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**THE CARRIER ARMS RACE IN EAST AND SOUTH
ASIA: RESPONSES TO A CHANGING STRATEGIC
ENVIRONMENT**

by

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CHANGING STRATEGIC ENVIRONMENT**

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ABSTRACT

Asian carrier navies do not suffer from the technocratic tendencies that afflict the United States. Each carrier program examined by this paper is designed to meet specific strategic problems. China's intentions remain largely obscured leading to a fair amount of speculation concerning the role of People's Liberation Army Navy carriers. China's involvement in regional maritime territorial disputes and its strategic interpretation of Western Pacific geography suggest that any investment in naval power projection instruments will support a desire for operational freedom of action within the First Island Chain. India recognized the utility of strike carriers early in its post-colonial history and recently articulated its intention to achieve regional manifest destiny in the face of increasing naval competition from China. India's vision suffers from some of the same diffuseness of the U.S. model that it attempts to emulate but is simultaneously easier to manage because of its smaller scope and acknowledged adversaries. Japan's gradual revival as a regional military power may have been inevitable in the absence of the Soviet threat and the U.S. regional engagement that accompanied it, but China's increasingly assertive actions over island territories has accelerated the Japanese Maritime Self-Defense Force's development into a limited power projection force. Finally, South Korea—while not yet committed to fixed-wing carrier acquisition—is likely exploring options for managing its precarious position between North Korea, China, and Japan.

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LIST OF ACRONYMS AND ABBREVIATIONS

A2/AD	Anti-access/area denial
ADIZ	Air defense identification zone
AEW	Airborne early warning
ASM	Anti-ship missile
ASW	Anti-submarine warfare
CATOBAR	Catapult assisted takeoff but arrested recovery
CMC	Central Military Commission
CNA	Center for Naval Analysis
CSG	Carrier strike group
CSIS	Center for Strategic and International Studies
CVH	Helicopter carrier
CVN	Nuclear powered aircraft carrier
DDG	Guided missile destroyer
DDH	Helicopter destroyer
DMZ	Demilitarized zone
DRP	Defense Reform Plan
DWP	Defense white paper
EEZ	Economic exclusion zone
ESG	Expeditionary strike group
HADR	Humanitarian assistance and disaster relief
IAC	Indigenous Aircraft Carrier Program
IN	Indian Navy
IOR	Indian Ocean Region
ISR	Intelligence, surveillance, and reconnaissance
JASDF	Japanese Air Self-Defense Force
JDAM	Joint Direct Attack Munition
JGSDF	Japanese Ground Self-Defense Force
JMSDF	Japanese Maritime Self-Defense Force
JSDF	Japanese Self-Defense Forces
KIDA	Korean Institute for Defense Analysis

LCA	Light combat aircraft
LPH	Landing platform helicopter ship
LST	Tank landing ship
MoD	Ministry of Defense
MoFA	Ministry of Foreign Affairs
NDPG	National Defense Program Guidelines
NLL	Northern Limit Line
ONI	Office of Naval Intelligence
PLAAF	People's Liberation Army Air Force
PLAN	People's Liberation Army Navy
PLANAF	People's Liberation Army Naval Air Force
RTN	Royal Thai Navy
SLOC	Sea line-of-communication
STOVAR	Short takeoff but arrested recovery
U.N.	United Nations
V/STOL	Vertical/short takeoff and landing
VTOL	Vertical takeoff and landing

I. INTRODUCTION: THE EASTERN REJECTION AND CONTEMPORARY REVIVAL OF THE AIRCRAFT CARRIER

A. MAJOR RESEARCH QUESTION

In a 2011 article titled “Twilight of the \$UPERfluous Carrier,” Henry J. Hendrix and J. Noel Williams declared,

Given very clear technology trends toward precision long-range strike and increasingly sophisticated anti-access and area-denial capabilities, high-signature, limited-range combatants like the current aircraft carrier will not meet the requirements of tomorrow’s [U.S. Navy] Fleet. In short, the march of technology is bringing the supercarrier era to an end, just as the new long-range strike capabilities of carrier aviation brought on the demise of the battleship era in the 1940s.¹

Hendrix and Williams are not alone in this sentiment. Western naval observers are increasingly suspicious of the carrier’s relevancy in the twenty-first century. Articles such as “Aircraft Carriers: R.I.P?” and “Shipping Out: Are Aircraft Carriers Becoming Obsolete?” continue to debate the paradox of maintaining large, expensive vessels in the growing age of anti-access/area-denial (A2/AD) weapons and shrinking defense budgets.² In January 2014, Christopher P. Cavas created ripples in U.S. naval circles by reporting that “indications are growing that the elimination of one carrier and one carrier air wing could be among the [fiscal year 2015 defense budget] request’s key features.”³

Although many Western observers seem sure of the carrier’s demise, navies on the other side of the Pacific do not share their pessimism. Japan commissioned two *Hyuga*-class helicopter destroyers (DDH) from 2009 to 2011 and launched the first ship of the larger *Izumo*-class in January 2013. China commissioned its first aircraft carrier—

¹ Henry J. Hendrix and J. Noel Williams, “Twilight of the \$UPERfluous Carrier,” *Proceedings*, May 2011, <http://www.usni.org/magazines/proceedings/2011-05/twilight-uperfluous-carrier>.

² Robert Farley, “Aircraft Carriers: R.I.P?” *The Diplomat*, March 14, 2013, <http://thediplomat.com/2013/03/aircraft-carriers-r-i-p/>; Robert Haddick, “Shipping Out: Are Aircraft Carriers Becoming Obsolete?” *Foreign Policy*, August 31, 2012, http://www.foreignpolicy.com/articles/2012/08/31/shipping_out.

³ Christopher P. Cavas, “Carrier Cut Could Be Back on the Table,” *Defensenews*, January 26, 2014, <http://www.defensenews.com/>.

the refurbished ex-Soviet hull *Liaoning*—in 2011, and a provincial Communist Party secretary announced in January 2014 that construction is underway on a new, indigenous carrier design. In August 2013, India christened its first indigenous carrier—*Vikrant*—through the Indigenous Aircraft Carrier (IAC) Program and commissioned the ex-Soviet *Vikramaditya* in November: ships that augment India’s aging ex-British *Viraat*. Finally, a 2013 South Korean feasibility study examined options for converting *Dokdo*-class landing platform ships into fixed-wing vertical takeoff and landing (VTOL) carriers and constructing two light aircraft carriers between 2028 and 2036.⁴

Why are navies in East and South Asia initiating carrier acquisition programs and what is the purpose of these ships? Are they simply manifestations of nationalist pride? Are India, Japan, and South Korea responding to China’s aggressive naval modernization in a version of the classic security dilemma? This thesis will address these questions through critical examination of each of the four navies in question and the larger strategic environment in which they operate.

B. IMPORTANCE

The Asian carrier race is indicative of the evolving naval strategic environment in the Western Pacific and Indian Ocean. Most Asian states have long refrained from investing in carriers, but the growing importance of these ships in the region suggests that the security needs of Asian states now require the ability to project power beyond the reach of land-based aircraft. The reasons behind these changes have important implications for regional powers and the globally committed United States.

C. PROBLEMS AND HYPOTHESES

Some observers are enchanted with the idea that Asian carriers are excellent platforms for humanitarian assistance and disaster relief (HADR) missions in the disaster prone Asia-Pacific, but such speculation fails to justify the significant investment of resources and effort required to build, maintain, supply, and operate aircraft carriers. The

⁴ Wendell Minnick, “Experts Wary Over News of China’s 2nd Carrier,” *Defensenews*, January 25, 2014, <http://www.defensenews.com/>; Jung Sung-Ki, “S. Korea Envisions Light Aircraft Carrier,” *Defensenews.com*, October 26, 2013, <http://www.defensenews.com/>.

acquisition costs alone are staggering. In 1999, Ken E. Gause listed the initial costs of Spain's *Principe de Asturias*, France's *Charles de Gaulle*, and a single vessel of the United States' *Nimitz*-class as \$285 million, \$3.4 billion, and \$5 billion respectively. The air wings added billions more.⁵ In addition, Gause correctly notes, "to have a viable carrier capability, a navy needs to have more than one to assure that one is always operational."⁶

The HADR argument also fails to acknowledge the historic roots of carrier-based aviation: long-range power projection. Primarily, *all of these ships are intended to serve a combat role*. It is hard, however, to fault observers for settling on non-traditional missions to explain Asia's aspiring carrier navies. With the exception of Imperial Japan and post-colonial India, Eastern navies have traditionally struggled with the offensive, power projection concept of Western carriers. Until recently, the People's Liberation Army Navy (PLAN) was a small, coastal defense force that regarded carriers with suspicion as tools of Western imperialism. Meanwhile, the Soviet Navy never committed to a pure carrier design. Soviet interest in carriers did not gain real traction until 1958 when—motivated by the threat posed by U.S. Polaris submarine-launched ballistic missiles—the government approved Project 1123. This was a doctrinally defensive class of ships that Valery Marinin and Valery Polyakov describe as "helicopter-carrying antisubmarine cruisers."⁷ Although designed to carry 14 anti-submarine warfare (ASW) helicopters, the two ships produced by Project 1123—*Moskva* and *Leningrad*—also carried anti-submarine missile systems, rocket launchers, and torpedo tubes, indicating that the class was not intended to employ the air wing as its sole or even primary weapon system. The 1967 follow-on design, Project 1143, retained the Soviet Navy's attachment to traditional surface combatant functions. Designated as *heavy aircraft carrying*

⁵ Gause lists the cost of *Principe de Asturias*'s air wing as \$65 million, *Charles de Gaulle*'s as \$998 million, and *Nimitz*'s as \$3 billion. Ken E. Gause, "Considerations for 21st Century Carrier Navies," in *Maritime Aviation: Light and Medium Aircraft Carriers into the Twenty First Century*, ed. Peter Hore and Thomas J. Hirschfeld (Hull, UK: University of Hull Press, 1999), 195–6.

⁶ *Ibid.*, 197.

⁷ Valery Y. Marinin and Valery N. Polyakov, "The Russian Navy's Aircraft Carrier Programmes," in *Maritime Aviation: Light and Medium Aircraft Carriers into the Twenty First Century*, ed. Peter Hore and Thomas J. Hirschfeld (Hull, UK: University of Hull Press, 1999), 48.

cruisers, Project 1143's *Kiev* and *Minsk* sported eight anti-ship cruise missile launchers, two medium-range surface-to-air missile systems, and several 76mm and 30mm guns in addition to anti-submarine weapons and Yak-38 VTOL attack aircraft. Successive Soviet projects never abandoned the odd, forced marriage of carrier, cruiser, and destroyer functions, which survived until 1991 when the break-up of the Soviet Union halted construction on *Varyag*: the second ship of the *Kuznetsov*-class that sails today as China's *Liaoning*.⁸ As late as 1999, Russian thought continued to regard carriers as defensive platforms. Marinin and Polyakov considered carriers "necessary to enable the [Russian] navy to ensure the security of the country in littoral waters," and Gause paraphrased Admiral Vladimir Chernavin's explanation that the *Kuznetsov*-class's "main role was to serve as a platform for fighter aircraft to provide long-range cover for ships when they sailed beyond the range of shore based fighters."⁹

The Royal Thai Navy's (RTN) *Chakrai Naruebet*, East Asia's first new carrier since the end of the Second World War, has not improved Western impressions of Asian carrier aspirations. Built by Spain and commissioned into the RTN in 1997, *Chakrai Naruebet* and its AV-8S Matador vertical/short take-off and landing (V/STOL) aircraft were part of Thailand's naval modernization program of the 1990s. During the Cold War, the RTN was confined to a coastal defense force that relied on small World War II-era ships and patrol craft. According to RTN Captain Kiatiyut Tiansuwan, the post-Cold War emergence of non-traditional military threats such as insurgency, terrorism, transnational crime, illegal immigration, and environmental destruction forced the RTN to venture farther out to sea. In addition, China's growing military capabilities and activities in Southeast Asia became a concern. Anticipation of facing a combination of traditional and non-traditional threats prompted the acquisition of modernized and expanded naval capabilities including Chinese and U.S. frigates, Singaporean amphibious ships, and *Chakrai Naruebet*. Unfortunately for the RTN, Thailand was hit hard by the 1997 Asian

⁸ Ibid., 48–51.

⁹ Marinin and Polyakov, "The Russian Navy's Aircraft Carrier Programmes," 54; Kenneth Gause, "Characteristics of Current Small and Medium Aircraft Carriers," in *Maritime Aviation: Light and Medium Aircraft Carriers into the Twenty First Century*, ed. Peter Hore and Thomas J. Hirschfeld (Hull, UK: University of Hull Press, 1999), 250.

Economic Crisis, and warming relations with China resulted in a new 1998 Thai National Defense Policy that discounted the likelihood of future external threats. By 2003, observers reported that only one or two of the RTN's AV-8Ss were still in operation, and the entire AV-8S fleet was grounded in 2006. *Chakrai Naruebet* is now relegated to disaster relief, search and rescue, economic exclusion zone (EEZ) patrols, and transportation of the Thai royal family, a role for which the ship maintains a set of royal quarters. None of these roles, however, require an aircraft carrier, and continuing budget problems cast doubt on *Chakrai Naruebet's* revival. Jokingly nicknamed "*Thai-tanic*" and "a glorified royal yacht," the ship now spends an average of 29 out of every 30 days in port.¹⁰

Given the Soviet Union and China's traditional disinterest in offensive carrier power projection and the defanging of *Chakrai Naruebet*, the prospects for future Asian carriers looked bleak at the turn of the century. In 1998, however, China, a leading producer of the A2/AD technologies that call the utility of western carriers into question, proceeded with plans to purchase *Varyag* from Ukraine and ushered in a new round of Asian carrier development. Research indicates that each state in the new carrier race is pursuing modernization programs tailored to their unique security challenges. For India, Japan, and South Korea, China's naval modernization represents a common threat, but individual security requirements also influence each state's approach.

D. LITERATURE REVIEW

In *Asia's Naval Expansion: An Arms Race in the Making?*, Geoffrey Till provides a critical framework for considering the strategic environment by asking a necessary question: is Asia experiencing "one race or many?"¹¹ It appears that many races are

¹⁰ Hunter Lanzaro, "Air Power at Sea: The World's Aircraft Carriers," *Sea Classics* 45, no. 12 (2012): 24, ProQuest Research Library (1115582930); Walter Hickey and Robert Johnson, "These Are the 20 Aircraft Carriers In Service Today," *Business Insider*, August 9, 2012, <http://www.businessinsider.com/the-20-in-service-aircraft-carriers-patrolling-the-world-today-2012-8?op=1>; Naval Modernization in Southeast Asia: Nature, Causes, Consequences (Singapore: S. Rajaratnam School of International Studies, 2011), 13; Jason Warren, "The Royal Thai Navy," *Naval Forces* 26, no. 5 (2005): 32–5, ProQuest Research Library (199351111); Gause, "Considerations for 21st Century Carrier Navies," 182.

¹¹ Geoffrey Till, *Asia's Naval Expansion: An Arms Race in the Making?* (London: The International Institute for Strategic Studies, 2012), 42.

underway, but each contributes to the larger strategic context. Till describes the North and South Korean relationship as the “most deadly” naval rivalry in the region given the *Cheonan* and Yeonpyeong Island incidents of 2010, which drives the primacy of the North Korean threat in ROKN acquisition programs.¹² However, Japan is primarily focused on China’s naval build-up because of “absolute economic and strategic reliance on the sea lines of communication that go through the East and South China seas” in addition to Chinese assertiveness around the Senkaku Islands.¹³ In the meantime, India is walking a thin line between China and Pakistan. Till argues India is hedging against the possibility of conflict with both states, but capabilities that hedge against one often illicit a reaction from the other. “Maritime frictions,” writes Till, “demonstrate that mutual trust between the two countries [India and Pakistan] remains in short supply, further complicating the naval balance between India and China.”¹⁴

Importantly, Till ties the various arms races into a single strategic package: “From Beijing’s perspective, a particularly worrying aspect of all of this (and hence a great incentive to develop its naval forces) is the extent to which this hedging process seems to end with China as the common denominator.”¹⁵ While South Korea, and Japan to a lesser extent, hedges against North Korea, and India hedges against Pakistan, the naval programs of Japan, South Korea, and India serve as a collective hedge against China: a situation that Till describes as Beijing’s “the rest versus China” dilemma.¹⁶

Are regional concerns about China’s naval build-up warranted? Although light on specific intentions, China’s biennial defense white papers (DWP) provide important indications of Chinese strategic trajectory. Concerning China’s international security outlook, the DWPs from 2004 thru 2010 used relatively passive language. In 2012, however, the language took a sharper tone by indicating an intention to “participate in

¹² Ibid.

¹³ Ibid., 44.

¹⁴ Ibid.

¹⁵ Ibid., 46.

¹⁶ Ibid., 47.

regional and international security affairs.”¹⁷ In addition, maritime security interests have assumed a progressively greater place in Chinese defense policy. In 2012, maritime interests became *essential* to Chinese national strategy: “It is an essential national development strategy to exploit, utilize and protect the seas and oceans, and build China into a maritime power. It is an important duty for the PLA to resolutely safeguard China’s maritime rights and interests.”¹⁸ China’s increasingly assertive language and recognition of both regional and global maritime economic interests suggest a growing need for a modern and capable navy.

