently, and successfully.”¹¹⁵ Though the Cold War ended with the collapse of the Soviet Union, the threat to the Panama Canal did not—it just changed hands.

3. U.S. Defense of the Canal Disproportionate to the Canal’s Importance in a GPC

In all GPCs since World War I, U.S. adversaries have realized the distinct strategic value of the Panama Canal to the United States. As such, every major adversary—from Japan, to Germany, to the Soviet Union, to China—has targeted the Canal as part of its wartime strategy, to cripple or limit U.S. warfighting capacity. With the rise of China and the ever-increasing size and capability of its navy, a new true naval threat now exists in the Pacific. Applied history demonstrates the heavy U.S. reliance on the Canal during small crises, such as the Cuban missile crisis, and extreme dependence on the Canal during World War II. In a GPC war with China, the Canal would be more important than at any other time in U.S. history.

Another quote that still holds true today comes from the former chiefs of naval operations in their letter to President Carter:

Contrary to what we read about the strategic declining value of the Canal, the truth is that this inter-ocean waterway is as important, if not more so, to the United States than ever. The Panama Canal enables the United States to transfer naval forces and commercial units from ocean to ocean as the need arises. This capability is increasingly important now in view of the reduced size of the U.S. Atlantic and Pacific fleets.¹¹⁶

At the time this letter was written, in 1977, the U.S. naval force comprised 523 vessels, but today, the force size is approximately 300 vessels.¹¹⁷ There is little evidence to argue against the strategic importance of the transfer capability of the Panama Canal for U.S. naval and military might. Today, the United States Navy, in its reduced numbers, debatably no longer retains the title of a true two-ocean navy, as was designed after World War II.

¹¹⁵ “Statement of John D. Feeley, Ambassador-Designate to Panama,” Senate Foreign Relations Committee, December 1, 2015, https://www.foreign.senate.gov/imo/media/doc/120115_Feeley_Testimony.pdf.

¹¹⁶ Kitchel, *The Truth about the Panama Canal*, 168.

¹¹⁷ Naval History and Heritage Command, “US Ship Force Levels.”

Additionally, the United States would struggle to harness the industrial capacity to construct one in a modern GPC war with China.

Nonetheless, while the strategic importance of the Canal has increased, it has been inversely prioritized with the efforts to defend it, with no foreseeable redress. From World War I through most of the Cold War, the Canal was robustly defended. Indeed, the robust defenses of the Canal were largely responsible for deterring overt military attacks, as seen by the discouragement of both Japanese and German operations. Yet, as the threats waned with the destruction of the Imperial Japanese fleet in World War II and the dissolution of the Soviet Union, policymakers' attention and commitment to the Canal declined, resulting in an undefended Canal.

The graph in Figure 2 juxtaposes the historical organic U.S. defenses of the Canal with the current strategic need for U.S. warships to transit the Canal in a possible 2024 war with China. Defense levels for the Canal were assessed on a scale of one to 100, associated with the volume of military ship transits through the Canal. The red line represents a subjective yet apt assessment of the historic organic U.S. defense capabilities at the Panama Canal. From the creation of the Canal through World War II, the Canal was robustly defended by permanent military installations and a significant troop presence. This period was given a defense rating of 100. Following World War II, U.S. defense installations and troop presence declined slightly but remained at a high level for several decades until the Carter-Torrijos treaty in 1977. This period was given a rating of 80. Following the 1977 treaty, there was a precipitous decline in both military installations and troop levels until complete attrition in 2000, reaching an assessed rating of zero. The orange line represents the data put forth in the previous section showing historic transit numbers by U.S. warships. The graphical representation in Figure 2 demonstrates the nearly complete lack of defense of the Canal against the possible strategic need for the Canal in a GPC war.

While this assessment is somewhat subjective, it contributes valuable academic discourse in demonstrating the historical need for warships to transit the Canal during a GPC compared to the precipitous decline of U.S. organic defenses. Notably, a lack of data following the Gulf War affected the period's representation of military transits in this figure. Future studies would benefit from assessing the U.S. military's use of the Canal in

military engagements following the Gulf War, but such research was beyond the scope of this thesis.

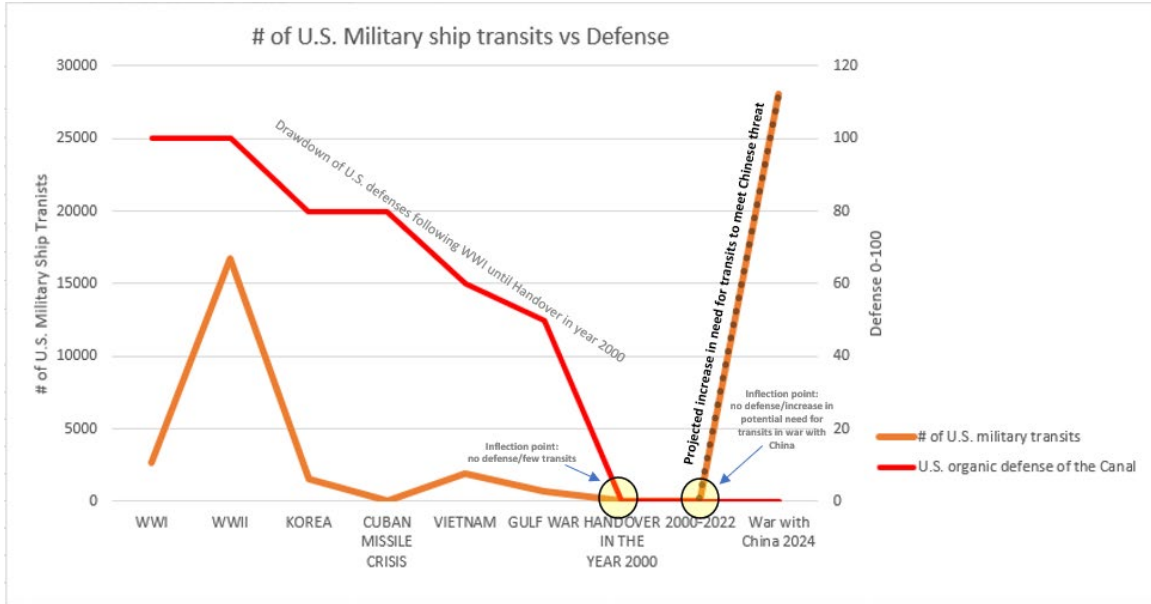


Figure 2. Number of U.S. Military Ship Transits vis-à-vis Organic U.S. Defenses of the Panama Canal and Projected Numbers for a 2024 GPC War with China.¹¹⁸

At current defense levels, the Canal is vulnerable to even small to moderate state actors. Venezuela, for example, poses one of the more significant regional threats to the Canal and its traffic. The U.S. Naval Institute reported in June 2021 that two Iranian frigates were bound for Venezuela. One vessel was observed to be carrying “seven high-speed missile-attack craft strapped to its deck.”¹¹⁹ The high-speed vessels are characteristic of fast attack craft (FAC) used by Iranian forces to harass shipping and U.S. warships in the

¹¹⁸ Adapted from Falcoff, *Panama’s Canal*, 53; Meisler, “Remnant of the Big Stick”; Tambs, *Strategy, Seapower, and Survival*; Kitchel, *The Truth about the Panama Canal*, 166; Padelford, *The Panama Canal in Peace and War*, 155.

¹¹⁹ H. I. Sutton and Sam LaGrone, “Updated: Iranian Warship Thought to Be Headed to Venezuela Left Port with 7 High-Speed Missile Boats Aboard,” USNI News, June 1, 2021, <https://news.usni.org/2021/06/01/iranian-warship-thought-to-be-headed-to-venezuela-left-port-with-7-high-speed-missile-boats-aboard>.

