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**NAVAL
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MONTEREY, CALIFORNIA

THESIS

**VIETNAM'S DRIVE TO MODERNIZE MILITARILY—
CAUSES AND IMPLICATIONS**

by

Ryan S. Clark

December 2014

Thesis Advisor:

Second Reader:

Michael Malley

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**VIETNAM'S DRIVE TO MODERNIZE MILITARILY—CAUSES AND
IMPLICATIONS**

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Lieutenant, United States Navy
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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

Since the initiation of economic reforms in the late 1980s, the Communist Party of Vietnam (CPV) has increasingly focused on updating its sea and air capabilities while also enhancing its foreign defense relations. Since then, military capabilities outside of Vietnam's ground forces have increased with the addition of more modern equipment. After the Soviet Union's collapse, Vietnam expanded its military procurement network and general defense policy beyond Russia. What are the specific details of these modernization efforts?

As Vietnam's economy has developed, its relationship with the People's Republic of China (PRC) has varied due to conflicting territorial claims in the South China Sea (SCS). The PRC took the Paracel Islands from Vietnam in 1974 and portions of the Spratly Islands in 1988 and the mid-1990s; its assertive SCS behavior toward Vietnam has continued. Since 1986, Vietnam's dramatic economic growth and development focus has led to military updates but also to a growing defense industry as it pursues industrialized status by 2020. Through historical analysis, this thesis seeks to answer the following question: What are the causes and implications of military modernization initiated by the CPV after the Doi Moi reforms of 1986?

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LIST OF ACRONYMS AND ABBREVIATIONS

A2/AD	Anti-Access Area Denial
ASEAN	Association of Southeast Asian Nations
ASW	Anti-Submarine Warfare
CCP	Chinese Communist Party
CPV	Communist Party of Vietnam
EEZ	Exclusive Economic Zone
FSF	Fisheries Surveillance Force
GDP	Gross Domestic Product
GFC	Global Financial Crisis
ISR	Intelligence, Surveillance, and Reconnaissance
MPA	Maritime Patrol Aircraft
MOU	Memorandum of Understanding
MOD	Ministry of Defense
MOFA	Ministry of Foreign Affairs
OPV	Offshore Patrol Vessel
PACOM	Pacific Command
PCC	Patrol Combat Corvette
PLAAF	People's Liberation Army Air Force
PLAN	People's Liberation Army Navy
PRC	People's Republic of China
SAM	Surface to Air Missile
SCS	South China Sea
SEA	Southeast Asia
CPV	Socialist Republic of Vietnam
UAV	Unmanned Aerial Vehicle
UMS	Unmanned Systems Group
VASA	Vietnam Aerospace Association
VCG	Vietnam Coast Guard
VPA	Vietnam People's Army
VPAF	Vietnam People's Air Force

VPN
WTO

Vietnam People's Navy
World Trade Organization

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I. VIETNAM’S DRIVE TO MODERNIZE MILITARILY— MOTIVATIONS AND IMPLICATIONS

A. MAJOR RESEARCH QUESTION

What are the causes and implications of military modernization initiated by the Communist Party of Vietnam (CPV) after the Doi Moi reforms of 1986? Since then, Vietnam has attempted to boost naval and air force capabilities and increased cooperation agreements and strategic partnerships with a variety of world players.¹ Exploring the influence of China and Vietnam’s economic growth and strategies, this thesis will identify the motivations behind Vietnam’s military modernization. The conclusion will focus on the implications of Vietnam’s military modernization efforts.

B. IMPORTANCE

As China continues to project power in the South China Sea (SCS), some of its neighbors have begun to improve their own military capabilities. In Southeast Asia, Vietnam has taken the greatest steps in this direction, partly because it is closest to China and has the longest record of armed conflict with China over maritime and land borders.² As Vietnam modernizes, its ability to defend its territorial claims is likely to rise. The effects of CPV’s military modernization on the regional security environment could be either destabilizing or stabilizing.

1. Destabilization

Vietnam’s military modernization program is an important issue, because it could possibly lead to a destabilizing environment in the SCS. The Philippines has experienced standoffs with the Chinese, but Vietnam’s military clashes with China in 1974, 1988, 2012, and 2014 surpass Manila’s experience. As Vietnam modernizes a force that already surpasses the capabilities of other Southeast Asian (SEA) claimants, its confidence in

¹ Carlyle Thayer, *The Vietnam People’s Army under Doi Moi* (Singapore: Institute of Southeast Asian Studies, 1994), 1–2, 41–45.

² Robert Kaplan, *Asia’s Cauldron—The South China Sea and the End of a Stable Pacific* (New York: Random House, 2014), 51–71.

defending maritime claims will surely increase. This development could lead to inadvertent confrontation with China as China seeks greater influence and control over territorial claims in the SCS. Currently, Vietnam does not maintain the capability to deter China, and until it does, China will likely continue to act assertively, creating a destabilized environment. Vietnam has revealed to the international community that while its force is incomparable to China's, it will still confront China over territorial claims. Depending on the degree of escalation, a destabilizing regional environment in the SCS could lead to drastic economic effects due to the large volume of trade activity transiting through the SCS.

2. Stabilization

On the other hand, Vietnam's military modernization program could possibly lead to stabilizing effects in the SCS, because it sends a signal to China that the People's Liberation Army Navy (PLAN) is not the only capable regional force. Because China's military capability likely surpasses not just Vietnam's but the collective forces of the Association of Southeast Asian Nations (ASEAN) bloc, the time for China to project power in the SCS is now.³ As Vietnam modernizes, the People's Republic of China (PRC) may feel less prone to engage in conflict with Vietnam and more likely to pursue settling claims in the SCS. If Vietnam achieves a deterrent force, then China might be less likely to act assertively in the SCS, and the result may lead to stabilization. Also, Vietnam's increasingly close relations with New Delhi, Washington, Tokyo, Manila, and other strategic partners could serve as a deterrent to China, especially considering the strong U.S. footprint currently in the region.⁴

C. PROBLEMS AND HYPOTHESES

Information is readily available concerning Vietnam's steps toward military modernization, but analysis of those capabilities and the reasons behind modernization

³ Michael Peck, "The Five Most Deadly Armies of Asia," *The National Interest*, November 3, 2014, <http://nationalinterest.org/feature/the-five-most-deadly-armies-asia-11589>.

⁴ Carlyle Thayer, "Vietnam Mulling New Strategies to Deter China," *The Diplomat*, May 28, 2014, <http://thediplomat.com/2014/05/vietnam-mulling-new-strategies-to-deter-china/>.

are lacking. This thesis will identify the reasons for Vietnam's emphasis on military modernization, assessing the most likely causes behind it. There are two leading hypotheses concerning Vietnam's defense modernization. The first and most widely accepted is the belief that modernization efforts are a reaction to China's assertive behavior in the SCS. A second hypothesis claims that Vietnam's rapid economic growth has created an opportunity for Vietnam to improve its outdated military capabilities and pursue industrialization.

1. Why is Vietnam modernizing its military?

One possible explanation behind CPV defense modernization is that Vietnam is reacting to China's assertive behavior in the SCS. China's actions in the SCS might be forcing Vietnam to modernize and defend claims in the SCS. China continues to modernize its military and her capabilities surpass Vietnam's. Vietnam has been able to witness China's military buildup firsthand. In 2008, commercial imagery revealed to the international community the construction of a major PLAN base on Hainan Island near the northern coast of Vietnam.⁵ IHS Jane's was aware of this information in 2004, also reporting on the placement of a Chinese SSBN near Hainan in December 2007.⁶ Vietnam's decision to order Kilo-class submarines in 2009 could have been a response to developments on Hainan. China has invaded Vietnam 17 times, but while border issues are relatively settled, conflict has extended to the maritime environment.⁷ Simply, Vietnam cannot accept China's nine-dash-line, which overlaps its claims.⁸ The government is building up its military to deter China in the SCS and send a message that it is serious about defending maritime territory and its sovereignty.⁹

⁵ Richard D. Fisher, "Secret Sanya - China's New Nuclear Naval Base Revealed," *IHS Jane's*, April 15, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1195510&Pubabbrev=JIR>.

⁶ Ibid.

⁷ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 51–71.

⁸ Ibid.

⁹ Ibid.

Vietnam's economic growth has enabled military modernization and has also promoted a stronger defense industry.¹⁰ In 2007, Vietnam became a member of the World Trade Organization (WTO) after experiencing high gross domestic product (GDP) growth rates in the early 2000s.¹¹ Maintaining one of the largest standing armies in SEA, ground-based procurements are currently less important for Vietnam.¹² Air force and naval modernization is necessary, because older equipment and platforms lack the capabilities to perform in the modern era.¹³ Also in 2007, the country announced its goal to be modernized by 2020, focusing on industry and military sectors—especially the maritime region.¹⁴ The push for Kilo submarines, which was purportedly central to the 2007 modernization policy, occurred before Vietnam was aware that submarines would be placed at the PLAN's base on Hainan Island.¹⁵ A socioeconomic goal for the CPV is to build its defense industry, and expanding defense relations leads to collaborative ventures, which strengthen Vietnam's industrial capacity.¹⁶ The purpose of Vietnam's modernization is bigger than deterring China, because a significant portion of it is meant to strengthen Vietnam as it pursues industrialization.¹⁷

¹⁰ Ministry of National Defense, *Vietnam National Defense* (Vietnam, Vietnam: Socialist Republic of Vietnam, 2009), 96.

¹¹ Vuong Quan Hoang, "Vietnam's Economic Challenges," *Stratfor*, August 21, 2012, <http://Army.stratfor.com/the-hub/vietnams-economic-challenges>.

¹² Greg Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines," *Reuters*, September 7, 2014, <http://Army.reuters.com/article/2014/09/07/us-vietnam-submarines-china-insight-idUSKBN0H20SF20140907>.

¹³ "IHS Jane's - Vietnam > Navy," August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305175&Pubabbrev=SEA>; "IHS Jane's - Vietnam > Air Force," August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305174&Pubabbrev=SEA>.

¹⁴ Nguyen Hung Son, "Vietnam: A Case Study in Naval Modernization," in *Naval Modernization in South-East Asia: Nature, Causes, and Consequences*, ed Geoffrey Till and Jane Chan (New York: Routledge, 2010), 126–131.

¹⁵ Jon Grevatt, "Vietnam Likely to Barter for Kilo Boats, Says Source," *IHS Jane's*, accessed May 9, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?ShowProductLink=true&DocType=News&ItemId=+++1206921&Pubabbrev=JNI>.

¹⁶ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

¹⁷ *Ibid.*

D. LITERATURE REVIEW

Since 1986, Vietnam has sought to modernize militarily, and as the country has progressed economically, military acquisitions and defense partnerships have increased.¹⁸ The possible explanations behind the CPV's decision to modernize its military are various. Some authors argue that China's territorial ambitions or Vietnam's economic performance and strategies are main motivators; others argue for some combination of these factors. After years of noteworthy economic growth, Vietnam is preparing to be an industrialized country in less than a decade, and its defense modernization may have regional implications.¹⁹ This literature review is broken into three sections: details of modernization, causes of modernization, and implications of modernization.

1. Details of Military Modernization in Vietnam

Concerning Vietnam's pursuit of capabilities to defend claims in the SCS, IHS Jane's provides valuable details. The firm's database regarding Vietnamese defense procurement begins to populate at a quicker rate around the beginning of the twenty-first century. Updated in April 2014, Jane's outlook on army procurements is bleak compared to naval, air force, and coast guard developments. The firm references the 2009 defense white paper that places a larger emphasis on ground forces but notes that this addition is likely meant to assuage the army's concern with the government's shift towards sea and air. Efforts to modernize the army's main battle tanks have largely been neglected for lack of funds. Jane's reports that more capable Su-30 or Sukhoi fighters are replacing MiG fighter jets and that Vietnamese defense firms have created at least six unmanned aerial vehicles (UAV) since 2013. IHS Jane's reporting confirms that new submarines, frigates, corvettes, patrol craft, and fixed and rotary wing aircraft have been added or ordered to complement the navy's enhanced capability.²⁰

¹⁸ Thayer, *The Vietnam People's Army*, 1–2, 41–45.

¹⁹ Central Committee of the Communist Party of Vietnam, "Strategy for Socio-Economic Development 2011–2020" (presented at the Eleventh National Congress, Vietnam, Vietnam, January 12–29, 2011).

²⁰ Paragraph details pulled directly from IHS Jane's, "Vietnam > Procurement."

Jane's reports increased defense cooperation between Vietnam and powers across the globe. Russia continues to be a main supplier of Vietnamese military equipment, but Vietnam has widened its procurement network to include the Czech Republic, Ukraine, and Poland.²¹ Since the signing of a defense agreement in 2000, India and Vietnam have expanded relations to include increased arms sales, training, and equipment repairs.²² Continuing towards greater cooperation, the countries signed a memorandum of understanding (MOU) in 2007 that included agreements on further training.²³ Leading delegations to Brazil, South Africa, Israel, East Asia, and Europe, Vietnam began initiating an effort to expand defense cooperation in 1993.²⁴ In November 2003, the USS *Vandergrift* pulled into the port of Saigon in Ho Chi Minh City, marking the first time in 30 years that a U.S. vessel anchored in Vietnam.²⁵ Since this visit, Vietnam has allowed increased humanitarian projects and ship visits, leading to warmer relations with Washington.²⁶ After Vietnam's groundbreaking purchase of six Kilo-class submarines in 2009, the Vietnamese decided to pursue the refurbishment of Cam Ranh Bay, providing the country a suitable deep-water port for foreign navies.²⁷ Vietnam's progress establishes it as a possible place-not-base alternative for Washington and a suitable focus for India's "Look East" policy.

2. Causes of Military Modernization in Vietnam

Vietnam's program is likely due to China's assertive SCS behavior, a desire to diminish fears, and an attempt to challenge the two state's asymmetric relationship. The most likely reason that Vietnam is modernizing its military is to cope with China's increasingly assertive policy in the SCS, which is forcing Vietnam to defend its territorial

²¹ IHS Jane's, "Vietnam > Procurement."

²² Jon Grevatt, "IHS Jane's - India and Vietnam Forge Closer Defence-Industry Ties," December 3, 2007, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1142377&Pubabbrev=JDIN>.

²³ Ibid.

²⁴ Thayer, *The Vietnam People's Army*, 1-2, 41-45.

²⁵ Casey Lucius, "Improvements in Military Relations: U.S.-Vietnam Military-to-Military Engagement from 2003-2013" (paper presented during meetings in Vietnam, December 2013).

²⁶ Ibid.

²⁷ IHS Jane's, "Vietnam > Procurement."

claims there. Writers who make this argument usually claim Vietnam seeks to build a military capability sufficient to deter China from further encroaching on territory that Vietnam claims. One of the most prominent proponents of this argument is Robert Kaplan, who devotes a chapter of his book on the SCS problem to Vietnam. For Kaplan, Vietnam is the only roadblock preventing China from winning control over the SCS. In discussing the historical relationship between the two countries, he mentions Vietnam's paranoia with China, explaining that tension shifted from land to maritime disputes after the collapse of the Soviet Union. Interviewing several Vietnamese defense officials, Kaplan reports that Vietnam's leadership believes China's economy will enable it to increase its SCS naval presence and exploit energy there. Such a move by China is forcing Vietnam to stand its ground and promote nationalism previously seen during the American War. Kaplan uses the purchase of six Kilo-class submarines to illustrate Vietnam's desire to be taken seriously. For Kaplan, the refurbishment of Cam Ranh Bay as Vietnam's preeminent deep-water port is meant to counter China. He clearly portrays China as the reason behind Vietnam's drive for military modernization.²⁸

Vietnam expert Carlyle Thayer stresses that because "Vietnam's strategic environment has become more complex due to the rise of China and the modernization of the People's Liberation Army...greater emphasis has been placed on Vietnam's capabilities to protect its offshore territorial claims."²⁹ For Thayer, Vietnam's emphasis on naval acquisitions is also meant to counter the submarine threats posed by China and other neighbor states.³⁰ In a separate *Wall Street Journal* article, Thayer attributes Vietnam's increased coordination with the United States to its desire to "hedge against China's rising military power."³¹ In 2011, Thayer proposed that a key Vietnamese scheme for managing relations with China included self-help or military modernization,

²⁸ Paragraph details pulled directly from Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 51–63.

²⁹ Carlyle Thayer, "Vietnam People's Army: Development and Modernization," (paper presented to the Sultan Haji Bolkuiah Institute of Defence and Strategic Studies, Bandar Seri Begawan, Brunei, August 23, 2009).

³⁰ Ibid.

³¹ Carlyle Thayer, "Vietnam's Defensive Diplomacy," *Wall Street Journal*, August 19, 2010, sec. Opinion, <http://online.wsj.com/news/articles/SB1000142405274870364900457543847408388449>.

focusing on area denial.³² For Vietnam, territorial claims are important in the SCS for securing its sovereignty and economic interests there.

Explaining Vietnam's posture towards China, Le Hong Hiep argues that China's rise has caused Vietnam to fear Chinese expansionism once again. As a result of this fear, Vietnam has pursued partnerships with foreign powers in hopes of deterring China or balancing against it. Le Hong Hiep reports that Vietnam's interest in strengthening its military ties with Washington has been to counter China's rise and aggressive actions in the SCS. The SCS is of utmost importance to Vietnam because of its role in economic activities, which include fishing, tourism, and oil and gas exploitation. In its possible pursuit of regional hegemony, China is trying to undermine these activities and has a history of doing so, previously seizing Vietnamese fishing vessels and cutting the cables of survey ships in Vietnam's exclusive economic zone (EEZ). To deter Chinese aggression and possible expansionism, Vietnam may have decided to pursue naval modernization and increase diplomatic relations with foreign powers.³³

Asia correspondent for the *South China Morning Post* Greg Torode writes that strategists are monitoring "Vietnam's attempt to create a maritime deterrent against its giant neighbor."³⁴ Vietnam's increased cooperation with Russia, India, the United States, Canada, Czech Republic, and Israel mark its desire to create leverage against China.³⁵ Vietnamese leaders understand that they cannot compete with China's modernization but think achieving a long-term deterrent force is possible.³⁶ Witnessing training, energy exploration cooperation, and arms sales, China would likely prefer a weaker India-

³² Carlyle Thayer, "The Tyranny of Geography: Vietnamese Strategies to Constrain China in the South China Sea," *Contemporary Southeast Asia: A Journal of International and Strategic Affairs* 33, no. 3 (2011): 348–69.

³³ Paragraph details pulled directly from Le Hong Hiep, "Vietnam's Strategic Trajectory: From Internal Development to External Engagement," *Strategic Insights ASPI* 59 (2012): 6–11

³⁴ Greg Torode, "Vietnam's Military Growth Raising Eyebrows in Region," *South China Morning Post*, January 27, 2012, <http://Army.scmp.com/print/article/991004/vietnams-military-growth-raising-eyebrows-region>.

³⁵ Le Hong Hiep, "Vietnam's Hedging Strategy against China Since Normalization," *Contemporary Southeast Asia* 35, No. 3 (2013): 334.

³⁶ Thayer, "Vietnam Mulling New Strategies to Deter China."

Vietnam relationship.³⁷ *Defense News* writer Wendell Minnick adds, “China’s military modernization efforts and problems in the SCS have been the primary driver for Vietnam’s procurement of six new conventional Kilo-class submarines from Russia”³⁸ Minnick and numerous other scholars report that Vietnam and other ASEAN countries have been hastily modernizing their militaries in response to perceived Chinese aggression.³⁹

Executing a streamlined modernization program due to economic progress, Vietnam is modernizing its military to simply update capabilities.⁴⁰ Its push for a modern military force is not likely targeting China, because Vietnam is currently incapable of achieving a comparable force. *The Straits Times* writer Robert Karniol argues that “the acquisition of some sophisticated platform or system does not necessarily translate into an effective capability.”⁴¹ He highlights Thailand’s lone aircraft carrier as an example but avoids comparing Vietnam’s recent acquisitions to Thailand’s irrelevant carrier.⁴² Illustrating the beginning of Vietnam’s initiative to progress economically and militarily, Karniol points to the Doi Moi policy introduced in 1986 as the catalyst for modernization.⁴³ With a spike in economic growth from 2001 to 2005 and a desire to replace dilapidated capabilities, Vietnam increased the pace and scope of force modernization.⁴⁴ A senior defense official for Vietnam claimed that continued growth meant continued force modernization.⁴⁵ This focus is not due to China’s rise but to

³⁷ Torode, “Vietnam’s Military Growth Raising Eyebrows in Region.”