Given the lack of transparency, it is appropriate to consider each of the individual roles that PLAN carriers could fill. In “Beijing’s Starter Carrier and Future Steps: Alternatives and Implications,” Andrew Erickson, Abraham Denmark, and Gabriel Collins offer six possibilities: security of China’s sea lines-of-communication (SLOC) against low-intensity threats, extended-range power projection along China’s SLOCs, humanitarian relief, support for a Taiwan scenario, offensive power projection over disputed maritime territory, and power projection beyond the so-called First Island Chain.¹⁹ The first four roles, while possible, are not probable. The last two roles, however, show more promise. When considered alongside statements from China’s DWPs, they offer plausible reasons for the PLAN’s considerable investment in carrier power projection.²⁰

In *Red Star over the Pacific: China’s Rise and the Challenge to America’s Maritime Strategy*, Toshi Yoshihara and James R. Holmes depict PLAN modernization as a carefully tailored response to Chinese strategic requirements. They argue that the PLAN will act as a sea denial force seeking to exercise localized sea control “for a finite

¹⁷ U.S.-China Economic and Security Review Commission, *China’s 2012 Defense White Paper: The Diversified Employment of China’s Armed Forces* (Washington, DC: U.S.-China Economic and Security Review Commission, 2013), 6.

¹⁸ Ibid.

¹⁹ The First Island Chain is a conceptual line running from Japan to Singapore through the islands of Taiwan, Luzon, and Borneo. The Second Island Chain runs from Japan to New Guinea through Guam. For more information, see <http://www.globalsecurity.org/military/world/china/plan-doctrine-offshore.htm>.

²⁰ Andrew S. Erickson, Abraham M. Denmark, and Gabriel Collins, “Beijing’s Starter Carrier and Future Steps: Alternatives and Implications,” *Naval War College Review* 65, no. 1 (2012): 36-40.

interval, until the nation's strategic objectives are in hand.”²¹ Heavily influenced by Maoist traditions, the PLAN, supported by land-based forces, will maintain the tactical offensive to keep other navies off balance as part of a strategic defense. This argument offers revolutionary possibilities for the use of carrier-based power projection, especially when considered in combination with A2/AD capabilities, and is an example of breaks from traditional American conceptions of power projection.²²

Of the four navies examined, India's naval strategy is the one that most closely resembles that of the United States. *Freedom to Use the Seas: India's Maritime Military Strategy* relies heavily on western naval concepts such as freedom of access, forward presence, and shaping operations.²³ The document even invokes a historically American concept: “The freedom to use the seas will become crucial if India is to attain her ‘manifest destiny.’”²⁴ Published five months before the U.S. sea services' *A Cooperative Strategy for 21st Century Seapower*, the Indian document reflects both shared maritime interests and the IN's traditionally outward-looking strategic thinking. It is far more, however, than just an Indian version of its American counterpart. Importantly, *Freedom to Use the Seas* reconciles India's broad, blue-water strategy with the local, South Asian context in four ways. First, it states the purpose of India's blue-water strategy as “a design for relating ends to means:” deterrence—followed by victory in war when necessary—is achieved through “a three-dimensional, versatile, blue-water Navy.”²⁵ Second, it acknowledges China's naval modernization through a critical lens, noting the rise of anti-access weapons and accusing China of encroaching on the Indian Ocean.²⁶ Third, it identifies the most likely arenas for IN combat operations as the Arabian Sea and

²¹ Toshi Yoshihara and James R. Holmes, *Red Star over the Pacific: China's Rise and the Challenge to U.S. Maritime Strategy* (Annapolis: Naval Institute Press, 2010), 73.

²² *Ibid.*, 73–100.

²³ *Freedom to Use the Seas: India's Maritime Military Strategy* (New Delhi: Integrated Headquarters Ministry of Defense (Navy), 2007), iii, 73, 80.

²⁴ *Ibid.*, 130.

²⁵ *Ibid.*, 9.

²⁶ *Ibid.*, 41.

the Bay of Bengal.²⁷ Finally, it establishes “influencing events on land” as one of the primary missions of the IN.²⁸

Carriers, however, are not a recent phenomenon for India. They have played an important role in Indian naval strategy since the state’s independence from Great Britain in 1947. Although written in 1990, Captain Arun Prakash’s “A Carrier for the Indian Navy” provides a useful cultural context for framing India’s well-established attachment to carriers. He claims, “That their country had been prey to centuries of invasions and conquests, and that final domination by an alien power resulted not from overland invasion, but by invasion across her shores, is a racial memory embedded in the Indian psyche.”²⁹ Prakash argues that the combination of India’s colonial experience, geographic location, and two important events during the 1971 Indo-Pakistani war—the carrier *Vikrant*’s contribution to the blockade of East Pakistan and the U.S. attempt to use gunboat diplomacy against India—have convinced Indian leaders of the importance of maintaining a blue-water navy capable of exercising sea control.³⁰

Collectively, the three editions of Japan’s National Defense Program Guidelines (NDPG) since 2004 provide a barometer for Japanese strategic perceptions. Four crucial themes emerge: the rising importance of China in Japanese security policy, the need to restructure the Japanese Self-Defense Force (JSDF) to meet the challenges of an evolving security environment, the JSDF’s force posture in the southwestern region of Japan, and the need to defend small offshore islands—presumably the Senkaku Islands—from possible invasion. *National Defense Program Guidelines: FY 2005-* devotes a single sentence to the defense of offshore islands.³¹ By the 2014 edition, however, the defense of remote islands is mentioned ten times, and the need for capabilities to defend the islands from invasion and recapture them in the event that an invasion cannot be stopped

²⁷ Ibid., 87.

²⁸ Ibid., 119.

²⁹ Arun, Prakash, “A Carrier Force for the Indian Navy,” *Naval War College Review* 43, no. 4 (1990): 59.

³⁰ Ibid., 59–60.

³¹ *National Defense Program Guidelines: FY2005* (Tokyo: Japan Ministry of Defense, 2004), 8, http://www.mod.go.jp/e/d_act/d_policy/national.html.

is clearly described.³² Toward these ends, the two latest NDPGs—coupled with the *Midterm Defense Program (FY2011–FY2015)*—direct the JSDF to transition from the post-Cold War *Basic Defense Force* concept to a new *Dynamic Joint Defense Force* and bolster integrated capabilities in Japan’s southwestern region.³³ In addition, *National Defense Program Guidelines: FY 2014 and Beyond* sets three new precedents that indicate how far the Chinese threat has driven Japan from its post-1945 pacifism. Japan is now developing amphibious capabilities, studying a long-range precision strike option to address ballistic missile threats, and reconsidering its self-imposed ban on arms exports.³⁴

Vice Admiral Yoji Koda’s “A New Carrier Race? Strategy, Force Planning, and JS *Hyuga*” provides the necessary historical and cultural context for analysis of Japan’s strategic trajectory and the development of new classes of helicopter destroyers. Koda describes the U.S.-Japan security alliance within the context of the Cold War as the foundation of the Japanese Maritime Self-Defense Force’s (JMSDF) primary identity as an anti-submarine and SLOC protection force. Although the JMSDF has long considered large deck aviation platforms as a requirement for these roles, post-World War II Japanese cultural resistance to offensive capabilities has repeatedly undermined efforts to develop ships similar to the new DDH classes. When considered together with the increasingly offensive language of the NDPGs, the construction of the new DDHs represents a significant shift away from Japan’s traditional pacifist defense policies.³⁵

The 1994 *Prospects for U.S.-Korean Naval Relations in the 21st Century* indicates that the prospect of aircraft carriers is not new in South Korean strategic thought. The document describes Center for Naval Analysis (CNA) conference participants eagerly considering prospects for a hypothetical reunification of the two Koreas while their

³² *National Defense Program Guidelines for FY 2014 and Beyond* (Tokyo: Japan Ministry of Defense, 2013), 14, http://www.mod.go.jp/e/d_act/d_policy/national.html.

³³ *National Defense Program Guidelines for FY 2011 and Beyond* (Tokyo: Japan Ministry of Defense, 2010), 7–13, http://www.mod.go.jp/e/d_act/d_policy/national.html; *Mid-Term Defense Program (FY 2011–2015)* (Tokyo: Japan Ministry of Defense, 2010), 3–4, http://www.mod.go.jp/e/d_act/d_policy/national.html; *National Defense Program Guidelines for FY 2014 and Beyond*, 7–17.

³⁴ *National Defense Program Guidelines for FY 2014 and Beyond*, 19–20, 27.

³⁵ Yoji Koda, “A New Carrier Race? Strategy, Force Planning, and JS *Hyuga*.” *Naval War College Review* 64, no. 3 (2011): 32–51.

Korean Institute for Defense Analysis (KIDA) counterparts were more concerned with the persistent North Korean threat. While the importance of amphibious, mine, and anti-submarine warfare around the Korean peninsula were debated at length, at least one South Korean participant suggested the addition of two light carriers to the ROKN as part of a blue-water development plan. Two important points emerge from the ensuing discussion. First, the document notes that “most U.S. participants were less enthusiastic about having the ROK Navy procure aircraft carriers” because of “the regional implications of such a move” regarding China and Japan.³⁶ Second, some South Koreans expressed skepticism about the potential range limitations of carrier-based aircraft compared to their land-based counterparts. However, U.S. participants countered that carriers could be quickly stationed in the Yellow Sea, applying air power against North Korean naval threats more directly than air bases on the peninsula. Curiously, CNA representatives tried to dissuade ROKN carrier aspirations while simultaneously highlighting carrier advantages.³⁷

In 2012, however, the prospect of Korean reunification was no longer high on the CNA’s list of concerns. In “Republic of Korea Navy and China’s Rise: Balancing Competing Priorities,” CNA analyst Terence Roehrig describes the ROKN’s challenge as striking a balance between traditional North Korean threats—highlighted by the 2010 *Cheonan* and Yeonpyeong Island incidents—and larger regional concerns including China’s strategic rise. “The South Korean Navy does not appear to have made any specific operational changes in response to its concerns,” Roehrig argues, “but its development of a blue water navy continues in part with an eye toward China.”³⁸ Roehrig also identifies the *Cheonan* incident as a turning point in South Korean blue-water planning, forcing the ROKN to concede the need to balance coastal defense with regional

³⁶ Christopher D. Yung, *Prospects for U.S.-Korean Naval Relations in the 21st Century* (Alexandria, VA: The Center for Naval Analyses, 1995), 12, <https://www.cna.org/research/1995/prospects-us-korean-naval-relations-21st-century>.

³⁷ *Ibid.*, 2–16.

³⁸ Terence Roehrig, “Republic of Korea Navy and China’s Rise: Balancing Competing Priorities,” in *CNA Maritime Asia Project Workshop Two: Naval Developments in Asia*, ed. Michael A. McDevitt and Catherine K. Lea (Alexandria, VA: The Center for Naval Analyses, 2012), 62, <https://www.cna.org/research/1995/prospects-us-korean-naval-relations-21st-century>.

maritime security requirements: “The issue is one of balance, and ROK leaders continue to assess and struggle with where to draw the lines between coastal defense and a blue water navy to achieve the proper balance.”³⁹ The ROKN’s predicament suggests the need for platforms that can serve both peninsular and regional roles.

In “From Defense to Deterrence: The Core of Defense Reform Plan 307,” Rhee Sang-Woo of the Center for Strategic and International Studies (CSIS) analyzes the ROK’s strategic shift to *proactive deterrence* in response to the 2010 North Korean provocations and argues that the military superiority necessary for the new doctrine also contributes to South Korea’s efforts to convince the North of the necessity for any reunification attempt to occur under the banner of a democratic republic.⁴⁰ What can be distilled from the South’s strategic predicament? The ROK’s requirements to establish military superiority on the peninsula, defend against coastal threats, and maintain some semblance of regional relevancy in the face of China’s naval build-up indicates the need for credible, multi-purpose, power projection platforms.

E. METHODS AND SOURCES

The thesis uses a combination of historical and comparative methods. The relevant histories of the four navies under examination—PLAN, IN, JMSDF, and ROKN—and the regional strategic environment are reviewed to identify evolving defense requirements that could justify investment in carrier forces. The thesis uses primary sources from regional defense agencies and military branches to identify major strategic concerns while secondary sources provide historical and cultural interpretation. Finally, analysis of vessel types and capabilities identifies probable strategic and operational roles for regional carrier forces.

³⁹ Ibid., 65.

⁴⁰ Rhee Sang-Woo, “From Defense to Deterrence: The Core of Defense Reform Plan 307,” Center for Strategic and International Studies, last modified September 7, 2011, <http://csis.org/publication/defense-deterrence-core-defense-reform-plan-307>.

F. THESIS OVERVIEW

The thesis consists of six chapters: (I) Introduction, (II) The People's Liberation Army Navy, (III) The Indian Navy, (IV) The Japanese Maritime Self Defense Force, (V) The Republic of Korea Navy, and (VI) Conclusion. To understand the regional naval security environment and the role of aircraft carriers within it, the thesis first addresses PLAN modernization. The IN is examined second because of India's outward-looking maritime strategy, carrier combat experience, and long-established intention to build a capable carrier force. The JMSDF is examined third because of its new capacity to support fixed-wing carrier operations despite traditional Japanese resistance to carriers and other offensive capabilities since the ratification of the 1947 *peace constitution*. Fourth, the ROKN is examined from a theoretical perspective due to the early stages of its feasibility studies. Finally, the sixth chapter draws conclusions that are relative to U.S. naval forces and offers alternative perspectives—based on the examination of the four regional navies—with which to consider the future of U.S. Navy carriers.

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II. THE PEOPLE'S LIBERATION ARMY NAVY

A. INTRODUCTION

In November 2008, Major General Qian Lihua, director of the Foreign Affairs Office of China's Ministry of Defense, commented on his nation's growing interest in aircraft carriers:

The question is not whether you have an aircraft carrier, but what you do with your aircraft carrier. Navies of great powers with more than ten aircraft carrier battle groups with strategic military objectives have a different purpose from countries with only one or two carriers used for offshore defense. Even if one day we have an aircraft carrier, unlike another country, we will not use it to pursue global deployment or global reach.⁴¹

Qian's statement clearly contrasts the carrier aspirations of the PLAN against the carrier-centric U.S. Navy, emphasizing a limited role for a small number of vessels. Such statements, however, have not ended the debate surrounding the strategic purpose of Chinese carriers and the larger effort to modernize the PLAN. In 2009 the Office of Naval Intelligence (ONI) included an artist's depiction of a potential indigenous Chinese carrier design in an assessment titled *The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics*. The fictional depiction draws heavily on Western concepts of modern super-carriers, including multiple steam powered catapults; an angled flight deck for aircraft recovery; and a highly capable air wing consisting of multi-role fighters, helicopters, and airborne early warning (AEW) aircraft. Such mirror imaging plays to popular interpretations of China's global aspirations and military modernization as a direct challenge to the United States, but may miss the mark when it comes to understanding the direction that the PLAN is heading. As the *Liaoning*, China's first operational carrier based on an *Admiral Kuznetsov*-class hull purchased from Ukraine in 1998, conducts sea trials, and the initial cadre of carrier aviators is trained by the People's Liberation Army Naval Air Force (PLANAF), observers anxiously await signs that could

⁴¹ "China has Aircraft Carrier Hopes," *BBC News*, November 17, 2008, <http://news.bbc.co.uk/2/hi/7732679.stm>.

clarify China's intentions. Qian's question is the key to understanding how carriers fit into China's defense strategy: What does China plan to do with them? Chinese officials may not know the answer yet. Western scholars and analysts have offered a spectrum of possibilities from humanitarian operations to offensive sea control, but an examination of each uncovers potential problems. Given China's territorial claims and regional maritime disputes, it is likely that China's evolving carrier force will be integrated into a broader doctrine of regional power projection beyond the cover of its capable, but geographically limited, land-based forces. This chapter examines China's evolving maritime strategy, potential roles for carriers within that strategy, and indicators of the PLAN carrier force's future direction.

B. CHINA'S EVOLVING MARITIME STRATEGY

At their core, aircraft carriers are power projection instruments that provide flexible options for the pursuit of national objectives. Depending on their configuration and the composition of the embarked airwing, carriers are capable of exerting national power in a variety of contingencies from HADR to offensive combat operations far from the reach of a state's land-based aircraft. It is now common for a U.S. Navy carrier strike group (CSG) to conduct operations as varied as disaster relief, maritime security, strike warfare, and gunboat diplomacy on a single deployment. The PLAN, however, is not the U.S. Navy. Despite a brief lapse of judgment in using a fictional rendering of a Chinese carrier that is unsupported by evidence, ONI concludes that PLAN modernization efforts do not represent a desire to establish a global presence of the type exercised by the United States. Instead, China's attention remains focused on East Asia with a growing appreciation for its maritime periphery. Still, unless more aircraft carrier theme parks are planned, the completion of *Liaoning* and the announcement of an indigenous carrier program indicate that China desires the ability to project power somewhere that is currently beyond the reach of the mainland.⁴²

⁴² Office of Naval Intelligence, *The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics* (Suitland, MD: Office of Naval Intelligence, 2009), 2; China purchased the former Soviet aircraft carrier Kiev in 2000 and converted the ship into a tourist attraction at Tianjin Binhai Aircraft Carrier Theme Park.