Straits of Hormuz.¹²⁰ Analysts suspect that Venezuela will take a page from the Iranian playbook and use the FAC to harass and disrupt shipping through the Panama Canal. In fielding this tactic, Venezuela appears to be asymmetrically countering superior U.S. naval forces and pressuring U.S. policymakers to lift sanctions on Venezuela.¹²¹

Simultaneously, entry of Iranian warships into the Caribbean is a significant escalation of Iranian naval provocation to the United States. Analysts suggest that this could be a foot-in-the-door event, with China silently watching, gauging the permissiveness of the Caribbean region and the U.S. response to threats to Canal traffic.¹²² Meanwhile, China's economic presence in Panama is growing and presents the most significant current threat to U.S. wartime use of the Canal. However, Chinese efforts merit a much larger investigation, to which the following chapter is dedicated.

C. CONCLUSION

Despite decades of controversy surrounding the strategic importance and the U.S. security commitment to the Panama Canal, it is hard to argue with the historical U.S. military reliance on the Canal in all types of conflict. World War II transit numbers provide security planners a benchmark to judge the required throughput of the Canal in a potential future war with China. One key fact Colin Gray points out is that “the war in the Pacific was, in reality, an American war, and the more important conflicts and debates in that war over strategy and resources were waged not between state allies, but rather between U.S. Navy and U.S. army.”¹²³ As Gray further stipulates, “The Pacific is not merely ‘out of area’ for NATO [North Atlantic Treaty Organization], it is tended to be very much out of mind. For the most obvious of geographical reasons the United States has long been a Pacific power in a way that has been shared by none of the great powers of Europe,

¹²⁰ Sutton and LaGrone.

¹²¹ Sutton and LaGrone.

¹²² “Iran’s Navy Heads to the Americas,” *Wall Street Journal*, June 1, 2021, <https://www.wsj.com/articles/irans-navy-heads-to-the-americas-11622586717>.

¹²³ Colin S. Gray, “Maritime Strategy and the Pacific: The Implications for NATO,” *Naval War College Review* 40, no. 1 (1987): 8–19.

including Russia.”¹²⁴ It is likely that a great war with China in the Pacific would also largely be an American-fought engagement. In such an engagement, the Panama Canal would provide the vital strategic jugular to U.S. strategy, just as it did in World War II, yet with even greater magnitude.

Historically, SOUTHCOM’s primary mission has been the defense of the Panama Canal, not other regional functions. All regional efforts outside of Canal defense have been subservient to that end. Any threats in the region have been immediately promoted to an exigent level if they were thought to endanger the Canal. It is time to consider a return to these former practices in light of a new GPC adversary like China, which is likely to outstrip the Japanese threat of World War II by many magnitudes. Consequently, the U.S. security policy toward the Canal should evolve to mirror this reality. The next two chapters examine current Chinese activities concerning the Canal.

¹²⁴ Gray, 10.

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V. THE CURRENT U.S. SECURITY LANDSCAPE OF THE PANAMA CANAL WITH CHINA AS A GREAT POWER ADVERSARY

The current security landscape in Panama presents U.S. policymakers and military planners with a significant challenge. U.S. political dominance has seen decades of decline in Panama. Beginning in 2001, almost immediately after the U.S. handover, China joined the World Trade Organization and began strengthening relations and economic investment in Panama. In its 2020 posture statement, SOUTHCOM leadership expressed concern over “China’s investments in deep ports and infrastructure on both sides of the Panama Canal.”¹²⁵ The 2021 posture statement expanded, stating,

China continues to increase its activities across all domains in the region: cyber, space, extractive and energy industries, transportation hubs, roads, infrastructure, telecommunications, legal and illegal fishing, agriculture, and military training. . . . The PRC is seeking to establish global logistics and basing infrastructure in our hemisphere in order to project and sustain military power at greater distances.¹²⁶

First, this chapter investigates recent Chinese political and economic efforts in Panama to ascertain their strategic impacts on the Panama Canal. Second, it examines Chinese actions in Panama through the lens of Chinese international relations scholars and media sources to bring clarity to the larger Chinese strategic designs on the Panama Canal.

A. CHINESE INTERNATIONAL RELATIONS AND ADOPTION OF RUSSIAN PLAY BOOK IN PANAMA

China has set its sights on the Panama Canal as a keystone of both its economic and military strategy in Latin America. Largely, Chinese strategists have adopted former Soviet tactics of eroding U.S. influence in Panama while increasing their position of soft power through economic partnership. Lei Yu points out, “There is a general agreement in Chinese political and scholarly circles that economic progress must be the basis for restoration of

¹²⁵ Sullivan and Lum, *China’s Engagement with Latin America and the Caribbean*.

¹²⁶ Sullivan and Lum.

China's fuqiang [greatness] through both 'hard' and 'soft' power."¹²⁷ In Panama, China is seeking to turn economic partnership into soft power to precipitate follow-on hard power.

China is following a well-trodden blueprint laid out by Soviet strategists. As early as 1946, Kremlin agents were inside Panama sowing dissent toward U.S. influence and ownership of the Panama Canal.¹²⁸ This strategy was the political arm of the larger Soviet grand naval strategy to construct a high seas fleet and control the world's sea lanes.¹²⁹ Dennison Kitchel articulated that the Soviet strategy was to build its Red Navy to patrol the approaches to major waterways, including the Panama and Suez Canals, but also to control the governments and militaries of the countries that surrounded these canals. The central geographic location of Panama and the U.S. military presence in the Canal Zone made controlling the Panama Canal a key objective of the Soviets' grand strategy in Latin America.¹³⁰

Control of the sea lanes was central to Soviet global aspirations just as it is to modern Chinese ambitions. In their *New York Times* article, Peter Goodman and Jane Perlez reported,

As China charts its global reach, six zones demand special attention: the maritime choke points. . . . At any one, an outbreak of hostilities could imperil China's free movement around the globe, jeopardizing its exports and access to resources. These zones have historically been policed by American naval power, which has made China's access dependent on peaceful relations with the United States. To liberate itself, China has been lavishing investment on governments that control the choke points.¹³¹

China perceives foreign investment and economic soft power as the primary vehicles for securing control of the Panama Canal and limiting its strategic risk to closing off vital

¹²⁷ Lei Yu, "China's Strategic Partnership with Latin America: A Fulcrum in China's Rise," *International Affairs* 91, no. 5 (2015): 1068, <https://doi.org/10.1111/1468-2346.12397>.

¹²⁸ Ryan, *The Panama Canal Controversy*, 122.

¹²⁹ Tambs, *Strategy, Seapower, and Survival*.

¹³⁰ Kitchel, *The Truth about the Panama Canal*, 175.

¹³¹ Peter Goodman and Jane Perlez, "Money and Muscle Pave China's Way to Global Power," *New York Times*, November 25, 2018, <https://www.nytimes.com/interactive/2018/11/25/world/asia/china-world-power.html>.

access to raw materials and trade in the event of war. In 2018, Panamanian and U.S. officials, including U.S. Admiral Kurt Tidd, former commander of SOUTHCOM, spoke with Jeff Seldin, national security correspondent for Voice of America News. Seldin reported,

One country of particular concern is Panama. China is already the world's second-largest user of the Panama Canal, according to Panamanian officials, and the two countries are set to begin a new round of trade negotiations next month. While U.S. military officials are not yet worried Beijing's efforts will have any immediate impact on the ability of the U.S. to move military vessels and materiel through the region, they are wary given China's ability to move quickly from economic ventures to military ones. "I'm thinking of Djibouti," U.S. Southern Command's Tidd told reporters Thursday, referencing China's first foreign military base in Africa. "How quickly they've ramped that up and established a fairly major presence."¹³²

The U.S. Army War College's Strategic Studies Institute affirms that there is much going on behind the balance books of Chinese economic investment in Panama. Evan Ellis, research professor of Latin American studies at the U.S. Army War College, stated, "China understands intuitively the strategic importance of that space."¹³³

Many prominent Chinese international relations scholars would agree with Admiral Tidd and the Army War College assessments of Chinese aspiration to control the Panama Canal through economic soft power. Beijing's economic strategy is to intensify economic cooperation with Panama to create a sphere of influence.¹³⁴ The PRC sees this as an appropriate retaliatory maneuver in response to U.S. efforts to contain China, similar to historical U.S. efforts to contain Japan and the Soviet Union.¹³⁵ Ultimately, "by intensifying economic interdependence and integration between itself and Latin America, China attempts . . . to sustain its own economic growth, generally seen by the country's

¹³² Jeff Seldin, "US Wary as Russia, China Set Sights on South, Central America," Voice of America News, June 7, 2018, ProQuest.