³⁸ Wendell Minnick, “Asia’s Naval Procurement Sees Major Growth,” *Defense News*, May 19, 2013, <http://Army.defensenews.com/article/20130519/DEFREG03/305190004/Asia-s-Naval-Procurement-Sees-Major-Growth>.

³⁹ Minnick, “Asia’s Naval Procurement.”

⁴⁰ Tung Nguyen Vu, “Vietnam’s Security Challenges: Vietnam’s New Approach to National Security and Implications to Defense and Foreign Policies,” 2010, 107–22.

⁴¹ Robert Karniol, “Too Much, Too Soon?” *The Straits Times*, January 4, 2010, <http://Army.viet-studies.info/kinhte/TooMUchTooSoon.htm>.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Australia Defense Intelligence Organization (DIO), “Vietnam,” *Defense Economic Trends in the Asia-Pacific* (2014): 28–29.

⁴⁵ Vu, “Vietnam’s Security Challenges,” 107–22.

Vietnam's. They have the ability and funds to modernize, and taking advantage of economic growth is logical. Karniol explains that Vietnam's newer acquisitions entail growing pains.⁴⁶ In purchasing maritime patrol aircraft and submarines, Vietnam requires a solid naval doctrine to incorporate new capabilities. While Vietnam is adding equipment, a transition into an effective force is not automatic.⁴⁷ Karniol adds, "Force modernization phased over time allows for the easier digestion of new capabilities, whereas the Vietnam People's Army appears set on a hurried meal."⁴⁸ This aspect appears tied to economic growth and Vietnam's drive to be modernized by 2020.

Tung Nguyen Vu promotes this hypothesis too, arguing that modernization is included in a broader defense policy excluding the deterrence of China.⁴⁹ Vietnam has maintained this attitude since the introduction of the Doi Moi reforms in 1986, reinforcing similar policy in 2004 and 2009 defense papers.⁵⁰ Vietnam's economic growth has enabled it to expand its defense budget, hoping to continue developing "a strong economy, just-enough national defense capability, and expanded international relations."⁵¹ Tung argues that force modernization is not about an arms race or contingency.⁵² Rather, upgrading capabilities is tied to what economic conditions allow and what abilities generally help defend the coast and maritime zones.⁵³ Military acquisitions are thus included in a broader defense policy that includes regional and global cooperation.⁵⁴ The 2009 defense white paper indicated Vietnam's desire to expand defense diplomacy beyond its current footprint that included defense relations with 65

⁴⁶ Karniol, "Too Much, Too Soon?"

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Vu, "Vietnam's Security Challenges," 107–22.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

countries and attaché offices in 31 countries, viewing this as essential for regional peace and stability.⁵⁵

China's behavior in the SCS has motivated Vietnam's push for military modernization, but Vietnam's economic performance has enabled it and driven the country to boost its defense industry with help from international partners. Therefore, this explanation leans away from attributing military modernization in Vietnam primarily to China's rise. In *Shadows and Wind: A View of Modern Vietnam*, Robert Templer writes, "The fear of domination has been constant and has crossed every ideological gap; it has created the brittle sense of anxiety and defensiveness about Vietnamese identity."⁵⁶ Clearly, Vietnam has a fear of Chinese aggression and competes with China over maritime claims; however, with Indonesia, Malaysia, Singapore, and Thailand emphasizing submarine capabilities, Vietnam's interest falls in line with regional modernization trends.⁵⁷ The Kilos are included in Vietnam's overall desire to become a modernized force, because its economy can allow it. Modern and effective militaries have submarines so Vietnam is emphasizing this capability.

IHS Jane's proposes both hypotheses mentioned previously as reasons for military modernization in Vietnam but avoids aligning with one cause. Jane's analyst Jon Grevatt notes, "In January 2007 a Vietnam decree declared a 10-year programme to develop its maritime interests at all levels in order to protect the country's sovereignty and strategic economic growth...the procurement of these submarines was central to this plan."⁵⁸ The 2007 policy was declared prior to a Chinese submarine arriving and establishing residence at Sonya Naval Base on Hainan Island. Additionally, Grevatt stresses that the acquisitions allow Vietnam to compete in the submarine arms race developing in the region, giving it a deterrent against Washington and Beijing.⁵⁹ Lacking well-trained

⁵⁵ Ministry of National Defense, *Vietnam National Defense*, 23–24.

⁵⁶ Robert Templer, *Shadows and Wind: A View of modern Vietnam* (New York: Penguin Books, 1999), 294.

⁵⁷ Carlyle Thayer, "Southeast Asian States Deploy Conventional Submarines," *The Diplomat*, January 3, 2014, <http://thediplomat.com/2014/01/southeast-asian-states-deploy-conventional-submarines/>.

⁵⁸ Grevatt, "Vietnam Likely to Barter for Kilo Boats."

⁵⁹ Grevatt, "Vietnam Likely to Barter."

forces to operate platforms, Vietnam is drastically behind both countries in terms of submarine capabilities and general effectiveness. Vietnam might be unable to practice deterrence and harm relations with Beijing or Washington, the former serving as Vietnam's greatest import market and the latter its greatest export market.⁶⁰

Vietnam is expanding diplomatic ties and emphasizing naval and air force capabilities, because the country wants to progress and reach a new modern status by 2020. Vietnam has sought to increase relations with a variety of powers including China, because the country realizes the stabilizing effects of the policy. Less concerned with countering China in the SCS, Vietnam wants to become further intertwined in the international community. Vietnam's drive to be a modern industrialized nation by 2020 includes defense modernization, because international partners can offer their expertise in building a stronger Vietnam defense industry. Vietnam spent decades building a formidable army and still maintains significant active duty and reserve force. Land disputes though, have diminished in importance and the maritime region now dominates Vietnam's focus. This shift, as well as partners participating in its capacity-building, is best illustrated by the Vietnam's expanding UAV and shipbuilding industries.⁶¹

3. Implications of Military Modernization in Vietnam

Vietnam's increased emphasis on military modernization has potential for destabilization, because China's window to act aggressively toward claimants might be closing. China is monitoring Vietnam's every move, worrying that increased capabilities will facilitate bellicosity by Vietnam.⁶² As Vietnam modernizes its force and increases ties with a variety of non-ASEAN actors, Vietnam's confidence in confronting China in the SCS could increase. Vietnam has revealed to the international community and ASEAN that it is not afraid of confronting China, the smaller country bloodying China's nose in a 1979 border war.⁶³ In 2010, in response to incidents with the Chinese near the

⁶⁰ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 63.

⁶¹ Paragraph details pulled directly from IHS Jane's, "Vietnam > Procurement."

⁶² Torode, "Vietnam's Military Growth Raising Eyebrows in Region."

⁶³ "Rigged," *The Economist*, June 14, 2014, <http://Army.economist.com/news/asia/21604203-comradely-relations-go-bad-worse-rigged>.

Spratly Islands, the CPV reaffirmed its claims in the SCS and ordered live-firing naval exercises off the coast of central Vietnam.⁶⁴ China has a window of opportunity before Vietnam truly acquires capabilities that “could make further Chinese attempts to control all of the South China Sea expensive and dangerous.”⁶⁵ It behooves China to be aggressive before Vietnam can project a possibly effective deterrent capability. As history reveals, China’s actions can surely provoke a Vietnamese response, causing a destabilized environment.

The implications of force modernization are also destabilizing, because China views Vietnam’s increased security relations as threatening its sovereignty. Vietnam’s ties with other countries have already caused a destabilized environment that could increase in tension. Vietnam has increased relations with the United States in a possible effort to balance against China.⁶⁶ Additionally, Vietnam continues to foster increased ties with India. Vietnam has likely increased security relations, because China has rebuffed calls for discussion and dispute management.⁶⁷ China’s decision to place an oil rig inside Vietnam’s EEZ came days after a visit by President Obama to Asia in which he denounced the use of aggressiveness and coercion in settling territorial claims.⁶⁸ While this move may have been aimed at revealing Washington’s inability to significantly deter China’s actions in the SCS, it nonetheless occurred as countries like Vietnam warm to an increased U.S. presence in Asia.⁶⁹ In 2011 and possibly as a result of their increased security relationship, India and Vietnam signed an agreement to allow Indian oil exploration in the SCS, the deal following a tense confrontation between a Chinese

⁶⁴ Thayer, “The Tyranny of Geography.”

⁶⁵ Army. D. S. Greenway, “Vietnam Won’t Be Pushed around by China,” *BostonGlobe.com*, May 25, 2014, <https://Army.bostonglobe.com/opinion/2014/05/24/vietnam-won-pushed-around-china/6DfsDLtGZaFc6PIGK0Wy6J/story.html>.

⁶⁶ Thayer, “The Tyranny of Geography.”

⁶⁷ Ibid.

⁶⁸ Carlyle Thayer, “China’s Oil Rig Gambit: South China Sea Game-Changer?,” *The Diplomat*, May 12, 2014, <http://thediplomat.com/2014/05/chinas-oil-rig-gambit-south-china-sea-game-changer/>.

⁶⁹ Ibid.

warship and the INS *Avarat* months prior.⁷⁰ Thayer writes, “At the moment, Vietnam appears to be considering two strategies to deter China—leveraging United States alliance relationships with Japan and the Philippines and, in the case of armed hostilities, mutually assured destruction.”⁷¹ Vietnam is preparing for a destabilized environment, but these very actions are likely provoking China into acting assertively before Vietnam can truly deter it. China has historically reasoned that its assertive behavior is due to perceived attacks from other SCS claimants—Vietnam and the Philippines.⁷²

Vietnam’s endeavors to increase security relationships in an effort to balance against China have possibly been overblown. Vietnam’s relations with India reveal a longstanding political relationship spanning more than six decades. While India has attempted to strengthen Vietnam’s military to deter China from naval operations in the Indian Ocean, Vietnam likely only welcomed the Indians to diversify its relations in the international environment and lessen its dependence on Russia.⁷³ Revealing that any balancing posture is absent from Vietnam’s strategy towards China, David Brewster argues that Vietnam has a tradition of showing deference to China.⁷⁴ Depending on China’s behavior though, Vietnam’s deference can shift quickly to confrontation. Vietnam began relations with India for economic reasons but has received little growth-related support, New Delhi additionally proving to be an unreliable arms supplier overall.⁷⁵ While India has sought to increase its security development in Southeast Asia,

⁷⁰ Harsh Pant, “Understanding India’s Interest in the South China Sea: Getting into the Seaweeds,” *Center for Strategic and International Studies*, December 18, 2012, <http://csis.org/publication/understanding-indias-interest-south-china-sea-getting-seaweeds>.

⁷¹ Thayer, “Vietnam Mulling New Strategies to Deter China.”

⁷² Abraham Denmark, “Could Tensions in the South China Sea Spark a War?,” *The National Interest*, May 31, 2014, <http://nationalinterest.org/feature/could-tensions-the-south-china-sea-spark-war-10572?page=2>.

⁷³ Carlyle Thayer, “How India-Vietnam Strategic Ties Are Mutually Beneficial,” *The Diplomat*, December 3, 2013, <http://thediplomat.com/2013/12/how-india-vietnam-strategic-ties-are-mutually-beneficial/>.

⁷⁴ David Brewster, “India’s Strategic Partnership with Vietnam: The Search for a Diamond on the South China Sea,” *Asian Security* 5 (2009): 38–40.

⁷⁵ David Brewster, *India as an Asia Pacific Power* (New York: Routledge, 2012), 94.

Vietnam has been less concerned for security and more focused on economic development and showing some deference to China.⁷⁶

CPV force modernization could also lead to a stabilizing environment, because an increase in security ties and capabilities may diminish efforts by the Chinese to assert its sovereignty. Vietnam has sought to diversify its international relations since the seventh party congress of 1991.⁷⁷ This drive has most recently been portrayed by Vietnam's lean towards Washington, Tokyo, and Manila. Vietnam likely seeks to deter China enough that it would have to accept the current situation or escalate and possibly risk confrontation with the United States.⁷⁸ Vietnam has no security alliance with Washington comparable to U.S. agreements with Japan or the Philippines, but as Vietnam continues ties with Washington, China may feel less prone to act provocatively in the SCS. Furthermore, China knows that in Vietnam, it faces an increasingly capable adversary. Vietnam's emphasis on force modernization has increased its capability to a stage where it cannot match the Chinese but can inflict some damage.

Vietnam's military modernization is also a potentially stabilizing factor, because it may force China to rethink confronting Vietnam and sacrificing economic and political relations with a fellow communist government. The countries are so economically linked that seeking stability behooves both countries. Ian Storey adds, "All of the parties—indeed all countries in the Asia Pacific—have a common interest in maintaining peace and stability in the South China Sea and the free flow of maritime trade."⁷⁹ The present stage of mature asymmetry between Vietnam and China cannot revert back to hostile asymmetry because both countries have too much at stake.⁸⁰ Economic relations have steadily expanded since 1991, China emerging as Vietnam's leading trading partner in

⁷⁶ Brewster, "India's Strategic Partnership with Vietnam," 38–40.

⁷⁷ Carlyle Thayer and Ramses Amer, *Vietnamese Foreign Policy in Transition* (New York: St. Martin's Press, 1999), 5.

⁷⁸ Thayer, "Vietnam Mulling New Strategies to Deter China."

⁷⁹ Ian Storey, *Can the South China Sea Dispute Be Resolved or Better Managed?* (Strategizing Change in Asia: The 27th Asia-Pacific Roundtable, 2013), http://Army.isis.org.my/attachments/apr27/PS9_Ian_STOREY.pdf.

⁸⁰ Thayer, "The Tyranny of Geography."

2004.⁸¹ By 1991, China had one investment project in Vietnam, but currently, maintains over 950 projects.⁸² While China's economic reforms started almost a decade before Vietnam's, China views Vietnam as a model for progressive political reform in the area of general secretary elections, for example.⁸³ Prominent Chinese authors point to the CPV as evolving in the correct manner.⁸⁴ The Chinese public appears to hold more of an aggressive posture towards the United States than Vietnam, and the Chinese Communist Party (CCP) obviously monitors progressive moves made by the CPV. Vietnam's force modernization enables the country to be taken more seriously by the CCP. It is possible that the CCP is monitoring the CPV, because it senses in Vietnam a country that is not far from displaying a similar rise in the regional environment. It behooves China to maintain ties and prevent escalation in the SCS, because it will require free and navigable sea-lanes due to its increasing energy requirements. Confronting an evolving and improving Vietnamese maritime force jeopardizes sea trade and energy security.

E. METHODS AND SOURCES

In explaining Vietnam's military modernization program, this thesis seeks to present Vietnam's general defense initiatives since 1986. Using historical analysis, it explains the plans and acquisitions leading to Vietnam's increased military capabilities. This thesis draws on official CPV documents including defense white papers, which reveal intentions behind modernization. Furthermore, this thesis relies on secondary sources such as scholarly literature and policy analysis from leading think tanks.

F. THESIS OVERVIEW

Focusing on Vietnam's military modernization, this thesis includes the following three chapters: details of modernization, causes of modernization, and closing thoughts. The details chapter will illustrate Vietnam's efforts to modernize militarily, explaining its

⁸¹ Joseph YS Cheng, "Sino-Vietnamese Relations in the Early Twenty-First Century," 2011, <http://Army.jstor.org/stable/10.1525/AS.2011.51.2.379>.

⁸² "More Chinese Investment Boosts China-Vietnam Trade Ties," *Chinadaily.com.cn*, January 16, 2014, http://Army.chinadaily.com.cn/bizchina/2014-01/16/content_17240039.htm.

⁸³ Cheng, "Sino-Vietnamese Relations in the Early Twenty-First Century."

⁸⁴ *Ibid.*

focus and intensions. The next chapter will explore causes behind Vietnam's military modernization, diminishing the hypothesis that attributes much of Vietnam's increased capabilities to China's influence. Attempting to ease concerns of major conflict in the SCS, the final chapter will assess both the hypotheses behind modernization and the implications of these findings for regional security.

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II. THE DETAILS OF MILITARY MODERNIZATION IN VIETNAM

Since the initiation of economic reforms in the late 1980s, the Vietnam People's Army (VPA) has increased its sea and air capabilities while also enhancing foreign defense relations. During the early to mid-1980s, Vietnam's strategic environment called for a strong ground force presence in Cambodia, Laos, and at its border with China. At that time, Vietnam relied almost completely on Soviet aid and equipment. By 1990, the CPV had withdrawn most forces from these hot-spots and adopted non-provocative policies, helping ease regional tension. By the mid-1990s and as a result of Vietnam's increasing focus on its economy and offshore territory, it decided to pursue policy and acquisitions geared more toward the maritime environment. Since then, military capabilities outside of Vietnam's ground forces have increased with the addition of more modern equipment. After the Soviet Union's collapse, Vietnam expanded its military procurement network and general defense policy beyond Russia. Since 1986, Vietnam has continued to improve its capabilities through targeted acquisitions, and it has focused increasingly on striking defense agreements across the international community.⁸⁵

A. EVOLUTION OF FORCES AND PROCUREMENTS

Since the late-1980s, CPV leaders have focused on boosting navy, air force, and coast guard capabilities while reducing the country's ground forces by over half. Notable improvements in Vietnam's maritime defense include more capable navy ships and locally-built equipment for the coast guard. Though most maritime roles are now shared with or have been assumed by the navy, the air force has received updated fighter aircraft and awaits the possible introduction of UAV capabilities to its order of battle. Though it received the most funding and political priority in the 1980s, the ground force has weakened considerably due to outdated equipment and less personnel. With the exception

⁸⁵ Paragraph details pulled directly from Thayer, *Vietnam People's Army*, 1–2, 41–45.

of the ground force, each service branch has improved significantly over the almost 25-year period.⁸⁶

1. Vietnam People's Navy

Given that offshore territory became a higher priority for the CPV after 1986, Vietnam has since strengthened its navy by adding more capable equipment.⁸⁷ Vietnam's economy began to rebound in the early to mid-1990s, and the CPV diverted funds toward strengthening SCS defense capabilities.⁸⁸ Policy makers had economic interests in the SCS and understood that their strategic environment had changed. In the wake of Doi Moi, they realized that their ability to defend offshore territory was lacking considerably.⁸⁹ The navy has since added more capable frigates and patrol craft, purchased submarines, absorbed an air wing, and developed local shipbuilding.⁹⁰ Its capabilities still lag behind those of other regional neighbors including Singapore, China, Taiwan, and Indonesia, but with better equipment, it has evolved into a more capable force with the potential to become one of ASEAN's top navies.⁹¹

Specifically, Vietnam's Ministry of Defense (MOD) has sought to improve the navy's frigate fleet. In 1986, the navy only had eight light frigates, including six 1,150-ton Petya-class ships—smaller than the average frigate.⁹² In 2006, defense leaders ordered two 2,100-ton Gepard-class guided missile frigates to replace the Petya-class frigates as the navy's principal surface combatants.⁹³ The navy received the Russian-

⁸⁶ Paragraph details pulled directly from IHS Jane's, "Vietnam > Procurement."

⁸⁷ Thayer, *Vietnam People's Army*, 41.

⁸⁸ *Ibid.*, 36.

⁸⁹ *Ibid.*, 41.

⁹⁰ "IHS Jane's - Vietnam > Navy," August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305175&Pubabbrev=SEA>; "IHS Jane's - Vietnam > Air Force," August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305174&Pubabbrev=SEA>.

