

# NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

# **THESIS**

# JAPANESE MARITIME SELF-DEFENSE FORCE EFFORTS TO COUNTER THREATS TO JAPAN

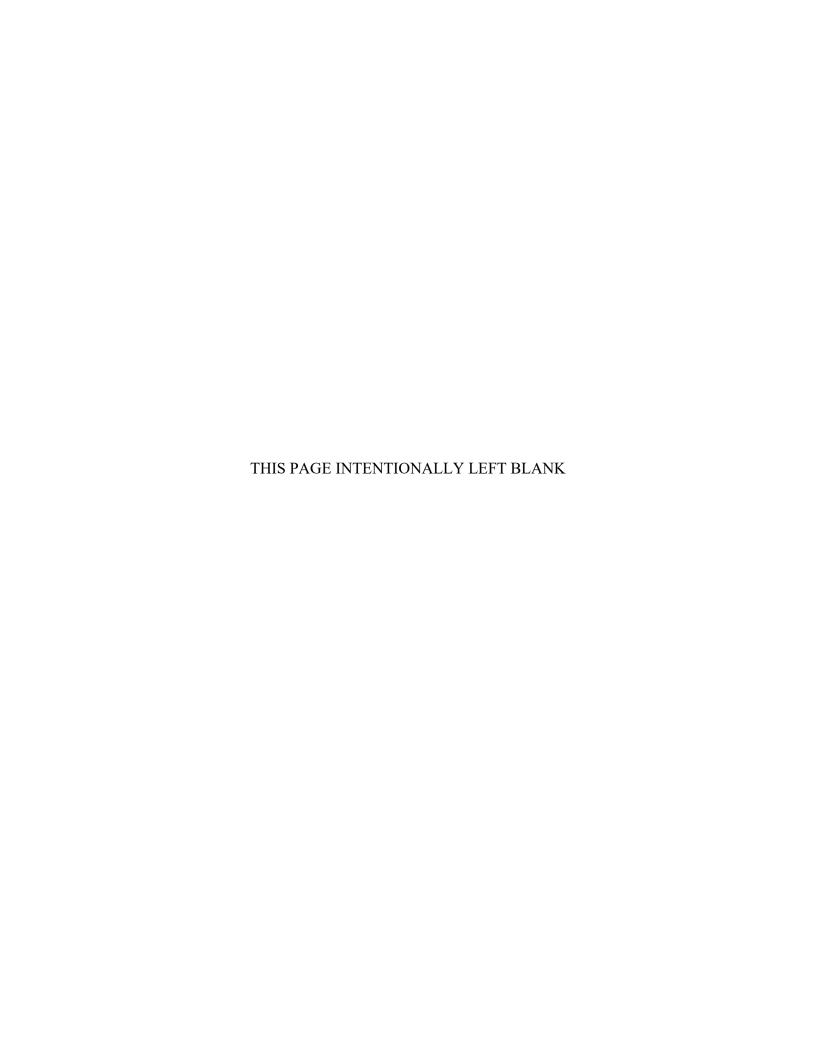
by

Timothy J. Hetteberg

December 2018

Thesis Advisor: Robert J. Weiner Second Reader: Wade L. Huntley

Approved for public release. Distribution is unlimited.



#### REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2018	3. REPORT TYPE AND DATES COVERED  Master's thesis			
<b>4. TITLE AND SUBTITLE</b> JAPANESE MARITIME SELF-DEFENSE FORCE EFFORTS TO COUNTER THREATS TO JAPAN			5. FUNDING NUMBERS		
6. AUTHOR(S) Timothy J. Hetteberg					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.					
<b>12a. DISTRIBUTION / AVAIL</b> Approved for public release. Distri			12b. DISTRIBUTION CODE A		

#### 13. ABSTRACT (maximum 200 words)

During the Cold War, the Japanese Maritime Self-Defense Force (JMSDF) was heavily focused on defending Japan from a Soviet invasion and ensuring sea lines of communications (SLOC) were available for U.S. naval forces in the event of a major conflict. After the Cold War, the JMSDF had to adopt new missions based on the constantly changing threat environment. This thesis assesses how well the JMSDF responded to a variety of threats to Japan during each of the three decades since the end of the Cold War. The main chapters look at the threats Japan faced each decade and then how JMSDF equipment and policy changed as a result of the identified threats. The research suggests that the JMSDF usually falls in the middle of the spectrum and adequately meets defense requirements. It also shows that there were times where the JMSDF was not prepared or was over prepared, but adjustments were made to bring the JMSDF back to the middle ground.