Power projection beyond the littoral environment of the Chinese coast is a significant break from the PLAN's traditional role. Until the mid-1980s, the PLAN was primarily a coastal defense force that supported army operations when necessary. The 1927–1950 Chinese civil war, the overlapping Japanese invasion, and the primacy of continental threats from Russia and India during the following decades served to relegate the PLAN to a tertiary position in Chinese defense strategy behind the PLA and People's Liberation Army Air Force (PLAAF). In 1982, as China became increasingly integrated into the globalized world economy, Admiral Liu Huaqing assumed command of the PLAN and drove a shift from coastal defense to offshore defense: a term defined by ONI as “a regional strategy that does not advocate replicating U.S. or [former] Soviet ‘blue-water’ naval capabilities. Instead, it calls for naval capabilities suited for China’s specific regional maritime interests.”⁴³ Liu, considered the father of the modern PLAN, advocated expanded roles beyond coastal waters to secure Chinese economic and territorial interests. Aircraft carriers were an integral part of his plan, which he continued to promote as Vice Chairman of the Central Military Commission (CMC) until 1997.⁴⁴

Liu's tenure at the CMC overlapped with President Jiang Zimen's 1993 issuance of “military guidelines for the new period” that directed the development of offensive sea control capabilities to secure economic and maritime territorial claims in addition to A2/AD capabilities designed to prevent U.S. intervention in a conflict with Taiwan. In 2004, President Hu Jintao built upon Jiang's guidelines and conferred four new “historical missions of the armed forces for the new stage in the new century” to the PLA: consolidate the ruling status of the Communist Party; help ensure China's sovereignty, territorial integrity, and domestic security in order to continue national development; safeguard China's expanding national interests; and help maintain world peace.⁴⁵ These broad missions leave significant room for interpretation, but references to

⁴³ Office of Naval Intelligence, *People's Liberation Army Navy*, 5.

⁴⁴ Andrew S. Erickson, Abraham M. Denmark, and Gabriel Collins, “Beijing's Starter Carrier and Future Steps: Alternatives and Implications,” *Naval War College Review* 65, no. 1 (2012): 16–9; Office of Naval Intelligence, *People's Liberation Army Navy*, 5–6.

⁴⁵ Cortez A. Cooper, “The PLA Navy's ‘New Historic Missions’: Expanding Capabilities for a Re-emergent Maritime Power,” RAND Corporation, last modified June 11, 2009, 2–3, <http://www.rand.org/pubs/testimonies/CT332.html>.

sovereignty, territorial integrity, national development, and expanding national interests are indicative of a growing awareness of the maritime domain. Consistent with this awareness, the RAND Corporation reported in 2009 that “China’s leadership has openly stated that the PRC is a central player in the world economy, and that global stability and prosperity are intertwined with Chinese national development.”⁴⁶

As rare glimpses into an otherwise opaque defense establishment, China’s biennial defense white papers (DWP) provide important indications of the PLA’s strategic trajectory. Concerning China’s international security outlook, the DWPs from 2004 thru 2010 used relatively passive language with references to “developing friendly relations and strengthening cooperation with other countries” in 2004; “mutual trust, mutual benefit, equality, and coordination” in 2006; “developing friendly relations” in 2008; and “promoting the establishment of equal, mutually beneficial . . . mechanisms for military confidence building . . . based on principles of holding consultations on an equal footing” in 2010.⁴⁷ Then, in 2012, the language took a sharper tone:

China’s armed forces have always been a staunch force upholding world peace and regional stability, and will continue to increase cooperation and mutual trust with the armed forces of other countries, participate in regional and international security affairs, and play an active role in international political and security fields.⁴⁸

Maritime security interests have also assumed a progressively greater place in Chinese defense policy. While explicit reference was omitted in 2004, the 2006 and 2008 DWPs both refer to “conflicting claims” over maritime territorial rights and interests.⁴⁹ The 2010 DWP intensified the maritime rhetoric, stating that “disputes over territorial and maritime rights and interests flare up occasionally. . . . Pressure builds up in preserving China’s territorial integrity and maritime rights and interests.”⁵⁰ Finally, in

⁴⁶ Ibid., 2.

⁴⁷ U.S.-China Economic and Security Review Commission, *China’s 2012 Defense White Paper: The Diversified Employment of China’s Armed Forces* (Washington, DC: U.S.-China Economic and Security Review Commission, 2013), 6.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.

2012, maritime interests became essential to Chinese national strategy: “It is an essential national development strategy to exploit, utilize and protect the seas and oceans, and build China into a maritime power. It is an important duty for the PLA to resolutely safeguard China’s maritime rights and interests.”⁵¹ China’s increasingly assertive language and recognition of both regional and global maritime economic interests suggest a growing need for a modern and capable navy. A2/AD capabilities have obvious implications for containing and controlling regional conflict, but the question that continues to frustrate scholars is what roles power projection instruments such as aircraft carriers will fill in Chinese defense strategy.

C. ILL-CONVEIVED ROLES FOR PLAN CARRIERS

Are aircraft carriers all that observers make them out to be, providing China with a naval Swiss Army knife that can solve all of their potential maritime problems? The answer is *maybe*, with some common sense caveats. In an article for *Naval War College Review*, Andrew Erickson, Abraham Denmark, and Gabriel Collins respond to arguments that the PLAN’s mission will expand beyond the Western Pacific to include humanitarian operations, SLOC protection, and naval diplomacy:

In the western Pacific and the Indian Ocean, China has not developed high-intensity military capabilities, instead projecting influence in the form of peacetime deployments. It is in conjunction with this more distant, low-intensity effort that China is likely developing its naval aviation. The validity of that strategic assessment would be bolstered by China’s indigenous development of additional, potentially larger and more capable, carriers.⁵²

It is unclear how they differentiate between high and low-intensity capabilities, but carriers similar to *Liaoning*, let alone larger and more capable ships, should not be considered low-intensity. In addition to the combat power that carriers can bring to bear, considerable time and resources are required to construct, operate, and maintain a carrier force, especially one being developed from the ground-up by a nation without a history or

⁵¹ Ibid.

⁵² Erickson, Denmark, and Collins, “Beijing’s Starter Carrier,” 36.

culture of carrier aviation to rely on. What low-intensity functions would a carrier force serve that could not be served by more appropriately scaled and cost effective forces?

Erickson, Denmark, and Collins offer six potential roles for PLAN carriers, but four of them do not provide significant strategic relevance. First, carriers could be employed to ensure the security of China's SLOCs against low-intensity threats such as piracy. Chinese leaders have recognized the threat posed by piracy to the sea lanes that transport the majority of imported Chinese oil, leading to PLAN anti-piracy deployments in the Gulf of Aden since 2008. Despite the success of these patrols, Erickson, Denmark, and Collins argue that counter-piracy

could be enhanced significantly by carrier-based, dedicated, airborne reconnaissance platforms. Carrier-borne strike-fighters would also give China a credible way to deter and attack pirates, as well as any other elements that attempted to disrupt Chinese vessels in the South China Sea, the Indian Ocean, or beyond.⁵³

Airborne reconnaissance would aid the counter-piracy mission, but carrier-based, fixed-wing reconnaissance is not the most effective way to extend influence over a SLOC. Negotiating basing agreements for long-range, high-endurance maritime patrol aircraft would offer larger sensor suites, longer loiter times, and extended ranges for potentially lower cost. A complementary or alternate option is the use of rotary-wing assets that can be integrated with the smaller surface combatants. Even a large-deck amphibious ship that could accommodate several helicopters, small boats, special operations forces, and a contingent of marines would be better suited for handling irregular threats at sea than the more specialized capabilities of carrier-based strike-fighters.

Second, PLAN carriers could be used for humanitarian relief missions. Erickson, Denmark, and Collins state that "the PLAN could reap substantial diplomatic benefits from a carrier that could support intensive helicopter operations following a disaster like the 2004 Indian Ocean Tsunami or Japan's 2011 earthquake."⁵⁴ It is true that China

⁵³ Ibid., 37.

⁵⁴ Ibid., 37-8.

provided only a meager contribution to the multi-national relief efforts in the wake of the 2004 tsunami while the United States dispatched the *Abraham Lincoln* CSG, the *Bonhomme Richard* expeditionary strike group (ESG), and the hospital ship *Mercy*. China appeared helpless in the face of death and destruction on the doorstep of the South China Sea. Former U.S. Undersecretary of the Navy Bob Work said, “The tsunami embarrassed them. The Chinese respond to embarrassments in very focused ways.”⁵⁵ If the PLAN was truly concerned with responding to humanitarian crises, however, they would be better served by large-deck amphibious ships carrying heavy lift helicopters, landing craft, and marines to provide manpower ashore. Similar to the argument against using fixed-wing carriers against low-intensity threats along vital SLOCs, improved amphibious capability or investment in humanitarian ships similar to *Mercy* would be a more cost effective way to exercise soft-power. The U.S. Navy dispatched *Abraham Lincoln* to the scene because she was already nearby on a port call to Hong Kong. The carrier provided some relief through a handful of embarked helicopters, but she was not ideally suited for the task. Although Chinese analysts noted the use of *Dwight D. Eisenhower* as a platform for U.S. Army helicopters during the 1994 peacekeeping mission in Haiti, their interest only proves that what is needed for humanitarian missions is a flat surface at sea that can support large numbers of helicopters.⁵⁶ A carrier like *Liaoning* with a ski jump for launching fixed-wing fighters is not the answer. In addition, humanitarian relief beyond the mainland still appears to be low on China’s list of priorities. After Typhoon Haiyan swept across the Philippines in November 2013, the Chinese government under-utilized its most capable soft-power instrument—financial aid—by pledging only \$100,000. Within days, domestic and international criticism prompted the government to supplement its pledge with \$1.4 million in supplies.⁵⁷

Third, PLAN carriers could be used for extended-range power projection along vital SLOCs between China and the markets and resources of Europe, Africa, and the

⁵⁵ David Axe, “How China Mimics U.S. Soft Power,” *The Diplomat*, November 9, 2010, <http://thediplomat.com/2010/11/how-china-mimics-us-soft-power/2/>.

⁵⁶ Erickson, Denmark, and Collins, “Beijing’s Starter Carrier,” 41.

⁵⁷ Jane Perlez, “China Increases Aid to Philippines,” *The New York Times*, November 14, 2013, http://www.nytimes.com/2013/11/15/world/asia/chinese-aid-to-philippines.html?_r=0.

Middle East. While contending that access to the global economic system is a vital Chinese national interest, Erickson, Denmark, and Collins acknowledge that the support system needed to sustain extended deployments of PLAN carriers would require a reversal of historical Chinese distaste for basing agreements with foreign governments. Although a textbook used by China's National Defense University promotes the establishment of "a contemporary, integrated and offensive, new, special mixed fleet with an aircraft carrier as core and missile destroyers (or cruisers) and nuclear attack submarines as backbone forces" to secure China's vital SLOCs, it is unclear what threats would prompt Chinese officials to adopt such a force structure.⁵⁸ The description sounds suspiciously like a U.S. Navy CSG, which is counter to General Qian's assertion that China's carriers are intended for offshore defense instead of regional or global reach. In addition, the sea-borne economic system that China is so reliant on is also in the national interests of states around the globe. The 2011 national military strategy of the United States reaffirms the historical U.S. commitment to international freedom of action and access to the global commons while condemning both state and non-state actors seeking to limit access. The mission described by China's National Defense University is the mission of the U.S. Navy in cooperation with regional navies around the world. If China desires to assume some of the responsibility for ensuring freedom of access—although contrary to China's established practices of developing anti-access capabilities and aggressively pursuing excessive maritime territorial claims—traditional surface combatants and maritime patrol aircraft are a more appropriate contribution. The construction of U.S.-style CSGs is both costly and unnecessary.

Fourth, carriers could be used in a Taiwan scenario. Although carriers were promoted by Admiral Liu as an alternative to constructing additional mainland airfields adjacent to Taiwan; Erickson, Denmark, and Collins acknowledge that Chinese land-based aircraft are now fully capable of handling a Taiwan scenario while PLA A2/AD capabilities prevent foreign naval intervention. Instead, they suggest that a PLAN carrier could be used to protect the approaches to the scene of action along the periphery, such as south of Hainan Island. However, this role assumes that there is a need to protect the

⁵⁸ Erickson, Denmark, and Collins, "Beijing's Starter Carrier," 39.

approaches from something. Foreign naval forces, especially U.S. Navy CSGs, would be more vulnerable along the north and south approaches than they would be approaching Taiwan from the east. PLA A2/AD weapons, including the DF-21D anti-ship ballistic missile, can cover the peripheral approaches in addition to the sea around Taiwan, and the northern and southern routes are exposed to additional threats from land-based aircraft, cruise missiles, and surveillance assets. The authors concede that a carrier similar to *Liaoning* would need to be “backed up by land-based air cover” to succeed in such guard duty.⁵⁹ The reasons for this limitation will be discussed in a later section.

D. RETURNING TO A CARRIER’S ROOTS: POWER PROJECTION

Erickson, Denmark, and Collins’s remaining two roles for PLAN carriers are much closer to meeting Chinese strategic intent and return to the core mission of a carrier force: power projection. First, the authors argue that Admiral Liu “envisioned the maintenance of China’s claims in the South China Sea as a primary carrier mission . . . [and] worried that amphibious vessels did not provide adequate air cover.”⁶⁰ Indeed, in 2010, retired PLA General Xu Guangyu told a reporter, “Our carrier will definitely not engage with the U.S.’ powerful aircraft carrier fighting groups, but it’s enough to be a symbolic threat among neighboring countries like Vietnam, Indonesia, and the Philippines who have territorial disputes with China.”⁶¹ The ability to extend offensive air power beyond the current reach of land-based aircraft gives the symbolic threat real credibility. From China’s southernmost airfields on Hainan Island, the PLA’s Su-30 family of frontline strike-fighters can barely cover the Spratly Islands without in-flight refueling, and Indonesia and most of the Philippines southeast of Manila remain beyond their reach.⁶² In addition, the Su-30 family is incompatible with the refueling system on China’s aging fleet of approximately three PLANAF and ten PLAAF H-6U tankers.⁶³

⁵⁹ Ibid., 38.

⁶⁰ Ibid., 36.

⁶¹ Minnie Chan, “Challenge Will be Training Pilots, Ex-General Says,” *South China Morning Post*, April 1, 2010, <http://www.scmp.com/article/710243/challenge-will-be-training-pilots-ex-general-says>.

⁶² Office of Naval Intelligence, *People’s Liberation Army Navy*, 24.

⁶³ Sino Defense, accessed December 1, 2013, <http://www.sinodefence.com/airforce/airlift/h6tanker.asp>.

Carriers would provide China with greater flexibility, increased on-station time, and more responsive aerial forces to project power over disputed maritime territories in the South China Sea or over the Philippine and Indonesian archipelagoes; carrier air forces could support an amphibious assault, defend occupied islands from counter-attack, and deter or defeat a response from regional neighbors.

Second, carriers could help the PLAN project power beyond the First Island Chain but not in the way that Erickson, Denmark, and Collins envision. They assert:

aircraft carriers could ultimately help the PLAN begin to shift its operational focus within the First and Second Island Chains from anti access and area denial to sea control. . . . [which] seeks to assert a navy's mastery over a given body of water in relative perpetuity.⁶⁴

Their statement implies that A2/AD and offensive sea control are mutually exclusive, and the PLAN must consciously shift from one to the other. Fortunately for the PLAN, however, the two concepts are mutually supportive. It is true that PLA A2/AD capabilities present a formidable challenge to any outside navy that might attempt to intervene in a maritime territorial dispute, but the A2/AD umbrella may not serve only a defensive purpose. In 2009, Rear Admiral Zhang Zhaozhang observed, "In order to defend the security of the national territory, marine territories and the waters within the First Island Chain, this proactive defense strategy does not mean that our navy only stays within the First Island Chain."⁶⁵

What would a proactive defense strategy look like? Daniel Kostecka, a senior U.S. Navy analyst, ties PLA counter-strike doctrine, designed to disrupt an opponent's rear areas through long-range strike to prevent or delay intervention in a regional conflict, with U.S. vulnerabilities in logistics and command-and-control. Citing a 2005 PLAN People's Navy newspaper article that identified continuous underway replenishment as a major weakness of U.S. Navy CSGs, Kostecka argues that logistics and command-and-control assets are likely first targets at the opening of a Western Pacific conflict between

⁶⁴ Erickson, Denmark, and Collins, "Beijing's Starter Carrier," 38.

⁶⁵ Daniel J. Kostecka, "China's Aerospace Power Trajectory in the Near Seas," *Naval War College Review* 65, no. 3 (2012): 105.

China and the United States. Deprived of underway replenishment, aerial refueling, and land-based AEW, the U.S. Navy and Air Force would be forced to withdraw or accept operations under degraded conditions far from logistical support. If U.S. naval forces did attempt to join the battle, the PLA's 2004 "Study on Joint Firepower Warfare Theory" suggests that land-based ballistic missile forces and the PLAN will coordinate anti-ship missile attacks from both high and low altitudes as far out to sea as possible. In such a scenario, carrier-based air cover would be essential for PLAN forces operating beyond the reach of land-based aircraft in addition to serving as low-altitude, anti-ship cruise missile platforms.⁶⁶

Zhang's statement and Kostecka's prediction fit neatly with Toshi Yoshihara and James Holmes's suggestion of a Maoist influence on PLAN strategy: a type of guerilla warfare at sea.⁶⁷ For Mao Tse-tung, they argue, "[resorting] to the strategic defensive did not limit military strategy or tactics to the purely defensive or passive."⁶⁸ In a maritime conflict, China could undertake tactical offensives as part of a larger strategic defense to prevent or delay outside intervention. The PLAN could use the maneuvering space inside the First Island Chain, the use of which has been denied to an opponent by A2/AD weapons, as an interior line from which to project power out to the Second Island Chain or beyond. Similar to the widely accepted doctrinal concept of air superiority, sea control could be projected beyond the First Island Chain over a specified area for an objective-

⁶⁶ Ibid., 110–3.