⁹¹ *Ibid.*

⁹² International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

⁹³ IHS Jane's, "Vietnam > Procurement."

made Gepard frigates in 2010 and commissioned them in 2011, subsequently ordering two more with anti-submarine warfare (ASW) capabilities to be delivered in 2017.⁹⁴ The navy still operates the Petya frigates, but a defense periodical currently classifies them under corvettes or patrol and coastal combatants.⁹⁵ By adding the Gepard-class frigates, Vietnam now has principal surface combatants capable of power projection, and these ships “will be the backbone of its navy for the foreseeable future.”⁹⁶ Once the navy receives the fourth Gepard frigate, this force should be capable of engaging air, surface, and subsurface threats while “providing an important layer in an area-access area denial (A2/AD)” strategy.⁹⁷

The navy has removed older, less capable patrol boats and increased its number of corvettes and patrol ships. Today, the Vietnamese Navy maintains close to 70 patrol and coastal combatants compared to 110 in 1986.⁹⁸ This decrease could be attributed to the navy simply removing older, less capable craft from the South Vietnam era and focusing more on blue-water capabilities. Defense leaders ordered the near 500-ton BPS-500 corvette in 1996, and it became the first ship to be built inside the country.⁹⁹ Taruntal-class ships—close to 500 tons—and Petya light frigates dominate the remaining supply of corvettes.¹⁰⁰ Initiating orders in 1995 and continuing into 2004, the navy currently operates eight Taruntal-class corvettes and should receive six additional craft once construction is complete.¹⁰¹ Additionally, the navy has ordered four 2,100-ton Sigma

⁹⁴ Ibid.

⁹⁵ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

⁹⁶ Brian Benedictus, “The Wildcard: Vietnam’s Naval Modernization and Its Role in the South China Sea,” *Warm Oolong Tea* (blog), February 11, 2013, <http://warm-oolong-tea.blogspot.com.au/2013/02/the-wildcard-vietnams-naval.html>.

⁹⁷ Ibid.

⁹⁸ International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137; International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

⁹⁹ “IHS Jane’s - Shipbuilding ay Centre of Vietnam Modernisation,” September 4, 1996, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1657318&Pubabbrev=JDW>.

¹⁰⁰ IHS Jane’s, “Vietnam > Procurement.”

¹⁰¹ Ibid.

corvettes from the Netherlands.¹⁰² Generally smaller than the Taruntal corvette and more similar to a patrol boat, Patrol Combat Corvettes (PCC) became a part of the navy's fleet beginning in 2002.¹⁰³ The navy received 375-ton Svetlyak-class ships beginning in 2002, and Vietnam shipbuilders delivered 480-ton TT-400TP ships beginning in 2011.¹⁰⁴ PCCs now include six Svetlyak and three TT-400TP craft.¹⁰⁵ The navy has 34 smaller patrol boats, including 13 torpedo and missile-capable craft.¹⁰⁶ Focusing on larger, more capable frigates and corvettes since 1986, the navy has decreased its number of patrol boats as the coast guard has mostly assumed their mission.

Vietnam's navy has only slightly increased its amphibious craft and minesweeping units. As for amphibious craft, the navy had seven landing ships and 20 smaller landing craft around the Doi Moi reforms.¹⁰⁷ In 2014, the navy maintains eight landing ships and 30 landing craft.¹⁰⁸ Minesweeping units became a fleet component in 1987 with 12 mine-countermeasure craft.¹⁰⁹ Today, this unit totals 13 craft.¹¹⁰ Amphibious and minesweeping capabilities are important for the navy but receive less attention and equipment due to their unique missions.

The navy's submarine acquisitions have been among the most notable procurements for Vietnam. In 1998, the navy added two 100-ton Yugo-class midget

¹⁰² Carlyle Thayer, "Vietnam's Maritime Forces" (paper presented to Conference on Recent Trends in the South China Sea and U.S. Policy, Washington, D.C., July 10–11, 2014).

¹⁰³ International Institute for Strategic Studies, *The Military Balance 2002* (London: IISS, 2002), 212–213.

¹⁰⁴ IHS Jane's, "Vietnam > Procurement"; Kate Tringham, "IHS Jane's - Vietnam Inducts Three Patrol Vessels," March 8, 2012, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1491157&Pubabbrev=JNI>.

¹⁰⁵ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

¹⁰⁶ Ibid.

¹⁰⁷ International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

¹⁰⁸ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

¹⁰⁹ International Institute for Strategic Studies, *The Military Balance 1987* (London: IISS, 1987), 171–173.

¹¹⁰ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

submarines from North Korea; however, these craft are largely inoperable.¹¹¹ In 2009, the Vietnamese struck a deal with Moscow to acquire six Kilo-class submarines with a displacement of 3,000 to 3,950 tons.¹¹² By the end of 2014, the navy will have received three of the submarines and expects to have all six in country by 2016.¹¹³ Once operational, Vietnam's Kilos—carrying quieter and more efficient diesel engines—will be some of the most modern, updated submarines in the region.¹¹⁴ Regional diplomats claim that two Kilos have been spotted conducting training cruises near the Cam Ranh Bay port, while a separate Vietnamese crew trains onboard the third Kilo near the coast of St. Petersburg, Russia.¹¹⁵ Vietnam has moved quickly to train crews for the new submarines, but the overall effectiveness of the force remains to be seen.¹¹⁶ Acquiring submarine capabilities is important for Vietnam, and these will be highly advanced platforms requiring highly trained sailors.

MOD established a navy air wing in 2012 after the air force relinquished control of most maritime aircraft.¹¹⁷ Helix helicopters were first delivered to the air force in 1999 but now provide the bulk of the navy's air wing.¹¹⁸ The navy now operates with 10 Ka-28 Helix A and two Ka-32 Helix C aircraft.¹¹⁹ Those numbers have remained steady since 2001, excluding three Ka-25 Helix aircraft retired in 2013.¹²⁰ To boost maritime patrol capabilities, defense officials ordered six DHC-6 Twin Otter light airplanes in

¹¹¹ "IHS Jane's - Vietnam > Navy."

¹¹² Carlyle Thayer, "With Russia's Help, Vietnam Adopts A2/AD Strategy," *The Diplomat*, October 8, 2013, <http://thediplomat.com/2013/10/with-russias-help-vietnam-adopts-a2/ad-strategy/>.

¹¹³ IHS Jane's, "Vietnam > Procurement."

¹¹⁴ *Ibid.*

¹¹⁵ Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines."

¹¹⁶ *Ibid.*

¹¹⁷ International Institute for Strategic Studies, *The Military Balance 2012* (London: IISS, 2012), 292–302.

¹¹⁸ International Institute for Strategic Studies, *The Military Balance 1999* (London: IISS, 1999), 200–201.

¹¹⁹ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

¹²⁰ International Institute for Strategic Studies, *The Military Balance 2013* (London: IISS, 2013), 342–352.

2010 and two EC225 rotary wing aircraft in 2012.¹²¹ One of each platform is now attached to the navy air wing.¹²² Prior to the DHC-6, Vietnam ordered 10 M-28 Skytruck patrol airplanes in 2005 and planned for a dozen more—one is currently operational.¹²³ Vietnam desires to purchase non-lethal P-3 Orion maritime patrol aircraft (MPA) from the United States, but discussions are still ongoing.¹²⁴ Using mostly rotary wing aircraft, the navy air wing has established roles in anti-submarine warfare and search and rescue, while also increasing maritime patrol capabilities to monitor territorial waters.

a. Navy Analysis

For the Vietnamese Navy, submarines are the most important acquisition to date, because the equipment provides the force its first genuine deterrent capability.¹²⁵ While the Gepard-class frigates and Taruntal-class corvettes “have the ability to be quick strike vessels...and deliver devastating blows to enemy vessels,” the navy’s Kilos are essential to Vietnam’s pursuit of an A2/AD strategy.¹²⁶ The navy’s MPA increases the military’s ability to monitor territorial waters, but while important, these aircraft do not cause China to question its behavior compared to the influence of submarines. Ankit Panda argues that the acquisitions could alter the imbalance between the countries, because China lacks effective ASW capabilities and fears “defending against an adversary with advanced surface ships and submarines.”¹²⁷ Vietnam’s diesel-electric Kilos could force China to

¹²¹ Jon Grevatt, “IHS Jane’s - Vietnam Buys Twin Otter Amphibians,” May 7, 2010, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1183534&Pubabbrev=JDW>; “IHS Jane’s - Details Emerge of Vietnam’s C295 Purchase,” July 23, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1717569&Pubabbrev=JDIN>.

¹²² “IHS Jane’s - Vietnam > Navy.”

¹²³ “IHS Jane’s - Vietnam Receives M28 Maritime Patrol Aircraft,” accessed August 27, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1205375&Pubabbrev=JNI>.

¹²⁴ Jon Grevatt, “IHS Jane’s - U.S. ‘May Ease’ Export Restrictions against Myanmar and Vietnam If Human Rights Concerns Are Addressed,” February 24, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1702617&Pubabbrev=JDIN>.

¹²⁵ Torode, “Vietnam Building Deterrent against China in Disputed Seas with Submarines.”

¹²⁶ Benedictus, “Warm Oolong Tea.”

¹²⁷ Ankit Panda, “Vietnam’s China Challenge: Making Asymmetric Deterrence Work,” *The Diplomat*, September 9, 2014, <http://thediplomat.com/2014/09/vietnams-china-challenge-making-asymmetric-deterrence-work/>.

rethink deploying vessels into disputed waters, and for the CPV, this A2/AD strategy is the best way to counter assertive behavior.¹²⁸ For this reason, the CPV's pursuit of submarines is currently the most important naval development.

While the navy's mission potential has been strengthened with the addition of submarines and advanced surface vessels, this force requires more time to sufficiently monitor its waters and "project naval power into the SCS."¹²⁹ For now, the navy's operational capability is relatively weak, because "spares are in short supply and many ships can lay only a tentative claim to operational capability."¹³⁰ Nguyen Hung Son adds, "The current fleet is considered far too small, slow and old for its duties."¹³¹ To mitigate these issues, the CPV has prioritized upgrading its navy with the introduction of submarines and newer frigates, corvettes, and patrol craft; however, while this equipment may yield a stronger force, "the acquisition of some sophisticated platform or system does not necessarily translate into an effective capability."¹³² Additionally, Chinese military researchers assess weaknesses in Vietnam's operating experience with advanced systems in addition to targeting, surveillance, and battle management.¹³³ Vietnam's submarines have the potential to deter China in the SCS, but the systems require highly trained crews and an efficient maintenance capacity.¹³⁴ For these reasons, a truly reliable, capable submarine force may take decades to achieve.¹³⁵ The VPN is capable of conducting constant patrols of contested waters and its infantry wing has become the country's rapid response force.¹³⁶ With the addition of submarines and aviation assets,

¹²⁸ Ibid.

¹²⁹ Thayer, "Vietnam People's Army: Development and Modernization."

¹³⁰ "IHS Jane's - Vietnam > Navy."

¹³¹ Son, "Vietnam: A Case Study in Naval Modernization," 126.

¹³² Karniol, "Too Much, Too Soon?"

¹³³ Jane Perlez, "Q. and A.: Lyle Goldstein on China and the Vietnamese Military," *Sinosphere Blog*, July 5, 2014, <http://sinosphere.blogs.nytimes.com/2014/07/05/q-and-a-lyle-goldstein-on-china-and-the-vietnamese-military/>.

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ "IHS Jane's - Vietnam > Navy."

the navy is now a three-dimensional force.¹³⁷ Vietnam's 2009 defense white paper claims that the navy can "effectively conduct search-and-rescue operations."¹³⁸ In the paper, defense leaders recognize that newer equipment will enhance their ability to protect Vietnam's sovereignty.¹³⁹ For the navy to respond to multiple threats along its coastline or EEZ, continued investment along with a more developed naval doctrine will be necessary.¹⁴⁰

Vietnam's capabilities are becoming among the strongest in ASEAN, and the country's modernization efforts mirror regional trends.¹⁴¹ In 1986, the Vietnamese Navy operated with no submarines, air wing, or principal surface combatants. The government has focused on increasing naval capabilities, and they have made adequate strides in doing so. Currently, the VPN receives \$706 million USD for expenditures compared to the air force's \$628 million and the army's \$366 million; IHS Jane's assesses the value of naval expenditures to increase.¹⁴² Vietnam has joined Singapore, Indonesia, and Malaysia as ASEAN's best navies. Regarding submarines, Thayer expects Vietnam's force to fall "somewhere between that of Singapore and Indonesia."¹⁴³ Additionally, some analysts believe that Vietnam's new submarines outclass China's Kilos.¹⁴⁴ Singapore and Indonesia maintain more robust capabilities in terms of naval aviation, but Vietnam's Gepard-class frigates will likely outperform Indonesia's and rival Singapore's.¹⁴⁵ Regarding trends, Bob Nugent writes, "In Malaysia and Indonesia... each

¹³⁷ Karniol, "Too Much, Too Soon?"

¹³⁸ Ministry of National Defense, *Vietnam National Defense*, 74.

¹³⁹ Son, "Vietnam: A Case Study in Naval Modernization," 126.

¹⁴⁰ "IHS Jane's - Vietnam > Navy; Karniol, "Too Much, Too Soon?"

¹⁴¹ Son, "Vietnam: A Case Study in Naval Modernization," 131; Jack McCaffrie, "Submarines for South-east Asia: A Major Step?," in *Naval Modernization in South-East Asia: Nature, Causes, and Consequences*, ed Geoffrey Till and Jane Chan (New York: Routledge, 2010), 36.

¹⁴² "IHS Jane's - Vietnam > Navy.

¹⁴³ Karniol, "Too Much, Too Soon?"

¹⁴⁴ Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines."

¹⁴⁵ "IHS Jane's - Singapore > Navy," September 1, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305141&Pubabbrev=SEA>; "IHS Jane's - Indonesia > Navy," September 1, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305009&Pubabbrev=SEA>.

country continues to focus on developing indigenous shipbuilding infrastructure, and each has plans to acquire numbers of frigates and corvettes that will enhance current mission capability in surface and submarine warfare to their navies.”¹⁴⁶ Similar to Vietnam, Singapore, Indonesia, and Malaysia have committed to submarine technology and its associated infrastructure.¹⁴⁷ Vietnam’s capabilities have advanced considerably, and the country is not alone in its desire to modernize naval capabilities.

The PLAN maintains a considerable advantage over the VPN in terms of size and capabilities. Located in Guangdong Province, China’s South Sea Fleet includes “nine coastal defense districts, with approximately 320 ships.”¹⁴⁸ This fleet maintains over 20 submarines and has four air divisions divided among fighters, bombers, and helicopters.¹⁴⁹ In any naval clash against China, Vietnam will clearly be outnumbered. CPV leadership understands that China’s naval capabilities far surpass its own; therefore, leaders have acquired capabilities to enhance an A2/AD strategy.¹⁵⁰ If successful in developing, maintaining, and operating certain capabilities, the VPN can potentially deter China in the SCS.

2. Vietnam People’s Air Force

As a result of an increased focus to strengthen air and sea capabilities beginning after Doi Moi, the Vietnam Peoples Air Force (VPAF) has evolved into a larger, more capable branch due to necessary updates in fighter aircraft and air defense.¹⁵¹ In 1986, the VPAF comprised of 15,000 members, 270 combat aircraft, and 65 combat helicopters.¹⁵²

¹⁴⁶ Bob Nugent, “Naval Acquisition Trends in Asia,” in *Naval Modernization in South-East Asia: Nature, Causes, and Consequences*, ed Geoffrey Till and Jane Chan (New York: Routledge, 2010), 18.

¹⁴⁷ McCaffrie, “Submarines for South-east Asia,” 45.

¹⁴⁸ “IHS Jane’s - China > Navy,” September 1, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomerPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1303146&Pubabbrev=CNA>.

¹⁴⁹ Ibid.

¹⁵⁰ Carlyle Thayer, “With Russia’s Help, Vietnam Adopts A2/AD Strategy,” *The Diplomat*, October 8, 2013, <http://thediplomat.com/2013/10/with-russias-help-vietnam-adopts-A2/AD-strategy/>.

¹⁵¹ “IHS Jane’s - Vietnam > Air Force,” August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomerPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305174&Pubabbrev=SEA>.

¹⁵² International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

Today, the total of air force members has doubled due to Vietnam's air defense force merging with the air force at the turn of the century.¹⁵³ Combat aircraft has decreased to 97, but the CPV has acquired better capabilities since 1986.¹⁵⁴ As defense leaders have emphasized boosting fighter aircraft, Vietnam's attack helicopter fleet has received fewer updates.¹⁵⁵ Newer missiles have arrived with newer fighter aircraft though, and Vietnam's air defense force has boosted its surface to air missile (SAM) inventory.¹⁵⁶ More recently, Vietnam has begun to research and develop an unmanned capability to further strengthen its air force.¹⁵⁷ VPAF looks different today than it did almost 25 years ago, because leaders have acquired better fixed wing aircraft, air defense capabilities, and emphasized a UAV focus.

At a more detailed level, the most notable procurements for VPAF have been fixed wing aircraft. After 1986, Vietnam decided to pursue more capabilities to defend maritime interests.¹⁵⁸ Before the Doi Moi reforms, variants of the MiG-21 dominated the VPAF's inventory. Adding to an order of battle already full of 1970-era aircraft, the Su-20/-22 fighter also flew for the VPAF in 1986.¹⁵⁹ Notable improvements to fighter aircraft began in 1995. At this time, defense officials ordered 12 fixed wing aircraft: six 1980-era Su-27 Flankers to assume combat roles and six older MiG-21UM aircraft for training purposes.¹⁶⁰ Between 1995 and 1998, the air force added additional Su-27s, and analysts assess 11 as currently operational.¹⁶¹ In 2003, Vietnam ordered four 1990-era

¹⁵³ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

¹⁵⁶ Ibid.

¹⁵⁷ Jon Grevatt, "IHS Jane's - Vietnam's Unmanned Ambitions," August 6, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1582456&Pubabbrev=JDW>.

¹⁵⁸ Thayer, *Vietnam People's Army*, 41.

¹⁵⁹ International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

¹⁶⁰ International Institute for Strategic Studies, *The Military Balance 1995* (London: IISS, 1995), 192–193.

¹⁶¹ "IHS Jane's - Vietnam > Air Force," August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305174&Pubabbrev=SEA>.

Su-30 Flankers with an option for eight additional aircraft.¹⁶² The 2003 orders arrived in 2005 and the option occurred in 2009 as an addition to the groundbreaking submarine transaction.¹⁶³ Presently, analysts assess that 23 Su-30 Flankers are operational.¹⁶⁴ The addition of Su-30 aircraft has improved VPAF's order of battle, but more are necessary to completely replace older MiG aircraft less capable of modern missions.

The air force has decreased rotary wing aircraft but increased its air defense capabilities. As for attack helicopters, air force personnel currently operate with 26 Mi-24 Hind aircraft compared to 30 in 1986.¹⁶⁵ The air force lost ASW-capable helicopters to the navy in 2012.¹⁶⁶ Unfortunately for the air force, rotary wing upgrades have largely been reserved for boosting maritime patrol capabilities for the navy and coast guard. In 1986, the air defense force operated 60 different sites with various towed SAMs including the SA-2 Guideline and SA-3 Goa.¹⁶⁷ In 1993, this force gained six sites and added the self-propelled SA-6 Gainful.¹⁶⁸ Beginning in 2000, the air defense force included man-portable, shoulder-fired SA-7 Grail and SA-16 Gimlet SAMs in its order of battle and in 2012, added the self-propelled SA-20 Gargoyle.¹⁶⁹ Beginning in 2001, the air defense force merged with VPAF and increased its numbers to 30,000.¹⁷⁰ The air defense force has maintained over 60 sites since the early 1990s and strengthened its

¹⁶² IHS Jane's, "Vietnam > Procurement."

¹⁶³ Ibid.

¹⁶⁴ "IHS Jane's - Vietnam > Air Force."

¹⁶⁵ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289; International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

¹⁶⁶ International Institute for Strategic Studies, *The Military Balance 2012* (London: IISS, 2012), 292–302.

¹⁶⁷ International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137.

¹⁶⁸ International Institute for Strategic Studies, *The Military Balance 1993* (London: IISS, 1993), 164–165.

¹⁶⁹ International Institute for Strategic Studies, *The Military Balance 2000* (London: IISS, 2000), 208–209; International Institute for Strategic Studies, *The Military Balance 2012* (London: IISS, 2012), 292–302.

¹⁷⁰ International Institute for Strategic Studies, *The Military Balance 2001* (London: IISS, 2001), 217–218.

firepower, increasing SAM variants from two to six.¹⁷¹ Though the navy assumed much of VPAF's ASW and patrolling aircraft, the air force still maintains capable attack helicopters as well as overall air defense units.