14. SUBJECT TERMS JMSDF, Japan, AEGIS, BMD operations, maritime strategy	15. NUMBER OF PAGES 109 16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. 239-18 THIS PAGE INTENTIONALLY LEFT BLANK

#### Approved for public release. Distribution is unlimited.

# JAPANESE MARITIME SELF-DEFENSE FORCE EFFORTS TO COUNTER THREATS TO JAPAN

Timothy J. Hetteberg Lieutenant, United States Navy BS, Ohio State University, 2011

Submitted in partial fulfillment of the requirements for the degree of

# MASTER OF ARTS IN SECURITY STUDIES (FAR EAST, SOUTHEAST ASIA, THE PACIFIC)

from the

## NAVAL POSTGRADUATE SCHOOL December 2018

Approved by: Robert J. Weiner

Advisor

Wade L. Huntley Second Reader

Afshon P. Ostovar Associate Chair for Research Department of National Security Affairs THIS PAGE INTENTIONALLY LEFT BLANK

#### **ABSTRACT**

During the Cold War, the Japanese Maritime Self-Defense Force (JMSDF) was heavily focused on defending Japan from a Soviet invasion and ensuring sea lines of communications (SLOC) were available for U.S. naval forces in the event of a major conflict. After the Cold War, the JMSDF had to adopt new missions based on the constantly changing threat environment. This thesis assesses how well the JMSDF responded to a variety of threats to Japan during each of the three decades since the end of the Cold War. The main chapters look at the threats Japan faced each decade and then how JMSDF equipment and policy changed as a result of the identified threats. The research suggests that the JMSDF usually falls in the middle of the spectrum and adequately meets defense requirements. It also shows that there were times where the JMSDF was not prepared or was over prepared, but adjustments were made to bring the JMSDF back to the middle ground.

THIS PAGE INTENTIONALLY LEFT BLANK

# TABLE OF CONTENTS

I.	INTRODUCTION			
	A.	MAJOR RESEARCH QUESTION	1	
	В.	SIGNIFICANCE OF THE RESEARCH QUESTION	2	
	<b>C.</b>	LITERATURE REVIEW	4	
		1. Threats to Japan	5	
		2. Response to Threats	7	
		3. Policy and Equipment	10	
	D.	POTENTIAL EXPLANATIONS AND HYPOTHESES		
	<b>E.</b>	RESEARCH DESIGN	14	
	F.	THESIS OVERVIEW AND DRAFT CHAPTER OUTLINE		
II.	HIS	TORY OF THE JMSDF	17	
	A.	THE CREATION OF THE JAPAN MARITIME SELF-		
		DEFENSE FORCE	18	
	В.	THE JMSDF THROUGH THE COLD WAR	22	
III.	THE	E JMSDF IN THE POST-COLD WAR SECURITY		
	ENV	IRONMENT		
	A.	THE NEW THREAT ENVIRONMENT	27	
	В.	JMSDF ORGANIZATION AND SHIPS	29	
		1. Cold War Influence on the JMSDF	30	
		2. New Ships for the JMSDF	33	
	<b>C.</b>	1990s POLICY CHANGES	36	
		1. The First Post-Cold War Crisis	37	
		2. Moving to Make a Regional Difference	39	
	D.	CONCLUSION: THE JMSDF'S FIRST STEPS IN THE POST		
		COLD WAR WORLD	40	
IV.	2000	Os JMSDF	43	
	A.	THE RISE OF NON-STATE THREATS AND THE RETURN		
		OF STATE BASED THREATS	43	
	В.	JMSDF EQUIPMENT	46	
		1. Ballistic Missile Defense for the JMSDF	47	
		2. Evolution of JMSDF Destroyers	49	
		3. Did Japan Just Build an Aircraft Carrier?	50	
	<b>C.</b>	JMSDF POLICY CHANGES		
		1. Anti-Terrorism	54	