⁶⁷ It would be a mistake to assume that the modern PLAN will automatically revert to Maoist military thought inherited from the early twentieth century. Robert Taber reminds us that "the policy of hitting the enemy when he is weak, evading him when he is strong, taking the offensive when he falls back, circling around when he advances—all of this is only common sense. There is no great novelty in it, nor can the Marxist-Leninist camp claim any especial credit for it." China's guerilla legacy should not be superimposed onto the modern PLAN out of a lack of better ideas. Instead, analysts should be cognizant of logical strategies that the PLAN could employ to obtain Chinese national objectives when confronted by a qualitatively or quantitatively superior opponent. Again, Taber reminds us that "in general, all warfare involves the same basic problem: how to use one's strength to exploit the enemy's weaknesses and so to overcome him (18)." To oppose an intervention by U.S. naval forces in the East or South China Seas, the PLAN could resort to a guerilla-like strategic defense while political objectives inside the First Island Chain are settled on Beijing's terms. Against a lesser opponent, however, the PLAN may choose to quickly and decisively settle the issue by overwhelming the enemy. The potential flexibility of PLAN carriers make them adaptable to both scenarios. *War of the Flea: The Classic Study of Guerilla Warfare* (Dulles, VA: Potomac Books, 2002), 17.

⁶⁸ Toshi Yoshihara and James R. Holmes, *Red Star over the Pacific: China's Rise and the Challenge to U.S. Maritime Strategy* (Annapolis, MD: Naval Institute Press, 2010), 29.

driven period of time instead of in perpetuity. Toward this end, PLAN carrier aircraft would serve either as strike platforms employing anti-ship cruise missiles or, as suggested by Erickson, Denmark, and Collins, provide air superiority over a PLAN surface action group.⁶⁹

E. INDICATORS OF STRATEGIC PURPOSE

Carriers are ideally suited for projecting power over disputed maritime territories or beyond the First Island Chain as part of a proactive defense.⁷⁰ Strategic decisions concerning the PLAN's force structure will determine which of the two roles their future carrier force is weighted towards, but it is too early to make a determination based on *Liaoning*, which will likely be used as a training carrier.⁷¹ The PLAN faces the daunting task of developing a carrier culture from scratch. In addition to training aviators in carrier takeoff and landing, shipboard sensors and command-and-control systems need to be integrated with the airwing, sailors must learn how to manage the movement of aircraft on the flight deck, maintenance personnel will have to overcome unique aircraft maintenance problems in the corrosive environment, support and escort vessels must be integrated into a battle group, and senior officers must learn how to effectively employ the ship and airwing. Significant growing pains are unavoidable, but lessons from *Liaoning's* experience will pay enormous dividends for future Chinese carrier design and doctrine. Seven months after *Liaoning's* 2012 commissioning, the ship's crew amassed more than 4,000 recommendations for improvement.⁷² Many changes will be minor, but observers are on the lookout for changes in future carrier designs that carry significant strategic consequences.

⁶⁹ Erickson, Denmark, and Collins, "Beijing's Starter Carrier," 38.

⁷⁰ The speed and altitude of carrier-borne strike aircraft can extend the effective reach of naval surface forces by contributing to the intelligence picture and providing commanders with flexible attack options. A proactive defense should be the most effective when air and surface forces are successfully integrated and coordinated.

⁷¹ Office of Naval Intelligence, *People's Liberation Army Navy*, 17.

⁷² Minnie Chan, "Rare Glimpse of Life Aboard the Aircraft Carrier *Liaoning*," *South China Morning Post*, April 20, 2013, <http://www.scmp.com/news/china/article/1218749/rare-glimpse-life-aboard-aircraft-carrier-liaoning>.

The continued use of a flight deck ski jump on future carrier classes will be the most significant indicator because it affects the composition and capabilities of future airwings. Lacking a catapult assisted takeoff capability, the ski jump design limits the weight of launching aircraft and, therefore, the weight of the ordnance that the aircraft can carry. Since the PLAN has focused on development of the J-15, an unlicensed copy of Russia's Su-33 strike-fighter, as the backbone of future carrier airwings, continued reliance on ski jump designs will necessitate lighter configurations, indicating intent to use the carriers in an air-superiority role. The J-15 would be able to provide some capability in an air-to-surface strike role, but the aircraft's full strike potential will not be realized unless mated with a catapult assisted carrier.⁷³

In addition, a catapult design is considered necessary to support larger, heavier aircraft that serve AEW and logistics roles, which is why Erickson, Denmark, and Collins assert that a ski jump carrier would need to be supported by land-based aircraft to guard the seaward approaches to Taiwan. Without the benefit of organic, long-endurance AEW aircraft such as the U.S. Navy's E-2C Hawkeye, PLAN vessels are reliant on surface based radars with horizon limitations determined by their height above the sea, providing detection sanctuaries to distant opponents and shortening the time available for radar controllers to direct fighters toward an intercept. In a defensive role, PLAN carriers would be at a severe disadvantage operating beyond land-based AEW coverage—something they will need to do if they are going to operate beyond the First Island Chain as part of a proactive defense. Disagreeing with the PLAN's decision to purchase an ex-Soviet design specifically because of its inability to support AEW aircraft, Rear Admiral Yin Zhuo called the ski jump a “mistake.”⁷⁴

If the PLAN retains the ski jump design but breaks with its current fighter-centric airwing concept to acquire alternative aircraft optimized for light attack, the strike role will become more prominent. The Harrier family of short takeoff aircraft has served successfully onboard the U.S. Navy's *Tarawa* and *Wasp*-class amphibious assault ships, Britain's *Hermes* and *Invincible*, and Spain's *Príncipe de Asturias*. However, the Royal

⁷³ Erickson, Denmark, and Collins, “Beijing's Starter Carrier,” 30.

⁷⁴ *Ibid.*, 33.

Navy's experience in the 1982 Falklands conflict serves as a warning to any navy considering reliance on short range, light attack aircraft without the support of air-superiority fighters and AEW aircraft in the face of even a moderately capable opponent.

F. CONCLUSION

In 1971, a Chinese official said, "China will never build an aircraft carrier. Aircraft carriers are tools of imperialism; they're like sitting ducks waiting to be shot."⁷⁵ It is now obvious that the PLAN has shed its inhibitions. China's nascent carrier force is undergoing a period of self-discovery, and, while the country's defense goals and global economic awareness have blossomed in recent years, the rapidly modernizing PLAN is enduring growing pains to meet the needs of the nation. New tactics, systems, and operational concepts will be tested, and many will be discarded along the way as the PLAN masters new roles in Chinese defense strategy. In the meantime, there is nearly as much disagreement among Chinese analysts as among their western counterparts over the exact nature of China's carrier ambitions. While it is true that China's continued economic growth and national interests lie increasingly on the sea, there is little reason to project power beyond the Western Pacific into arenas that remain the traditional haunts of the U.S. Navy and its regional partners. Economic and territorial interests much closer to home, however, continue to figure prominently in China's defense white papers and in its interactions with neighboring states. The PLAN's future carrier force, while providing inherent flexibility for contingencies in distant seas, is likely destined for power projection roles that will allow China to assert military influence within its regional sphere of interest but beyond the reach of continental assets.

⁷⁵ Ibid., 17.

III. THE INDIAN NAVY

A. INTRODUCTION

In 1990, Arun Prakash, an Indian naval aviator, future commanding officer of the aircraft carrier *Viraat*, and eventual Chief of the Naval Staff, remarked on reactions to India's naval modernization of the late 1980s:

India has possessed a million-strong army and a thousand-aircraft air force (respectively, the third and fourth largest in the world) for many years without attracting inordinate attention. Current efforts to bring her navy to an equal strength level are raising hackles in some quarters. This, perhaps, significantly indicates the implications of naval power. In this context, the question most often asked is: What is India's purpose in having two aircraft carriers and plans to build a third?⁷⁶

His statement sums up India's strategic quandary. Years of border wars between India and its northern neighbors—Pakistan and China—have solidified the army and air force's position in the national defense paradigm while saddling the Indian Navy (IN) with what Prakash describes as a “Cinderella service” burden.⁷⁷ This burden, however, is contrary to what many might regard as India's natural strategic position, both in terms of geography and its growing, internationally-oriented economy. “An array of land-driven concerns has . . . since Independence, had a way of dragging India back to shore. . . . Blessed by its geography, India is cursed by its neighborhood,” laments Iskander Rehman.⁷⁸ Despite the neighborhood, however, the IN has endured. Now, after publishing a new maritime strategy in 2007, the IN is aggressively pursuing naval modernization programs that include foreign and indigenously produced carriers. Unlike the PLAN, however, IN carrier acquisitions are not a revolutionary break from the past. Instead, the acquisition of *Vikrant*—the second IN carrier to bear that name—and *Vikramaditya* is the realization of a long-standing dream for the IN and its aspirations to

⁷⁶ Arun Prakash, “A Carrier Force for the Indian Navy,” *Naval War College Review* 43, no. 4 (1990): 58.

⁷⁷ Iskander Rehman, “India's Aspirational Naval Doctrine,” Carnegie Endowment for International Peace, last modified October 15, 2012, <http://carnegieendowment.org/2012/10/15/india-s-aspirational-naval-doctrine/e177?reloadFlag=1>.

⁷⁸ *Ibid.*

be a blue-water navy without equal in the Indian Ocean. This chapter examines the IN's historical approach to naval power projection, its historical relationship with aircraft carriers, and the role of carriers in contemporary Indian maritime strategy.

B. INDIA'S HISTORICAL APPROACH TO NAVAL AND CARRIER-BASED POWER PROJECTION

The IN inherited a healthy respect for carriers from the Royal Navy. Based on a 1947 strategic assessment of India's security needs after independence from the British Empire, the IN envisioned two fleets, each anchored by a carrier, that could cover the east and west coasts of India, which Cheng Ruisheng describes as a "big dagger penetrating the heart of the Indian Ocean."⁷⁹ In 1957, India purchased the World War II surplus carrier *Hercules* from Britain: refitted with an angled flight deck and steam catapults, the ship was reborn in 1961 as the original *Vikrant*. India's first carrier, however, was forced to wait for the right moment to make an impression. In 1962, the Sino-Indian war erupted with PLA offensives across the disputed Himalayan border and cemented what Prakash describes as the "continental bias of Indian thinkers."⁸⁰ During the Indo-Pakistani War of 1965, Pakistani and Indian naval forces each played minor roles while the bulk of operations were conducted in or near the disputed Kashmir region. *Vikrant* was in dry-dock at the time, a fact recounted with a sense of regret by the Indian Ministry of Defense's bimonthly magazine *Sainik Samachar*, in a brief history of the ship.⁸¹

Finally, in 1971, *Vikrant*, along with the rest of the IN's power projection capabilities, was put to the test in the first of two episodes identified by Prakash as "demonstrations of the classical application of naval power:" episodes that helped undermine the previous continental bias of Indian strategic thought.⁸² From December 4–10 during the 1971 Indo-Pakistani War, *Vikrant* launched highly successful air strikes against Pakistani shipping in the ports of Chittagong and Cox's Bazar in East Pakistan—

⁷⁹ Diyana Ishak, "Reflections from China: An Interview with Cheng Ruisheng," *Journal of International Affairs* 64, no. 2 (2011): 219, ProQuest Research Library (864293275).

⁸⁰ Prakash, "A Carrier Force for the Indian Navy," 59.

⁸¹ "First Aircraft Carrier: Saga of Vikrant," *Sainik Samachar*, accessed May 18, 2014, <http://www.sainiksamachar.nic.in/englisharchives/2013/aug16-13/h2.htm>.

⁸² Prakash, "A Carrier Force for the Indian Navy," 59.

present day Bangladesh. *Vikrant's* strikes, as part of a larger IN blockade of the Bay of Bengal, helped isolate East Pakistan from the larger war: the damage done to shipping and port facilities is generally credited with neutralizing East Pakistani ports, preventing the sustainment of East Pakistani forces, and isolating the eastern theater from the larger war.⁸³ Simultaneously, IN surface forces in the west conducted surface-to-surface missile strikes against Karachi, destroying Pakistani warships, merchantmen, and fuel reserves. Taken together, the IN's highly successful strike operations in two theaters proved the utility of naval power projection launched from the Indian Ocean.

Vikrant, however, was not the only carrier to make an impression on the Indians in 1971. Prakash observes

the significance of naval power was rudely brought home to Indian strategists and politicians when President Nixon attempted to intervene in the war on behalf of Pakistan by dispatching Task Force 74 to the Bay of Bengal. . . . Nixon's deployment of the *Enterprise* task force was a somewhat ill-considered and ill-timed attempt at gunboat diplomacy. . . . It helped, more than anything else, to solidify a consensus—both politically and militarily—that there was a need to insulate the country against externally applied pressures and laid a firm foundation for India's naval resurgence.⁸⁴

The war concluded before the *Enterprise* task force arrived, but the point was made. The 1971 war, therefore, served two important functions in the evolution of Indian naval strategic thought. First, it demonstrated the strategic potential of robust, sea-based power projection and strike warfare on the Indian sub-continent. Second, it demonstrated the coercive power that naval power grants to the state that wields it. The *Enterprise* episode argued in favor of a more powerful IN by exposing India's vulnerability to third party pressure while underscoring, on a grander scale, the strategic lesson of power projection provided by *Vikrant*. Given the lessons of 1971, it is not surprising that the IN purchased the Royal Navy's *Hermes*—the V/STOL carrier of Falklands fame—in 1987 and renamed her *Viraat*, making the IN the first multi-carrier navy to call Asia home since 1945.

⁸³ Prakash, "A Carrier Force for the Indian Navy," 59; "First Aircraft Carrier: Saga of *Vikrant*."

⁸⁴ Prakash, "A Carrier Force for the Indian Navy," 59–60.

C. INDIAN STRATEGIC PERCEPTIONS IN THE INDIAN OCEAN REGION

In 1990, Prakash dubbed the IN “a blue water force [with] the capability to deploy anywhere in the Indian Ocean as an instrument of national policy.”⁸⁵ The continental bias of the 1950s and ‘60s that he previously described seems in retrospect to be a momentary lapse in strategic judgment by Indian policy makers who were subsequently brought to their senses and have since given the sea the attention that it deserves, marking a significant difference from their Chinese counterparts. Unlike China, modern India has always been conscious of the sea both because of its geographic position as Ruisheng’s *dagger* and because of the role that the sea has played in the state’s political history. “That their country had been prey to centuries of invasions and conquests,” remarks Prakash,

and that the final domination by an alien power resulted not from overland invasion, but by invasion across her shores, is a racial memory embedded in the Indian psyche. The thought process of common men and intellectuals alike have been conditioned with a deep-rooted fear that the country faces an ever-present threat of losing its independence—whether the menace be military, economic, or political.⁸⁶

If Prakash is correct, it is easier to understand India’s motivation for pursuing a navy that can guarantee its position and embracing concepts of naval power that it inherited from the British Empire and continues to observe from the United States.

The Western—particularly U.S.—influences in Indian naval strategy are undeniable. Richard Bitzinger argues that the IN strives to be the sea control force of the Indian Ocean in the same way that the U.S. Navy exercises sea control globally, and is focused on carriers as the engine to achieve that goal.⁸⁷ Geoffrey Till adds that the IN’s force structure, much like the U.S. Navy’s, is designed to confront a variety of potential threats: a broad requirement that makes carriers valuable assets around which to base

⁸⁵ Ibid., 62.

⁸⁶ Ibid., 59.

⁸⁷ *Naval Modernization in Southeast Asia: Nature, Causes, Consequences* (Singapore: S. Rajaratnam School of International Studies, 2011), 6.

operations.⁸⁸ The strongest marks of U.S. influence, however, are found in *Freedom to Use the Seas: India's Maritime Military Strategy*. First, in the strategy's foreword, Chief of the Naval Staff Admiral Sureesh Mehta states, "the focus would be on critical capabilities [rather] than on the number of ships or aircraft," which is the same way that the U.S. Navy has strived to maintain qualitative advantages over potential adversaries.⁸⁹ Second, *access* and *shaping*, two terms firmly rooted in the lexicon of U.S. military and maritime strategy, are woven together in the Indian strategy:

Nine important passages provide access into the Indian Ocean, of which five are key energy Seas Lines of Communications (SLOC). . . . Choking any one of them would cause disruption of seaborne trade, and uncontrolled volatility in oil and commodity prices, leading to upheavals in the global economy.⁹⁰

Not only is access to the Indian Ocean recognized as controllable, the document considers the security of Indian Ocean SLOCs in global terms. To ensure access, shaping in the "areas which control access to the Indian Ocean" is necessary to prepare the maritime battle-space.⁹¹ Third, *forward presence* is promoted as a way to enable "political and military decision-makers to be proactive rather than reactive in dealing with situations."⁹² Finally, the strategy unabashedly states that "freedom to use the seas will become crucial if India is to attain her 'manifest destiny:'" a term rarely used outside of nineteenth century U.S. history.⁹³ All of these concepts, with the exception of manifest destiny, are found in the U.S. sea services' *A Cooperative Strategy for 21st Century Seapower*, although the Indian document was published five months before its U.S. counterpart. Notably, India's *Freedom to Use the Seas* cites U.S. sources titled *The Maritime Strategy*, *From the Sea*, and *Forward from the Sea* in a pseudo bibliography.⁹⁴

⁸⁸ Geoffrey Till, *Asia's Naval Expansion: An Arms Race in the Making?* (London: The International Institute for Strategic Studies, 2012), 76.