¹³³ Kirk Sempel, "China Extends Reach in the Caribbean, Unsettling the U.S.," *New York Times*, November 8, 2020, <https://www.nytimes.com/2020/11/08/world/americas/china-caribbean.html>.

¹³⁴ Yu, "China's Strategic Partnership with Latin America.," 1058–59.

¹³⁵ Yu., 1050.

political leaders and scholars alike as the basis for China's comprehensive national power, including its military strength."¹³⁶

The Chinese Communist Party (CCP)'s foremost strategic desire is to secure the survival of the CCP regime. In a 2015 *International Affairs Journal* article, Li Yu writes that prominent Chinese international relations scholars foresee that

any rapid economic downturn or stagnation will endanger not only the livelihoods of ordinary Chinese people but also the legitimacy of the CCP's rule. It is in pursuit of sustained growth to prevent this threat that access to overseas markets and investment destinations, including those of Latin America, is today one of the most important goals of Chinese economic diplomacy.¹³⁷

Jennifer Rice and Eric Robb, senior intelligence analysts at the U.S. Office of Naval Intelligence (ONI), state, "China does not control the straits and transit lanes on which its economy depends and once a crisis or war at sea occurs, [China's] sea transport could be cut off."¹³⁸ Thus, prominent Chinese international relations scholars argue that in Panama, "China should continue to give strategic priority to its economic advancement and modernization as the basis for its military strength and, at the same time, enhance both its 'hard' and 'soft' power."¹³⁹

At a Pentagon press conference in 2018, Admiral Tidd, SOUTHCOM's commander, expressed that economic competition in South America and the Caribbean is a tactic used by countries like Russia and China to influence and undermine U.S. partnerships in the region. Admiral Tidd specifically addressed Panama's breaking off ties with Taiwan in 2017 and the subsequent activities of Chinese conglomerates' building port facilities for cruise ships near the entrance of the Canal.¹⁴⁰ U.S. General Stephen Townsend, commander of U.S. Africa Command, addressed similar Chinese actions taking

¹³⁶ Yu, 1048.

¹³⁷ Yu, 1062.

¹³⁸ Lendon, "China Has Built the World's Largest Navy."

¹³⁹ Yu, "China's Strategic Partnership with Latin America," 1050.

¹⁴⁰ John Grady, "SOUTHCOM Tidd: China Making Aggressive Investments in South, Central America," USNI News, March 5, 2018, <https://news.usni.org/2018/03/05/southcom-tidd-china-making-aggressive-investments-south-central-america>.

place in Africa. General Townsend stated, “They’re looking for a place where they can rearm and repair warships. That becomes militarily useful in conflict.”¹⁴¹

From a strictly military standpoint, the Chinese People’s Liberation Army foresees the eventuality of needing to gain physical control of the Canal or destroy it. Citing Chinese publications, ONI analysts point out, “One source urges naval forces to ‘control key strategic channels’ far from China. . . . Another wartime mission is to strike important nodes and high-value targets in the enemy’s strategic depth to ‘ease pressure on the near-seas battlefield.”¹⁴² The Panama Canal is perhaps the quintessential single facility that Chinese strategists would target to control or destroy to ease pressure on the near-seas battlefield.

By closing the Canal either temporarily or indefinitely, China would cripple the United States’ ability to reinforce the Pacific theater in the immediate term while permanently lengthening U.S. strategic lines of communication by up to two weeks. With rapid effect, this would lend China an asymmetric advantage of numbers to deal a strategic blow to U.S. forces in the Pacific and provide a golden period of operations before remaining U.S. forces could respond. Meia Nouwens, a senior fellow for Chinese defense policy at the International Institute for Strategic Studies, states, “By 2049 China aims to have a global military that’s able to fight and win wars and project power globally.”¹⁴³ Shi Yinhong, a Chinese professor of international relations at Renmin University in Beijing who advises the CCP, sums up Chinese aspirations well: “Over the long term, China’s power and influence will undoubtedly weaken and ultimately abolish U.S. dominance in the region.”¹⁴⁴ Nonetheless, this claim does not go far enough regarding the Panama Canal. China seeks to control the Canal, harness its economic and military strategic capacity in peace and war, and if necessary, destroy the Panama Canal to shield the Pacific theater in the event of open hostilities with the United States.

¹⁴¹ Castronuovo, “China Is Actively Seeking to Set Up an Atlantic Naval Base.”

¹⁴² Lendon, “China Has Built the World’s Largest Navy.”

¹⁴³ Lendon.

¹⁴⁴ Goodman and Perlez, “Money and Muscle Pave China’s Way to Global Power.”

B. CHINESE BELT AND ROAD ACTIVITIES AND FUTURE ASPIRATIONS FOR THE CANAL

Panama has become the epicenter of Chinese economic activities in Latin America. The previous section illustrated that economic partnership is China's number one strategy to build a soft and hard power base in Panama. Panama plays a foundational role in the broader Chinese investment strategy because the Canal is the gateway to coastal Atlantic markets. As such, China has focused significant foreign direct investment in Panama. As Mat Youkee explains in a 2019 article,

Chinese firms are finalists to build major metro and power projects. . . . Panama could soon become the Latin American nation with the highest levels of Chinese investment on a per capita basis. . . . China Railways has already established their regional headquarters in Panama City, while the telecoms giant Huawei has made the Colón free trade zone, on the Caribbean coast, a distribution hub for its electronic systems.¹⁴⁵

In December 2018, President Xi Jinping made his inaugural visit to Panama. The 24-hour visit yielded “19 cooperation agreements on trade, infrastructure, banking, tourism, and other areas” between the Chinese and Panamanian governments.¹⁴⁶ This successful visit established a significant economic foothold for the Chinese in Panama, from which to exercise soft power. The more debt China can leverage against Panama through infrastructure projects and dependency on Chinese companies, the more control it gains. Secretary of State Mike Pompeo stated in a 2018 speech, “The importance isn't that China is out competing in the world. We welcome that. It's when state-owned enterprises show up in a way that is clearly not transparent, clearly not market-driven and designed not to benefit the people of Panama, but rather to benefit the Chinese government.”¹⁴⁷

¹⁴⁵ Mat Youkee, “The Panama Canal Could Become the Center of the U.S.-China Trade War,” *Foreign Policy*, May 7, 2019, <https://foreignpolicy.com/2019/05/07/the-panama-canal-could-become-the-center-of-the-u-s-china-trade-war/>.

¹⁴⁶ Elida Moreno, “Panama, China Sign Accords on Xi Visit after Diplomatic Ties Start,” Reuters, December 3, 2018, <https://www.reuters.com/article/us-panama-china-idUSKBN1O22PE>.

¹⁴⁷ Edward Wong, “Mike Pompeo Warns Panama against Doing Business with China,” *New York Times*, October 19, 2018, <https://www.nytimes.com/2018/10/19/world/americas/mike-pompeo-panama-china.html>.