		2. Anti-Piracy and CTF-151	55
	D.	CONCLUSION: THE JMSDF'S ROLE CONTINUES TO	
		EXPAND	57
V.	CUE	RRENT JMSDF (2010 AND ON)	59
• •	A.	THREATS TO JAPAN IN THE 2010s	
		1. North Korea	
		2. China and its Growing Maritime Claims	
	В.	JMSDF SHIPS	
		1. JMSDF Destroyer Evolution Continues	
		2. Upgrades and Additions to the AEGIS Destroyers	
		3. The Izumo Class Helicopter Carriers	
	<b>C</b> .	POLICY CHANGES	72
		1. Collective Self Defense Allowed	72
		2. Indian Ocean Deployments	74
	D.	CONCLUSION: DEVELOPMENTS SINCE 2010	76
VI.	CON	NCLUSION	79
LIST	OF R	EFERENCES	85
INIT	TAT D	ACTDIDITION LICT	05

### LIST OF ACRONYMS AND ABBREVIATIONS

ASROC anti-submarine rocket
ASW anti-submarine warfare
BMD ballistic missile defense

CEC cooperative engagement capability

DDG guided missile destroyer
DDH helicopter destroyer

IJN Imperial Japanese Navy

JCG Japan Coast Guard

JSDF Japan Self-Defense Force

JMSDF Japan Maritime Self-Defense Force

MSA Maritime Safety Agency

MTDP Mid-Term Defense Program

NDPG National Defense Program Guidelines
NDPO National Defense Program Outline
PLA(N) People's Liberation Army (Navy)

SLOC sea line of communication

USN United States Navy

VLA vertically launched anti-submarine rockets

VLS vertical launching system

THIS PAGE INTENTIONALLY LEFT BLANK

#### **ACKNOWLEDGMENTS**

This thesis took me on a long and challenging journey that included a few breaks to clear my mind with a round of golf. But the real support came from my parents who were always interested in my progress and constantly pushed me to keep working. I will try to call home more often now that this project is behind me. Thank you, Mom and Dad, for all the love and support.

I would also like to acknowledge my advisors, Dr. Robert Weiner and Dr. Wade Huntley. Thank you for all the comments throughout my revisions that helped me look at the topic in a different way so I could write a more complete thesis.

THIS PAGE INTENTIONALLY LEFT BLANK

## I. INTRODUCTION

Japan's Constitution was adopted in 1947 under the occupation led by the United States and Article 9 renounced war as a method to solve disputes among nations. The constitution requires Japan to promote "an international peace based on justice and order." As part of its renunciation of war, Japan vowed to never maintain war potential; instead, it relied on the United States for security. The outbreak of war on the Korean Peninsula and the movement of U.S. troops from Japan to Korea put into motion the first reinterpretation of Article 9 allowing Japan to maintain military equipment for defensive purposes. When the Cold War ended, the United States was no longer focused on containing communism, and the East Asia region began to see a reduction of U.S. military forces. The threat of communism was eventually replaced by North Korean and Chinese belligerency, which required Japan to improve its defensive capabilities in light of the reduced United States military footprint. In particular, Japan now faces North Korea's nuclear and ballistic missile threats and China's aggressiveness in the East and South China Seas.

Since the Imperial Japanese Navy was disbanded in 1945, Japan has gone from not possessing a navy to possessing a well-respected maritime force that maintains capabilities found only among the most advanced navies of the world. The maritime component of the Japan Self-Defense Force (JSDF), the Japanese Maritime Self-Defense Forces (JMSDF), started as a way for Japan to counter regional threats directed at Japan. The JMSDF's mission was, and still is, to prevent threats from reaching the shores of Japan.