The last notable development includes Vietnam's emerging interest in UAV capabilities, which appears to have developed after 2010.¹⁷² State-owned defense institutions including the Vietnam Aerospace Association (VASA) and Viettel Group have spearheaded UAV development in country; the former group struck a collaborative deal with foreign firms in 2012.¹⁷³ Sending personnel and technology to Vietnam for co-development and production of tailored assets, Russia's Irkut and Sweden's Unmanned Systems Group (UMS) have begun working alongside VASA members.¹⁷⁴ The Russian firm plans to model the Vietnamese asset after its Irkut-200, which has a 12-hour endurance, 745-mile range, and wingspan of 21 feet.¹⁷⁵ The Swedish platform will likely perform under half the endurance and range of the Irkut model.¹⁷⁶ The Viettel Group unveiled the country's first UAV earlier this year after beginning development in 2011.¹⁷⁷ Viettel's UAV appears comparable in size and performance to Boeing's ScanEagle. Jane's assesses that Vietnam currently maintains six Viettel UAVs, but information regarding their operational status is unavailable.¹⁷⁸ While it is unclear at this time which service will own the emerging UAV platforms, the air force will likely be involved in their employment and the capability will surely enhance Vietnam's ability to monitor its coast and offshore territory.

¹⁷¹ International Institute for Strategic Studies, *The Military Balance 1986* (London: IISS, 1986), 136–137; International Institute for Strategic Studies, *The Military Balance 2012* (London: IISS, 2012), 292–302.

¹⁷² Kevin Wong, "IHS Jane's - Vietnam Unveils Patrol VT Tactical UAV," February 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1703288&Pubabbrev=IDR>.

¹⁷³ Grevatt, "IHS Jane's - Vietnam's Unmanned Ambitions."

¹⁷⁴ Ibid.

¹⁷⁵ "IHS Jane's - Irkut-200," January 7, 2009, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1318511&Pubabbrev=JUAV>.

¹⁷⁶ Thu Ha, "Vietnam to Make Unmanned Aircraft - News VietNamNet," November 21, 2012, <http://english.vietnamnet.vn/fms/science-it/53079/vietnam-to-make-unmanned-aircraft.html>.

¹⁷⁷ Wong, "IHS Jane's - Vietnam Unveils Patrol VT Tactical UAV."

¹⁷⁸ Grevatt, "IHS Jane's - Vietnam's Unmanned Ambitions."

a. Air Force Analysis

The VPAF's most important developments include upgraded Sukhoi fighter aircraft and the pending introduction of UAV capabilities. The majority of the VPAF's fighter inventory still includes the Su-22 and MiG-21.¹⁷⁹ It has been critical for VPAF leadership to pursue newer fighters, because the aforementioned aircraft are nearing end of service.¹⁸⁰ Acquiring Su-30 fighters has been vital to modernize this force, provide a more capable aircraft for ensuring sovereignty over SCS features, and help Vietnam "understand the technology of the same jet fighter as China is manufacturing under license."¹⁸¹ Though still a developing sector, UAV capabilities can provide the VPAF—or the VPN depending on allocation—a cheaper intelligence, surveillance, and reconnaissance (ISR) option compared to MPA aircraft. With UAVs, the VPAF can extend its abilities to monitor contested areas, potentially acquiring valuable enemy force characteristics.

Regarding mission potential, the VPAF is capable of adequate close air support and partial air superiority.¹⁸² The newer Sukhoi fighters have improved the VPAF's inventory, but this force is untested and requires greater numbers and investment.¹⁸³ These fighters are capable of reaching the Spratly Islands and potentially competing for air superiority against China, because "China is not particularly strong in the domain of aerial refueling."¹⁸⁴ Additionally, the effective range of China's aircraft combined with their distance from available airfields causes concern for PRC leadership, though the PRC is inching closer toward establishing an airfield at the Spratlys.¹⁸⁵ An emphasis on UAVs may result in Vietnam establishing a credible unmanned presence for the air force,

¹⁷⁹ "IHS Jane's - Vietnam > Air Force."

¹⁸⁰ Ibid.

¹⁸¹ Carlyle Thayer, "Vietnam: New Order for Su30MKs," *Thayer Consultancy* (2010): 1.

¹⁸² "IHS Jane's - Vietnam > Air Force."

¹⁸³ Ibid.

¹⁸⁴ Perlez, "Q. and A."

¹⁸⁵ Benedictus, "Warm Oolong Tea," James Hardy and Sean O'Connor, "China Building Airstrip-Capable Island on Fiery Cross Reef," *IHS Jane's*, November 20, 2014, <http://Army.janes.com/article/46083/china-building-airstrip-capable-island-on-fiery-cross-reef>.

but these capabilities are still developing. Overall, the VPAF needs more capable fighters to completely fulfill its mission potential, and “the question is how they manage to balance that qualitative improvement with the need for fighter numbers, as the MiGs and Su-22s age out.”¹⁸⁶

Overall, VPAF’s capabilities still trail leading members of ASEAN and China, but its gradual modernization has certainly improved what was an outdated and neglected branch.¹⁸⁷ After Doi Moi, Vietnam leaders understood that updating its air force required greater emphasis, and its aging order of battle received newer, more capable platforms beginning in 1995.¹⁸⁸ Removing or retiring older MiG and Su-22 aircraft and replacing them with more capable, modern aircraft was and still should remain a priority for Vietnamese leaders. Jane’s assesses the VPAF as lagging behind Singapore and Thailand in terms of combat capability, though Indonesia and Malaysia likely surpass the VPAF’s abilities too.¹⁸⁹ Compared to Vietnam, these countries have sought upgraded capabilities as well. Malaysia and Indonesia have procured Sukhoi fighter aircraft and all four have benefited from Boeing and Lockheed Martin equipment.¹⁹⁰ Compared to China, the VPAF is extremely outmatched. The strength of the People’s Liberation Army Air Force (PLAAF) is close to 400,000 personnel compared to 30,000 in Vietnam; China has 59 air combat regiments while Vietnam has nine.¹⁹¹ China clearly maintains a more robust air

¹⁸⁶ Defense Industry Daily, “Vietnam’s Russian Restocking: Subs, Ships, Sukhois, and More,” *Defense Industry Daily*, August 28, 2014, <http://Army.defenseindustrydaily.com/vietnam-reportedly-set-to-buy-russian-kilo-class-subs-05396/>.

¹⁸⁷ “IHS Jane’s - Vietnam > Air Force; “IHS Jane’s - Malaysia > Air Force,” September 26, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319075&Pubabbrev=JWAF>.”

¹⁸⁸ Thayer, “Vietnam People’s Army: Development and Modernization.”

¹⁸⁹ “IHS Jane’s - Vietnam > Air Force; “IHS Jane’s - Malaysia > Air Force.”

¹⁹⁰ “IHS Jane’s - Malaysia > Air Force,” September 26, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319075&Pubabbrev=JWAF>; “IHS Jane’s - Indonesia > Air Force,” October 14, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319049&Pubabbrev=JWAF>; “IHS Jane’s - Singapore > Air Force,” September 30, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319117&Pubabbrev=JWAF>; “IHS Jane’s - Thailand > Air Force,” November 4, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319131&Pubabbrev=JWAF>.

¹⁹¹ “IHS Jane’s - China > Air Force,” November 4, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1319011&Pubabbrev=JWAF> and “IHS Jane’s - Vietnam > Air Force.”

capability, and if conflict were to ignite between the countries, Vietnam must hope for action at the distant Spratly Archipelago, which will challenge the PLAAF's range.¹⁹²

3. Vietnam Coast Guard

During the past 16 years, Vietnam's Coast Guard (VCG) has assumed a more prominent role, strengthened its capabilities, and changed its name.¹⁹³ In September 1998, the defense ministry created the Vietnam Marine Police to enforce maritime laws across the navy's five regions.¹⁹⁴ Overall, the younger force operates with more modern equipment than the other services due to the government's emphasis on boosting maritime strength. This modernization has enabled it to expand patrols and increase its confidence in confronting maritime threats. The force has benefitted from Vietnam's recent shipbuilding interest, because it has received newer, locally produced patrol boats.¹⁹⁵ Additionally, this force has received an increase in aviation support since orders began in 2005.¹⁹⁶ In 2013, the Vietnam Marine Police became the Vietnam Coast Guard in order to align with international norms and increase collaboration with other regional coast guards.¹⁹⁷ The coast guard has evolved from operating a handful of former navy torpedo boats to having air support and tailored patrol craft capable of confronting offshore threats and monitoring Vietnam's coast.¹⁹⁸

¹⁹² Benedictus, "Warm Oolong Tea."

¹⁹³ "IHS Jane's - Vietnam > Navy;" Walter Russell Mead, "US Offers Vietnam Massive Aid Package To Boost Coast Guard," *The Feed*, December 16, 2013, <http://Army.the-american-interest.com/blog/2013/12/16/us-offers-vietnam-massive-aid-package-to-boost-coast-guard/>.

¹⁹⁴ Thayer, "Vietnam's Maritime Forces."

¹⁹⁵ Ridzwan Rahmat, "IHS Jane's - Vietnamese Coast Guard to Acquire Naval Helicopters for OPVs," accessed August 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1705630&Pubabbrev=JNI>.

¹⁹⁶ Gareth Jennings, "IHS Jane's - Vietnam Stands up New Air Force-Navy Brigade," accessed August 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1579763&Pubabbrev=JNI>.

¹⁹⁷ Jon Grevatt, "IHS Jane's - Vietnam Reorganises Littoral Forces into New Coast Guard," August 29, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1584560&Pubabbrev=JDW>.

¹⁹⁸ "IHS Jane's - Vietnam > Navy."

The VCG operates with over 35 maritime vessels, receiving most of its equipment from local shipyards between 2000 and 2010.¹⁹⁹ Prior to 2000, the coast guard received handed down equipment from the navy and retrofitted it to suit its needs—several Soviet-era Shershen-class torpedo craft, for example.²⁰⁰ With design help from Russian defense firms and local shipbuilder ShipTech, the coast guard received close to 26 indigenously-produced 44-meter, 200-ton TT-200 and 35-meter, 120-ton TT-120 patrol boats from 2000 to 2010.²⁰¹ In 2012 and after an order for four 90-meter offshore patrol vessels, the Damen Shipyards Group from the Netherlands and Hai Phong-based 189 Shipbuilding Company collaboratively produced the coast guard’s most modern ship to date.²⁰² Operating with a range of 5,000 nautical miles, a displacement of 2,400 tons, and a rear flight deck, the DN2000 enhances the coast guard’s ability to monitor its maritime environment and provides it a more versatile capability due to potential flight operations.²⁰³ Using designs from Russia’s Marine Technology Development, Hong Ha Shipbuilding Company unveiled the 54-meter, 400-ton TT-400TP patrol vessel in 2011 and has since added three to its inventory.²⁰⁴ In 2013, South Korea provided the coast guard with older patrol vessels, and in 2014, Japan announced that it would provide Vietnam six fishing vessels for shipbuilders to convert for the coast guard.²⁰⁵ The coast guard has increased its fleet to include modern patrol craft and will likely continue to receive added capabilities with help from local shipbuilders and the government’s—as well as foreign partner’s—emphasis on its maritime defense.

¹⁹⁹ Thayer, “Vietnam’s Maritime Forces.”

²⁰⁰ Ibid.

²⁰¹ Mrityunjoy Mazumdar, “IHS Jane’s - Vietnam Makes Slow Progress on OPV,” June 8, 2012, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1510577&Pubabbrev=JNI>.

²⁰² Ibid.

²⁰³ Ibid.

²⁰⁴ Ridzwan Rahmat, “IHS Jane’s - Vietnam Navy Receives Third TT400TP Patrol Vessel,” June 2, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1713282&Pubabbrev=JNI>.

²⁰⁵ Thayer, “Vietnam’s maritime forces;” Kosuke Takahashi, “IHS Jane’s - Japan to Provide Vietnam with Six Patrol Vessels,” August 4, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1718461&Pubabbrev=JDW>.

VCG has also benefitted from an increase in maritime aviation assets.²⁰⁶ From 2012 to 2013, three C-212-400 MPA arrived and became the coast guard's primary maritime support asset.²⁰⁷ In mid-2013, Vietnam established a combined air force and navy brigade, operating the C-212 on behalf of the coast guard.²⁰⁸ MOD has emphasized acquiring a strong maritime patrol capability, and it is likely that this new air brigade will also utilize navy and air force-owned MPA including EC225 and Mi-8/-17 helicopters as well as DHC-6 and M28 airplanes.²⁰⁹ The coast guard has also begun to explore the acquisition of new helicopters for its DN2000 patrol craft, which carries a flight deck.²¹⁰ With the introduction of newer patrol aircraft, the air force-navy air component, and the possibility of helicopters for newer ships, the coast guard is now able to extend its maritime monitoring capabilities.

The coast guard recently received funds to boost its capabilities and will also benefit from a new Fisheries Surveillance Force (FSF), because this force can help expand the coast guard's monitoring capability.²¹¹ After the coast guard's name change in 2013, Vietnam's MOD announced that VCG funding would "be sourced from the state budget under a separate item allocated to the MOD," suggesting that the VCG's modernization and activity would not fall under Vietnam's defense budget.²¹² In June 2014, Vietnam's government approved a \$747 million USD plan to boost maritime

²⁰⁶ Jon Grevatt, "IHS Jane's - Details Emerge of Vietnam's C295 Purchase," July 23, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1717569&Pubabbrev=JDIN>.

²⁰⁷ Ibid.

²⁰⁸ Gareth Jennings, "IHS Jane's - Vietnam Stands up New Air Force-Navy Brigade," accessed August 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1579763&Pubabbrev=JNI>.

²⁰⁹ Ibid.

²¹⁰ Ridzwan Rahmat, "IHS Jane's - Vietnamese Coast Guard to Acquire Naval Helicopters for OPVs," accessed August 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1705630&Pubabbrev=JNI>.

²¹¹ Ridzwan Rahmat, "IHS Jane's - Vietnam Approves USD747 Million Plans to Boost Maritime Security," June 5, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1713840&Pubabbrev=JDW>.

²¹² Jon Grevatt, "IHS Jane's - Vietnam Reorganises Littoral Forces into New Coast Guard," August 29, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1584560&Pubabbrev=JDW>.

capabilities.²¹³ These funds appear to be channeling toward the VCG and the newly formed FSF under the government's Ministry of Agriculture and Rural Development, which is an entity created to police fishing practices at sea.²¹⁴ In August 2014, Vietnam passed legislation to authorize weapons onboard over 50 FSF vessels by September 2014, including explosives, handguns, and 14.5 mm machine guns.²¹⁵ Among the FSF's five missions, it is tasked with "contributing to security order and national sovereignty in Vietnam's maritime area."²¹⁶ This mission overlaps with the VCG's mission of enforcing maritime law, and both forces worked in coordination to confront Chinese forces during the May 2014 oil rig standoff.²¹⁷ The CPV intends to create a formidable coast guard, and by investing in a FSF, the coast guard can benefit from another force that expands its maritime capabilities.

a. Coast Guard Analysis

For the VCG, the most important acquisitions have been the DN2000 offshore patrol vessel and C-212-400 MPA. The DN2000 is an important acquisition, because it provides the VCG a principal vessel, which can maintain naval helicopters and coordinate with MPA. Prior to the DN2000, the VCG only operated with smaller patrol craft incapable of flight operations. The DN2000 has the characteristics of a frigate. It is slightly over 10 meters shorter than the navy's new Gepard frigates but has a greater displacement and range.²¹⁸ The DN2000 is also important, because Vietnam's defense industry helped co-produce the vessel with the Netherlands' Damen Shipbuilding Group.²¹⁹ Though not operating illustrations of Vietnam's burgeoning defense industry,

²¹³ Ridwan Rahmat, "IHS Jane's - Vietnam Approves USD747 Million Plans to Boost Maritime Security," June 5, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1713840&Pubabbrev=JDW>.

²¹⁴ Rahmat, "IHS Jane's - Vietnam Approves USD747 Million Plans to Boost Maritime Security."

²¹⁵ Tra Mi, "Vietnam to Arm Fishery Surveillance Ships After Standoff With China," *VOA*, August 1, 2014, <http://Army.voanews.com/content/vietnam-to-arm-fishery-surveillance-ships-after-standoff-with-china/1969985.html>.

²¹⁶ Thayer, "Vietnam's Maritime Forces."

²¹⁷ *Ibid.*

²¹⁸ Mazumdar, "IHS Jane's - Vietnam Makes Slow Progress on OPV."

²¹⁹ Thayer, "Vietnam's Maritime Forces."

the C-212-400 MPA are important acquisitions, because they are completely dedicated to the VCG.²²⁰ These aircraft help extend the VCG's footprint and help accelerate the VCG's response to maritime issues.

Since 1998, the coast guard's mission potential has improved considerably, but increased investment and a legitimate code of conduct are necessary to perform essential tasks and enforce maritime laws. Along Vietnam's coastline and among its continental shelf and EEZ, the coast guard is tasked with the following missions: "drug smuggling, human trafficking, counter terrorism, industrial radioactive and toxic waste dumping, marine environmental protection, surveillance of illegal operations by foreign fishing vessels, maritime law enforcements, marine assistance, and search and rescue."²²¹ With its smallest ship at 120 tons and its largest at 2,500 tons, the VCG has close to 40 vessels, but more are necessary to enforce laws across the five regions of the VPN.²²² Even with greater investment, it behooves Vietnam to continue pressing for a binding code of conduct in the SCS. A code of conduct could strengthen the coast guard's ability to enforce maritime law in the SCS, because a legally binding agreement could potentially deter actors from behaving aggressively toward Vietnam.

The VCG competes for one of ASEAN's best coastal forces, and its development falls in line with regional trends.²²³ The VCG has improved since 1998 thanks to the evolution of Vietnam's defense industry. Local shipbuilding firms have evolved to acquire the necessary skills to manufacture basic patrol craft, adding to the service's inventory. Due to foreign collaboration and the government's increased emphasis on the maritime environment, the coast guard has received the DN2000 and its own air assets.²²⁴ No other ASEAN coast guard can boast ships comparable to the DN2000, because it is

²²⁰ Grevatt, "IHS Jane's - Details Emerge of Vietnam's C295 Purchase."

²²¹ Thayer, "Vietnam's Maritime Forces."

²²² Ibid.

²²³ Sam Bateman, "Regional Navies and Coast Guards: Striking a Balance Between "Lawships" and Warships," in *Naval Modernization in South-East Asia: Nature, Causes, and Consequences*, ed Geoffrey Till and Jane Chan (New York: Routledge, 2010), 245–259.

²²⁴ "IHS Jane's - Vietnam > Navy."

larger and more versatile than the vessels leading ASEAN coast guards maintain.²²⁵ Sam Bateman writes, “Southeast Asian countries without coast guards are establishing them, and those that already had coastguards are expanding them.”²²⁶ The Asia-Pacific region is generally pursuing increased coast guard capabilities, because “coast guards are more suitable than navies for operations in disputed areas and for cooperation with neighboring countries to maintain good order at sea.”²²⁷ Compared to other regional forces, Vietnam maintains half the number of total vessels that Singapore and Malaysia operate, and Malaysia’s Coast Guard owns more dedicated air assets.²²⁸ Indonesia is capable of creating a preeminent coast guard, but the navy, shortfalls in capacity, and a lack of coordination between various maritime entities has stunted its development.²²⁹ Though the force still operates under the navy’s control, the Philippine Coast Guard has a long history but has suffered from decreased funding.²³⁰ Furthermore, Thailand’s coastal force is attached to its national police department, and the country has mostly revealed a lack of commitment to boost capabilities and re-structure maritime roles.²³¹ Based on total dedicated equipment and investment, the VCG likely falls behind Singapore and Malaysia for ASEAN’s best coast guard; however, with increased investment and continued local defense industry production, the VCG will strengthen amid the region’s growing emphasis on “lawships over war ships.”²³²

China’s capabilities in civil maritime enforcement far surpass Vietnam’s. China maintains five separate maritime law enforcement agencies, and two groups have dedicated air assets.²³³ In 2010, Lyle Goldstein outlined the agencies’ planning requirements for the SCS. Those plans included the following 132 vessels: four large

²²⁵ Mazumdar, “IHS Jane’s - Vietnam Makes Slow Progress on OPV;” Bateman, “Regional Navies and Coast Guards,” 245–259.

²²⁶ Bateman, “Regional Navies and Coast Guards,” 245.