These recent Chinese investment projects follow on the heels of one extremely notable failed construction project in 2013, a Chinese–Nicaraguan Canal. During the original U.S.–French planning effort for a transoceanic canal, now known as the Panama Canal, engineers considered crossing Nicaragua as a potential route. The plan was ultimately discarded, and the Panamanian route was chosen. However, Jeroen Gelsing explained that was not the end of the saga: “In 2013, a Hong Kong–based development group obtained a 100-year concession [from the Nicaraguan government] to construct and operate a nearly 200-mile-long canal cutting across Nicaragua.”¹⁴⁸

The Nicaraguan canal was, for many years, a significant reality. The Hong Kong–based group even broke ground on the project, but ultimately the project went bankrupt. The strategic significance of this effort cannot be understated and speaks volumes about China’s intentions.¹⁴⁹ The building of a Nicaraguan canal represents a monumental devotion of political will and Chinese state resources to achieve a specific strategic end. Currently, Panama remains a neutral actor in the movements of trade goods and military equipment, providing passage for both U.S. and Chinese goods and warships. A Chinese owned and run Nicaraguan canal would “permit uninhibited transfer of Chinese warships between the Pacific and Atlantic—perhaps even undetected movement of submarines between both great oceans, provided it is dug to its reported planned depth of 28 meters.”¹⁵⁰ Despite these strategic benefits, the project was abandoned. However, the subsequent implications of China’s stepping away from the construction of a Nicaraguan canal was its renewed strategic focus on obtaining influence over the existing Panama Canal, a “plan B.”

In 2015, Chinese engineering firms met with the Panama Canal Authority to discuss financing an expansion of the current lock structure. The offer was entertained though not undertaken.¹⁵¹ In a 1960 declassified secret U.S. National Security Council document,

¹⁴⁸ Jeroen Gelsing, “Monroe Who?—The Chinese Dragon Stirs in Latin America,” *Asian Affairs* 46, no. 3 (2015): 476–88, <https://doi.org/10.1080/03068374.2015.1080996>.

¹⁴⁹ Youkee, “Center of the U.S.-China Trade War.”

¹⁵⁰ Gelsing, “Monroe Who?”

¹⁵¹ Youkee, “Center of the U.S.-China Trade War.”

security assessments described the worst-case scenario for control of the Canal: Russia's providing financial and technical assistance to Panama for the Canal.¹⁵² Nevertheless, China has done just that while causing few waves in U.S. political circles.

Chinese-constructed locks would have likely included and increased Chinese port facility holdings in Panama. One Chinese firm already holds both significant deep-water port facilities on the Pacific and Atlantic sides of the Canal. The port facilities of Balboa and Cristobal were awarded in 1996 in a 50-year lease to Hutchinson-Whampoa, a Hong Kong-based shipping conglomerate.¹⁵³ U.S. company Bechtel was outbid by a wide margin in what was believed to be corrupt bidding processes, plagued by heavy-handed bribes to Panamanian officials by Chinese actors.¹⁵⁴ These actions align with Admiral Tidd's 2020 comments to midshipmen at the U.S. Naval Academy: "China is using economic statecraft—and more unscrupulous means like bribes—to pull Latin America into its orbit, as part of their intent to reshape the international system in its favor."¹⁵⁵ More recent investments include a 2017 effort by Chinese state firms to develop 1,200 hectares of land adjacent to the Atlantic opening of the Panama Canal for an industrial park.¹⁵⁶ Concerning the 1,200 hectares, the chief executive of the Panama Canal Authority, Jorge Quijano, said, "China's state firms have in recent years already chalked up investments in key logistics nodes."¹⁵⁷

Rodrigo Noriega, a political analyst with *La Presna*, points out that Chinese investment in Panama comes with significant risk. He draws particular attention to Panama's weak institutions, which make it vulnerable to bribes.¹⁵⁸ Moreover, as Noriega

¹⁵² National Security Council, *U.S. Policy on the Panama Canal and a Future Inter-Oceanic Canal in Central America*, NSC 6102 (Washington, DC: National Security Council, 1960), 9, Gale.

¹⁵³ S., *Panama Canal and United States Interests*.

¹⁵⁴ S., *Panama Canal and United States Interests*.

¹⁵⁵ Kurt W. Tidd, "Opening Remarks: Forrestal Lecture at the U.S. Naval Academy," U.S. Southern Command, April 10, 2018, <https://www.southcom.mil/Media/Speeches-Transcripts/Article/1495379/adm-tidd-opening-remarks-forrestal-lecture-at-the-us-naval-academy/>.

¹⁵⁶ "Panama Canal Land Attracts Chinese State Firms," *China Economic Review*, March 28, 2017, ProQuest.

¹⁵⁷ "Panama Canal Land Attracts Chinese State Firms."

¹⁵⁸ Youkee, "Center of the U.S.-China Trade War."

describes, “the mismatch between China’s spending power and Panama’s weak institutions represents an explosive and toxic combination. . . . Chinese development of port, bridge, and energy infrastructure in the canal region would enhance Beijing’s influence over the workings of the canal.”¹⁵⁹ Beijing has positioned itself through significant political partnerships and foreign investment “to become the most important commercial partner in a country that controls a key chokepoint of world trade.”¹⁶⁰

The year 2018 marked the first anniversary of reestablishing economic ties between China and Panama. In 2018, China and Panama entered talks to establish a free trade agreement (FTA), ending with the creation of a memorandum of understanding. China’s Ambassador to Panama, Wei Qiang, stated the goal was to “negotiate a modern, ample, comprehensive and high-level FTA that reaffirms China’s interest in Panama as a Latin American gateway, given its role as a trade and distribution hub.”¹⁶¹ Panamanian Minister of Commerce Augusto Arosemena stated, “It’s highly important to boost our access to the Chinese markets and attract Chinese investment, as well as position ourselves as a gateway for Chinese products and investment in the Latin American region, a goal both countries see as one of the essential principles of the negotiation.”¹⁶² These FTA negotiations came ahead of an all-important visit by President Xi Jinping in December 2018. They prepared the way for President Varela and President Xi to sign the trade agreements into law.¹⁶³

President Xi’s visit came on the heels of a contentious meeting with President Trump at the G20 summit in Brazil to address tensions in the U.S.–China trade war. Two weeks before Xi’s state visit to Panama, at the APEC Summit in Papua New Guinea, Vice

¹⁵⁹ Youkee.

¹⁶⁰ Youkee.

¹⁶¹ “Panama, China Launch Free-Trade Talks for Mutual Benefit,” *Shanghai Daily*, June 11, 2018, ProQuest.

¹⁶² “Panama, China Launch Free-Trade Talks for Mutual Benefit.”

¹⁶³ “China-Panama: China and Panama Sign Memorandum of Understanding on Trade in Services Cooperation,” *Asia News Monitor*, December 10, 2018, ProQuest; “China: The First Round of China-Panama FTA Negotiation Held in Panama City,” *Asia News Monitor*, July 25, 2018, ProQuest.

President Mike Pence warned smaller countries not to be tempted by Beijing's promises and that the U.S. offered better options for investment and diplomatic relations.¹⁶⁴

Another flashpoint in the U.S.–Panamanian relationship just prior to President Xi's visit was a dispute about the possible construction of a Chinese embassy on the Amador Peninsula. The Peninsula was home to only a few dilapidated former U.S. military buildings. However, the island sits at the mouth of the Panama Canal adjacent to the Bridge of the Americas, under which every cargo ship passes to transit the Canal. The United States pushed back aggressively, and plans for the embassy were canceled. A Panamanian diplomatic representative told the *Guardian*, "Of course there was pushback from the US: they weren't going to allow a huge Chinese flag next to the entrance to the Canal."¹⁶⁵

By most political measures, President Xi's 2018 visit was a great success for Panama and China. President Xi and President Varela signed into effect 19 cooperation agreements on trade, infrastructure, banking, tourism, and other areas. The meeting also reaffirmed Panama's intentions to cut ties with Taiwan, support the "one China" cause, and join China's belt and road initiative.¹⁶⁶ The United States was surprised by the sudden announcement of close relations, having only been informed hours beforehand.¹⁶⁷

The visit marked President Xi's first state visit to a small Central American nation. Both the Dominican Republic and El Salvador, two other traditionally strong U.S. allies, made shifts toward China and broke ties with Taiwan following China's success in

¹⁶⁴ "Remarks by Vice President Pence at the 2018 APEC CEO Summit, Port Moresby, Papua New Guinea," White House, November 16, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-vice-president-pence-2018-apec-ceo-summit-port-moresby-papua-new-guinea/>; "Xi in Panama: Chinese President's Visit to U.S. Backyard Tells Washington Two Can Play Influence Game: The Trip Next Month Is Seen as Part of Beijing's Efforts to Deepen Ties with Latin America Nations," *South China Morning Post*, November 24, 2018.