⁸⁹ *Freedom to Use the Seas: India's Maritime Military Strategy* (New Delhi: Integrated Headquarters Ministry of Defense (Navy), 2007), v.

⁹⁰ *Ibid.*, 25.

⁹¹ *Ibid.*, 87.

⁹² *Ibid.*, 81.

⁹³ *Ibid.*, 130.

⁹⁴ *Ibid.*, 144.

What, however, does the strategy indicate about India's perceptions of sea-based power projection—particularly carriers and naval aviation—in the twenty-first century? While acknowledging the central role of light carriers in India's first independent naval plans, which even in 1948 recognized the need to secure Indian Ocean SLOCs, the 2007 strategy gives considerable attention to expeditionary and sea-to-shore strike warfare.⁹⁵ *Influencing Operations Ashore* and the *Role of Air Power* are listed among the “key determinants for shaping the maritime military strategy.”⁹⁶ Again strikingly similar to U.S. strategic documents, the Indian strategy establishes the ability to influence events on land as a primary role for Indian maritime forces and charges maritime air power with achieving “synergistic effects” that include long-range, precision strike and surveillance.⁹⁷ Lessons from the 1971 war are included in the strategy. First, “the identification of neutrals turned out to be much simpler than anticipated” despite concerns that strikes against Pakistani shipping in the western theater could inadvertently hit neutral merchants.⁹⁸ Second, IN strategists lament that an effective, war-shortening amphibious assault was not conducted in 1971 and argue that “amphibious operations merit attention as such capabilities enhance options and opportunities that exist” in the region.⁹⁹ The strategy also applies the IN's historical record in low-intensity conflict. Recognizing the navy as the supporting service for army operations in Sri Lanka against the Tamil Tigers, the document admits that the IN “lacked capabilities to provide direct fire in support of Army operations” while stating that those deficiencies are now being addressed.¹⁰⁰ Taken together with Indian recognition of SLOC security, freedom of access, and forward presence, the strategy's statements concerning naval power projection indicate that the IN is striving to become a multi-role force in the mold of the U.S. Navy: capable of sustained expeditionary and strike operations to strategically influence regional events in addition to maintaining the security of the Indian Ocean.

⁹⁵ Ibid., 15.

⁹⁶ Ibid., 10.

⁹⁷ Ibid., 12.

⁹⁸ Ibid., 16.

⁹⁹ Ibid., 18.

¹⁰⁰ Ibid., 22.

D. ROLES FOR INDIAN CARRIERS

In contrast to the opacity of Chinese intentions, the transparency of *Freedom to Use the Seas* assists analysis of roles for IN carriers. Indian references to the success of naval strike warfare in 1971 and deficiencies in joint fire support in Sri Lanka indicate both functions will be included in the carriers' list of tasks. "Priority" is assigned to the development of long-range, precision strike systems to support expeditionary operations, and the document also addresses carrier use in counter-air operations through the introduction of "modern carrier-based aircraft and airborne surveillance systems."¹⁰¹ Sustainment of prolonged operations is also addressed through the "induction of tankers and afloat support ships with enhanced capability to replenish fuel, ammunition and victuals, and provide on-site maintenance support in distant areas for ships and submarines" and support facilities "in the farthest littoral reaches of the IOR."¹⁰² Considering these requirements together, a picture quickly emerges of IN task forces designed to conduct strike, expeditionary, and counter-air warfare for sustained periods far from the Indian coast.

India possesses three carriers in varying states of readiness. With *Vikrant's* (R11) decommissioning in 1997, *Viraat* served as the IN's sole carrier until *Vikramaditya*—formerly the Soviet *Kiev*-class *Admiral Gorshkov*—was commissioned in November 2013, and the second *Vikrant* was launched in August 2013 under the IN's Indigenous Aircraft Carrier (IAC) program but is not yet commissioned. The design and capabilities of the ships and their air wings speak directly to their roles in Indian naval strategy. As it did under the Royal Navy, *Viraat* continues to operate Sea Harriers from a ski-jump flight deck, and, before its retirement, *Vikrant* (R11) was converted from a catapult-assisted-take-off-but-arrested-recovery (CATOBAR) carrier to a ski-jump design in 1983 as its aging complement of conventional takeoff aircraft reached the end of their service lives. Reliance on V/STOL aircraft carries the same liabilities discussed in analysis of PLAN options, namely short ranges and smaller payloads. Prakash indicates, however, that the IN's decision during the 1980s to operate V/STOL carriers was based more on a

¹⁰¹ Ibid., 119.

¹⁰² Ibid., 118.

lack of suitable conventional aircraft designs for light carriers than on any perceived advantage of the Harriers:

Criticism of the IN's decision to maintain an air capability at sea through the medium of V/STOL carriers, in spite of their limitations, has an element of validity. However, this was the result of a technology-gap, which failed to produce more capable aircraft for small carriers. Technology is not static, and it is vital that the IN keep the art of carrier aviation alive through the means of V/STOL machines, if necessary, till other options become available.¹⁰³

The *art of carrier aviation* that Prakash refers to is the carrier culture that the PLAN currently lacks, and it is alive in the IN today thanks to the transitory use V/STOL carriers. It is clear, however, that India does not intend to remain constrained by V/STOL limitations.

Both *Vikramaditya* and *Vikrant* are short-take-off-but-arrested-recovery (STOVAR) carriers like China's *Liaoning*. Writing in 1990, Prakash commented on Soviet experimentation with STOVAR designs and carrier variants of MiG-29 and Su-27 fighters but concluded that the fuel and payload limitations imposed on the conventional aircraft by the rolling ski-jump takeoff should remove STOVAR designs from consideration by the IN.¹⁰⁴ Press releases published on the IN's website, however, state that *Vikramaditya's* fixed-wing complement will consist of MiG-29Ks and remaining Sea Harriers while *Vikrant* will carry MiG-29Ks and an indigenously produced Light Combat Aircraft (LCA) that has been under development since the 1980s.¹⁰⁵ Despite the limitations of STOVAR designs, there are no illusions about the ships' primary purpose: one press release states that "an aircraft carrier carrying long range multi-role fighters is a platform inherently designed for power projection. . . . The MiG-29K swing role fighter

¹⁰³ Prakash, "A Carrier Force for the Indian Navy," 69.

¹⁰⁴ *Ibid.*, 66.

¹⁰⁵ "About INS Vikramaditya: The Newest and Largest Ship of the Indian Navy," Indian Navy, accessed January, 26, 2014, <http://indiannavy.nic.in/news-events/about-ins-vikramaditya-newest-largest-ship-indian-navy>; "'Vikrant:' Navy's First Indigenous Aircraft Carrier Launched," Indian Navy, accessed January 26, 2014, <http://indiannavy.nic.in/press-release/vikrant-navys-first-indigenous-aircraft-carrier-launched>.

is the main offensive platform and provides a quantum jump for the Indian Navy's maritime strike capability."¹⁰⁶

Similar to the PLAN's *Liaoning*, all of the IN's carriers are constrained by the lack of carrier-based fixed-wing AEW aircraft. Noting the AEW problem for smaller carriers, Prakash advocated for integrating Indian carriers with land-based aircraft. Even with long-range aircraft, however, that solution would tether IN carrier groups to the mainland, which is contrary to the vision of far-ranging power depicted in *Freedom to Use the Seas*.¹⁰⁷ IN press releases do not mention early warning capabilities other than *Vikrant's* surface-based sensor suite and Ka-31 helicopters, but do state that "the ship's integration with [the] Navy's Network Centric Operations will provide force multiplication."¹⁰⁸ If the IN can share data from a network of sensors, it may be able to compensate for a lack of high-altitude, organic AEW capabilities to permit extended-range combat operations in the IOR.

In an article for *Journal of Defense Studies*, Gurpreet Khurana proposes "numerous possible scenarios wherein [an Indian] carrier capability would be indispensable."¹⁰⁹ Similar to the list for *Liaoning* offered by Erickson, Denmark, and Collins, Khurana runs the gambit by including strike warfare, SLOC security, naval diplomacy, overseas interests and island territory security, and non-combat roles such as HADR. Just as in *Liaoning's* case, all are inherent capabilities for carriers, but—given the evidence of Indian strategic intentions—some are more likely to figure into the IN's strategic planning than others. Strike warfare grounded heavily in the experience of the 1971 war figures prominently into India's naval strategy, and it is reasonable to perceive a continuing need for sea-based strike as long as the rivalry with Pakistan continues and China becomes increasingly involved in the IOR. In addition, *Vikramaditya* has already conducted its first naval diplomacy mission: in January 2014, within days of China's

¹⁰⁶ "About INS Vikramaditya."

¹⁰⁷ Prakash, "A Carrier Force for the Indian Navy," 69.

¹⁰⁸ "Vikrant."

¹⁰⁹ Gurpreet Khurana, "Aircraft Carriers and India's Naval Doctrine," *Journal of Defense Studies* 2, no. 1 (2008): 99, http://idsa.in/system/files/jds_2_1_gskhurana.pdf.

publication of photos documenting the *Liaoning* task force's first underway period, *Vikramaditya* joined *Viraat* for a multi-carrier photo opportunity and reminded the world that India is the only Asian state to operate more than one fixed-wing carrier since 1945.¹¹⁰

India's professed consciousness of SLOC security begs the same question posed of China's supposed need to secure its sea lanes: who poses a threat to India's SLOCs? Just as the success of naval strike warfare in both theaters of the 1971 war left a lasting impression on Indian naval strategists, it is also likely that the IN's only combat loss of a warship left a similar impression. On December 9, 1971, a Pakistani submarine sank the frigate *Khukri*, marking the IN's most significant casualty in an otherwise highly successful campaign. India is, therefore, the first state to lose a ship to submarine warfare since the Second World War in addition to being the only Asian state with combat carrier experience since Imperial Japan. In addition, as the PLAN sends vessels to the Gulf of Aden to protect Chinese shipping from pirates, Indian strategists must wonder if the PLAN will eventually patrol the sea lanes near the Indian dagger. Just as in the PLAN's case, however, SLOCs provide a useful concept to frame the argument in favor of a robust IN. Carriers are not required to provide SLOC security: they are power projection instruments as noted by several of the sources discussed.

The utility of Indian landward power projection is well established, but the role of carriers in resting sea-control from an enemy during a future conflict offers potential pitfalls that Indian strategists should be wary of. Khurana, a commander in the IN and a research fellow at the Institute for Defense and Strategic Analysis, argues

the *raison d'être* of a carrier is to establish *sea-control* (including air-dominance) in a sizeable area around it . . . This implies that before a carrier is put to sea, it must be capable of sanitizing all possible threats (in all dimensions) in the sea-control area.¹¹¹

In addition, addressing the threat posed by hostile anti-ship missiles, he states

¹¹⁰ Khurana, "Aircraft Carriers," 100–1; David Cenciotti, "India Outdoes China with TWO-Carrier Photo Op: New Delhi Shows off Refurbished Russian Flattop," War is Boring, accessed January 28, 2014, <https://medium.com/war-is-boring/9df45f259a32>.

¹¹¹ Khurana, "Aircraft Carriers," 103.

the value of ‘organic’ aviation of a carrier here lies in the availability, at virtually immediate notice, of a means to search and positively identify distant hostile platforms, and thereafter ‘kill’ these, before a missile launch. This makes the carrier-borne aircraft in anti-air, anti-ship and anti-submarine roles imperative, to protect not only the carrier and its escorts, but also other units operating in the area.¹¹²

Khurana’s assertions propose one beguiling idea while exposing a quandary. First, the carrier can be misconceived as a silver bullet: an indispensable asset that can locate and destroy any hostile target on, over, or under the sea. American admirals can only dream of such capabilities, and are often professionally embarrassed by the discovery of a submarine in the wake of their flagships or the chance discovery of a foreign destroyer or maritime patrol aircraft hidden nearby among civilian traffic. Second, is the carrier and its task force a vital national asset whose protection becomes the mission of the air wing, or is the carrier’s purpose to employ the air wing against the enemy to achieve a strategic effect even at the risk of the carrier’s survival? On this question, Prakash is clear:

One must start with the premise that the only certainty in a naval battle is that ships will be lost to enemy action. Admittedly, a carrier is a high-visibility target of considerable value, but to demand invulnerability of any weapon system is to condemn it to oblivion.¹¹³

Despite Khurana’s argument, the identity of aircraft carriers as power projection platforms and combat assets appears firmly grounded in Indian naval thought, and—based on Prakash’s 1990 argument and statements concerning strike and expeditionary warfare in *Freedom to Use the Seas*—it is unlikely that IN strategists harbor misconceptions about a carrier’s strategic purpose.

E. CONCLUSION

Are India’s carrier programs and maritime strategy for the new century a response to a larger Asian naval buildup? Indian strategists are optimistic about improving relations with China: “Through a range of dialogue mechanisms, India and China have been able to appreciate each other’s point of view and sustain the bilateral dialogue on

¹¹² Ibid., 104.

¹¹³ Prakash, “A Carrier Force for the Indian Navy,” 63.

outstanding issues.”¹¹⁴ Their optimism, however, does not close the door on potential sources of future conflict. *Freedom to Use the Seas*, Chapter 3, “Indian Ocean Region and its Geopolitics,” demonstrates that Indian strategists have a thorough understanding of regional socio-economic issues and the potential influence of the IN in regional and global maritime security. The final paragraph of the chapter, however, concludes with a telling statement. After acknowledging the common strategic interests between India and most extra-regional navies that have increased their operations in the Indian Ocean as a result of Operations Enduring and Iraqi Freedom and calling for further regional engagement, the document singles out the PLAN for extra scrutiny:

The Chinese Navy is set on a path to becoming a blue water force. It has an ambitious modernization program. Notable amongst those are [*sic*] the renewed interest in the aircraft carrier program, the nuclear submarines, and the ballistic/cruise missile projects along with the attempts to gain strategic toe-hold [*sic*] in the IOR.¹¹⁵

The strategy does not elaborate further, but it is the only non-positive reference to a navy other than Pakistan’s.

In addition to China, Pakistan’s influence on Indian naval strategy, of course, cannot be ignored. It is clear that India’s experiences in Indo-Pakistani conflicts have colored their perceptions of sea power, but Pakistan also contributes to India’s relationship with China. Till observes that “the naval situation between China and India is complicated by the parallel difficulties that India has with Pakistan,” and offers Indian Defense Minister A. K. Antony’s assessment that “the increasing nexus between China and Pakistan in the military sphere remains an area of serious concern. We have to carry out continuous appraisals of Chinese military capabilities and shape our responses accordingly.”¹¹⁶ Against either rival, carrier task forces modeled on U.S. CSG’s offer options to Indian policy makers while also serving India’s peacetime aspirations in the Indian Ocean.

¹¹⁴ *Freedom to use the Seas*, 29.

¹¹⁵ *Ibid.*, 41.

¹¹⁶ Till, *Asia’s Naval Expansion*, 43.

The IN certainly considers itself to be the gatekeeper of the IOR, and its 2007 maritime strategy recognizes the ability of the navy to influence the strategic environment on land. Until recently, however, the IN has not had to compete with the PLAN in the Indian Ocean. Now, given the PLAN's modernization and forays to the Gulf of Aden and Southeast Asia, India must confront the reality that a traditionally continental rival is also a potential maritime rival. Indian acknowledgment of the PLAN's carrier program, however, does not indicate that Indian carrier acquisitions are a direct response. Rather, based on *Freedom to Use the Seas*, carriers are part of a larger effort to develop the IN into a capable, multi-purpose force that is receiving increasing attention in part because of PLAN expansion.

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IV. THE JAPANESE MARITIME SELF-DEFENSE FORCE

A. INTRODUCTION

Since the early days of the Cold War, Japan has adhered to an “exclusively defense-oriented” national security policy, which the Japanese Ministry of Defense (MoD) states “means that defensive force is used only in the event of an attack, that the extent of use of defensive force is kept to the minimum necessary for self-defense, and that the defense capabilities to be possessed and maintained by Japan are limited to the minimum necessary for self-defense.”¹¹⁷ On March 18, 2009, however, the Japanese Maritime Self-Defense Force (JMSDF) commissioned its first new aircraft carrier since the Second World War, raising reasonable questions about the role of a power projection instrument in a defensive policy. The JMSDF’s two *Hyuga* and two *Izumo*-class helicopter destroyers (DDH) are much more than just replacements for the *Haruna*-class destroyers that retired in 2011. According to retired Vice Admiral Yoji Koda, “*Hyuga* realizes a long-standing dream and goal of the JMSDF, which has wanted to be a truly capable maritime force, with escort—that is, antisubmarine warfare (ASW)—carriers.”¹¹⁸

Although not conceived or built as fixed-wing carriers, Japan’s new DDH generation requires careful consideration alongside other regional carrier programs for three reasons. First, the *Hyuga* and *Izumo*-classes are capable of supporting fixed-wing V/STOL aircraft, leading to speculation that Japan intends to embark F-35B Joint Strike Fighters on the ships.¹¹⁹ Second, although outwardly similar to large-deck amphibious assault ships such as the U.S. Navy’s *Tarawa* and *Wasp*-classes, Japan’s DDHs were not designed or conceived to be amphibious vessels: a distinction that draws attention to the JMSDF’s unique Cold War strategic heritage as an anti-submarine warfare (ASW) force. Finally and most importantly, the new DDHs are the first front-line Japanese warships to

¹¹⁷ “Basis of Defense Policy,” Ministry of Defense, accessed February 12, 2014, http://www.mod.go.jp/e/d_act/d_policy/dp02.html.