²²⁷ *Ibid.*

²²⁸ *Ibid.*, 253–255.

²²⁹ *Ibid.*, 252–253.

²³⁰ *Ibid.*, 254.

²³¹ *Ibid.*, 254–255.

²³² *Ibid.*, 245–247.

²³³ *Ibid.*, 250–251.

cutters greater than 3,500 tons, five midsize cutters greater than 1,500 tons, 43 small cutters greater than 500 tons, and 80 small boats greater than 100 tons.²³⁴ Comparably, the VCG has almost forty vessels and will eventually have four DN2000s at 2,500 tons.²³⁵ The VCG is incredibly small compared to China's coastal forces, but it is improving and competing for SEA's most capable coast guard.

4. Vietnam People's Ground Forces

The ground force has evolved in a different direction compared to Vietnam's other military branches, suffering personnel cuts and scant updates in equipment. The collapse of the Soviet Union left Vietnam without a main defense partner. Losing a substantial amount of Soviet military aid, Vietnam adopted new defense practices, choosing to focus on strengthening services outside of ground forces. Issued in 1987 by the CPV Political Bureau, Resolution No. 2 demobilized 600,000 soldiers and today, the ground force totals 412,000. At the time of the resolution, the ground force included one million soldiers and ranked among the largest in the world, trailing only the Soviet Union, China, the United States, and India. Notably, Vietnam's ground force has encountered minor insurgencies since 1986 but nothing comparable to foes faced prior to 1986. Hampered by the loss of key defense suppliers and the government's shifting defense priorities, the ground force has not improved and has received less equipment to boost capabilities.²³⁶

Ground force procurements have been less than substantial, and the service continues to operate older equipment with fewer people.²³⁷ Procuring modern equipment for ground forces has been a low priority for Vietnamese leaders. Main Battle Tank (MBT) numbers have stayed relatively the same, with 1,270 MBTs today compared to

²³⁴ Lyle Goldstein, "Five Dragons Stirring Up the Sea: Challenge and Opportunity in China's Improving Maritime Enforcement Capabilities," *China Maritime Study* 5 (2010): 5.

²³⁵ Thayer, "Vietnam's Maritime Forces."

²³⁶ Paragraph details pulled directly from Thayer, *Vietnam People's Army*, 14–26.

²³⁷ "IHS Jane's - Vietnam > Army," September 1, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomerPages/Janes/DisplayPage.aspx?DocType=Reference&ItemId=+++1305173&Pubabbrev=SEA>.

1,300 in 1994.²³⁸ With the newest T-62 beginning service for the Soviets in the sixties, Vietnam's MBTs are extremely outdated. The 30-tank decrease in MBTs is attributed to the VPA eliminating the M-48A3 from their order of battle and essentially retiring the 1940-era T-34. They have increased Light Battle Tanks (LBT) by 20, though these were initially produced in the 1960s.²³⁹ The most notable developments have been in Armored Personnel Carriers (APC) and organization.²⁴⁰ Defense leaders have added 200 U.S.-made M113 APCs, the 1960-era equipment used heavily by the United States during the Vietnam War.²⁴¹ With fewer ground forces in 2014, the VPA has sought to increase combat support and combat service support roles by establishing logistic, medical, training, electronic warfare, and signals responsibilities.²⁴² The CPV has recently struck a deal with Israeli defense firms, placing a production facility inside Vietnam to manufacture the Galil 31/32 ACE assault rifle to eventually replace the army's AK-47 stockpile.²⁴³

a. Ground Force Analysis

There have been few important acquisitions for Vietnam's ground force, and the force is less mission-capable due to less funding—a region-wide trend for ground forces. Since the 1980s, the ground force has received significantly less attention by the CPV. After land wars ended with China and the Khmer Rouge, ground force numbers decreased, pushing Vietnam out of the top five for largest standing armies. Since then, leaders have allocated defense funding toward boosting air and sea capabilities, which required significant modernization. Unlike the other services, Vietnam's ground force

²³⁸ International Institute for Strategic Studies, *The Military Balance 1994* (London: IISS, 1994), 171–172; International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289.

²³⁹ International Institute for Strategic Studies, *The Military Balance 2014* (London: IISS, 2014), 287–289

²⁴⁰ Ibid.

²⁴¹ Ibid.

²⁴² Ibid.

²⁴³ Jon Grevatt, "IHS Jane's - Israel Weapon Industries to Begin Assault Rifle Production in Vietnam," February 4, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1603776&Pubabbrev=JDIN>.

capabilities have weakened considerably since the 1980s. Though Jane's assesses this ground force as resilient, it has not faced substantial conflict since 1989 and would likely be unable to thwart an invasion comparable to China's intrusion in 1979. The army has little rapid response capability, and its mission has evolved to reflect an internal security force. At 410,000 members, Vietnam still maintains the largest standing army in SEA, while the closest ASEAN countries are Singapore at 350,000 and Indonesia at 300,000, respectively. For comparison, China's army is at least triple the size of Vietnam's. Including top ASEAN militaries and China, defense spending is increasingly aimed at improving air and maritime forces to secure offshore interests and develop maritime economies.²⁴⁴

B. CHANGING RELATIONSHIP WITH INTERNATIONAL DEFENSE COMMUNITY

After the Doi Moi reforms and the subsequent collapse of the Soviet Union, Vietnam chose to eliminate isolationist tendencies and pursue an omnidirectional foreign military defense strategy.²⁴⁵ The most notable increases in defense relations occurred in the 1990s and especially after 2007. Russia still dominates Vietnam's procurement network, but Vietnam is beginning to acquire military equipment from places other than the former Soviet Union.²⁴⁶ Vietnam has made progress in diversifying defense suppliers and increasing defense ties with countries in nearly every continent. Outside of SEA, Vietnam has specifically increased ties with European countries to boost its defense industry, but this strategy extends to other countries too, including Canada, South Korea,

²⁴⁴ Paragraph details pulled directly from "IHS Jane's - Vietnam > Army," September 1, 2014, https://janes.ihs.com.libproxy.nps.edu/Cust_omPages/Janes/DisplayPage.aspx?DocType=Reference&ItemID=+++1305173&Pubabbrev=SEA.

²⁴⁵ Vu, "Vietnam's Security Challenges."

²⁴⁶ IHS Jane's, "Vietnam > Procurement."

Japan, India, and the United States.²⁴⁷ For David Brewster, Vietnam's pursuit of warmer relations with India and the United States began in 2001 as the new CPV general secretary re-emphasized a need to diversify international relations.²⁴⁸ In Vietnam, both countries find a partner eager to increase its defense capacity. The Indians and Americans are providing equipment and training for Vietnamese forces but also increasing their presence in Vietnam and off its coast.

1. Procurement Sources

Russia continues to be Vietnam's primary arms supplier, but Vietnam has expanded its procurement network.²⁴⁹ The Soviet Union's collapse caused a brief departure of warm defense relations between the countries, but beginning in 1995, Vietnam resumed notable defense deals with Russia, which have included frigates, corvettes, submarines, and fighter aircraft.²⁵⁰ Poland began selling aircraft to Vietnam in 2003, including fighters but also MPA.²⁵¹ Spain, Canada, and Romania have provided Vietnam MPA as well as training aircraft.²⁵² The Netherlands has taken an active role in guiding Vietnam's shipbuilding practices, helping provide new patrol ships for the

²⁴⁷ Jon Grevatt, "IHS Jane's - Canada, Vietnam to Expand Industrial Ties," June 6, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1713860&Pubabbrev=JDW>; "IHS Jane's - Vietnam Extends Defence Industry Ties with India and South Korea," October 14, 2010, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1149669&Pubabbrev=JDIN>; "IHS Jane's - United States, Vietnam Expand Defence Collaboration," July 29, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1581386&Pubabbrev=JDIN>; Takahashi, "IHS Jane's - Japan to Provide Vietnam with Six Patrol Vessels."

²⁴⁸ Brewster, *India as an Asia Pacific Power*, 94.

²⁴⁹ IHS Jane's, "Vietnam > Procurement."

²⁵⁰ Ibid.

²⁵¹ International Institute for Strategic Studies, *The Military Balance 2005* (London: IISS, 2005), 331.

²⁵² Jon Grevatt, "IHS Jane's - Vietnam Signs Defence Accords with Spain and Czech Republic," September 22, 2010, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1149518&Pubabbrev=JDIN>; "IHS Jane's - Canada, Vietnam to Expand Industrial Ties," June 6, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1713860&Pubabbrev=JDW>; "IHS Jane's - Vietnam and Romania Negotiate Trade Agreement," October 19, 2010, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1149695&Pubabbrev=JDIN>.

VCG.²⁵³ Sweden—along with Russia—has provided guidance and design for Vietnam’s new UAVs.²⁵⁴ Ukraine provided training aircraft in 2004 and has been a steady supplier for various equipment and parts since before 1986.²⁵⁵ The Czech Republic has sold spare parts and other defense equipment for Vietnam’s Soviet-era weaponry, and Israel recently established a production facility in Vietnam.²⁵⁶ Furthermore, Japan and South Korea have shown increased interest in boosting the VCG’s capabilities, and India has steadily increased its involvement in Vietnam’s defense sales since 2000.²⁵⁷ While Russia still provides the bulk of its defense equipment, Vietnam has received notable MPA and naval craft from other sources.²⁵⁸ Outside of lessening its dependency on Russia, Vietnam seeks diversified procurement deals, because they often lead to defense industry collaboration.²⁵⁹ This collaboration enables different countries to add their own particular strength to Vietnam’s burgeoning defense industry.

2. Defense Ties

Defense ties and general defense industry collaboration have expanded as Vietnam has sought memorandums of understanding (MOU) and strategic partnerships to progress beyond previous isolationist tendencies. Since 2007, Vietnam has established or advanced defense agreements with over 25 countries including Mozambique, Australia,

²⁵³ Jon Grevatt, “IHS Jane’s - Vietnam and Netherlands Extend Shipbuilding Partnership,” March 31, 2011, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1150593&Pubabbrev=JDIN>.

²⁵⁴ Grevatt, “IHS Jane’s - Vietnam’s Unmanned Ambitions.”

²⁵⁵ Jon Grevatt, “IHS Jane’s - Vietnam, Ukraine Agree Jet Engine Repair Contract,” July 25, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1581230&Pubabbrev=JDIN>.

²⁵⁶ Jon Grevatt, “IHS Jane’s - Vietnam, Czech Republic Sign Deal to Support Defence Trade,” August 19, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1719756&Pubabbrev=JDIN> and “IHS Jane’s - Israel Weapon Industries to Begin Assault Rifle Production in Vietnam.”

²⁵⁷ Thayer, “Vietnam’s Maritime Forces;” Takahashi, “IHS Jane’s - Japan to Provide Vietnam with Six Patrol Vessels;” Rahul Bedi, “IHS Jane’s - Indian Navy to Train Vietnamese Submarine Crews,” December 2, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1594584&Pubabbrev=JNI>.

²⁵⁸ IHS Jane’s, “Vietnam > Procurement.”

²⁵⁹ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

and countries across Europe, Asia, and the Americas.²⁶⁰ The agreements, most of which are defense-related MOUs, generally focus on increasing defense collaboration, arms sales, training, and military to military exchanges.²⁶¹ Relations with India and the United States deserve attention, because they have rapidly improved since Doi Moi and especially since 2007.²⁶² Vietnam has become a strategic priority for the countries, especially as China has grown more assertive in the SCS. Notable events between Vietnam and these two countries occurred in 2007, 2013, and 2014; their importance and the overall significance of closer ties are discussed below. Overall, Vietnam's increase in relations falls in line with state policy and is important for supporting the development of Vietnam's military, defense industry, and strategy toward China.

a. Developments with India

India's 1991 "Look East" policy, initially focusing on increasing political and economic ties, has evolved to include defense issues, and the 2007 Joint Declaration on Strategic Partnership marked a turning point in defense relations with Vietnam.²⁶³ Progressing ties beyond cooperation agreements signed in 1994, 2000, and 2003, the countries elevated the relationship to a strategic partnership in 2007.²⁶⁴ Indian leaders acted almost immediately upon the defense component of the November 2007 agreement by sending 5,000 spare parts to Vietnam for the refurbishment of naval ships and

²⁶⁰ Jon Grevatt, "IHS Jane's - Vietnam, Mozambique Expand Defence Collaboration," March 24, 2011, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1150565&Pubabbrev=JDIN>.

²⁶¹ Ibid.

²⁶² Grevatt, "IHS Jane's - India and Vietnam Forge Closer Defence-Industry Ties;" Lucius, "Improvements in Military Relations."

²⁶³ Carlyle Thayer, "How India-Vietnam Strategic Ties Are Mutually Beneficial," *The Diplomat*, December 3, 2013, <http://thediplomat.com/2013/12/how-india-vietnam-strategic-ties-are-mutually-beneficial/>.

²⁶⁴ Jon Grevatt, "IHS Jane's - India and Vietnam Forge Closer Defence-Industry Ties," December 3, 2007, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1142377&Pubabbrev=JDIN>; "IHS Jane's - Vietnam Extends Defence Industry Ties with India and South Korea," October 14, 2010, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1149669&Pubabbrev=JDIN>; "IHS Jane's - Vietnam Extends Bilateral Ties with Germany and India," October 14, 2011, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1188459&Pubabbrev=JDW>.

agreeing to cooperate “in national defense, navy, air defense and training.”²⁶⁵ Vietnam had only previously initiated a similar level of cooperation with Russia in 2001 and Japan in 2006; however, unlike Japan, India has considerable experience with Soviet era weaponry and Russian-produced equipment.²⁶⁶ The 2007 agreement was important, because it introduced expanded defense cooperation and provided a framework for the countries to follow and strengthen.

Events in 2013 and 2014 improved upon the 2007 strategic partnership, because India and Vietnam agreed to expand training opportunities and arms sales.²⁶⁷ During 2013, India offered Vietnam a substantial loan for the country to purchase Indian-made military equipment and announced the transfer of four patrol boats to be built in Vietnam.²⁶⁸ Along with the patrol boat sales, India also announced that it would provide submarine training for 500 Vietnamese sailors in preparation for Vietnam’s new underwater capabilities.²⁶⁹ These developments are noteworthy considering prior to 2013, the majority of defense deals “focused on Hanoi’s purchase of spare parts and components for fitting onto Russian-made materiel in service with the VPA.”²⁷⁰ From September to October 2014, the countries agreed to deepen their strategic partnership to include expanded joint exercises, training programs, defense equipment cooperation, and the likely sale of the BrahMos supersonic cruise missile.²⁷¹ The expanded training programs are expected to include Vietnam’s Sukhoi pilots, and the potential acquisition

²⁶⁵ Thayer, “How India-Vietnam Strategic Ties Are Mutually Beneficial.”

²⁶⁶ Carlyle Thayer, “How Vietnam Woos China and India Simultaneously,” *The Diplomat*, October 28, 2014, <http://thediplomat.com/2014/10/how-vietnam-woos-china-and-india-simultaneously/>; Carlyle Thayer, “Vietnam-India Defense Relations and China,” *Thayer Consultancy* (2011): 1.

²⁶⁷ Bedi, “IHS Jane’s - Indian Navy to Train Vietnamese Submarine Crews.”

²⁶⁸ Jon Grevatt, “IHS Jane’s - India Extends \$100m Loan to Vietnam to Buy Indian-Made Equipment,” November 21, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1593736&Pubabbrev=JDIN>; Bedi, “IHS Jane’s - Indian Navy to Train Vietnamese Submarine Crews.”

²⁶⁹ Bedi, “IHS Jane’s - Indian Navy to Train Vietnamese Submarine Crews.”

²⁷⁰ Grevatt, “IHS Jane’s - India Extends \$100m Loan to Vietnam to Buy Indian-Made Equipment.”

²⁷¹ Satish Chandra, “Consolidate India-Vietnam Ties,” *The New Indian Express*, November 6, 2014, Army <http://Army.newindianexpress.com/columns/Consolidate-India-Vietnam-Ties/2014/11/06/article2509340e>.

of the BrahMos cruise missile strengthens Vietnam's deterrence strategy.²⁷² Ankit Panda adds, "The supersonic missiles would allow Vietnam to threaten any naval assets that China may choose to use in the future against Vietnamese interests."²⁷³ Publicly announcing his commitment to the modernization of Vietnam's military, Indian Prime Minister Narendra Modi recently referred to defense relations with Vietnam as among his country's most important.²⁷⁴ The 2013 and 2014 developments revealed strengthened ties between two countries moving toward greater defense cooperation.

Defense ties with India are important for Vietnam, because they lessen its dependency on Russian arms.²⁷⁵ Regarding a November 2013 visit by the CPV's secretary general to India, Thayer writes, "Vietnam seeks to leverage India's expertise and experience with Soviet/Russian military technology to its advantage and mitigate the risk of dependency on a sole supplier."²⁷⁶ Another author indicates that "India could potentially be the most ideal non-Russian source of military technologies for Vietnam's arms diversification attempts."²⁷⁷ While India could potentially be Vietnam's most ideal partner, it has traditionally been unreliable, "proving itself uncompetitive, bureaucratic, politically hesitant in supplying weapons to Vietnam."²⁷⁸ The 2013 and 2014 agreements were important for altering this perception. Both countries operate similar weaponry and are eager to expand defense ties. For Vietnam, developments since 2007 are important, because they reveal India as an ideal alternative for defense cooperation outside of the former Soviet Union.

²⁷² Rajat Pandit, "After Submarine Training, India Likely to Train Vietnamese Pilots to Fly Sukhois," *The Times of India*, October 28, 2014, <http://timesofindia.indiatimes.com/india/After-submarine-training-India-likely-to-train-Vietnamese-pilots-to-fly-Sukhois/articleshow/44954895.cms>; Ankit Panda, "India-Vietnam Supersonic Missile Talks in 'Advanced Stage,'" *The Diplomat*, September 15, 2014, <http://thediplomat.com/2014/09/india-vietnam-hypersonic-missile-talks-in-advanced-stage/>.

²⁷³ Panda, "India-Vietnam Supersonic Missile Talks in 'Advanced Stage.'"

²⁷⁴ Suhasini Haidar, "India to Modernise Vietnam's Defence Forces," *The Hindu*, October 29, 2014, <http://Army.thehindu.com/news/national/indiavietnam-bilateral-ties-india-to-modernise-vietnams-defence-forces/article6542138.ece>.

²⁷⁵ Thayer, "How India-Vietnam Strategic Ties Are Mutually Beneficial."

²⁷⁶ Ibid.

²⁷⁷ Koh, "ASEAN Perspectives," 200.

²⁷⁸ Brewster, *India as an Asia Pacific Power*, 95.

Vietnam's relations with India are also important, because they have led to an increased Indian presence at Vietnam's ports and in the SCS, boosting Vietnam's economic and defense efforts.²⁷⁹ Economically, India has a keen interest in building Vietnam's defense capacity, which in turn benefits Vietnam's defense industry. Additionally, both countries are collaborating to exploit potential energy resources in the SCS.²⁸⁰ Previously offering seven oil block contracts to India in 2013, Vietnam offered an additional two blocks to India during the 2014 meetings.²⁸¹ Defensively, the Indian Navy's (IN) increased presence reveals to China that the countries share similar strategic interests and that an emerging power—whose “navy is more advanced than China's in some respect”—has unique access to Vietnam.²⁸² After 2011, the CPV granted the IN greater access to its ports in an effort to “draw... closer to China's Hainan Island, where a major PLAN base in Sanya is located.”²⁸³ The Indian press reported the developments—specifically access to the new Nha Trang port—as “a first for any foreign navy,” providing the IN a greater SCS reach and positioning it much closer to China's South Sea Fleet.²⁸⁴ China would prefer less presence by the Indians. It expressed its discontent in 2011 over a joint energy venture in SCS waters and later over the INS *Airavat* steaming toward Vietnam's northern-most port at Haiphong.²⁸⁵ Vietnam is still building its capacity to project power into the SCS, but its relationship with India leads to a SCS presence, which complements its security efforts.²⁸⁶

²⁷⁹ Koh, “ASEAN Perspectives,” 197.

²⁸⁰ Indrani Bagchi, “India Ignores China's Frown, Offers Defence Boost to Vietnam,” *The Times of India*, October 29, 2014, <http://timesofindia.indiatimes.com/india/India-ignores-Chinas-frown-offers-defence-boost-to-Vietnam/articleshow/44965272.cms>.