#### A. MAJOR RESEARCH QUESTION

Despite the impressive naval capabilities of the JMSDF, Japan still remains true to the nation's renunciation of war stated in Article 9. In parallel with the JMSDF's evolution, Japan has been debating constitutional changes and reinterpretations of Article 9. These debates have focused on whether Japan can or should possess a normal military, albeit one that is still closely controlled by civilian power that still advocates for peaceful solutions

<sup>&</sup>lt;sup>1</sup> "The Constitution of Japan," Prime Minister of Japan and His Cabinet, November 3, 1946, https://japan.kantei.go.jp/constitution and government of japan/constitution e.html.

to disputes.<sup>2</sup> Some reinterpretations have been implemented allowing the JMSDF to more effectively counter threats to Japan. Regardless of the current status of those debates, the JMSDF is still required to maintain a naval force that is capable of defending Japan against a growing array of threats. Since a reinterpretation of Article 9 does not allow Japan to maintain a normal military, the JMSDF is constrained by self-imposed limitations.

This thesis addresses the question: How well have the JMSDF's changes in equipment and policy countered the threats Japan has identified since the end of the Cold War? Japan is faced with internal and external pressures over how to employ the JMSDF. There is a large consensus across Japan that the "renunciation of war" clause in the Japanese Constitution is important but the country is divided on whether Article 9 should be amended.<sup>3</sup>

To answer this question, this thesis focuses on the threats from North Korea and China that have arisen since the mid-1990s, but also the rise of non-state threats such as terrorism and piracy. Japan's response within the JMSDF is assessed with regard to how ballistic missile defense, surface combatants, and the introduction of the four flattop helicopter carries (DDH) have given Japan a credible defensive naval force. Policy changes that have allowed the JMSDF to act in a wider range of scenarios are used to show how Japan is taking a more active role in the international community to prevent threats from rising in the first place. By looking at these threats and Japan's response in terms of policy and equipment, the thesis examines whether any gaps exist between Japan's security requirements and its actions to date, and why those gaps may exist.

### B. SIGNIFICANCE OF THE RESEARCH QUESTION

The capabilities the JMSDF can possess and its freedom to use those capabilities has long been a topic of interest, particularly considering Article 9 of the Japanese

<sup>&</sup>lt;sup>2</sup> Adam Liff, "On the Verge of History? Japan's 2016 Election and Prospects for Article 9 Revision," Pacific Forum, July 11, 2016, https://www.pacforum.org/analysis/pacnet-56-verge-history-japans-2016-election-and-prospects-article-9-revision.

<sup>&</sup>lt;sup>3</sup> "Majority of Japanese Oppose Any Constitutional Revisions Under Abe, but See Need for Future Changes, Poll Finds," *Japan Times*, April 26, 2018, https://www.japantimes.co.jp/news/2018/04/26/national/majority-favor-constitutional-revision-just-not-abe-poll/#.XArQnWhKiUk.

Constitution. As Japan continues to take the steps it sees as necessary to counter the threats it has identified these actions might be seen by Japan's neighbors, who still remember the actions of the Japanese during the first half of the 20<sup>th</sup> century, as a sign of a resurgent Imperial Japan. In today's global environment, those fears may seem unsubstantiated, considering Japan's economic ties form a significant restraint. But, that point does little to assuage the fears other countries have of a resurgent, militarily oriented Japan.

If Japan decided to add offensive weapons to the list of capabilities of the JMSDF, as a more comprehensive way to counter threats from aboard, this would significantly change the power dynamics in the Western Pacific. A JMSDF with offensive capabilities could be more influential in protecting Japan's sea lines of communication (SLOC), a vital piece of its economy. This does not necessarily mean Japan would start conducting preemptive strikes to defend its interests, but its ability to do so could change the way nations decide to act regarding Japanese interests. It also does not mean that Japan would drop Article 9 in favor of a more aggressive foreign policy. But, as previously stated, the move would also draw concern from Japan's neighbors. It would also mean another key ally for the United States in the region capable of exerting more pressure on China and North Korea. Additionally, for the USN, this could help ease the workload of overburdened forward-deployed assets in the region.

Overall, the degree to which Japan is making changes to the JMSDF in response to threats can cause significant changes to Japan's relations with other major players in the region, especially China, South Korea, and the United States. While China and South Korea are connected economically with Japan, their diplomatic and military ties to Japan are more contentious. In particular, China's territorial claims in nearby seas, disregard for international rules, and willingness to use its military to assert those claims are a stark contrast to Japan's view on the same. The addition of a JMSDF that others view as a normal navy would surely complicate the picture even more.