¹¹⁸ Yoji Koda, “A New Carrier Race? Strategy, Force Planning, and JS *Hyuga*,” *Naval War College Review* 64, no. 3 (2011): 32.

¹¹⁹ Trefor Moss, “Asian Powers’ Carrier Craze,” *South China Morning Post*, August 23, 2013, <http://www.scmp.com/comment/insight-opinion/article/1298598/asian-powers-carrier-craze>.

feature a through-deck design since the aircraft carriers of Imperial Japan, representing a significant shift in Japanese public and political perceptions of the East Asian security environment and instruments of power projection. This chapter considers the implications of Japan's new DDHs by examining the JMSDF's Cold War doctrine, Japan's post-Cold War security concerns, and new power projection requirements.

B. JAPAN'S POST-SECOND WORLD WAR APPROACH TO NATIONAL DEFENSE AND NAVAL POWER

The two strongest influences on Japanese defense policy following the Second World War have been the 1947 Constitution of Japan and the 1960 Treaty of Mutual Cooperation and Security between Japan and the United States. Article IX of the Constitution famously states

the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes. In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.¹²⁰

The developing Cold War and U.S. strategic requirements to resist the expansion of Soviet influence overcame strict interpretation of Article IX. With the support of the United States, the Japanese Self-Defense Forces (JSDF) were founded in 1954 and Article IX was reinterpreted to permit Japan to exercise the right of self-defense. According to the MoD,

Since Japan is an independent state, it is recognized beyond doubt that the provision in the article does not deny the inherent right of self-defense that Japan is entitled to maintain as a sovereign nation. Thus the self-defense right of Japan is not denied, and therefore, the Government of Japan interprets the Constitution as being allowed to possess and maintain the minimum level of armed strength for self-defense necessary to ensure that Japan exercises the right. On the basis of such understanding, the government has adopted an exclusively defense-oriented policy as its basic policy of national defense, has maintained the Self-Defense Forces as an

¹²⁰ Japan Const. art. IX, The Constitution of Japan, Prime Minister of Japan and His Cabinet, accessed June 23, 2014, http://japan.kantei.go.jp/constitution_and_government_of_japan/constitution_e.html.

armed organization, and has taken steps to improve their capabilities and conduct their operations under the Constitution.¹²¹

Despite the reinterpretation, the pacifism embodied in the *peace constitution* remains deeply entrenched in modern Japanese politics and culture. Japan adopted strict non-nuclear weapon policies in 1968, self-imposed a ban on all arms exports in 1976, and renounced the right of collective self-defense granted to all states by the United Nations (U.N.) charter.¹²² In addition, the Congressional Research Service notes that the constitutional legality of maintaining the JSDF was a topic of debate in Japan as recently as 2013.¹²³

In 1957, the Japanese government adopted its Basic Policy on National Defense to guide the development of defense policy within the constraints of Article IX. In addition to confirming adherence to only defensive capabilities, the Basic Policy stipulated “dealing with external aggression based on the security arrangements with the U.S.” while working through the U.N. to address the source of aggression.¹²⁴ This arrangement was written into Article V of the Treaty of Mutual Cooperation and Security, which states

Each Party recognizes that an armed attack against either Party in the territories under the administration of Japan would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional provisions and processes. Any

¹²¹ “Constitution of Japan and Right of Self-Defense,” Ministry of Defense, accessed February 12, 2014, http://www.mod.go.jp/e/d_act/d_policy/dp01.html.

¹²² The Three Principles on Arms Exports were adopted in 1967 and prohibit the export of weapons to “communist bloc countries, countries subject to arms exports embargo under the United Nations Security Council’s resolutions, and countries involved in or likely to be involved in international conflicts.” “Japan’s Policies on the Control of Arms Exports,” Ministry of Foreign Affairs of Japan, accessed June 24, 2014, <http://www.mofa.go.jp/policy/un/disarmament/policy/index.html>. An additional principle prohibiting exports to all other states was adopted in 1976. The Three Non-Nuclear Principles of 1968 prohibit Japan from possessing nuclear weapons, manufacturing nuclear weapons, or permitting the entry of nuclear weapons into Japan. Regarding collective self-defense, the Japanese MoD states that “it is beyond doubt that as a sovereign state, Japan has the right of collective self-defense under international law. It is, however, not permissible to use the right, that is, to stop armed attack on another country with armed strength, although Japan is not under direct attack, since it exceeds the limit of use of armed strength as permitted under Article 9 of the Constitution.” “Constitution of Japan,” Ministry of Defense.

¹²³ Emma Chanlett-Avery and Ian E. Rinehart, “The U.S.-Japan Alliance” (Washington, DC: Congressional Research Service, 2013), 6, 25.

¹²⁴ “Basis of Defense Policy.”

such armed attack and all measures taken as a result thereof shall be immediately reported to the Security Council of the United Nations in accordance with the provisions of Article 51 of the Charter. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.¹²⁵

The constitution and the U.S.-Japan defense treaty created the context for the development of JSDF doctrine that continues to exist today. All JSDF capabilities are intended to deter aggression against Japan—and territories under Japanese administration—and defend Japan if deterrence fails. Offensive action outside of Japanese territory is the responsibility of the United States, which is relieved of many defensive responsibilities around Japanese territory by a “‘spear and shield’ relationship.”¹²⁶

The JMSDF draws its strategic purpose and doctrine of protecting the sea space and SLOCs around Japan from the U.S.-Japan defense relationship. As Koda describes,

The JMSDF ensures that Japan can receive American reinforcements from across the Pacific Ocean, guarantees the safety of U.S. naval forces operating around Japan, and enables U.S. carrier strike groups (CSGs) to concentrate on strike operations against enemy naval forces and land targets. At the same time, for Japan, as a country with few natural resources and little domestic food production, the safety of merchant shipping is a matter of national survival in crisis and wartime.¹²⁷

Soviet submarines posed a significant threat to Japan’s national survival and the U.S. Navy’s freedom of action in East Asian waters during the Cold War, driving the JMSDF to become a semi-specialized ASW force. In addition to land-based maritime patrol aircraft and surface ships, JMSDF planners recognized the ASW potential of early naval helicopters and developed plans for ASW “hunter/killer” groups consisting of several destroyers centered on a helicopter carrier (CVH) that could range the SLOCs and secure critical sea spaces from enemy submarines.¹²⁸

¹²⁵ “Japan-U.S. Security Arrangements,” Ministry of Defense, accessed February 12, 2014, http://www.mod.go.jp/e/d_act/d_policy/dp03.html.

¹²⁶ Koda, “New Carrier Race,” 34.

¹²⁷ Ibid.

¹²⁸ Ibid., 39.

Despite the recognized utility of ASW helicopter flotillas for the JMSDF's strategic mission, the quest for a light carrier would take over forty years to realize due to deeply entrenched aversion to a carrier's offensive image. The JSDF included a CVH in its 1961 budget request, but later withdrew it due to political opposition related to the domestic political debate over the U.S.-Japan defense treaty. By the late 1960s, the JMSDF calculated that a task force of eight destroyers and six helicopters was optimal for the ASW mission, but "it was still too early to make a serious argument for a ship that looked something like an aircraft carrier, even if it was simply an ASW helicopter platform."¹²⁹ Instead, the JMSDF settled for two over-sized destroyers that could support three helicopters each: the original DDHs of the *Haruna*-class. The threat posed by Soviet air-launched anti-ship missiles (ASMs) in the late 1980s prompted the JMSDF to consider a fleet defense carrier employing fighters and airborne early-warning (AEW) aircraft to protect its ASW forces, but the idea was rejected "due to [the] negative resonance of the phrase 'aircraft carrier.'"¹³⁰ The JMSDF was forced to settle again, adopting the Aegis guided missile destroyer (DDG) because of its inoffensive image despite its inability to threaten Soviet aircraft attacking the fleet.¹³¹ The early 1990s witnessed the first through-deck design for the JMSDF but not on a carrier. Arguing for a new tank landing ship (LST) design on the grounds of safety and efficiency for helicopter lift operations, the JMSDF succeeded in securing the through-deck *Oosumi*-class. Perceptions still mattered, however, and the JMSDF was forced to designate *Oosumi* as a "maritime operational transport" that could not operate its helicopters in combat.¹³² It would take several more years and a new threat to finally convince the Japanese government of the need for a through-deck combat carrier.¹³³

¹²⁹ Ibid., 41.

¹³⁰ Ibid., 46.

¹³¹ Koda notes that "the proposed Aegis DDG would be able to shoot down large numbers of incoming ASMs but would be unable to deal with the bombers themselves, attacking from beyond the [DDG's] maximum range. . . . The bombers would survive and their attacks would continue forever, in theory, while surface units would suffer accumulated losses (46)."

¹³² Koda, "New Carrier Race," 47.

¹³³ Ibid., 39, 41, 45-7.

C. JAPAN'S SHIFTING SECURITY CONCERNS AND EVOLVING DEFENSE POLICY

By 2001, designs were being produced for a new DDH to replace the aging *Haruna*-class. One design presented to the Japanese public was a destroyer-like vessel with two helicopter flight decks—one fore and one aft—completely separated by the ship's superstructure. Koda argues that “this seems to have been done to offset potential public objections rooted in the offensive image of aircraft carriers.”¹³⁴ The DDH design finally agreed upon, however, was the through-deck *Hyuga*: a seemingly small step for most modern navies, but a landmark event for Japan given its post-Second World War aversions.

The evolving East Asian security environment is responsible for breaking down Japan's mental barriers. With the release of *National Defense Program Guidelines: FY 2005-* (NDPG 2005), Japanese planners acknowledged departures from the Cold War-era defense paradigm that shaped the twentieth century JSDF: the growing importance of terrorists and non-state actors, North Korean nuclear proliferation, and Chinese military expansion took more prominent roles in the list of national security threats. In a significant admission for a pacifist state, the guidelines state

the use of military force now plays a broader role in the international community than simply deterring or responding to armed conflict. Military force is also used for a variety of purposes, including the prevention of conflict and the [*sic*] reconstruction assistance.¹³⁵

Breaking with traditional adherence to the Basic Policy on National Defense, Japan was signaling its willingness to collaborate in “international peace cooperation activities” with an improved JSDF “capable of effectively responding to new threats and diverse situations.”¹³⁶

NDPG 2005 was a transitional document, and the subtle language used to indicate small breaks from the Basic Policy suggests that Japanese policy makers were struggling

¹³⁴ Ibid., 48.

¹³⁵ *National Defense Program Guidelines: FY2005* (Tokyo: Japan Ministry of Defense, 2004), 2, http://www.mod.go.jp/e/d_act/d_policy/national.html.

¹³⁶ Ibid., 5.

to address both new and traditional threats in an increasingly alien environment. The majority of the document emphasized benefits of the U.S.-Japan alliance and Japanese intentions to work through the U.N. and other international institutions to promote global peace and non-proliferation principles. North Korean ballistic missiles received more attention than any other regional threat including China: a country that NPDG 2005's authors coolly shelved by saying, "We will have to remain attentive to its future actions."¹³⁷

The subsequent *National Defense Program Guidelines for FY 2011 and Beyond* (NDPG 2011), however, leave little doubt about China's primacy in contemporary Japanese defense planning. First, NDPG 2011 notes "a growing number of so-called 'gray-zone' disputes . . . over territory, sovereignty, and economic interests;" a clear reference to the sharp increase in confrontations with China over maritime territories.¹³⁸ Second, the document points to "a global shift in the balance of power" through the rise of states such as China and "the relative change of influence of the United States."¹³⁹ Third, the document warns of "risks concerning sustained access to the seas, space, and cyberspace" and more frequent Chinese operations in seas near Japan: references to the threat posed by Chinese A2/AD capabilities.¹⁴⁰

NDPG 2011 called for several dramatic changes to address growing regional uncertainty, directing the JSDF to abandon the Basic Policy in favor of "a Dynamic Defense Force that possesses readiness, mobility, flexibility, sustainability, and versatility" to actively engage with "India and other countries that share common interests in ensuring the security of maritime navigation from Africa and the Middle East to East Asia;" and to acquire specific defense capabilities such as minesweepers "broad

¹³⁷ Ibid., 2–3.

¹³⁸ *National Defense Program Guidelines for FY 2011 and Beyond* (Tokyo: Japan Ministry of Defense, 2010), 3, http://www.mod.go.jp/e/d_act/d_policy/national.html.

¹³⁹ Ibid.

¹⁴⁰ Ibid., 4.

scale” maritime intelligence, surveillance, and reconnaissance (ISR) platforms, and nation-wide ballistic missile defenses.¹⁴¹

The recognition of the naval mine threat is particularly significant to the development of the *Hyuga* and *Izumo*-classes: the relevance of mine warfare and mine countermeasures was necessarily on the minds of JMSDF planners before the publication of NDPG 2011, and contributed to the argument in favor of a through-deck DDH. Koda notes the added requirement—identified in the design stage—for the new DDHs to accommodate MH-53E mine countermeasures helicopters, which are significantly larger than Japan’s SH-60 ASW helicopters and added weight to arguments in favor of a carrier-like design with additional hangar space below the flight deck.¹⁴² Throughout the Cold War, the Soviet naval threat was primarily embodied in submarines, but recognition of mine warfare as an element of Chinese A2/AD capabilities is now influencing JMSDF force structure.

NDPG 2011 is also the first NDPG to mention the establishment of a readiness posture that would allow the JSDF to respond to acute threats, the improvement of defense infrastructure in Japan’s southwestern region, and the assignment of Japanese Ground Self-Defense Force (JGSDF) priority to “the defense of off-shore islands.”¹⁴³ It is little wonder why: statistics from the Japanese MoD show that the frequency of Japanese Air Self-Defense Force (JASDF) fighter scrambles in response to incursions by Chinese aircraft began steadily increasing in 2008 and surpassed the number of scrambles in response to Russian aircraft in 2012.¹⁴⁴ The Japanese Ministry of Foreign Affairs (MoFA) also charts the presence of Chinese vessels in Japan’s contiguous zone and territorial sea beginning with a 2008 confrontation between the Japanese Coast Guard and two Chinese government ships near the Senkaku Islands. The frequency of the Chinese

¹⁴¹ Ibid., 7, 9, 16.

¹⁴² Koda, “New Carrier Race,” 51.

¹⁴³ *National Defense Program Guidelines for FY 2011*, 12–3, 15.

¹⁴⁴ “Number of Scrambles in the Last Decade and its Breakdown,” Ministry of Defense, accessed July 9, 2014, http://www.mod.go.jp/e/jdf/sp/no44/sp_img_activities.html#ac01.

presence near the Senkakus began increasing in late 2010 before jumping sharply to unprecedented levels in 2012 and 2013.¹⁴⁵

D. POTENTIAL NAVAL SOLUTIONS TO NEW POWER PROJECTION REQUIREMENTS

The latest edition of the Japanese MoD's defense guidelines—*National Defense Program Guidelines for FY 2014 and Beyond* (NDPG 2014)—firmly establishes the continuity of the Chinese threat in Japan's twenty-first century defense policy. Bluntly citing “cases where coastal states [have] unilaterally asserted their [perceived] rights . . . thereby unduly infringing the freedom of the high seas” and accusing China of “[attempting] to change the status quo by coercion” in ongoing island territorial disputes, NDPG 2014 concludes that Japan's security predicament “has become increasingly severe” since the publication of NDPG 2011.¹⁴⁶ Importantly, NDPG 2014 provides the JSDF with strong guidance for addressing current vulnerabilities. Remote or offshore islands are mentioned thirteen times in the thirty-one page English translation, and the JSDF is explicitly charged with developing amphibious plans and capabilities—which were previously avoided due to the offensive nature of amphibious forces—to “recapture” lost islands.¹⁴⁷ In addition, NDPG 2014 builds on NDPG 2011's Dynamic Defense Force concept with a new Dynamic Joint Defense Force to improve crisis response and directs the improvement of AEW capabilities to provide long-term command and control over southwestern Japan.¹⁴⁸ The JGSDF is now training “marine infantry” in cooperation with U.S. advisors and is considering acquisition of amphibious assault vehicles and V-22 Osprey aircraft to facilitate movement and assault.¹⁴⁹

¹⁴⁵ “Trends in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands, and Japan's Response: Records of Intrusions of Chinese Government and Other Vessels into Japan's Territorial Sea,” Ministry of Foreign Affairs of Japan, accessed July 9, 2014, http://www.mofa.go.jp/region/page23e_000021.html.

¹⁴⁶ *National Defense Program Guidelines for FY 2014 and Beyond* (Tokyo: Japan Ministry of Defense, 2013), 2, 3, 5, http://www.mod.go.jp/j/approach/agenda/guideline/2014/pdf/20131217_e2.pdf.

¹⁴⁷ *Ibid.*, 7.

¹⁴⁸ *Ibid.*, 19, 23.