²⁸¹ Panda, “India-Vietnam Supersonic Missile Talks in ‘Advanced Stage.’”

²⁸² Carlyle Thayer, “Vietnam-India Defense Relations and China,” *Thayer Consultancy* (2011): 2.

²⁸³ Koh, “ASEAN Perspectives,” 197.

²⁸⁴ *Ibid.*

²⁸⁵ *Ibid.*, 198–199.

²⁸⁶ *Ibid.*, 197.

b. *Developments with the United States*

Vietnam-US relations have improved considerably due to the success of the 2007 Pacific Partnership exercise, which Robert Lucius characterizes “as a watershed in the development of the bilateral military relationship.”²⁸⁷ During the USS *Peleliu*’s 10-day visit at Danang Harbor, Vietnamese medical professionals worked with nongovernmental organizations and military personnel from Asia-Pacific nations and the United States to treat over 3,500 patients.²⁸⁸ Specific coordinating events included: biomedical repair teams restoring equipment at 12 Vietnamese health clinics; participating countries’ health professionals engaging in exchanges, discussions, and training; and U.S. Navy construction battalions building or repairing schools, an orphanage, and medical clinics.²⁸⁹ For the first time, a U.S. warship partnered with a civilian ministry in Vietnam, and for the first time in 40 years, a foreign navy’s landing craft operated in Vietnam’s territorial waters.²⁹⁰ Lastly and also for the first time, CPV leaders allowed observers to join the mission during follow-on activities at other countries.²⁹¹ This exercise was important, because it “set a precedent for cooperation...without accelerating the bilateral defense relationship at a pace beyond that which the People’s Army was capable of or willing to accept.”²⁹² Involving previously unseen coordination, this exercise built trust between the countries, propelled both into more collaborative humanitarian projects, and revealed America’s eagerness to participate in Vietnam’s capacity-building.²⁹³

From July 2013 to October 2014, defense relations between Vietnam and the United States transformed to include a comprehensive partnership and the partial lifting of a 30-year-old arms embargo; both measures aim to bolster maritime capabilities.²⁹⁴ In

²⁸⁷ Robert Lucius, “Pacific Partnership Visits Vietnam: Setting the Standard for Sea-Based Humanitarian Cooperation,” *Naval War College Review* 60 (2007): 125.

²⁸⁸ Ibid.

²⁸⁹ Ibid., 125–126.

²⁹⁰ Ibid., 131.

²⁹¹ Ibid., 132.

²⁹² Ibid., 131.

²⁹³ Lucius, “Improvements in Military Relations.”

²⁹⁴ Carlyle Thayer, “The U.S. Lifts Arms Embargo: The Ball Is in Vietnam’s Court,” *The Diplomat*, October 6, 2014, <http://thediplomat.com/2014/10/the-us-lifts-arms-embargo-the-ball-is-in-vietnams-court/>.

July 2013, the countries strengthened a previously established 2011 MOU by creating the U.S.-Vietnam Comprehensive Partnership, which includes nine cooperative areas including defense and security.²⁹⁵ Under the partnership, the countries have emphasized maritime security cooperation, aiming to increase coast guard collaboration and transform the VCG “into a more effective player in the maritime governance of SEA.”²⁹⁶ In December 2013, Washington provided a \$32.5 million USD aid package to SEA nations for the boosting of maritime security—over half went to Vietnam.²⁹⁷ The U.S.-Vietnam Comprehensive Partnership was important, because it provided a framework for strengthening defense ties and especially Vietnam’s maritime capabilities. In October 2014, the United States partially lifted its arms embargo on Vietnam, and the U.S. State Department declared that it only “applied to weapons for maritime purposes.”²⁹⁸ Thayer writes, “The changed U.S. policy is aimed at bolstering Vietnam’s Coast Guard by providing patrol boats, coastal radar and maritime surveillance aircraft.”²⁹⁹ The partial lifting of the arms embargo was extremely important for boosting Vietnam’s maritime capabilities and for building trust between the countries.³⁰⁰ The developments in 2013 and 2014 have been the most notable events since 2007 and indicate a clear priority by U.S. officials “to enhance the capabilities of the VCG to defend itself.”³⁰¹

Defense ties with the United States are important for Vietnam, because they can strengthen Vietnam’s military modernization efforts, particularly in the maritime environment.³⁰² While the relationship lags behind Vietnam’s relations with India, it also

²⁹⁵ Murray Hiebert, Phuong Nguyen, and Gregory Poling, “A New Era in U.S.-Vietnam Relations: Deepening Ties Two Decades After Normalization,” *Center for Strategic and International Studies* (2014): 7–8.

²⁹⁶ *Ibid.*, 8.

²⁹⁷ Lesley Wroughton, “U.S. Offers Help to South East Asia, Most to Vietnam, to Patrol Seas,” *Reuters*, December 16, 2013, <http://Army.reuters.com/article/2013/12/16/us-vietnam-usa-kerry-maritime-idUSBRE9BF07M20131216>.

²⁹⁸ “US Partially Lifts Vietnam Arms Ban,” *BBC News*, accessed November 18, 2014, <http://Army.bbc.com/news/world-us-canada-29469719>.

²⁹⁹ Thayer, “The U.S. Lifts Arms Embargo.”

³⁰⁰ Hiebert, Nguyen, and Poling, “A New Era in U.S.-Vietnam Relations,” 16.

³⁰¹ Thayer, “The U.S. Lifts Arms Embargo.”

³⁰² *Ibid.*

has the potential to diminish Vietnam's reliance on Russian defense imports with the partial lifting of the arms embargo. Additionally, the United States could prove a more reliable, stronger defense partner than India. The partial lifting of the embargo means that the United States "has moved beyond diplomatic rhetoric and support for international law to a strategy that now embraces arming littoral states to defend themselves in their maritime domain."³⁰³ It behooves Vietnam to take advantage of this policy shift, because U.S. equipment such as armed patrol craft and the P-3 Orion MPA could dramatically improve Vietnam's ability to monitor its maritime environment. Along with equipment sales, training opportunities with the U.S. Coast Guard can improve the VCG's ability "to deter—if not respond to—Chinese assertiveness without directly dragging the United States into a naval confrontation with China."³⁰⁴

Maintaining defense ties with the United States is also important for Vietnam if Chinese aggression persists or increases in the SCS.³⁰⁵ In a similar way that India's presence in the SCS perturbs China, U.S. warships in contested waters prevents China from exerting max influence over the SCS. The USS *Vandergraft's* port call at Saigon in November 2003 marked the first visit by a U.S. warship in over 30 years.³⁰⁶ Subsequent U.S. warship visits in 2004 and 2005 helped solidify relations between U.S. military attaches located in Vietnam and their colleagues in Vietnam's MOD External Relations Department.³⁰⁷ In 2006, the CPV lifted its one-ship-per-year policy with the United States, allowing the USS *Patriot* and USS *Salvor* to visit simultaneously in July—a first for Vietnam.³⁰⁸ While ship visits and general defense relations have increased, some U.S. officials perceive "red lines that Vietnam does not want to cross for fear of upsetting Beijing or further stoking the latter's concerns about U.S. attempts to contain it."³⁰⁹ If Chinese aggression in the SCS continues, certain authors indicate that Vietnam will cross

³⁰³ Ibid.

³⁰⁴ Ibid.

³⁰⁵ Thayer, "Vietnam Mulling New Strategies to Deter China."

³⁰⁶ Lucius, "Improvements in Military Relations."

³⁰⁷ Ibid.

³⁰⁸ Lucius, "Improvements in Military Relations."

³⁰⁹ Hiebert, Nguyen, and Poling, "A New Era in U.S.-Vietnam Relations," 17.

these red lines, because a stronger U.S.-Vietnam partnership will preserve strategic interests in Vietnam and ease public concern over whether the CPV is protecting its sovereignty.³¹⁰ China may never cause Vietnam to cross this red line, but if it does, the United States and Vietnam will have already experienced successful collaborative efforts, developing trust and a foundation for increased ties.

C. CONCLUSION

Boasting increased defense capabilities and expanded foreign relations, Vietnam's military has changed significantly since the Doi Moi reforms and continues to evolve amid a dynamic regional maritime environment.³¹¹ Today, Vietnam's ground force is a shell of its former 1980s strength, but while it has diminished in importance for the military, the government has drastically improved the navy, coast guard, and to a lesser extent, the air force. Submarines, fighter jets, and indigenous shipbuilding have been among the most notable developments for Vietnam's military. Vietnam is no longer isolated and relying on a sole supplier for equipment and defense collaboration. Defense ties with India and the United States resulted from the country's desire to seek stronger defense partners, and these ties have allowed Vietnam to lessen its dependency on Russia and maintain a friendly, foreign presence in its waters that contributes "to maritime security by balancing Chinese military power."³¹²

³¹⁰ *Ibid.*, 18.

³¹¹ Carlyle Thayer, "Vietnam: Military Modernization and the South China Sea," *Thayer Consultancy* (2011): 1–2.

³¹² Carlyle Thayer, "Vietnam's East Sea Strategy and China-Vietnam Relations" (paper presented at the 2nd International Conference on China's Maritime Strategy, Macau, September 19–20, 2014).

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III. THE CAUSES OF MILITARY MODERNIZATION IN VIETNAM

Enabled by economic growth, Vietnam's military modernization program is mainly a response to China's assertive behavior in the SCS but is also a response to Vietnam's socioeconomic development strategies. China has a history of acting assertively toward Vietnam, and aspects of the CPV's military modernization program are aimed at deterring or decreasing China's actions in the maritime environment.³¹³ Military modernization efforts are also intended to ease fears of China's encroachment and to challenge China's overwhelming power advantage in the SCS. However, another cause of modernization is Vietnam's economic growth, which has allowed the country to update its capabilities and partnerships. CPV leaders have prioritized industrialization and a modernizing defense industry in turn benefits the economy.³¹⁴ This chapter presents the primary motivating factors behind Vietnam's military modernization and closes with a balanced explanation, including aspects of both arguments.

A. CHINA'S INFLUENCE

Vietnam's military modernization program is likely due mainly to China's assertive SCS behavior, a desire to diminish fears of losing territory, and an attempt to mitigate the two states' asymmetric relationship. Since the early 1950s, the PRC has attempted to assert control over the SCS, and it has operated with little to no regard for the territorial claims of Vietnam and other nations (See Figure 1). China's actions have resulted in Vietnam losing maritime territory and shifting its military focus to the maritime domain. China's assertive behavior has continued in step with Vietnam's military modernization. Having suffered numerous invasions, Vietnam has a bitter history with its larger neighbor, and China's recent actions have exacerbated fears inside

³¹³ Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines."

³¹⁴ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96

Vietnam.³¹⁵ The country's military modernization program is aimed at easing these fears and thus limiting internal criticism of the CPV.³¹⁶ Moreover, Brantly Womack argues that Vietnam has experienced an asymmetric relationship with China for centuries; I contend that defense procurements and partnerships are also intended to change this uneven structure.³¹⁷ Figure 1 illustrates the territorial claims by the countries involved in the SCS dispute.

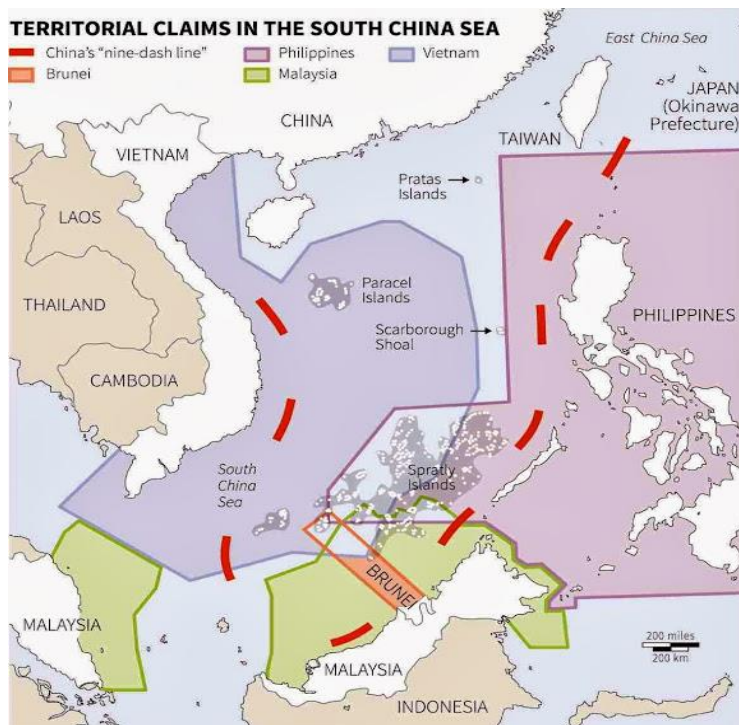


Figure 1. Territorial Claims in the South China Sea³¹⁸

³¹⁵ Alexander Vuving, “Did China Blink in the South China Sea?,” *The National Interest*, July 27, 2014, <http://nationalinterest.org/feature/did-china-blink-the-south-china-sea-10956>; “Vietnam Stops Anti-China Protests after Riots, China Evacuates Workers,” *Reuters*, May 18, 2014, <http://Army.reuters.com/article/2014/05/18/us-china-vietnam-idUSBREA4H00C20140518>.

³¹⁶ Ari Nakano, “Concerns Fester in Vietnam over China Policy, Industrial Pollution,” *AJW by The Asahi Shimbun*, October 16, 2014, http://ajw.asahi.com/article/forum/politics_and_economy/southeast_asia/AJ201410160042.

³¹⁷ Brantly Womack, *China and Vietnam: The Politics of Asymmetry* (New York: Cambridge University Press, 2006), 5–29.

³¹⁸ Đặng-vũ Chính, “China’s ‘Nine-Dash Line’ Is Dangerous,” *Chính’s News* (blog), February 19, 2014, <http://chinhdangvu.blogspot.com/2014/02/chinas-nine-dash-line-is-dangerous.html>, author reproduced image from source.

1. China's Assertive Behavior

Initially, the PRC pursued the Paracel Islands and sought to eradicate Vietnam's control there. In 1956, the Chinese successfully conquered the eastern portion of the Paracels—the country's first occupation at the archipelago.³¹⁹ Three years later, Vietnamese forces denied a Chinese advance toward the western Paracels or Crescent Group and captured over 80 Chinese soldiers disguised as fishermen.³²⁰ After significant force reductions by the South Vietnamese on the western Paracels and by the U.S. Navy in the SCS, Chinese naval vessels sailed toward the Crescent Group in early 1974.³²¹ The Chinese crushed the Vietnamese, captured the entire Paracel archipelago, and declared sovereignty over the island grouping.³²² At the time, South and North Vietnam had yet to unite as a single country, and the North viewed the loss as the South's problem.³²³ The North did not protest the Chinese occupation at the Paracels, but Vietnam still claimed the island grouping after unification.³²⁴ By 1976, Vietnam had lost control of one of its archipelagos, but it did not pursue a modernized military until after China's decision to target the Spratlys.

Several years after capturing the Paracel Islands, China shifted its attention southward to pursue a presence at the Spratly Islands. China's leadership ordered survey operations during the early 1980s, and in 1987, the PLAN began occupying Spratly Island reefs. Realizing the PRC's intentions, Vietnam responded by attempting to occupy more territory. The two countries continued this reef-hopping campaign with little conflict until March 1988. At this time, both governments ordered the opposing forces to evacuate Johnson Reef, and it took the PLAN less than one hour to sink several Vietnamese ships and kill over 60 Vietnamese sailors. Lacking the necessary capabilities

³¹⁹ "The Sovereignty of Viet Nam Over the Hoang Sa Archipelago," *Permanent Mission of the Socialist Republic of Viet Nam*, July 7, 2014, <http://Army.vietnam-un.org/en/vnun.php?id=275>.

³²⁰ Ibid.

³²¹ Ibid.

³²² Ibid.

³²³ Nga Pham, "Vietnam Marks South China Sea Battle," *BBC News*, January 14, 2014, <http://Army.bbc.com/news/world-asia-25709833>.

³²⁴ Ibid.

to confront and deter China, Vietnam's navy was no match for the PLAN in 1988. By 1989 and to Vietnam's dismay, China had established a physical presence on the Spratlys, and Vietnamese leadership realized that their military required modernization in certain areas.³²⁵

From 1989 to the present, China gradually intensified its assertive behavior in the SCS. Vietnam endorsed an ASEAN statement of concern in 1995 after the PRC "occupied and constructed buildings on Mischief Reef" from late 1994 to March 1995.³²⁶ This event marked China's most aggressive SCS behavior in almost seven years. Since 1999, the PRC has imposed fishing bans from May to August, subjecting Vietnamese fisherman to "harassment, ill treatment, seizure of fish catches, confiscation of GPS navigational equipment, tools and spares, and physical violence against Vietnamese fishing crews including fatalities."³²⁷ Chinese vessels have harassed local Vietnamese oil companies as well as foreign companies contracted by the CPV to explore SCS hydrocarbon deposits. Chinese forces cut the cables of a PetroVietnam survey ship in 2011; the Chinese ships contained "specialized cable-cutting devices."³²⁸ In May 2014, Chinese forces escorted a deep sea drilling rig to Vietnam's EEZ—130 nautical miles from Vietnam's coast.³²⁹ China withdrew the structure in July 2014 after deploying water cannon and ramming VCG ships attempting to disrupt rig operations. Showing few signs of altering its behavior in the SCS, China continues to ignore Vietnam's sovereignty claims and to interfere with Vietnamese operations in the SCS.

³²⁵ Paragraph details pulled directly from Jeff Benson, "South China Sea: A History of Armed Conflict," *USNI News*, June 20, 2012, <http://news.usni.org/2012/06/20/south-china-sea-history-armed-conflict>.

³²⁶ *Ibid.*, 8; Vietnam refers to the SCS as the East Sea

³²⁷ Thayer, "Vietnam's East Sea Strategy."

³²⁸ Bloomberg News, "Vietnam Says Chinese Boat Harassed Survey Ship; China Disputes," *BusinessWeek: Undefined*, June 9, 2011, <http://Army.businessweek.com/news/2011-06-09/vietnam-says-chinese-boat-harassed-survey-ship-china-disputes.html>.

³²⁹ "China Sends Four Oil Rigs to South China Sea amid Regional Tensions," *Reuters*, June 20, 2014, <http://Army.reuters.com/article/2014/06/20/us-china-southchinasea-rigs-idUSKBN0EV0WG20140620>.

2. Responding to Fears and Challenging Asymmetry

China has historically harassed Vietnam, and Vietnam's military modernization could be an attempt to overcome or ease fear stemming from Chinese aggression. As a country, Vietnam has a long history of both resisting hostile Chinese forces and showing deference to its larger neighbor. Kaplan writes that because Vietnam cannot escape China's embrace, Vietnam's history is largely concentrated on one aspect—resisting China.³³⁰ Maps and artifacts at Vietnam's History Museum commemorate Vietnam's resistance against eleventh, fifteenth, and eighteenth century Chinese dynasties, and the Ngoc Son temple honors Vietnam's defeat over the thirteenth century Yuan.³³¹ China has invaded Vietnam seventeen times, and school textbooks relay stories of resistance heroes fighting China.³³² While Vietnam previously acted as a Chinese outpost, China's Han Dynasty conquered Vietnam in 111BC.³³³ Placing Vietnam under tributary state status, the Chinese occupied Vietnam for almost a millennium.³³⁴ Vietnam won independence in the tenth century over the Tang Dynasty, and subsequent Ly, Tran, and Le Dynasties repelled Chinese armies from the north; however, for twenty years, Vietnam lost control to China's Ming Dynasty in the fifteenth century.³³⁵ Even through the modern era, China's desire to meddle in Vietnam's affairs continued as China helped the French battle Vietnam in 1946 and invaded Vietnam again in 1979. Chinese leader Deng Xiaoping's 1979 invasion aimed at "bleeding Vietnam white."³³⁶ Deng's plan worked too, because it entangled Vietnam in a guerilla war that damaged its economy, forcing drastic reform.³³⁷ These events point to China's inability to leave Vietnam alone and accept its independence.³³⁸

³³⁰ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 51–63.

³³¹ Ibid.

³³² Ibid.

³³³ Ibid.