Looking at policy that guides the JMSDF and the equipment it has acquired in relation to the threats Japan faces, we can get a better picture of how Japan is taking adequate steps to protect itself. Consciously avoiding the political debate that surrounds the use of the JMSDF, and the JSDF as a whole, allows this thesis to focus on Japan's

ability to defend itself within the confines of its constitution. Framing the research in this manner provides a unique look at how the JMSDF, and Japan in general, handles its defense.

The JMSDF deserves to be studied not only because it is understudied as an individual service (at least in terms of English literature on policy decisions) but also because it plays a distinct role within Japanese foreign policy. The JMSDF represents a more outward expression of Japan's foreign policy. While the Ground Self-Defense Forces and the Air Self-Defense Forces typically stay on Japanese territory, except for occasional bilateral training exercises, the JMSDF is regularly seen operating much farther from Japan in the Pacific and as far west as the Gulf of Aden. In the Gulf of Aden, the JMSDF routinely conducts anti-piracy patrols with surface vessels and P-3 maritime patrol aircraft. Since the JMSDF is a more outward expression of Japan's military involvement in the international arena, a closer look at how Japan wields this branch provides a better look at how Japan is confronting the threats it identifies as crucial to maintaining its security.

#### C. LITERATURE REVIEW

Literature on the role of the JMSDF centers on two main topics: equipment and policy. This literature review examines how the current literature available looks at the threats Japan faces, what Japan has done in terms of policy and equipment to counter those threats, and what could or should be done in response to identified threats. Examining the discussions surrounding these three topics creates a better picture of how accurately Japan is structuring the JMSDF to counter its threats.

While the general topic of Japan's defense is widely discussed, it is usually broken down into two separate categories, relating policy to threats<sup>4</sup> or equipment to threats.<sup>5</sup> In

<sup>&</sup>lt;sup>4</sup> Adam Liff, "'Self-Restraint' With Japanese Characteristics," Asia Maritime Transparency Initiative, March 10, 2016, https://amti.csis.org/self-restraint-with-japanese-characteristics/; and Atsuhiko Fujishige, "New Japan Self-Defense Force Missions Under the 'Proactive Contribution to Peace' Policy: Significance of the 2015 Legislation for Peace and Security," Center for Strategic and International Studies, July 21, 2016. https://www.csis.org/analysis/new-japan-self-defense-force-missions-under-%E2%80%9Cproactive-contribution-peace%E2%80%9D-policy.

<sup>&</sup>lt;sup>5</sup> Matthew Gamble, "Japan's Izumo-Class Helicopter Destroyer: An Aircraft Carrier in Disguise?," Center for International Maritime Security, April 11, 2016, http://cimsec.org/japans-izumo-class-helicopter-destroyer-aircraft-carrier-disguise/24130.

terms of the JMSDF, though, there tends to be more literature available that reviews equipment capabilities than literature that reviews policy. There is only a small amount of English literature which focuses solely on the JMSDF: most literature focuses on the Self-Defense Forces in general. Material on the JMSDF tends to focus on either equipment or policy, while pieces analyzing both topics and their mutual relationship has not been found. What is not typically discussed is to what degree the JMSDF's equipment and policy work together to counter the threats Japan identifies. In the broader context of Japan and the JSDF, the JMSDF is usually not addressed.

#### 1. Threats to Japan

The threats that Japan faces range from the strategic level to more narrowly focused maritime threats, as described in various official government documents and articles. Japan's defense strategy starts with the National Security Strategy, which lays out the basic policy Japan aims to pursue in terms of diplomacy and defense. Japan's National Security Council issued its first National Security Strategy in 2013. From this broad document, the Ministry of Defense writes the National Defense Program Guidelines. The 2013 National Defense Program Guidelines (NDPG) look to the future by prescribing what the JSDF should look like in about ten years. To define the force, the NDPG also identifies numerous threats Japan faces in all domains: sea, air, land, space, and cyber-space. The NDPG is supplemented by the 2013 Mid-Term Defense Program (MTDP), which reiterates the threats and places limits on expenditures and quantities of major equipment over a five-year period. The MTDP is then used to define the annual budget for the JSDF.