¹⁶⁵ Mat Youkee, "Panama the New Flashpoint in China's Growing Presence in Latin America," *Guardian*, November 28, 2018, <http://www.theguardian.com/world/2018/nov/28/panama-china-us-latin-america-canal>.

¹⁶⁶ "Xi in Panama"; "Panama/China: Panama, China Sign Accords on Xi Visit after Diplomatic Ties Start," *Asia News Monitor*, December 5, 2018, ProQuest; Moreno, "Panama, China Sign Accords."

¹⁶⁷ Youkee, "Panama the New Flashpoint."

Panama.¹⁶⁸ Former Mexican ambassador to China, Jorge Guajardo, said regarding President Xi's visit, "Panama is different. Going to Panama is Xi's way of signaling that China can also play that game, vying for influence in a traditional U.S. zone of influence. It sends the message that China treasures these relations and will not take them for granted."¹⁶⁹ In May 2019, Panamanian President Laurentino Cortizo stated to Reuters on election day, "While they're [the United States] not paying attention, another one [China] is making advances."¹⁷⁰

C. CONCLUSION

China's belt and road economic investments in Panama show no signs of abating. Based on the Chinese strategy to use economic investment as a deliberate path to soft and hard power, U.S. strategists would be well advised to see each investment as a creep of Chinese influence over Panama and the Panama Canal. Chinese investments are not equitable to those from any other state but more dubious. Chinese firms are subject to and often even operate directly under the umbrella of the CCP as a front for government operations. Port facilities are not just commercial ports; they are instruments of political and economic pressure on the shipping industry. They are staging points to from which to conduct sortie attacks. They are depots to rearm and repair warships. They are weapons storage facilities. They are intelligence collection points to monitor U.S. movements. Ultimately, they are an enemy-operated facility on the jugular of U.S. hemispheric defense.

For many years, U.S. strategy neglected Latin America in general and Panama specifically, aptly to apply focus and pressure in the Middle East. China has been taking advantage of this attention vacuum using gray-zone tactics, gleaned from the Soviets, to undermine the foundation of U.S. influence in Panama. China clearly perceives the strategic value of the Canal. The CCP is using the tools of its statecraft to secure

¹⁶⁸ "Warm Words from Xi Jinping for Panama on First State Visit by a Chinese Leader: Xi Sees Potential for Cooperation with Central American Nation, Which Has Signed 28 Deals with Beijing since Switching Ties from Taipei," *South China Morning Post*, December 4, 2018, ProQuest; Moreno, "Panama, China Sign Accords."

¹⁶⁹ "Xi in Panama."

¹⁷⁰ Youkee, "Center of the U.S.-China Trade War."

infrastructure and influence in an aggressive and real physical presence surrounding the Canal, like a tightening noose.

Having redirected efforts away from creating a Chinese-run Nicaraguan canal, China seeks to control the Panama Canal to the maximum extent possible. U.S. policymakers should consider not only shutting down Chinese attempts to gain further influence in Panama through political and economic maneuvering but also implementing an aggressive plan to bolster U.S. popular support and investment in Panama. A robust U.S. economic investment presence could fill the economic and political space, undercutting and supplanting future Chinese efforts to build a foothold. Furthermore, the reestablishment of U.S. military basing, specifically naval basing, in Panama would reassert U.S. security and dominance over the Panama Canal and provide imperative organic defense to this vital asset. Chinese scholars and strategists see Chinese economic investment in Panama as a key tool of both their political and military strategy, and so should U.S. strategic planners. U.S. planners can fight fire with fire, leveraging this same tactic to regenerate U.S. influence over and security for the Panama Canal while simultaneously stifling Chinese efforts to do the same.

VI. CONCLUSION: U.S. SECURITY CHALLENGES AND RECOMMENDATIONS

The United States can ill afford to remain idle while control of the Canal in a great power conflict is in question. Admiral Thomas Moore testified to Congress in 1998, “If we were in an Emergency of the level of World War I or II and did not have that canal, we would have to take it.”¹⁷¹ This statement rings true today, as the United States would truly and desperately need the pass-through capacity of the Panama Canal in a GPC war. Admiral Tidd, former SOUTHCOM commander, told reporters in 2018, “We can’t just pay attention to what they’re doing in Europe or in the South China Sea. . . . Right here, far closer to home, there is competition going on. It’s competition for influence and the single-most important thing we can do is compete ourselves.”¹⁷² Later, in 2020, Admiral Tidd remarked, “Latin America and the Caribbean is the ‘next frontier’ of some of the toughest, most complex, and most dynamic security challenges that exist today.”¹⁷³

How, then, should U.S. strategists counter Chinese efforts in Panama to increase the security of the Panama Canal to ensure its viability to U.S. forces in a GPC war? To begin, U.S. strategists need to pull the lid back and realize just how far U.S. security of the Panama Canal has fallen. While the strategic value of the Canal in a GPC has not decreased since World War II, all organic basing and defense in Panama have attrited to near zero. In a 2020 address, Commander of SOUTHCOM, Admiral Faller, said, “In the absence of an enduring U.S. military presence in most of Latin America and the Caribbean, recurring rotations of small teams of U.S. active and reserve forces play central roles in building trust and enabling the exchange of critical expertise.”¹⁷⁴ Correcting this absence is the primary vehicle for solving Panama Canal security concerns. Reestablishing a U.S. naval base in Panama is the fundamental pathway both to increase U.S. political influence and to achieve a perpetual U.S. security presence in Panama. Chapter IV established that U.S. defense of

¹⁷¹ S., *Panama Canal and United States Interests*.

¹⁷² Seldin, “US Wary as Russia, China Set Sights on South, Central America.”

¹⁷³ Tidd, “Opening Remarks.”

¹⁷⁴ “Partnerships in Hemisphere Important.”

the Canal in World War II was a dominant factor in deterring both Japanese and German attacks. By deterring these attacks, the U.S. Navy preserved the Canal pass-through capability for its warships and supply ships to the tune of 16,700 transits.¹⁷⁵

This pass-through capability remains a critical factor for the United States' ability to fight a GPC war with China. An estimated 168 percent increase in Canal transits, above and beyond World War II thresholds, would be required to combat a Chinese threat in the Pacific in 2024. Currently, U.S. strategy relies on an international coalition to defend the Canal and deployment of U.S. forces to the fray if the Canal is threatened. While this strategy may work well for other waterways, due to two factors, this arguably is a poor strategy for the Panama Canal. First, the Panama Canal is too vulnerable and too critical to the national defense and strategic capability of the United States. To leave the Canal undefended jeopardizes U.S. homeland security, chiefly in the new security environment of a GPC with China.

Second, this strategy is reactionary. History has shown that in previous GPC wars, a standing defense was a determinant in the survivability of the Canal in warding off attacks. In the event a competent aggressor attacks Canal infrastructure, due to its fragility, the attack will likely render the Canal inoperable for one to four years. U.S. forces rushed to the scene will be impotent to overcome the damage and will likely be viewing a closed Panama Canal.¹⁷⁶ Negotiating standing U.S. bases in Panama where U.S. forces can intermesh with the Panamanian Defense Forces to strengthen the defenses of the Canal is critical. The establishment of a robust and permanent defense to act as deterrence to hostile forces is key to protecting the pass-through capability of the Canal for U.S. forces in a GPC.