¹⁴⁹ Kyle Mizokami, “Japan's Amphibious Buildup,” *USNI News*, October 9, 2013, <http://news.usni.org/2013/10/09/japans-amphibious-buildup>.

Although designed primarily as ASW platforms, the new DDHs will have a role to play in future amphibious operations: the integration of the three JSDF branches into the joint force outlined in NDPG 2014 was being studied during *Hyuga's* design phase. Consequently, accommodation for the embarkation of a joint staff headquarters was built in to the new DDH classes, and, although both the *Hyuga* and *Izumo*-classes lack well decks for landing craft, the larger *Izumo* has room for 970 while only requiring a crew of approximately 470.¹⁵⁰ The remaining bunks could potentially accommodate a 500-strong JGSDF unit. *Hyuga* participated in the 2013 amphibious exercise Dawn Blitz alongside U.S. naval forces. Significantly, she employed CH-47 Chinook transport helicopters and AH-64 Apache attack helicopters instead of the ASW and mine countermeasure aircraft that she was designed to accommodate. *Hyuga's* crew also gained first-hand experience launching and recovering U.S. Marine Corps MV-22 Ospreys.¹⁵¹

E. CONCLUSION

From the Japanese MoD's perspective, "as a maritime state, enhancing 'Open and Stable Seas' and securing the safety of maritime and air traffic constitutes the foundation of the peace and prosperity of Japan."¹⁵² This simple premise formed the foundation of Japanese defense strategy during the Cold War and survives today. The difference between the two eras is in the nature and origin of the threat. Although North Korea receives due attention in many Japanese strategic documents, the hermit regime remains largely contained, threatening Japan only with ballistic missiles that the MoD is actively working to negate with reliable defenses. The real challenge for Japanese strategy is the increasing assertiveness of Chinese claims to disputed islands and the accompanying regional destabilization. China's reaction to Japanese defense developments has been predictable: one Xinhua News Agency editorial argued that Prime Minister Shinzo Abe's

¹⁵⁰ Koda, "New Carrier Race," 52; James Hardy, "Japan Unveils Largest-Ever Helicopter Carrier," *Jane's Defense Weekly*, August 6, 2013, <http://www.ihs.com/products/janes/defence-business/news/defence-weekly.aspx>; Kyle Mizokami, "Japanese 'Helicopter Destroyer' Stirs Regional Tensions," *USNI News*, August 12, 2013, <http://news.usni.org/2013/08/12/japanese-helicopter-destroyer-stir-regional-tensions>.

¹⁵¹ Kyle Mizokami, "Dawn Blitz 2013: First Glance," Japan Security Watch, last modified June 15, 2013, <http://jsw.newpacificinstitute.org/?p=10943>.

¹⁵² *National Defense Program Guidelines for FY 2014*, 4.

government is “[distorting] Japan’s history of aggression in a bid to challenge the post-war international order,” and “[igniting] the tension between the two countries to justify the expansion of Japan’s military powerhouse.”¹⁵³

Japan may not need a carrier strike capability yet, but a shifting regional strategic environment, offensive trends in recent Japanese defense policy, and a softening of Japanese public and political adherence to the peace constitution suggest the possibility of fixed-wing carrier aviation in the future. A 2012 public opinion survey indicates that Japanese citizens are increasingly in favor of a stronger JSDF: the number of respondents that believe the JSDF contributes to international stability increased seven percent since a similar poll in 2009 while ten percent more favor increasing JSDF capabilities and eleven percent more answered that the JSDF should focus on preventing invasion.¹⁵⁴ The most significant indication of changing Japanese security perceptions, however, is Abe’s decision to reinterpret Japan’s ban on collective self-defense: a move that was preceded by a public relations campaign and is considered likely to survive Japan’s legislative process.¹⁵⁵

The future of Japanese carrier aviation will continue to depend on Japan’s recognized security requirements. As to speculation that the JSDF will acquire F-35Bs and turn its four DDHs into light, fixed-wing carriers, Koda argues that it is unlikely without a reasonable need. If Japan does acquire STOVL fighters, their integration with the DDHs—at least procedurally for crisis response if not permanently—would provide options to commanders and policy makers, but the primarily ASW and C2 oriented DDHs were not designed with jets in mind. “In the future,” reasons Koda, “should Japan, in a changed security environment, need a (light) aircraft carrier within the scope of the

¹⁵³ Tyler Roney, “China Blasts Japan’s Defense White Paper,” *The Diplomat*, July 12, 2013, <http://thediplomat.com/2013/07/china-blasts-japans-defense-white-paper/>.

¹⁵⁴ “Outline of ‘Public Opinion Survey on the Self-Defense Forces (SDF) and Defense Issues,’” Ministry of Defense, last modified March 2012, http://www.mod.go.jp/e/d_act/others/pdf/public_opinion.pdf.

¹⁵⁵ John Swenson-Wright, “What Japan’s Military Shift Means,” *BBC News*, July 2, 2014, <http://www.bbc.com/news/world-asia-28122791>; Michael Green and Jeffrey W. Hornung, “Ten Myths About Japan’s Collective Self-Defense Change: What the Critics Don’t Understand about Japan’s Constitutional Reinterpretation,” *The Diplomat*, July 10, 2014, <http://thediplomat.com/2014/07/ten-myths-about-japans-collective-self-defense-change>.

nation's constitution, it should build one.”¹⁵⁶ Currently, Japanese fixed-wing aircraft are able to cover the southwestern islands from existing airfields, and confidence in the operational relationship with U.S. carrier-based forces remains in-place. Until Japan identifies a clear need for maritime strike or fighter aircraft that cannot be satisfied using existing force structures, JMSDF carrier aviation will remain limited to ASW and amphibious support roles.

¹⁵⁶ Koda, “New Carrier Race,” 56.

V. THE REPUBLIC OF KOREA NAVY

A. INTRODUCTION

The swirling debate on the true role of carriers in previously carrier-free navies is being repeated in South Korea. On October 11, 2013, South Korean National Assembly Representative Chung Hee-soo commented on an ROKN light carrier feasibility study: “To cope with potential maritime disputes with neighboring countries, we need to secure aircraft carriers as soon as possible. For more active international peacekeeping operations, our navy should have carriers.”¹⁵⁷ Chung’s comments are the first public record of current ROKN carrier aspirations, and, citing Chung, journalist Jung Sung-ki lists “three phases” of carrier development:

The first is to equip the second ship of the *Dokdo*-class landing platform helicopter ship (LPH) with a ski ramp to operate short-range or vertical take-off and landing (VTOL) aircraft. . . . Second, the Navy could build an amphibious assault ship, similar to the Spanish Navy’s *Juan Carlos*, before 2019. Finally, the service aims to build two 30,000-ton light aircraft carriers between 2028 and 2036. . . . The carrier is to have specifications similar to the Italian aircraft carrier *Cavour*, which can support about 30 aircraft.¹⁵⁸

While it is unclear what Chung intended by referencing *international peacekeeping operations*, Jung also reports that, according to an anonymous ROKN source, South Korean carriers are a response to PLAN and JMSDF naval programs.¹⁵⁹ Adding a third voice to the debate during his confirmation hearing as Chairman of the Joint Chiefs of Staff, ROKN Admiral Choi Yoon-hee gave a more practical assessment: “We should have capabilities to deter North Korea, and at the same time, we need minimal capabilities to respond to potential threats from neighboring countries.”¹⁶⁰ Unfortunately, the interim feasibility study in question, which could settle many

¹⁵⁷ Jung Sung-Ki, “S. Korea Envisions Light Aircraft Carrier,” *Defensenews*, October 26, 2013, <http://www.defensenews.com/>.

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

¹⁶⁰ *Ibid.*

questions being asked by outside observers, is not available for public review, and analysis of ROKN intentions for light carriers must be based on past South Korean debates on naval strategy and power projection. Against the backdrop of those debates, Choi's assessment hits closest to the mark: ROKN force composition—and any decision on the future of a light carrier force—will be determined by the competing requirements to protect the South from North Korea while hedging against the growing capabilities of both China and Japan. This chapter examines the ROKN's historical approach to naval power projection, its new strategic concerns, and the utility of carriers for striking a balance between emerging and traditional threats.

B. SOUTH KOREA'S HISTORICAL APPROACH TO NAVAL POWER PROJECTION

It is understandable that deterrence of North Korea through land and air forces has dominated South Korean defense strategy since the early days of the Cold War, but *Prospects for U.S.-Korean Naval Relations in the 21st Century*—the summary of a combined 1994 conference between the Center for Naval Analyses (CNA) and the Korea Institute for Defense Analyses (KIDA)—indicates that the prospect of aircraft carriers is not new in South Korean strategic thought. According to the CNA summary, the strategic problems of 1994 were remarkably similar to those of 2014. Korean attendees were wary of potential arms races among major East Asian countries and “questioned the longevity of America’s military presence” in East Asia based on “a declining trend in defense budgets.”¹⁶¹ Interestingly, many CNA participants were eager to consider prospects for increased Korean regional engagement following a hypothetical reunification of the two Koreas while KIDA participants “concentrated on the continuing threat from North Korea . . . [and] were less likely to accept scenarios and defense policies in which North Korea played no role.”¹⁶²

¹⁶¹ Christopher D. Yung, *Prospects for U.S.-Korean Naval Relations in the 21st Century* (Alexandria, VA: The Center for Naval Analyses, 1995), 3, <https://www.cna.org/research/1995/prospects-us-korean-naval-relations-21st-century>.

¹⁶² *Ibid.*

The summary records one South Korean attendee stating that the “fundamental objective of ROK naval strategy in the present situation and in the near future is to carry out operations to deter and defend against North Korean maritime provocations,” and the CNA acknowledged North Korean strengths in submarine and mine warfare while noting the difficulty of defending more than 3,000 islands and a coastline more than eight times the length of the demilitarized zone (DMZ).¹⁶³ In addition, the asymmetric naval threat posed by North Korea has always been high. In addition to numerous battles between North and South Korean patrol craft, fishing vessels, and intelligence ships along the maritime Northern Limit Line (NLL) since the 1970s, North Korea seized the USS *Pueblo* and landed a company-size unit of commandoes on the east coast of South Korea in 1968, North Korean patrol craft seized a South Korean ship near the NLL in 1970, two North Korean agents were discovered on the South’s east coast in 1982, twelve South Korean fishermen and their vessel were captured by the North in 1987, and a North Korean submarine inserted 26 commandoes into the South in 1996. 1998 was a particularly active year for naval special operations: South Korea captured a Northern midget submarine tangled in fishing nets off of Sokcho, the body of a North Korean combat diver was recovered on a Southern beach, the ROKN forced a North Korean craft to abort either an infiltration or exfiltration attempt near Kanghwa Island, and a North Korean semi-submersible and at least one combat diver was lost near Pusan.¹⁶⁴

The primacy of the North Korean threat remained at the forefront of the South Korean perspective throughout the CNA conference although fears of U.S. disengagement played a role. CNA participants—assuming the regional withdrawal of the U.S. in the post-Cold War environment—urged South Korean planners to consider the ROKN’s inability to address regional problems outside the Korean littoral, and one KIDA member argued that it was precisely the U.S. Navy’s presence in the region that

¹⁶³ Ibid., 10–1.

¹⁶⁴ Hannah Fischer, “North Korean Provocative Actions, 1950–2007” (Washington, DC: Congressional Research Service, 2007), 4–18, <http://www.fas.org/sgp/crs/row/RL30004.pdf>.

had inhibited the development of the ROKN into the blue-water navy that it needed to become.¹⁶⁵ Within this context, the first mention of ROKN carriers emerges:

The same participant argued for the inclusion of two small aircraft carriers in a small but modern and effective fleet, within two decades. . . . Most U.S. participants were less enthusiastic about having the ROK Navy procure aircraft carriers. Along with some Korean participants, they were concerned with the regional implications of such a move, and had difficulty seeing how carriers would serve any practical Korean naval purpose. One participant suggested that both the Chinese and Japanese would be seriously concerned if the ROK Navy acquired carriers or other significant power-projection capability.¹⁶⁶

It appears that the CNA participants were caught in a contradiction, prodding South Korea to look past the deadlock along the DMZ and toward a future in which a unified Korea looks outward with a blue-water navy after the United States has said farewell. However, aircraft carriers were apparently not what the CNA had in mind when calling for a regionally powerful, self-sufficient Korea, although it is difficult to imagine why Japan and China would have acquiesced to a blue-water ROKN surface and submarine fleet but drawn a line over two light carriers.

What is more important, however, is that the majority of KIDA participants remained fixed on the more immediate North Korean threat despite the prospect of U.S. withdrawal. In addition to the need for South Korean ground and air forces to maintain working and complimentary relationships with their U.S. counterparts in case of another North Korean invasion; mine warfare, anti-submarine warfare, and coastal protection against irregular threats and infiltration remained high on the KIDA list of priorities for the ROKN. Although one KIDA participant was willing to test the waters on a blue-water, power-projecting fleet, others doubted the efficiency of using carrier aircraft to support ground operations against North Korea compared to aircraft originating on the peninsula. U.S. and South Korean strategic perceptions were drifting apart in 1994. The U.S. envisioned a reunified Korea and post-Cold War stability that would allow the

¹⁶⁵ Yung, *Prospects for U.S.-Korean Naval Relations*, 11–2.

¹⁶⁶ *Ibid.*, 12.

return of forward deployed forces; South Korea remained fixed on the ever-present and hostile North despite its ally's call to begin thinking about new regional roles.¹⁶⁷

C. SOUTH KOREA'S NEW STRATEGIC CONCERNS

The prospect of Korean reunification is not a topic that appears often in contemporary strategic literature. Much has transpired since 1994, including North Korea's 2006 nuclear test, and it seems that U.S. post-Cold War optimism was only a momentary lapse. Fears of an Asian arms race and tightening U.S. defense spending remain. The difference now, however, is that there is real evidence of Chinese and Japanese naval buildups. U.S. participants at the 1994 CNA conference countered their KIDA counterparts' concerns about East Asian arms races with faith in regional economic ties and "the preoccupation of most [East Asian] countries with internal problems."¹⁶⁸ While all states have internal problems of greater or lesser extent, whole books have been written in recent years about Asian military expansion, especially China's outward looking foreign policy and naval modernization. Wedged between the stomping grounds of the PLAN and JMSDF, South Korea now has good reason to consider the need for a more capable, blue-water navy.¹⁶⁹

By 2012, Korean reunification was no longer high on the CNA's list of concerns, and the economic ties promoted by conference attendees in 1994 were not enough to overpower the strategic implications of regional naval modernization. Considering China's rise, CNA analyst Terence Roehrig writes

despite the strong economic ties and common interests, South Korea also has some anxiety regarding its relations with China. Some of the concerns include trepidation over China's overall strategic direction . . . The South Korean Navy does not appear to have made any specific operational

¹⁶⁷ Ibid., 10, 16.

¹⁶⁸ Ibid., 3.

¹⁶⁹ Ibid.

changes in response to its concerns but its development of a blue water navy continues in part with an eye towards China.¹⁷⁰

Contemporary China presents several problems for South Korea: regional destabilization due to unpredictable policy decisions such as the 2013 East China Sea Air Defense Identification Zone (ADIZ), EEZ and territorial disputes over islands such as the Ieodo reef, and various forms of Chinese political support for North Korea.¹⁷¹

China, of course, is not the only extra-peninsula concern. The dispute with Japan over the Liancourt Rocks is ongoing and fed by deep-rooted mistrust between the two countries resulting from the Second World War. In addition, South Korea is economically—although not literally—an island. Just as Japan is dependent on the security of SLOCs for economic vitality and wartime survival, South Korea is dependent on sea lanes that can be threatened by North Korean submarines and mines, the PLAN, and—theoretically but not constitutionally—the JMSDF. South Korea, therefore, must now contend with the potential vulnerability of its SLOCs and maritime territorial disputes with both China and Japan on top of its traditional security problems with North Korea.¹⁷²

Prior to 2010, the challenges described above seemed to tip South Korean strategic planning in favor of a strengthened, blue-water ROKN. In 2001, President Kim Dae-Jung endorsed ROKN blue-water development, and *Defense Reform Plan 2020* (DRP 2020) established a framework for naval modernization and enlargement in 2005 while calling for an overall reduction in the strength of ROK ground and air forces due to a perceived reduction in the likelihood of war with the North. In response, South Korean shipyards prepared to fill ROKN contracts.¹⁷³

¹⁷⁰ Terence Roehrig, “Republic of Korea Navy and China’s Rise: Balancing Completing Priorities,” in *CNA Maritime Asia Project Workshop Two: Naval Developments in Asia*, ed. Michael A. McDevitt and Catherine K. Lea (Alexandria, VA: The Center for Naval Analyses, 2012), 62, <https://www.cna.org/research/1995/prospects-us-korean-naval-relations-21st-century>.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Roehrig, “Republic of Korea Navy and China’s Rise,” 63–4; Rhee Sang-Woo, “From Defense to Deterrence: The Core of Defense Reform Plan 307,” *Korea Chair Platform*, Center for Strategic and International Studies, last modified September 7, 2011, 1, http://csis.org/files/publication/110907_FromDefensetoDeterrence_Rhee.pdf.