³³⁴ Ibid.

³³⁵ Ibid.

³³⁶ Templer, *Shadows and Wind*, 297.

³³⁷ Ibid.

³³⁸ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 51–63.

Vietnam has been interested in preventing the SCS from becoming China's inner sea, and China's recent actions have reminded Vietnamese of centuries-long Chinese aggression.³³⁹ Le Hong Hiep writes, "China's re-emergence as a proto-superpower in recent decades...has necessarily renewed and intensified Vietnam's China challenge."³⁴⁰ China's rise threatens Vietnam, and its leaders understand that China will require SCS energy resources, which Vietnam relies on too.³⁴¹ In 1999, Thayer wrote that "Vietnam has always been wary of excessive Chinese influence in Vietnam."³⁴² According to Henry Kamm, Vietnam distrusts China, and the suspicion and fear of its giant neighbor transcends and unites all Vietnamese classes.³⁴³ This unifying impact was evident, for example, in 2007 when street demonstrations involving over 200 students occurred in front of China's embassy as China announced its plans to incorporate the competing archipelagos under a new local authority.³⁴⁴ Similarly, violence against Chinese-owned factories in Vietnam occurred in May 2014 after China's decision to park a gigantic oil rig in contested waters.³⁴⁵ Fear of China can promote nationalist tendencies among Vietnamese citizens, which often creates an unstable internal security environment for the CPV. Adding capabilities and partnerships can ease these fears and stabilize the country by assuring citizens that the government is pursuing measures to deter China in the SCS and protect its sovereignty.³⁴⁶

Brantly Womack characterizes the Sino-Vietnam relationship as asymmetric. China holds the stronger position and is therefore less attentive to the relationship than Vietnam. Vietnam is more attentive, because it feels vulnerable to a much stronger China. There are two relationships here: China and Vietnam, Vietnam and China. Both countries

³³⁹ Henry Kamm, *Dragon Ascending: Vietnam and the Vietnamese* (New York: Arcade Publishing, 1996) 132–133.

³⁴⁰ Hiep, "Vietnam's Hedging Strategy," 334.

³⁴¹ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 61–63.

³⁴² Thayer and Amer, *Vietnamese Foreign Policy in Transition*, 131.

³⁴³ Kamm, *Dragon Ascending*, 132–133.

³⁴⁴ "Vietnamese Hold Rare Demonstration to Protest China's Move to Control Disputed Islands," *The China Post*, December 9, 2007, <http://www.chinapost.com.tw/detail.asp?ID=&GRP=>.

³⁴⁵ "Vietnam Stops Anti-China Protests after Riots, China Evacuates Workers."

³⁴⁶ Kaplan, *Asia's Cauldron—The South China Sea and the End of a Stable Pacific*, 51–63.

treat the relationship differently and interpret the other's behavior differently. During peace or war, the Chinese have never viewed the Vietnamese as their equal. For Vietnam, China is the mysterious and giant neighbor to the north who controls the relationship. Vietnam is caught in a dilemma, because, while it needs peace with China, it risks losing its autonomy and national substance if pushed around by China. Vietnam fears uncontrolled contact by the Chinese and any Chinese attempt to undermine its sovereignty. Vietnam recognizes China as a global power, but also thinks China is manipulative toward Vietnam. The asymmetric situation has strengthened with China's economic and military rise, and though normalization finally occurred in 1991, the event did not symbolize perfect harmony. During the 1990s and continuing today, the conflicting issues have surrounded the maritime environment. This asymmetric relationship has historically shown few signs of altering in a drastic way.³⁴⁷

When Vietnam resists China, it does so because Vietnam desires to “maintain its sovereignty, territorial integrity and political autonomy.”³⁴⁸ China has revealed a lack of respect for these desires. A contemporary example of this asymmetric relationship and Vietnam's resistance occurred in May 2014 when China parked a giant oil rig inside Vietnam's EEZ. Thayer called the act “unexpected, provocative, and illegal.”³⁴⁹ In response to the rig placement, Vietnam dispatched VCG and FSF vessels to confront Chinese forces surrounding the rig.³⁵⁰ As Vietnam's maritime forces maintained a presence near the rig even after being rammed by Chinese forces and losing a fishing boat, CPV leadership sought negotiations with China, and Beijing withdrew the rig after a month and a half near Vietnam's coast.³⁵¹ At the beginning of June 2014, China had brought 125 total maritime forces to the contested area.³⁵² For perspective, this event occurred before the CPV decided to arm FSF vessels, and if Vietnam had dispatched its entire VCG, it would have totaled less than 40 vessels. Regarding its sovereignty and

³⁴⁷ Paragraph details pulled directly from Womack, *China and Vietnam*, 5–29.

³⁴⁸ Hiep, “Vietnam's Hedging Strategy,” 334.

³⁴⁹ Thayer, “China's Oil Rig Gambit.”

³⁵⁰ Thayer, “Vietnam's Maritime Forces.”

³⁵¹ Vuving, “Did China Blink in the South China Sea?”

³⁵² Ibid.

maritime territory, Vietnam has a weaker coastal force than China, but it is not afraid to confront its larger neighbor even if the current relationship is asymmetric.

Vietnam is pursuing military modernization to challenge the asymmetric relationship. Vietnam understands its position but also understands that with a few key military items, it can possibly force China to be more attentive to the relationship and less harassing. U.S. Naval War College Professor Lyle Goldstein claims that China closely monitors Vietnam's military modernization, respects its air force, and worries about Vietnam's new submarine capability.³⁵³ In October 2013, Thayer added, "By the end of this year the naval balance of power in the South China Sea will begin to alter when Vietnam takes delivery of its first Kilo-class fast attack submarines."³⁵⁴ It is likely that Vietnam has purchased better equipment and warmed closer to India and the United States to feel less vulnerable. By acquiring specific weaponry and developing relations with countries who share similar strategic goals in the SCS, Vietnam desires China to be more attentive to the relationship. History has revealed the relationship as asymmetric, but Vietnam's pursuit and effective use of defense partnerships and better equipment are aimed at altering China's perception and SCS tactics.³⁵⁵

3. Hanoi's Response

In response to China's increasingly assertive behavior, Vietnam has updated its capabilities and embraced unconventional warfare strategies again. In 1988, the country had no coast guard capability and operated older aircraft and naval vessels. After reaching a more comfortable economic level, Vietnam's desire to pursue military modernization began. The mid-1990s mark this initiation, and Thayer calls it a "response to sovereignty disputes with China in the East Sea in the 1990s."³⁵⁶ The mid-1990s focus occurred as China conquered Mischief Reef in the Spratly Islands. Acquisitions since then have been aimed at upgrading air and sea capabilities to protect Vietnam's

³⁵³ Thayer, "Vietnam's East Sea Strategy."

³⁵⁴ Thayer, "With Russia's Help, Vietnam Adopts A2/AD Strategy."

³⁵⁵ Thayer, "Vietnam's East Sea Strategy."

³⁵⁶ Ibid.

“territorial integrity and national sovereignty in the SCS.”³⁵⁷ Vietnam’s new Su-30 fighters provide the country with more capable aircraft to defend “sovereignty over its features in the SCS.”³⁵⁸ Additionally, defense leaders continue to acquire MPA to monitor territorial waters. Modernization of the coast guard “has accelerated as Vietnam has reacted to growing tension in the disputed waters of the South China Sea.”³⁵⁹ Demonstrating Vietnam’s ability to confront China and show resolve, the coast guard responded to China’s giant oil rig emplacement in May 2014.³⁶⁰ Ultimately, Vietnam is hoping that its submarines can check China’s actions in the SCS, and its navy will soon own the region’s newest, quietest submarines.³⁶¹ These acquisitions are meant to build a deterrent against China and to create a “circumstance where China would have to accept the status quo or escalate.”³⁶² If the Vietnamese can create a psychological deterrent, then the navy can practice an A2/AD strategy, which “is really the only good way to counter China’s attempts at enforcing its territorial claims in disputed waters.”³⁶³ Often employed by weaker forces, asymmetric strategies are a familiar warfare for Vietnam, masterfully employing guerilla warfare tactics against France, the United States, and China in previous generations.³⁶⁴ Vietnam is unable to match China ship for ship, and embracing guerrilla warfare in the maritime environment may result in its most effective strategy.³⁶⁵ It remains to be seen whether Vietnam can alter China’s actions, but the CPV’s quest for

³⁵⁷ Thayer, “Vietnam: Military Modernization and the South China Sea,” 1.

³⁵⁸ Thayer, “Vietnam: New Order for Su30MKs,” 1.

³⁵⁹ Jon Grevatt, “IHS Jane’s - Vietnam Reorganises Littoral Forces into New Coast Guard,” August 29, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1584560&Pubabbrev=JDW>.

³⁶⁰ Carlyle Thayer, “Vietnam, China and the Oil Rig Crisis: Who Blinked?,” *The Diplomat*, August 4, 2014, <http://thediplomat.com/2014/08/vietnam-china-and-the-oil-rig-crisis-who-blinked/>.

³⁶¹ Torode, “Vietnam Building Deterrent against China in Disputed Seas with Submarines.”

³⁶² Thayer, “Vietnam Mulling New Strategies to Deter China.”

³⁶³ Panda, “Vietnam’s China Challenge.”

³⁶⁴ Torode, “Vietnam Building Deterrent against China in Disputed Seas with Submarines.”

³⁶⁵ Gary Li, “Vietnam’s Asymmetrical Strategy: Location Offers Advantages Over China,” *Defense News*, February 5, 2012, <http://Army.defensenews.com/article/20120205/DEFBEAT05/302050007/Vietnam-8217-s-Asymmetrical-Strategy-Location-Offers-Advantages-Over-China>.

newer air and sea capabilities—especially submarines—appears to be an attempt to end China’s assertive behavior.

To counter the Chinese, ease domestic fears, and challenge the asymmetric relationship, Vietnamese leaders have completely embraced defense diplomacy too. Developed two months after the Johnson Reef event in 1988, the CPV’s Resolution No. 13 “shifted [Vietnam’s] foreign policy from one of confrontation to one of accommodation with former foes.”³⁶⁶ Essentially, Vietnam’s defense ministry pursued a similar accommodating and omnidirectional strategy with the international community. Hiep notes, “Facing a far more powerful China, Vietnam has been employing a multi-tiered, omni-directional hedging strategy to handle its relations with its northern neighbor.”³⁶⁷ The CPV understands the importance of its strategic position, but the country lacks the political and military clout to influence or pressure China. Thayer adds, “Vietnam engages in hedging by encouraging the major powers...to contribute to maritime security by balancing Chinese military power.”³⁶⁸

An expanded defense relationship in 2000 and a strategic partnership in 2007 have led to increased ties between Vietnam and India, both states sharing territorial disputes with China. India has taken an active role in providing spare parts and submarine training to Vietnam and has recently agreed to training Vietnamese pilots, selling patrol ships, and possibly providing long-coveted short range cruise missiles to Vietnam.³⁶⁹ India is wary of the PLAN’s Indian Ocean presence, and considering the IN’s power projection limitations, Vietnam could provide India a “naval poke to China as and when needed.”³⁷⁰

In October 2014, the United States partially lifted a ban on lethal item sales to Vietnam, and the *New York Times* credited the move to both states facing “a common

³⁶⁶ Ibid.

³⁶⁷ Hiep, “Vietnam’s Hedging Strategy,” 360.

³⁶⁸ Thayer, “Vietnam’s East Sea Strategy.”

³⁶⁹ Bagchi, “India Ignores China’s Frown, Offers Defence Boost to Vietnam.”

³⁷⁰ Pramit Pal Chaudhuri, “Vietnam, India Scale the Great Wall of China,” *Hindustan Times*, <http://Army.Hindustantimes.com/>, accessed October 30, 2014, <http://Army.hindustantimes.com/commant/analysis/vietnam-india-scale-the-great-wall-of-china/article1-1279966.aspx>.

challenge in China.”³⁷¹ Since normalization in 1995, the U.S.-Vietnam relationship has evolved in a positive direction, and some Vietnamese strategists argue that “only the U.S. can alter China’s SCS calculus so as to deter it from using military force to change the status-quo.”³⁷² A strong U.S. presence in the SCS shows few signs of diminishing, and Vietnam has welcomed U.S. port visits and training opportunities with the Americans since 2003.

In 2014, before the oil rig crisis, Vietnam suggested that Japan and the United States join it in a trilateral security dialogue, and Vietnam has included Japan in talks with the Philippines to increase maritime patrols and training.³⁷³ Thayer writes, “Vietnam’s strategy puts the onus on China to decide whether or not to shoulder the risk of attacking mixed formations of Vietnamese naval vessels and aircraft operating in conjunction with American allies, the Philippines and Japan, or U.S. military personnel.”³⁷⁴ Vietnam is using defense diplomacy to hedge against China, and its relations the United States, India, Japan, and the Philippines are central aspects of this strategy.³⁷⁵

B. ECONOMIC INFLUENCE

While China has motivated the acquisition of specific military capabilities and partnerships, Vietnam’s economic growth has enabled the overall military modernization and has also promoted a stronger defense industry. The 1986 Doi Moi reforms initiated changes in economic policy, which ultimately led to rapid economic growth during the 2000s.³⁷⁶ As a result of these reforms and subsequent growth, the CPV increased

³⁷¹ The Editorial Board, “A Deepening Partnership With Vietnam,” *The New York Times*, October 24, 2014, <http://Army.nytimes.com/2014/10/25/opinion/a-deepening-partnership-with-vietnam.html>.

³⁷² Truong-Minh Vu and Ngo Di Lan, “The Political Significance of American Lethal Weapons to Vietnam,” *The Diplomat*, October 7, 2014, <http://thediplomat.com/2014/10/the-political-significance-of-american-lethal-weapons-to-vietnam/>.

³⁷³ Thayer, “Vietnam Mulling New Strategies to Deter China.”

³⁷⁴ *Ibid.*

³⁷⁵ Hiep, “Vietnam’s Hedging Strategy,” 360–362.

³⁷⁶ Australia Defense Intelligence Organization (DIO), “Vietnam,” 28–29.

partnerships, defense spending, and procurements.³⁷⁷ Additionally, the CPV has prioritized the goal of becoming an industrialized nation by 2020.³⁷⁸ The pursuit of a modernized military has helped improve Vietnam's defense industry, because defense partnerships have led to capacity-building inside the country. After the 1988 13th Politburo Resolution, a stronger economy, sufficient defense, and an expanded foreign policy became necessary to ensure national security.³⁷⁹ Those goals are still important today, and Vietnam's economy and military modernization are interdependent.

1. Economic Growth Enables Military Modernization

Vietnam's economic focus has enabled and promoted an increase in defense relations.³⁸⁰ The Doi Moi reforms placed economic reforms as a priority, but to accomplish those goals, Vietnam's attitude toward non-communist states required transformation.³⁸¹ After the 1986 6th National Congress, the Politburo's 1987 Resolution No. 2 and the 1988 Resolution No. 13 initiated the transformation, because following these resolutions, leaders pulled ground forces out of Cambodia and Laos, cut ground forces by half, and adopted diverse foreign policy strategies.³⁸² These changes were made because Vietnam's economy was suffering, and because Mikhail Gorbachev began to emanate new political thoughts.³⁸³ When Gorbachev's USSR collapsed in 1991, Vietnam was forced to fully embrace these policies and the defense sector faced challenges, briefly losing its primary defense partner.³⁸⁴ Months before the Soviet Union's collapse, the CPV's Seventh National Congress declared its desire to be friends with all countries,

³⁷⁷ Thayer, *Vietnam People's Army*, 1–2, 41–45.

³⁷⁸ Central Committee of the Communist Party of Vietnam, "Strategy for Socio-Economic Development 2001–2010" (presented at the Ninth National Congress, Vietnam, Vietnam, April 19–22, 2001).

³⁷⁹ Vu, "Vietnam's Security Challenges."

³⁸⁰ Ministry of National Defense, *Vietnam National Defense*, 96.

³⁸¹ Carlyle Thayer, "Vietnam's Defense Policy and its Impact on Foreign Relations" (paper presented at EuroViet6, Hamburg, Germany, June 6–8, 2008).

³⁸² Thayer, "Vietnam's Defense Policy."

³⁸³ *Ibid.*

³⁸⁴ Nguyen Vu Tung, "Vietnam's New Concept of Security in the Context of Doi-Moi," in *Comprehensive Security in Asea: Views from Asia and the West on a Changing Security Environment*, ed Kurt Radtke and Raymond Feddema (Netherlands: Brill, 2000), 408–409.

because the country needed to grow less isolated to overcome economic shortfalls.³⁸⁵ By focusing primarily on economic development, Vietnam's Ministry of Foreign Affairs (MOFA) and its MOD have expanded internationally to attract partners and investment. For defense leaders, this expansion has meant advanced agreements and partnerships including countries such as India and the United States. Without a renewed economic focus beginning in 1986, it is possible that Vietnam's defense sector would have remained isolated and unable to modernize effectively.

Additionally, Vietnam's defense spending and emphasis on military modernization correlates with economic growth.³⁸⁶ From 2000 to 2010, Vietnam's real economic growth averaged 7.3%, but its performance was most notable from 2000 to 2007.³⁸⁷ During this period, defense spending increased as a result of economic growth, and Table 1 provides a snapshot of the correlation between economic performance and defense spending. This performance allowed Vietnam to begin updating its air force in 2003 with the introduction of Su-30 fighter aircraft.³⁸⁸ In 2005, this growth provided the navy the ability to order newer frigates and maritime patrol aircraft.³⁸⁹ Local shipbuilding firms improved during this era and provided Vietnam's Coast Guard with the majority of its current vessels.³⁹⁰ Though Vietnam officially ordered its Kilo-class submarines in 2008 during the global financial crisis, the country initiated plans for submarine purchases at the beginning of its economic surge; a 2000 defense agreement with India hinted at submarine training.³⁹¹

Vietnam's economic growth since Doi Moi has made military modernization possible.³⁹² Current Prime Minister Nguyen Tan Dung remarks, "We modernize our

³⁸⁵ Ibid.

³⁸⁶ Australia Defense Intelligence Organization (DIO), "Vietnam," 28–29.

³⁸⁷ Ibid., 29.

³⁸⁸ "IHS Jane's - Vietnam > Air Force."

³⁸⁹ "IHS Jane's - Vietnam > Navy."

³⁹⁰ Ibid.

³⁹¹ Carlyle Thayer, "Russian Subs in Vietnam," *USNI News*, August 10, 2012, <http://news.usni.org/2012/08/20/russian-subs-vietnam>.

³⁹² Vu, "Vietnam's Security Challenges."

armed forces when the economic conditions allow, and that is normal.”³⁹³ A developing country choosing to increase military capabilities is not a new phenomenon. The Pentagon has attributed China’s military rise to its staggering economic growth.³⁹⁴ Vietnam’s economic growth has been lower than China’s, but has still provided the resources for the government to increase defense spending. After the country had shown signs of recovering from effects of the global financial crisis, Thayer claimed that the 2010 order of additional Su-30 fighter aircraft was “linked to economic growth.”³⁹⁵ Though the crisis impacted defense spending, Vietnam’s upward trend appears to have returned as of 2011, and the economy will likely dictate Vietnam’s continued military modernization.³⁹⁶

³⁹³ Ibid.

³⁹⁴ Tom Gjelten, “China’s Economic Rise Enables Military Growth,” *NPR.org*, accessed October 21, 2014, <http://Army.npr.org/templates/story/story.php?storyId=129284282>.

³⁹⁵ Thayer, “Vietnam: New Order for Su30MKs.”

³⁹⁶ Australia Defense Intelligence Organization (DIO), “Vietnam,” 28-29.

Table 1. Defense Budget and Real Economic Trends in Vietnam³⁹⁷

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Official Defense Budget:										
U.S.\$ (billion)	7.6	7.9	8.0	7.9	5.0	4.6	3.4	3.2	3.6	3.8
Real Growth (%)	3.5	4.8	1.3	-0.5	-35.7	-0.5	-20.8	2.3	14.5	9.6
Percentage of real GDP	5.6	5.5	5.2	4.8	2.9	2.8	2.1	2.0	2.2	2.2
GDP:										
U.S.\$ billion (real GDP)	136.1	145.3	154.1	164.2	169.6	165.2	163.6	160.9	167.7	170.0
Real Growth (%)	7.8	7.5	7.0	7.1	5.7	5.4	6.4	6.2	5.2	5.3

³⁹⁷ Australia Defence Intelligence Organization, *Defence Economic Trends in the Asia-Pacific* (Canberra: 2014), author reproduced data from this source.