The U.S. treaty with Panama does not preclude reestablishing U.S. military basing, though it would require a new treaty.¹⁷⁷ At its height, Panama played host to 10 major and

¹⁷⁵ Kitchel, *The Truth about the Panama Canal*, 166.

¹⁷⁶ Major, "Wasting Asset."

¹⁷⁷ Falcoff, *Panama's Canal*, 22.

more than two dozen minor U.S. defense installations.¹⁷⁸ As the closing of U.S. bases and the handover of the Panama Canal approached in 2000, Dr. Mark Falcoff pointed out there was significant “clamor in both countries calling for a new agreement that would allow some American troops to remain.”¹⁷⁹ In 1996, the Atlantic Council, an American think tank in international affairs, called for a new agreement to establish U.S. military basing in Panama.¹⁸⁰ The dominant factor plaguing U.S. negotiations leading up to the handover of the Canal was the rise of Panamanian nationalism and the issues of U.S. colonial military holdings in Panama. The State Department and the Office of the President were the primary drivers of the U.S. military withdrawal from Panama and the defense of the Panama Canal.¹⁸¹ In 1975, President Ford directed the Joint Chiefs of Staff to cease infighting with the State Department over retaining military defenses near the Panama Canal.¹⁸² Now that Panama has succeeded in its independence for several decades, it is perhaps time for the executive branch, State Department, and U.S. military strategists to reconsider the issue of U.S. basing in Panama.

From a defense perspective, the primary arguments against permanently defending the Canal were its vulnerability to nuclear attack and the efficacy of the U.S. Navy as a two-ocean fleet. Denison Kitchel has taken exception to the argument that the need to defend the Canal is invalidated due to its vulnerability against nuclear weapons. Kitchel counters this argument, pointing out the logical fallacy in that any military facility can be bombed with nuclear weapons, so all military facilities must not be important enough to defend, just like the Panama Canal.¹⁸³ Kitchel goes on to quote U.S. Marine Corps Lieutenant General V. H. Krulak: “In truth, the Panama Canal is an essential link between the naval forces of the United States deployed in the Atlantic and in the Pacific. It is only because of the waterway that we are able to risk what amounts to having a bare-bones one-

¹⁷⁸ Falcoff, 74.

¹⁷⁹ Falcoff, 75.

¹⁸⁰ Falcoff, 76.

¹⁸¹ Kitchel, *The Truth about the Panama Canal*, 166–67.

¹⁸² Ryan, *The Panama Canal Controversy*, 139.

¹⁸³ Kitchel, *The Truth about the Panama Canal*, 168.

ocean navy.”¹⁸⁴ Hanson W. Baldwin—distinguished writer on military affairs—echoes Krulak’s assessment: “The navy today is in the same strategic bind it was prior to World War II: it is a one-ocean Navy (in size and power) with two ocean responsibilities.”¹⁸⁵ For much of the Canal’s lifespan, any regional issue in the Western Hemisphere that endangered the Canal was immediately elevated to a serious threat to U.S. national security.¹⁸⁶ Yet, today, we have a great power adversary operating port facilities on both ends of the Panama Canal. China continues to grow its footprint rapidly in the Canal Zone while the SOUTHCOM theater architecture has favored basing in Colombia and Puerto Rico to replace the strategic hole left after U.S. facilities closed in Panama.¹⁸⁷

The United States should entice Panama back to the negotiating table regarding U.S. basing to defend the Panama Canal and surrounding region. In a March 1995 congressional hearing, Congressman Phillip M. Crane (R-Ill.) strongly argued before the House Subcommittee on the Western Hemisphere that the United States should seek new basing rights in Panama. Crane debated for a land-lease agreement whereby Panama maintained sovereignty of the bases and the United States would operate as a military tenant and provide security.¹⁸⁸ Most notably, Crane cited public opinion polls in both the United States and Panama that favored a remaining U.S. presence and U.S. basing at a rate of three to one.¹⁸⁹ Kitchel argued in his book that a legal agreement mirroring U.S. basing in Rota, Spain, or similar to Guantanamo, Cuba, could be used as scaffolding to negotiate a lease agreement in Panama.¹⁹⁰

While modern basing negotiations and current opinion polls are beyond the scope of this research, it is plain to see that not long ago, the United States had popular support

¹⁸⁴ Kitchel, 168.

¹⁸⁵ Kitchel, 168–69.

¹⁸⁶ Falcoff, *Panama’s Canal*, 66.

¹⁸⁷ John Lindsay, “U.S. Military Bases in Latin America and the Caribbean,” Institute for Policy Studies, October 5, 2005, https://ips-dc.org/us_military_bases_in_latin_america_and_the_caribbean/.

¹⁸⁸ Evans, *Death Knell of the Panama Canal?*, 40.

¹⁸⁹ Evans, 40.

¹⁹⁰ Kitchel, *The Truth about the Panama Canal*.

from both the U.S. and Panamanian populace for U.S. basing. With arguments over the sovereignty of the Panama Canal laid to rest in 2000 with the successful handover, the political landscape may be ready to reap the rewards sown by the State Department all those years ago. A new non-imperial U.S.–Panamanian partnership for defense and success of the Panama Canal can now be tabled. This could prove to be a new era of U.S.–Panamanian security integration, based on a mutually reinforcing partnership that strategically secures the Panama Canal for decades to come, against the growing threat that is communist China. U.S. policymakers should begin by approaching the Panamanian government to request a new treaty, naval and air basing access in Panama, a status-of-forces agreement, and a new robust security cooperation plan between the U.S. military and the Panamanian Defense Force.

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LIST OF REFERENCES

- Asia News Monitor*. "China: The First Round of China-Panama FTA Negotiation Held in Panama City." July 25, 2018. ProQuest.
- . "China-Panama: China and Panama Sign Memorandum of Understanding on Trade in Services Cooperation." December 10, 2018. ProQuest.
- . "Panama/China: Panama, China Sign Accords on Xi Visit after Diplomatic Ties Start." December 5, 2018. ProQuest.
- . "United States: Partnerships in Hemisphere Important, SOUTHCOM Commander Says." March 4, 2019. ProQuest.
- Bureau of Transportation Statistics. "Suez Canal Blockage by Ever Given Will Affect U.S. Ports, Businesses, Consumers." April 1, 2021. <https://www.bts.gov/data-spotlight/ever-given-suez-canal>.
- Castronuovo, Celine. "US General Warns China Is Actively Seeking to Set Up an Atlantic Naval Base." *Hill*, May 7, 2021. <https://thehill.com/policy/defense/552331-us-general-warns-china-is-actively-seeking-to-set-up-an-atlantic-naval-base>.
- CE Noticias Financieras*. "US-China Trade War Has Had 'Minimal' Impact on Panama Canal." July 6, 2019. ProQuest.
- Chen, C. Peter. "Panama Canal." World War II Database. Accessed January 26, 2021. https://ww2db.com/facility/Panama_Canal/.
- Chicago Tribune*. "Panama's New Canal and the Midwest." December 28, 2017. ProQuest.
- China Economic Review*. "Panama Canal Land Attracts Chinese State Firms." March 28, 2017. ProQuest.
- Cohen, Stan, Don DeNevi, and Richard Gay. *They Came to Destroy America: The FBI Goes to War against Nazi Spies & Saboteurs before and during World War II*. Winnipeg: Pictorial Histories Publishing, 2003.
- Creighton, Neal. "Panama Canal Role Fades for Military." *Chicago Tribune*, April 13, 1998. ProQuest.
- Daley, Jason. "Documents Show Chile Foiled Nazi Plot to Attack Panama Canal." *Smithsonian Magazine*, June 27, 2017. <https://www.smithsonianmag.com/smart-news/chile-foiled-nazi-plot-attack-panama-canal-documents-show-180963836/>.
- EFE News Service. "US Nat-Gas Surge Proves a Boon to Expanded Panama Canal." June 26, 2017. ProQuest.