Japan uses the NDPG to identify the threats it faces, including the threats that North Korea and China present to the security of Japan and the stability of the region. This

<sup>&</sup>lt;sup>6</sup> Japan Ministry of Defense, *Defense of Japan 2017: Outline of the National Security Strategy*, (Tokyo: Japan Ministry of Defense, 2017), http://www.mod.go.jp/e/publ/w\_paper/pdf/2017/DOJ2017\_2-1-3 web.pdf.

<sup>&</sup>lt;sup>7</sup> Japan Ministry of Defense, Defense of Japan 2017.

<sup>&</sup>lt;sup>8</sup> Japan Ministry of Defense, Defense of Japan 2017.

<sup>&</sup>lt;sup>9</sup> Japan Ministry of Defense, Defense of Japan 2017.

document is generally accepted as accurately representing Japan's threats, <sup>10</sup> with few disputing the main threats of China and North Korea. North Korea's continued pursuit of nuclear weapons and ballistic missiles is of growing concern to Japan. Several North Korean ballistic missile tests have flown over or toward Japan's northern island of Hokkaido, and North Korea has issued verbal threats toward Japan from time to time, including the use of nuclear weapons. <sup>11</sup> Japan's close relationship with the United States, a sworn enemy of North Korea, and its support of sanctions against the bellicose nation further fuels North Korea's anger toward Japan.

China possesses the same nuclear and ballistic missile capability as North Korea, but its substantially larger navy and aggressive overall policy in the region presents a more direct maritime threat. Additionally, China does not make the same hostile statements as North Korea, making China's nuclear and ballistic missile inventories less threatening. The NDPG points to China's increasing defense expenditures, which are funding advances across all domains, but the reason for the advancements remains unclear. The lack of clarity regarding China's military expenditures, aggressive actions in the South China Sea, and noted negative sentiment toward Japan combine to make China a threat. As a result of China's suspect behavior regarding islands in the East China Sea, the NDPG includes a section to discuss the way forward in "response to an attack on remote islands." China's actions in the East China Sea and South China Sea are seen by Japan as "attempts to change

<sup>10</sup> Michael Auslin, "Japan's National Power in a Shifting Global Balance" in *Strategic Asia 2015-16: Foundations of National Power in the Asia-Pacific*, ed. Ashley Tellis, Alison Szalwinski, and Michael Wills (Seattle: National Bureau of Asian Research, 2015), 56-89; Liff, "Self-Restraint' With Japanese Characteristics; Yoji Koda, "Japan's Perceptions of Interests in the South China Sea," *Asian Policy*, no. 21 (January 2016): 29-35, https://doi.org/10.1353/asp.2016.0011; Yuki Tatsumi, "What North Korea's ICBM Means for Japan's Defense Planning," The Diplomat, December 12, 2017, https://thediplomat.com/2017/12/what-north-koreas-icbm-means-for-japans-defense-planning/; and Richard J. Samuels, "Japan's Goldilocks Strategy," *The Washington Quarterly*, 29, no. 4 (Autumn 2006): 111-125, Project Muse.

<sup>&</sup>lt;sup>11</sup> Jesse Johnson, "North Korea Threatens to Make Japan and U.S. Bases 'Disappear," *Japan Times*, November 20, 2017, https://www.japantimes.co.jp/news/2017/11/20/national/north-korea-threatens-make-japan-u-s-bases-disappear/#.Wrrge4jwZPY.

<sup>&</sup>lt;sup>12</sup> Japan Ministry of Defense, *National Defense Program Guidelines for FY2014 and Beyond* (Tokyo: Japan Ministry of Defense, 2013), http://www.mod.go.jp/j/approach/agenda/guideline/2014/pdf/20131217 e2.pdf, 3.

<sup>13</sup> Japan Ministry of Defense, 14.

the status quo by coercion,"<sup>14</sup> typified by the People's Liberation Army Navy's (PLA(N)) frequent intrusions into Japanese territorial waters, island building, and expanding operational areas.<sup>15</sup>

Given that Japan's two main security concerns are well known, the lack of debate surrounding them is unsurprising. <sup>16</sup> As an example of this consensus, Tatsumi points to the ongoing threats Japan faces from the Chinese navy's aggressive actions in the regional maritime domain and from North Korea's ICBM threats. Specifically, on the North Korea threat, she states, "there is no question that Japan needs to enhance its defense posture to better protect the country from North Korea's missile threat." Additionally, Tatsumi agrees with the Japanese government's assessment of the security threats and advocates for Japan to continue its pursuit in deterring those and many other threats.