2. Economic Benefits of Military Modernization

The domestic production of modernized military capabilities is a central aspect of Vietnam's socio-economic strategies, and updating capabilities promotes capacity-building and economic growth.³⁹⁸ During the CPV's 11th National Congress in 2011, Vietnamese leaders agreed that the country would continue striving to become modern and industrialized by 2020.³⁹⁹ Vietnam's Socio-Economic Development Strategy for the Period of 2011–2020 provides the government a guideline for achieving economic goals.⁴⁰⁰ Among many recommendations, it stresses industrial development, achieving an independent economy, and utilizing outside resources for the country's development.⁴⁰¹ Improving the country's defense industry is an aspect of this plan, and foreign partners are necessary to provide guidance in improving military industrial capabilities.⁴⁰² Global management consulting firm McKinsey & Company adds, "As Southeast Asian countries strive to develop their own broader industrial capabilities, partnerships with international defense players could provide an avenue for capability and knowledge transfers."⁴⁰³ Vietnam's military modernization strategy aims to widen its procurement network but to also improve its industrial capacity by leveraging the talents of international partners.⁴⁰⁴ Jon Grevatt writes, "This strategy has seen Vietnam enter defense collaboration partnerships with the Czech Republic, France, Germany, India, Indonesia, Poland, and Spain."⁴⁰⁵ By allowing outside governments to assist in defense industry development,

³⁹⁸ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

³⁹⁹ "Vietnam Sticks to Goal of Becoming Industrialized Country by 2020," *Tuoitrenews*, March 31, 2014, <http://tuoitrenews.vn/politics/18711/vietnam-sticks-to-goal-of-becoming-industrialized-country-by-2020>.

⁴⁰⁰ Central Committee of the Communist Party of Vietnam, "Strategy for Socio-Economic Development 2011–2020" (presented at the Eleventh National Congress, Vietnam, Vietnam, January 12–29, 2011).

⁴⁰¹ *Ibid.*

⁴⁰² Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

⁴⁰³ Chinn, "Southeast Asia: The Next Growth Opportunity," 10.

⁴⁰⁴ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

⁴⁰⁵ Jon Grevatt, "IHS Jane's - Vietnam and UK Agree Defence Co-Operation Action Plan," March 29, 2012, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1493479&Pubabbrev=JDIN>.

the country can reduce its dependence on imports, and possibly begin to develop a competitive industry of its own. Modernization is a benefit to Vietnam's economy because it helps strengthen industrial capacity and "enhance self-sufficiency"—key socioeconomic goals for the CPV.⁴⁰⁶

Furthermore, Vietnam's most recent defense white paper reveals the importance of modernizing to benefit the economy. To support "rapid and sustainable economic growth," Vietnam seeks to "develop both its socio-economic and defense capabilities and closely coordinate defense-security and diplomatic activities to support the cause of industrialization and modernization."⁴⁰⁷ Defense leaders argue that scientific and technological investment in the country's national defense combined with the absorption of technologies from the international community contributes toward and is the driving force behind economic development.⁴⁰⁸ Vietnam's economic performance after Doi Moi shaped its approach to military modernization, because the performance made leaders realize the benefits of international cooperation. This realization has led leaders to prioritize international partnerships, because Vietnam hopes to develop defense industries enough to become self-reliant.⁴⁰⁹ Vietnam is determined to be an industrialized, modernized nation by 2020, and boosting its defense industry aids the military and more importantly, the economy.

Two areas where international partners have begun to improve Vietnam's defense industry include UAVs and ships. UAV capabilities provide Vietnam a cheaper alternative for surveillance outside of MPA, and learning to develop these systems is an easier task than attempting to build manned aircraft. Vietnam's UAV focus has allowed outside companies to penetrate the country's market, including Russia's Irkut and Sweden's UMS.⁴¹⁰ Jon Grevatt notes, "The latter is representative of Vietnam's

⁴⁰⁶ Grevatt, "IHS Jane's - Vietnam's Unmanned Ambitions."

⁴⁰⁷ Ministry of National Defense, *Vietnam National Defense*, 20.

⁴⁰⁸ *Ibid.*, 40.

⁴⁰⁹ *Ibid.*, 96.

⁴¹⁰ Grevatt, "IHS Jane's - Vietnam's Unmanned Ambitions."

increasing willingness to diversify its military suppliers.”⁴¹¹ Transferring technology, co-developing, and co-producing systems to meet Vietnam’s needs, UMS is working in coordination with VASA to ultimately “be able to export jointly developed UAV products to regional customers.”⁴¹² Obviously, this partnership can benefit Vietnam’s economy. In regards to shipbuilding, Vietnam is attempting to become a leading world developer, and this focus has led to the Netherlands’ Damen Shipyards collaborating with Vietnamese shipbuilding companies.⁴¹³ After 2012, the coast guard received its first of four helicopter capable offshore patrol vessels (OPV) from local shipyard Z189; the shipyard is basing its design on materials provided by the Dutch.⁴¹⁴ Signing MOUs with the Vietnam Shipbuilding Industry Corporation and Vietnam Maritime University in 2008, Norway has also taken an active role in boosting the country’s shipbuilding capacity.⁴¹⁵ These developments indicate Vietnam’s pursuit of a stronger, more capable defense industry. The country is clearly striving to become more industrialized and more self-reliant in order to benefit its economy. Modernizing its military has provided Vietnam opportunities to leverage the capabilities of defense partners, and as the defense industry improves, Vietnam’s economy should benefit.

C. CONCLUSION

Enabled by strong economic performance, Vietnam’s military modernization program is aimed at boosting capabilities and building its industrial capacity. In turn, these two approaches allow Vietnam to pursue two mutually supporting goals—deterring China and developing its economy. The majority of literature points to China as the primary reason for Vietnam’s modernization. By acquiring targeted capabilities such as submarines and defense partnerships with India and the United States, Vietnamese

⁴¹¹ Ibid.

⁴¹² Grevatt, “IHS Jane’s - Vietnam’s Unmanned Ambitions.”

⁴¹³ Jon Grevatt, “IHS Jane’s - Vietnam Bids to Be Major Shipbuilder,” November 19, 2008, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1145015&Pubabbrev=JDIN>.

⁴¹⁴ Ridzwan Rahmat, “IHS Jane’s - Vietnamese Coast Guard to Acquire Naval Helicopters for OPVs,” accessed August 28, 2014, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1705630&Pubabbrev=JNI>.

⁴¹⁵ Grevatt, “IHS Jane’s - Vietnam Bids to Be Major Shipbuilder.”

leaders hope to limit China's assertive behavior, decrease their country's fear of China, and alter the asymmetric relationship. Fewer writers reference internal factors for Vietnam's modernization. CPV leaders initiated economic reforms in the 1980s, which resulted in economic growth.⁴¹⁶ This growth has increased the resources available to the government and permitted it to invest in new defense equipment.⁴¹⁷ Economic liberalization has led to increased partnerships with defense industries in countries other than Russia and has contributed to the development of a stronger domestic defense industry—a key goal for socio-economic development.⁴¹⁸ Neither cause should dominate the narrative behind Vietnam's military modernization. Instead, readers should understand that Vietnam is pursuing a parallel track toward two complementing goals.

⁴¹⁶ Thayer, *Vietnam People's Army*, 41–45.

⁴¹⁷ *Ibid.*

⁴¹⁸ Ministry of National Defense, *Vietnam National Defense*, 20.

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IV. CLOSING THOUGHTS

In Vietnam, fundamental defense policy shifts occurred after the introduction of the 1986 Doi Moi reforms.⁴¹⁹ As Chapter II revealed, the CPV has made a conscious effort to update its military capabilities and increase its defense partnerships since then. The next logical step was to then explain the causes behind this military modernization. The beginning of this thesis offered two hypotheses, and Chapter III explicitly addressed both, generally including aspects of Chinese influence and Vietnam's economic performance. First, Vietnam seeks to deter China in the SCS and acquiring modernized capabilities and particular partnerships increases the likelihood of this goal. Second, though economic performance has certainly enabled increased defense spending, Vietnam also seeks to develop its economy, and pursuing new capabilities and partnerships leads to capacity-building inside the country. Introduced in Chapter I, several implications stem from Vietnam's pursuit of military modernization such as an increasingly destabilized or stabilized regional security environment. In closing, this chapter will assess both the hypotheses behind modernization and the implications of these findings for regional security.

A. ASSESSING THE CAUSES BEHIND MODERNIZATION

Vietnam's Kilo submarines are its most impressive acquisitions to date and the greatest supporting evidence behind China's influence on its military modernization. These acquisitions are geared toward establishing a formidable A2/AD strategy in the SCS.⁴²⁰ Regarding submarine developments, Thayer claims that "Vietnam is altering the naval balance in the SCS."⁴²¹ Others declare that with the addition of submarines, "the Vietnamese have changed the whole scenario."⁴²² The acquisition and successful employment of subsurface capabilities forces China to question its SCS tactics more than

⁴¹⁹ Thayer, *Vietnam People's Army*, 1–2, 41–45.

⁴²⁰ Thayer, "With Russia's Help, Vietnam Adopts A2/AD Strategy."

⁴²¹ *Ibid.*

⁴²² Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines."

any other capability.⁴²³ Vietnam understands that China “remains rather ill-equipped to stage an offensive against an opponent employing a submarine-enforced area denial strategy,” because China’s ASW capabilities “depend on proximity to Chinese bases for effectiveness.”⁴²⁴ Without submarines, some could argue that Vietnam’s military modernization program is aimed simply at boosting general maritime capabilities; however, with the inclusion of submarines, Vietnam has significantly strengthened the greatest strategy toward deterring China and preserving its maritime claims in the SCS.⁴²⁵

Also providing supporting evidence behind China’s influence on its military modernization, Vietnam’s defense relations have expanded to include India and the United States. For Vietnam, India and the United States are ideal partners, because China’s rise threatens their strategic goals too. For primarily economic reasons, India and the United States seek a stable SCS environment, and China’s assertive behavior could threaten freedom of navigation there. India’s “Look East” strategy aims to project power into China’s sphere of influence, while China’s “String of Pearls” strategy seeks the same goal but in India’s sphere. Additionally, India maintains territorial disputes with China, and has shown an eagerness to boost Vietnam’s defense capacity and to establish a greater SCS presence.⁴²⁶ Allowing humanitarian exercises, ship visits, and coast guard coordination, Vietnam has increased defense ties with the United States since the early 2000s, creating a suitable environment for Washington’s rebalance to the Asia-Pacific region.⁴²⁷ These developments are aimed at thwarting China’s rise and assertive behavior, because it “puts the onus on China to decide whether or not to shoulder the risk of attacking mixed formations of Vietnamese naval vessels and aircraft operating in conjunction with American allies, the Philippines and Japan, or U.S. military

⁴²³ Thayer, “With Russia’s Help, Vietnam Adopts A2/AD Strategy.”

⁴²⁴ Panda, “Vietnam’s China Challenge.”

⁴²⁵ Ibid.

⁴²⁶ Thayer, “How India-Vietnam Strategic Ties Are Mutually Beneficial.”

⁴²⁷ Lucius, “Improvements in Military Relations.”

personnel.”⁴²⁸ Vietnam believes that with a greater foreign presence in the SCS, China will be less likely to risk escalation.⁴²⁹ Moreover, the relationships that Vietnam is fostering with certain powers could prove beneficial if China were to choose massive escalation in the SCS.

The evidence against China’s influence on the program includes Vietnam’s economic performance and official CPV modernization strategies, which target developing foreign ties to boost defense capacity.⁴³⁰ For Vietnam, a greater defense budget has correlated with greater economic performance, as revealed in Chapter III. This economic growth has allowed Vietnam to update its military capabilities, and its decision to acquire submarines falls in line with regional trends.⁴³¹ Additionally, Vietnam’s relations with India and the United States are included in a broader defense diplomacy strategy that aims to develop arms sales and also defense industry collaboration.⁴³² As stated in Vietnam’s 2007 maritime-focused strategy, its 2009 defense white paper, and its 2011 Socio-Economic Development Strategy, Vietnam is seeking industrialization and boosting its defense capacity is a key goal toward that end.⁴³³

The greatest evidence supporting the economic argument is Vietnam’s defense budget and its expanding defense industry. Chapter III described a correlation between Vietnam’s GDP and its defense budget. Its budget rose during times of increasing economic growth and contracted during periods of economic peril—the global financial crisis, for example.⁴³⁴ It was during a period of substantial economic growth—specifically 2000 to 2007—that Vietnam began to make significant strides toward

⁴²⁸ Thayer, “Vietnam Mulling New Strategies to Deter China.”

⁴²⁹ Vuving, “Did China Blink in the South China Sea?”

⁴³⁰ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96; Central Committee of the Communist Party of Vietnam, “Strategy for Socio-Economic Development 2011–2020.”

⁴³¹ Thayer, “Southeast Asian States Deploy Conventional Submarines.”

⁴³² Grevatt, “IHS Jane’s - India and Vietnam Forge Closer Defence-Industry Ties;” “IHS Jane’s - United States, Vietnam Expand Defence Collaboration,” July 29, 2013, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=+++1581386&Pubabbrev=JDIN>.

⁴³³ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

⁴³⁴ Australia Defense Intelligence Organization (DIO), “Vietnam,” 28–29.

updating its navy, air force, and coast guard.⁴³⁵ In 2007, Vietnam gained WTO membership and significantly advanced relations with both India and the United States.⁴³⁶ Key aspects surrounding its defense diplomacy include the establishment of arms sales and defense industry collaboration.⁴³⁷ Vietnam needs international partners to strengthen its defense industry and expedite its path toward general industrialization.⁴³⁸ In doing so, Vietnam gains greater independence and inches closer toward fulfilling socioeconomic goals. These desires are illustrated in official documents, which this thesis has referenced.

Evidence against the economic hypothesis includes the procurements Vietnam has made and the defense relationships it has developed since the start of Doi Moi in 1986. Updated fighter aircraft and Kilo submarines greatly enhance Vietnam's A2/AD strategy.⁴³⁹ The Kilos are Vietnam's first credible naval deterrent and are meant to make China question its assertive tactics in the SCS.⁴⁴⁰ Additionally, Vietnam's defense diplomacy strategy has increasingly included China's rivals—India, the United States, the Philippines, and Japan. The security interests of these four countries match those of Vietnam's, and improved relations strengthen a hedging strategy meant "to counter undue pressure from China and deter Chinese aggression."⁴⁴¹

The details of Vietnam's military modernization have most notably included updates in maritime capabilities and defense relations, and Chapter III determined that both the China and economic hypotheses explain the main causes behind it. Both serve to explain its modernization, because deterring China and developing its economy are mutually supporting goals for the CPV. Neither explanation is more correct than the

⁴³⁵ IHS Jane's, "Vietnam > Procurement."

⁴³⁶ Rahul Bedi, "IHS Jane's - India Looks East to Strengthen Ties with Vietnam," December 24, 2007, <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/DisplayPage.aspx?DocType=News&ItemId=++1175645&Pubabbrev=JDW>.

⁴³⁷ Ministry of National Defense, *Vietnam National Defense*, 39, 20, 40, 43, 46, 96.

⁴³⁸ Ibid.

⁴³⁹ Thayer, "With Russia's Help, Vietnam Adopts A2/AD Strategy."

⁴⁴⁰ Torode, "Vietnam Building Deterrent against China in Disputed Seas with Submarines."

⁴⁴¹ Hiep, "Vietnam's Hedging Strategy," 361.

other. The benefits of military modernization mean that Vietnam's submarines can potentially deter China in the SCS and that its socioeconomic goal of industrialization is being met. China's behavior has certainly motivated particular arms purchases, but a drive to industrialize and develop its economy has also motivated Vietnam's defense diplomacy strategies. Chapter II illustrated the progress Vietnam has made in modernizing its military; particular arms purchases and expanding defense relationships are integral to that modernization.

B. ASSESSING THE IMPLICATIONS BEHIND MODERNIZATION

The beginning of this thesis offered two basic implications of Vietnam's military modernization—destabilization and stabilization of the maritime environment in Southeast Asia. In general, Vietnam's program will either cause China to act more aggressively before the Vietnamese can perfect deterrence, or it will lead to a stabilized environment wherefore Vietnam deters China and causes it to avoid assertive and escalatory measures. In closing, I offer several scenarios that could potentially lead to a destabilized or stabilized regional security environment.

A destabilized environment likely depends in large part on China's perception of Vietnam's capabilities and defense relationships. If China feels that Vietnam's Kilo submarines—or potential BrahMos cruise missiles—will deter it and create too unsafe of an environment, then China may hasten its assertive behavior before Vietnam achieves a fully credible deterrent. Similarly, if China realizes that Vietnam's relations with the West are less than substantial and that it lacks the conviction to steer from its “three nos” defense policy, then Chinese forces will likely continue acting assertively, fearing no substantial third party intervention.⁴⁴² Much depends on how Vietnam employs its eventual submarine capability and how far the CPV leadership is willing to accept China's SCS tactics. A safe assessment is that Vietnam would likely continue employing mostly paramilitary assets in response to assertive Chinese behavior; however, if China

⁴⁴² The three nos defense policy provides the following stance: no military alliances, no foreign bases on soil, soil, and no to relying on countries for combat assistance; Ankit Panda, “What to Expect If the U.S. Lifts Its Vietnam Arms Embargo,” *The Diplomat*, September 29, 2014, <http://thediplomat.com/2014/09/wh-at-to-expect-if-the-us-lifts-its-vietnam-arms-embargo/>.

were to attack Vietnam's shores, exchange ramming and water cannon tactics for deadly force against Vietnamese assets, or eliminate its entire ability to economically exploit the maritime environment, then the fallout could lead to massive destabilization if Vietnam lacks the support of third parties.

A stabilized environment is likely to emerge if China respects Vietnam's eventual deterrent capability. If Vietnam's capabilities—submarines, defense relations, and potential cruise missiles—are enough to deter China, then PRC forces will likely proceed more cautiously, creating a more stable environment. Yet, this projection is much more likely in the long-term due to the following reasons: Vietnam's submarine capabilities are far from reaching effectiveness, and the CPV has yet to reveal conduct indicating clear alignment with the West.

Additionally, the type of assertive behavior employed by the Chinese could lead to a stabilized environment depending on Vietnam's response. If China pushes Vietnam to the brink of imploring third parties for assistance, then China would likely limit its assertive behavior for fear of dramatic escalation. In its actions toward claimant states, China has sought to balance assertiveness and restraint in order to alter the status quo gradually and prevent others from turning completely against it. For Alexander Vuving, the May 2014 oil rig crisis erred on the wrong side of the balance, hailing it as the worst Sino-Vietnamese crisis since 1988. According to Vuving, the PRC's decision to remove the rig stemmed from the CPV's decision to drop any legal action and any involvement by third parties, particularly the West. China's assertive tactics work if the other side chooses self-censorship, which a fear of escalation keeps in place. The best way to counter China's tactics is to reveal that restraint is no longer one-sided; therefore, stabilization is more likely when Vietnam attempts to include other parties, returning a fear of escalation onto the PRC.⁴⁴³

Finally, Vietnam seeks to place the choice of destabilizing the security environment squarely on China.⁴⁴⁴ Vietnam's military modernization program is not

⁴⁴³ Paragraph details pulled directly from Vuving, "Did China Blink in the South China Sea?"

⁴⁴⁴ Thayer, "Vietnam Mulling New Strategies to Deter China."

meant to retake SCS island groupings from China. Its forces have revealed no such assertive behavior, because it would risk escalation in an environment it wishes to keep peaceful and stable.⁴⁴⁵ China's assertive behavior shows few signs of diminishing, but the benefits of Vietnam's military modernization program—submarines and defense relations with the West—could potentially bring stability if employed in the most effective way.

⁴⁴⁵ Tran Truong Thuy and Nguyen Minh Ngoc, "Vietnam's Security Challenges: Priorities, Policy Implications and Prospects for Regional Cooperation" (paper presented at the fourth International Workshop on Asia-Pacific Security, Tokyo, Japan, January 16–17, 2013).

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