- Eland, Ivan. "Panama Canal Stirs Cold Warriors." Independent Institute, October 19, 1999. <https://www.independent.org/news/article.asp?id=1067>.
- Evans, David C. *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887–1941*. Annapolis: Naval Institute Press, 1997.
- Evans, G. Russell. *Death Knell of the Panama Canal?* Fairfax, VA: National Security Center, 1997.
- Falcoff, Mark. *Panama's Canal: What Happens When the United States Gives a Small Country What It Wants*. Washington, DC: AEI Press, 1998.
- Fiske, Bradley. "Memorandum for the Secretary." Official memorandum. Washington, DC: Department of Defense, 1913. Gale.
- Gardham, Richard. "Why Are the Panama and Suez Canals So Important?" Investment Monitor, April 8, 2021. <https://investmentmonitor.ai/distribution/panama-suez-canals-important-trade>.
- Gelsing, Jeroen. "Monroe Who?—The Chinese Dragon Stirs in Latin America." *Asian Affairs* 46, no. 3 (2015): 476–88. <https://doi.org/10.1080/03068374.2015.1080996>.
- Georgia Tech Panama Logistics Innovation and Research Center. "Panama Canal Statistics." Accessed October 24, 2021. <https://logistics.gatech.pa/en/assets/panama-canal/statistics>.
- Goodman, Peter, and Jane Perlez. "Money and Muscle Pave China's Way to Global Power." *New York Times*, November 25, 2018. <https://www.nytimes.com/interactive/2018/11/25/world/asia/china-world-power.html>.
- Grady, John. "Pentagon Report: China Now Has World's Largest Navy as Beijing Expands Military Influence." USNI News, September 1, 2020. <https://news.usni.org/2020/09/01/pentagon-report-china-now-has-worlds-largest-navy-as-beijing-expands-military-influence>.
- . "SOUTHCOM Tidd: China Making Aggressive Investments in South, Central America." USNI News, March 5, 2018. <https://news.usni.org/2018/03/05/southcom-tidd-china-making-aggressive-investments-south-central-america>.
- Gray, Colin S. "Maritime Strategy and the Pacific: The Implications for NATO." *Naval War College Review* 40, no. 1 (1987): 8–19.
- Guevara Mann, Carlos. "National Security or Special Interests? U.S. Support for the Panama Canal Expansion Program." *Global Society* 25, no. 2 (2011): 181–204. <https://doi.org/10.1080/13600826.2011.553529>.

- Holcomb, Staser. "Strategic Military Importance of the Panama Canal Outlined." Official memorandum. Washington, DC: Department of Defense, 1976. Gale.
- Hussey, Anna-Liesa. "PANAMAX 2018 Concludes in Mayport." Federal Information and News Dispatch, August 13, 2018. ProQuest.
- Jorden, William J. *Panama Odyssey*. Austin: University of Texas Press, 1984.
- Keegan, John. *The American Civil War: A Military History*. New York: Alfred A. Knopf, 2009.
- Kitchel, Denison. *The Truth about the Panama Canal*. New Rochelle, NY: Arlington House, 1978.
- LaGrone, Sam. "AFRICOM: Chinese Naval Base in Africa Set to Support Aircraft Carriers." USNI News, April 20, 2021. <https://news.usni.org/2021/04/20/africom-chinese-naval-base-in-africa-set-to-support-aircraft-carriers>.
- Leggett, Theo. "Egypt's Suez Canal Blocked by Huge Container Ship." BBC News, March 24, 2021. <https://www.bbc.com/news/world-middle-east-56505413>.
- Lendon, Brad. "China Has Built the World's Largest Navy. Now What's Beijing Going to Do with It?" CNN, March 5, 2021. <https://www.cnn.com/2021/03/05/china/china-world-biggest-navy-intl-hnk-ml-dst/index.html>.
- Lindsay, John. "U.S. Military Bases in Latin America and the Caribbean." Institute for Policy Studies, October 5, 2005. https://ips-dc.org/us_military_bases_in_latina_merica_and_the_caribbean/.
- Mahan, Alfred T. "Fortify the Panama Canal." *North American Review* 193, no. 664 (1911): 331–39.
- . *The Influence of Sea Power upon History, 1660–1783*. 12th ed. Boston: Little, Brown and Company, 1890. <https://www.gutenberg.org/files/13529/13529-h/13529-h.htm>.
- . "The Panama Canal and the Distribution of the Fleet." *North American Review* 200, no. 706 (1914): 406–17.
- Major, John. "Wasting Asset: The U.S. Re-assessment of the Panama Canal, 1945–1949." *Journal of Strategic Studies* 3, no. 2 (1980): 123–46. <https://doi.org/10.1080/01402398008437043>.
- Marker (blog). "A Ship Trapped in the Suez Canal Is Causing Global Trade Chaos." March 25, 2021. <https://marker.medium.com/a-ship-trapped-in-the-suez-canal-is-causing-global-trade-chaos-38d07a3dd087>.

- Martin, Nik. "Suez Canal Blockage: 4 of the Biggest Trade Chokepoints." Deutsche Welle, March 27, 2021. <https://www.dw.com/en/suez-canal-blockage-4-of-the-biggest-trade-chokepoints/a-57020755>.
- Meisler, Stanley. "Remnant of the Big Stick: Panama Canal: 'Part of the American Way of Life.'" *Los Angeles Times*, February 3, 1974. ProQuest.
- Moreno, Elida. "Panama, China Sign Accords on Xi Visit after Diplomatic Ties Start." Reuters, December 3, 2018. <https://www.reuters.com/article/us-panama-china-idUSKBN1O22PE>.
- National Security Council. *U.S. Policy on the Panama Canal and a Future Inter-Oceanic Canal in Central America*. NSC 6102. Washington, DC: National Security Council, 1960. Gale.
- Naval History and Heritage Command. "US Ship Force Levels: 1886–Present." Accessed July 22, 2021. <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html>.
- Office of Fossil Energy and Carbon Management. "Strategic Petroleum Reserve." Accessed October 24, 2021. <https://www.energy.gov/fe/services/petroleum-reserves/strategic-petroleum-reserve/spr-storage-sites>.
- Omang, Joanne. "Panama Canal: Efficient but Vulnerable." *Washington Post*, May 17, 1976.
- Organization for Economic Co-operation and Development. "Ocean Shipping and Shipbuilding." Accessed July 6, 2021. <https://www.oecd.org/ocean/topics/ocean-shipping/>.
- O'Rourke, Ronald. *Defense Primer: Geography, Strategy, and U.S. Force Design*. CRS Report No. IF10485. Washington, DC: Congressional Research Service, 2021. <https://crsreports.congress.gov/product/pdf/IF/IF10485>.
- Padelford, Norman J. "Neutrality, Belligerency, and the Panama Canal." *American Journal of International Law* 35, no. 1 (1941): 55–89. <https://doi.org/10.2307/2192598>.
- . *The Panama Canal in Peace and War*. New York: Macmillan, 1942.
- Panama Canal Authority. "Traffic through the Panama Canal by Lock Type and Market Segment: Fiscal Years 2021–2020." Accessed January 13, 2022. <https://www.panacanal.com/eng/op/transit-stats/index.html>.
- Paris, Costas. "The Panama Canal's Big Bet Is Paying Off; Ocean Operators Switch Some Sailings from Suez as Bigger Ships Can Cross New Panama Locks to Reach U.S. East Coast." *Wall Street Journal*, October 8, 2017. ProQuest.