The loss of the ROKN corvette *Cheonan* and forty-six South Korean sailors on March 26, 2010, near Baengnyeong Island to a North Korean torpedo marked the demise of DRP 2020, and, together with the artillery barrage of Yeonpyeong Island that killed four and wounded eighteen South Korean civilians and marines later that year, forced policy makers to reevaluate the South's defense priorities. According to Roehrig, "The [*Cheonan*] tragedy was a reminder of the DPRK maritime threat and the need for a stronger coastal defense, particularly ROK anti-submarine capability and readiness."¹⁷⁴ DRP 2020 was in jeopardy as early as 2009 when President Lee Myung-bak appointed a commission to reevaluate the plan's assumptions, but the *Cheonan* sinking contributed significantly to the commission's result: *Defense Reform Plan 307* (DRP 307).¹⁷⁵ According to South Korean Deputy Defense Minister for Policy Chang Gwang Il in 2011,

the people of South Korea suffered much anguish from the tragic ROKS *Cheonan* and YP-do shelling incidents last year. These unfortunate events did, however, provide us with an opportunity to review and improve the 'Defense Reform 2020.' Considering the changes in the security threats and military environments of the Korean peninsula, ROK MND announced a revised and more realistic version . . . on March 8th, the 'Defense Reform 307 Plan.'¹⁷⁶

Of the three major changes spelled out in DRP 307, the switch to *proactive deterrence* is the most significant for discussions of ROKN power projection. Prior to 2011, South Korea adhered to a passive strategy known as *defense by denial*, which sought to avoid escalation by ruling out retaliatory or punitive strikes in response to reckless North Korean provocations. Rhee Sang-Woo argues, however, that

this approach not only constrains the ability of the South Korean forces to shape a more favorable battlefield environment, but also allows the North Korean forces to enjoy operational freedom by choosing the location and timing of attacks. Under this scenario, the [South Korean armed forces] will be drawn into combat against its will, and at strategic disadvantage.¹⁷⁷

¹⁷⁴ Roehrig, "Republic of Korea Navy and China's Rise," 64.

¹⁷⁵ Rhee, "From Defense to Deterrence," 2; Chang Gwang Il, "ROK Military 'Defense Reform 307 Plan,'" *ROK Angle: Korea's Defense Policy*, no. 47 (2011): 1, <http://www.kida.re.kr/eng/pcrm/data/data20110331.pdf>.

¹⁷⁶ Gwang-Il, "ROK Military 'Defense Reform 307 Plan,'" 1.

¹⁷⁷ Rhee, "From Defense to Deterrence," 2.

Through *proactive deterrence*, South Korean forces will respond to both the Northern Korean units engaged in the use of force and units serving in a support role.¹⁷⁸

South Korea's northwestern islands receive special attention under proactive deterrence. According to Chang, "the Northwest Islands Defense Command will be initiated with the ROK Marine Corps Command as the body. . . . With the aid of the Northwest Defense Command, the ROK military will be able to secure dominance over the northwest islands and effectively respond against North Korea's attempt to nullify the NLL."¹⁷⁹ After the *Cheonan* and Yeonpyeong Island incidents, it appears that South Korea has had enough of North Korea's four-decade long campaign against the Yellow Sea NLL.

D. STRIKING A BALANCE BETWEEN EMERGING AND TRADITIONAL THREATS

Roehrig points out

the [2010] attacks reminded military planners that despite South Korea's global interests and ambitions, there remain crucial defense priorities close to home. . . . The issue is one of balance, and ROK leaders continue to assess and struggle with where to draw the line between coastal defense and a blue-water navy to achieve the proper balance.¹⁸⁰

Cheonan and Yeonpyeong Island did not erase the strategic problems recognized in 2005's DRP 2020: they merely postponed South Korea's response to them. Given the need to grapple with global export-oriented economic interests and regional naval developments while still holding the littoral line against a recalcitrant North Korea, how can the ROKN frame a potential investment in light carriers? This question was also debated in 1994, although not directly. One KIDA proposal that emerged from the conference was for

improvements in ROKN force projection in its capability to close enemy SLOCs, its capability to wage mine warfare against major ports of the enemy, its combat capability to protect ports and coastal areas based on a

¹⁷⁸ Gwang-II, "ROK Military 'Defense Reform 307 Plan,'" 2.

¹⁷⁹ Ibid.

¹⁸⁰ Roehrig, "Republic of Korea Navy and China's Rise," 65.

sea-denial strategy, and its surface fleet combat and core strike capabilities.¹⁸¹

The CNA added an argument in favor of maintaining amphibious forces that could “flank an invading North Korean army.”¹⁸²

While all of these suggestions were intended as counters to North Korea, several are now potential dual-use concepts in the evolving East Asian strategic environment. First, carrier-based surveillance and light attack aircraft could augment ROKN surface and subsurface campaigns to close North Korean SLOCs through the Sea of Japan and the Yellow Sea: a function that could be applied to other regional SLOCs, presumably in concert with the U.S. Navy, under circumstances not involving North Korea. Second, the need to protect South Korean ports and coastal areas—a paramount requirement for enabling U.S. assistance during renewed, large-scale hostilities on the peninsula—could be satisfied by carrier-based ASW and mine countermeasures aircraft in coordination with land-based maritime patrol assets: an arrangement modelled on the JMSDF’s DDH operating concept and applicable in any scenario in which South Korea’s own SLOCs are threatened. Third, carriers have obvious utility within the ROKN’s “core strike capabilities.”¹⁸³ Not only would carrier-based aircraft be able to conduct traditional strike missions against peninsula targets or rival regional naval forces far out to sea, but carriers could potentially conduct offensive mine warfare against ports and waterways. Finally, a South Korean amphibious operation designed to flank an invading North Korean army could presumably be conducted beyond the reach of South Korean land-based aircraft, requiring sea-based aircraft for close and deep air support, transport, and sustainment. As with the PLAN and JMSDF, the same argument for organic, expeditionary air support also applies to South Korean maritime territorial contingencies.

If DRP 307’s proactive deterrence endures, some connection between carrier-based power projection and retaliatory strike capabilities must be made. According to Chang,

¹⁸¹ Yung, *Prospects for U.S.-Korean Naval Relations*, 10.

¹⁸² *Ibid.*

¹⁸³ *Ibid.*

Priorities on [DRP 307] force enhancement will focus more on preparing local provocations and asymmetric threats. Acquisitions on [*sic*] conventional war forces including mechanized assets will be reduced, and subsequently the retrenched resources will be reinvested to acquire new forces for effectively countering North Korea submarine threats. Through the acquisition of counter artillery detection radars and Joint Direct Attack Munition (JDAM), North Korea long range artillery will be destroyed at a faster rate, and introducing high-altitude UAVs will enhance our Intelligence, Surveillance, and Reconnaissance (ISR) capabilities.¹⁸⁴

Baengnyeong Island—the site of the *Cheonan* sinking along the NLL—sits less than eight nautical miles from the North Korean mainland but more than seventy from the South. Reprisal raids against North Korean forces engaging South Korea’s northwestern islands could potentially be conducted more responsively and efficiently from sea-going platforms than from airbases on the peninsula. All of the aviation-based priorities cited by Chang including ASW, JDAM strike warfare, and ISR are within the capacity of both retrofitted *Dokdo*-class LPHs and the 30,000-ton light carriers described in Jung’s article on the ROKN feasibility study. Their effectiveness, of course, would depend on proximity and availability, which could require regular proactive patrols in the Yellow Sea. Carriers intended for retaliatory strike missions are even less useful than mainland airbases when they are confined to port. South Korean planners may already recognize this problem, explaining why two light carriers are planned in addition to retrofitted amphibious ships.

E. CONCLUSION

South Korean carrier aspirations remain in the early stages, limited to feasibility studies and evaluations of security requirements. The Chinese influence on the strategic environment is strong, but the primary threat posed by North Korea cannot be ignored. Any investment in increased naval power projection will likely have utility on the Korean Peninsula in addition to the East China Sea. Fortunately, South Korea’s geographic situation makes most naval force structures applicable to both. As Kim Jae-Hwan argues,

Surrounded on three sides by water, South Korea will inevitably need its force to be naval. And while the South’s ability to truly project power

¹⁸⁴ Gwang-II, “ROK Military ‘Defense Reform 307 Plan,’” 2–3.

beyond the East Asian maritime sphere will be heavily constrained by nearby powers as well as by the U.S. naval dominance, Seoul will nonetheless work to build a navy capable of deterring immediate interference by either China or Japan. Ultimately, South Korea must do this because it exists in a region where political fault lines are both deep and unstable.¹⁸⁵

The future of ROKN carrier development, however, depends on the perceived future of the U.S.-South Korea relationship. As long as U.S. strategic communication satisfies South Korean concerns about U.S. commitment to South Korea and the larger Asia-Pacific region, then the ROKN will likely remain focused on shielding the South from unpredictable Northern aggression. While arguments can be made in favor of more autonomous South Korean strike and amphibious warfare capabilities to hedge against both North Korea and evolving regional powers, developments in those warfare areas will likely proceed within a cooperative, complementary, and cost-conscious framework that seeks to leverage the strengths of the U.S. Navy while providing critical capabilities—such as coastal protection and mine countermeasures—that are unique requirements in the Korean littoral. Representative Chung’s unveiling of the ROKN’s carrier feasibility study, however, indicates that South Korean policy makers harbor doubts about the strength of U.S. regional commitment.

¹⁸⁵ Kim Jae-Hwan, “South Korea’s Maritime Strategy,” *Stratfor*, July 19, 2012, <http://www.stratfor.com/sample/analysis/south-koreas-maritime-strategy>.

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VI. CONCLUSION: THE AMERICAN DISCONNECT

In 1975, Roger Waters and David Gilmour lamented “running over the same old ground” only to encounter “the same old fears.”¹⁸⁶ Although Pink Floyd has long since faded from most squadron ready rooms, the sentiment easily applies to the unbreakable cycle of U.S. naval procurement. All of the U.S. Navy’s carriers survived the fiscal year 2015 budget turmoil. Congressional pressure in early 2014 defeated a proposal to retire *George Washington* instead of beginning the ship’s multi-billion dollar mid-career nuclear refueling process.¹⁸⁷ In addition, the dominance of the super-carrier as the embodiment of U.S. naval power projection and global reach is virtually guaranteed for decades to come as construction on the *Gerald R. Ford*-class (CVN-78) pushes ahead despite alarming cost growth. The Congressional Research Service reports, “the estimated procurement costs of CVNs 78 and 79 have grown 22.9% and 25.1% respectively” with an additional 1.3 billion dollars requested for fiscal years 2014 to 2016 to cover cost growth.¹⁸⁸

The influence of domestic political interests over difficult—but necessary—decisions concerning U.S. defense spending is disturbing enough, but even more troubling is the U.S. Navy’s insistence on pursuing grossly expensive weapon systems with little consideration for their applicability in meeting national strategic objectives. Although Assistant Secretary of the Navy Sean Stackley admits that *Ford*-class cost growth is “unacceptable,” very little effort has been expended to explain how super-carriers will address the strategic problems of the future, nor how their anticipated costs can be rendered acceptable relative to those problems.¹⁸⁹ The blame does not rest with force-structure planners or the military-industrial base. If asked to consider the purpose of

¹⁸⁶ David Gilmour and Roger Waters, “Wish You Were Here,” Pink-Floyd-Lyrics, accessed July 25, 2014, <http://www.pink-floyd-lyrics.com/html/wish-you-were-here-wish-lyrics.html>.

¹⁸⁷ Julian E. Barnes, “Pentagon Drops Plan to Mothball USS *George Washington* Aircraft Carrier,” *The Wall Street Journal*, February 6, 2014, <http://online.wsj.com/news/articles/SB10001424052702304450904579365130060602564>.

¹⁸⁸ Ronald O’ Rourke, “Navy *Ford* (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress” (Washington, DC: Congressional Research Service, 2014), 8.

¹⁸⁹ *Ibid.*, 21.

super-carriers in U.S. national and military strategic objectives, the answer appears at once obvious yet elusive. Super-carrier proponents can correctly argue that the varied and unpredictable nature of American military activities and global commitments require U.S. naval forces to maintain flexible, multi-purpose assets capable of responding to a diverse range of contingencies. Unfortunately, poorly-articulated strategic guidance and persistent fiscal constraints will force the U.S. Navy to invest available funding in platforms and doctrinal concepts that push the limits of practicality while trying to meet possible yet highly unlikely strategic scenarios. The U.S. Navy is required to plan for the use of force in pursuit of national objectives whose future character is unknown. Its historical preference for highly capable ships, and especially the modern super-carrier, is a form of insurance against that uncertainty. One may argue about whether or not such insurance is worth the cost, but it is important to recognize that American carriers reflect a strategic agnosticism that may not be shared by other navies.

U.S. naval aviation is focused on technocratic problems rather than strategy and doctrine. A section titled “Where We Are Going” in the 2012 edition of the *Naval Aviation Vision* praises new airframes and systems for promising “increased sortie generation rates, reduced manning, and lower total ownership costs.”¹⁹⁰ Similarly the *Vision’s* “Transformation Roadmap” for U.S. super-carriers focuses on technological features such as “improved nuclear reactors,” “distributed systems,” and increased “electrical generating capacity” while references to displacement growth margins, operational analytical modeling, performance parameters, theory of constraints, barrier removal teams, and Kaizen initiatives force readers to wonder if *vision* is an appropriate title.¹⁹¹

The tendency of American strategic thinking to devolve into reflections on emerging technology can create a misleading frame of reference for evaluating the role of carrier aviation in other navies. It is certainly a mistake to dismiss such efforts as strategically irrelevant because the platforms involved do not measure up to their U.S. counterparts. Comparisons to super-carriers are fruitless because Asian carriers are not

¹⁹⁰ *Naval Aviation Vision: January 2012* (Washington, DC: Naval Aviation Enterprise, 2012), 15.

¹⁹¹ *Ibid.*, 17, 26, 31, 80, 90.

intended for the same nebulous purposes. It must also be recognized that carriers remain relevant because Asian navies believe that they are relevant: a belief reflected in the creatively adaptive carrier programs that could change the way power is projected in the Western Pacific and Indian Ocean. Asian carrier navies do not suffer from the technocratic tendencies that afflict the United States. Each carrier program examined by this paper is designed to meet specific strategic problems. China's intentions remain largely obscured leading to a fair amount of speculation concerning the role of PLAN carriers. China's involvement in regional maritime territorial disputes and its strategic interpretation of Western Pacific geography suggest that any investment in naval power projection instruments will support a desire for operational freedom of action within the First Island Chain. India recognized the utility of strike carriers early in its post-colonial history and recently articulated its intention to achieve regional manifest destiny in the face of increasing naval competition from China. India's vision suffers from some of the same diffuseness of the U.S. model that it attempts to emulate, but is simultaneously easier to manage because of its smaller scope and acknowledged adversaries. Japan's gradual revival as a regional military power may have been inevitable in the absence of the Soviet threat and the U.S. regional engagement that accompanied it, but China's increasingly assertive actions over island territories has accelerated the JMSDF's development into a limited power projection force. Finally, South Korea—while not yet committed to fixed-wing carrier acquisition—is likely exploring options for managing its precarious position between North Korea, China, and Japan.

The rise of carriers in Asia is rooted in the particular geopolitics of the region and should not be labeled a classic arms race. Although China's military build-up is a shared concern for India, Japan, and South Korea, no state is building carriers simply in response to another state's carriers. Instead, carriers fulfill individual state strategic needs that are emerging in the larger context of the post-Cold War strategic environment. That these states are identifying new strategic problems and acting to address them in groundbreaking ways is far more important than fretting over the decline of any imaginary U.S. carrier monopoly.

Accordingly, there is no need to interpret Asian carrier developments as a challenge to U.S. dominance in naval aviation, power projection, or freedom-of-action, but the implications for U.S. influence and strategic relationships in the Asia-Pacific region should be considered. Although the U.S.-Japan alliance remains strong, policy makers should note that Japan's drift away from constitutional pacifism, coupled with its newly felt need for tactically offensive amphibious capabilities, could indicate waning confidence in the U.S. commitment to maintain the integrity of Japanese administered territories. Similarly, South Korea's eye toward the wider region despite persistent problems with the North may stem from a perception that the future of American regional presence is uncertain. Indian aspirations in the IOR present an opportunity for the United States, which has historically risen only half-heartedly to the prospect of an Indo-American strategic relationship. U.S. guidance could move Indian naval expansion in directions that compliment U.S. interests instead of leaving the Indian Navy to its own devices and hoping that the two countries will always see eye-to-eye.

In its only attempt to connect means and ends, the U.S. *Naval Aviation Vision* offers the following for consideration:

To meet the demands of 21st-century warfare, *Nimitz* and *Ford*-class aircraft carriers will deploy long-range manned and unmanned strike aircraft. Advanced weapons and sensors, combined with high-speed sealift platforms, tilt-rotor aircraft, and advanced amphibious assault vehicles, will generate more flexible combat power. Joint concepts of operation, centered on the aircraft carrier, will leverage the military strengths of all the services, bringing cooperative muscle to the fight and a potent synergy across the warfare continuum.¹⁹²

The reliance on systems and platforms, and the implied confidence that—strategically speaking—their capabilities somehow speak for themselves, is unmistakable. Terms such as long-range, high-speed, advanced, flexible, joint, cooperative, synergy, and continuum are evidence of the U.S. Navy's need to demonstrate the ability to address any strategic problem while comprehensively preparing for none in particular. That may be the inescapable reality for the United States for the time being, but officers and policy

¹⁹² Ibid., 17.

makers should remain vigilantly aware that other navies, including potential adversaries, are pursuing specific strategic capabilities in focused and manageable ways.

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