- Paz, María Emilia. *Strategy, Security, and Spies: Mexico and the U.S. as Allies in World War II*. University Park: Pennsylvania State University Press, 1997.
- Roosevelt, Theodore. *Presidential Addresses and State Papers*. Vol. 1, February 19, 1902, to May 13, 1903. New York: Review of Reviews Company, 1910.
<http://archive.org/details/presidentialadd13roosrich>.
- Russon, Mary-Ann. “The Cost of the Suez Canal Blockage.” BBC News, March 29, 2021.
<https://www.bbc.com/news/business-56559073>.
- Ryan, Paul B. *The Panama Canal Controversy: U.S. Diplomacy and Defense Interests*. Hoover International Studies. Stanford, CA: Hoover Institution Press, 1977.
- Schwartz, Matthew S. “Suez Canal Traffic Backlog Finally Cleared following the Ever Given Saga.” NPR, April 3, 2021. <https://www.npr.org/2021/04/03/984111501/suez-canal-traffic-backlog-finally-cleared-following-the-ever-given-saga>.
- Seldin, Jeff. “US Wary as Russia, China Set Sights on South, Central America.” Voice of America News, June 7, 2018. ProQuest.
- Sempel, Kirk. “China Extends Reach in the Caribbean, Unsettling the U.S.,” *New York Times*, November 8, 2020. <https://www.nytimes.com/2020/11/08/world/americas/china-caribbean.html>.
- Shanghai Daily*. “Panama, China Launch Free-Trade Talks for Mutual Benefit.” June 11, 2018. ProQuest.
- Sharma, Gaurav. “Expanded Panama Canal Feels Benign Impact of U.S. Oil and Gas Exports to Asia.” *Forbes*, April 16, 2018. <https://www.forbes.com/sites/gauravsharma/2018/04/16/expanded-panama-canal-feels-benign-impact-of-u-s-oil-and-gas-exports-to-asia/>.
- Shiryaevskaya, Anne, Inajima Tsuyoshi, and Sundria Saket. “Panama Canal Clogged with Ships, and Pandemic Is Making It Worse.” Bloomberg, October 30, 2020.
<https://www.bloomberg.com/news/articles/2020-10-30/lng-vessels-transiting-panama-canal-face-delays-amid-congestion>.
- Shugart, Thomas H., III. “Trends, Timelines, and Uncertainty: An Assessment of the State of Cross-Strait Deterrence: Testimony before the U.S. China Economic and Security Review Commission.” Washington, DC: Center for a New American Security, 2021.
- South China Morning Post*. “Warm Words from Xi Jinping for Panama on First State Visit by a Chinese Leader: Xi Sees Potential for Cooperation with Central American Nation, Which Has Signed 28 Deals with Beijing since Switching Ties from Taipei.” December 4, 2018. ProQuest.

- . “Xi in Panama: Chinese President’s Visit to U.S. Backyard Tells Washington Two Can Play Influence Game: The Trip Next Month Is Seen as Part of Beijing’s Efforts to Deepen Ties with Latin America Nations.” November 24, 2018.
- Stevens, Pippa. “The Ship That Blocked the Suez Canal May Be Free, but Experts Warn the Supply Chain Impact Could Last Months.” CNBC, March 29, 2021. <https://www.cnbc.com/2021/03/29/suez-canal-is-moving-but-the-supply-chain-impact-could-last-months.html>.
- Suliman, Adel. “Suez Canal Traffic Jam ‘Cleared’ Days after Ever Given Cargo Ship Freed.” NBC News, April 3, 2021. <https://www.nbcnews.com/news/world/suez-canal-traffic-jam-cleared-days-after-ever-given-cargo-n1262961>.
- Sullivan, Mark P., and Thomas Lum. *China’s Engagement with Latin America and the Caribbean*. CRS Report No. IF10982. Washington, DC: Congressional Research Service, 2021. <https://crsreports.congress.gov/product/pdf/IF/IF10982>.
- Sutton, H. I., and Sam LaGrone. “Updated: Iranian Warship Thought to Be Headed to Venezuela Left Port with 7 High-Speed Missile Boats Aboard.” USNI News, June 1, 2021. <https://news.usni.org/2021/06/01/iranian-warship-thought-to-be-headed-to-venezuela-left-port-with-7-high-speed-missile-boats-aboard>.
- Tambs, Lewis A. *Strategy, Seapower, and Survival: The Case for Retaining the Isthmian Canal*. Washington, DC: Central Intelligence Agency, 1967. Gale.
- Tidd, Kurt W. “Opening Remarks: Forrestal Lecture at the U.S. Naval Academy.” U.S. Southern Command, April 10, 2018. <https://www.southcom.mil/Media/Speeches-Transcripts/Article/1495379/adm-tidd-opening-remarks-forrestal-lecture-at-the-us-naval-academy/>.
- Trump, Donald J. *Statement on the 2017 National Security Strategy*. Washington, DC: White House, 2017. ProQuest.
- U.S. Congress. Senate Foreign Relations Committee. “Statement of John D. Feeley, Ambassador-Designate to Panama.” December 1, 2015. https://www.foreign.senate.gov/imo/media/doc/120115_Feeley_Testimony.pdf.
- U.S. Energy Information Administration. “Map of U.S. Oil Refineries.” *Petroleum, Refineries, and the Future* (blog), July 19, 2012. <https://scalar.usc.edu/works/petroleum-refineries-and-the-future/media/map-of-us-oil-refineries-1>.
- . “Oil and Petroleum Products Explained: Refining Crude Oil.” Accessed July 6, 2021. <https://www.eia.gov/energyexplained/oil-and-petroleum-products/refining-crude-oil-refinery-rankings.php>.

- . “Oil and Petroleum Products Explained: Where Our Oil Comes From.” Accessed July 6, 2021. <https://www.eia.gov/energyexplained/oil-and-petroleum-products/where-our-oil-comes-from.php>.
- Wallace, George M. “Memorandum for Ambassador Hill.” Official memorandum. Washington, DC: Office of the Assistant Secretary of Defense, August 7, 1973. https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/International_Security_Affairs/07-M-3155_Action_Memo_Study_of_US_National_Interests_in_Panama_Canal.pdf.
- . “Study of U.S. National Interests in the Panama Canal.” Official memorandum. Washington, DC: Office of the Assistant Secretary of Defense, August 7, 1973. https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/International_Security_Affairs/07-M-3155_Action_Memo_Study_of_US_National_Interests_in_Panama_Canal.pdf.
- Wall Street Journal*. “Iran’s Navy Heads to the Americas.” June 1, 2021. <https://www.wsj.com/articles/irans-navy-heads-to-the-americas-11622586717>.
- Warner, Natalie. “The Plot to Destroy the Panama Canal during World War II.” Coronado Concierge Panama, June 11, 2018. <https://coronadoconciergepanama.com/plot-destroy-panama-canal-world-war-ii/>.
- Watson Institute for International and Public Affairs. “Pentagon Fuel Use, Climate Change, and the Costs of War.” July 1, 2019. <https://watson.brown.edu/research/2019/pentagon-fuel-use-climate-change-and-costs-war>.
- White House. “Remarks by Vice President Pence at the 2018 APEC CEO Summit, Port Moresby, Papua New Guinea.” November 16, 2018. <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-vice-president-pence-2018-apec-ceo-summit-port-moresby-papua-new-guinea/>.
- Wong, Edward. “Mike Pompeo Warns Panama against Doing Business with China.” *New York Times*, October 19, 2018. <https://www.nytimes.com/2018/10/19/world/americas/mike-pompeo-panama-china.html>.
- Youkee, Mat. “The Panama Canal Could Become the Center of the U.S.-China Trade War.” *Foreign Policy*, May 7, 2019. <https://foreignpolicy.com/2019/05/07/the-panama-canal-could-become-the-center-of-the-u-s-china-trade-war/>.
- . “Panama the New Flashpoint in China’s Growing Presence in Latin America.” *Guardian*, November 28, 2018. <http://www.theguardian.com/world/2018/nov/28/panama-china-us-latin-america-canal>.
- Yu, Lei. “China’s Strategic Partnership with Latin America: A Fulcrum in China’s Rise.” *International Affairs* 91, no. 5 (2015): 1047–68. <https://doi.org/10.1111/1468-2346.12397>.

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