### 2. Response to Threats

The discussion of threats leads to a discussion of how to handle them. This discussion is further divided into what the JMSDF should be doing and what the JMSDF is doing in response to stated threats. There is debate among policy analysts as to what Japan should do. Some, like Tatsumi and Auslin, advocate for the strengthening of the JSDF. Others believe that Japan should maintain what it has and continue to use diplomacy to bring stability to the region. Liff, for example, advocates that Japan does act overly aggressive in its defense policy. He acknowledges that Japan faces an evolving security threat from China and North Korea but calls for Japan to pursue a more diplomatic route to counter the threats, instead of further military build-up. <sup>18</sup> Japan is also not provoking

<sup>&</sup>lt;sup>14</sup> Japan Ministry of Defense, 3.

<sup>15</sup> Japan Ministry of Defense, 3-4.

<sup>16</sup> Auslin, "Japan's National Power in a Shifting Global Balance,"; Liff, "Self-Restraint' With Japanese Characteristics,"; Koda, "Japan's Perceptions of Interests in the South China Sea,"; Tatsumi, "What North Korea's ICBM Means for Japan's Defense Planning,"; and Samuels, "Japan's Goldilocks Strategy."

<sup>17</sup> Tatsumi, "What North Korea's ICBM Means for Japan's Defense Planning."

<sup>18</sup> Adam Liff, "The 2015 US-Japan Guidelines for Defense Cooperation: Toward 'A More Balanced and Effective Alliance," Center for Strategic and International Studies, April 23, 2015, https://www.pacforum.org/analysis/pacnet-27-2015-us-japan-guidelines-defense-cooperation-toward-more-balanced-and-effective.

the issues surrounding its island disputes with China. In this case, much of the attention centers on China's aggressive actions and little attention is paid to the fact that Japan does not act provocatively. In fact, Japan adheres to a 2002 declaration for all parties involved to "exercise self-restraint" more so than China. Liff places a great deal of emphasis on the debate within Japan for its contribution to Japan's relatively slow progress in terms of defense. As the overall Article 9 debate continues, this trend is likely to continue, which suggests that policy is also going to be slow to evolve. <sup>20</sup>

Samuels shares Liff's view, in that he believes Japan should continue to rely on diplomacy as it moves forward. But given the alliance with the United States, he also sees Japan growing its military capacity as well, in order to avoid having to rely on the United States as much for security purposes.

Given Japan's physical and economic position in the region, it enjoys the support of those who see Japan as a counter to the Chinese threat to the regional maritime order. Patalano advocates for countries that live in a maritime region to maintain their sea power. In particular, he views Japan's maintenance of a strong JMSDF to be crucial in the East China Sea given the debate with China over the Senkaku Islands.<sup>21</sup> To that end, Patalano sees the JMSDF's evolution to enhance its capabilities to maintain sea control in the maritime environment as crucial to Japan's economic power.

Not surprisingly, Patalano is joined by former JMSDF Admiral Yoji Koda in the promotion of Japan taking on a greater role in the maritime environment. Koda would like to see a freer and more capable JMSDF that will enhance the security and stability of the regional maritime environment.<sup>22</sup> A strong JMSDF would help promote the "rule of law

<sup>&</sup>lt;sup>19</sup> Liff, "Self-Restraint' With Japanese Characteristics."

<sup>20</sup> Liff, "On the Verge of History."

<sup>&</sup>lt;sup>21</sup> Alessio Patalano, "Seapower and Sino-Japanese Relations in the East China Sea," *Asian Affairs* 45, no. 1 (January 2014): 34-54, https://doi.org/10.1080/03068374.2013.876809.

<sup>22</sup> Koda, "Japan's Perceptions of Interests in the South China Sea."

and the importance of respecting long-standing international norms"<sup>23</sup> as stressed by Prime Minister Abe. While Koda may well be informed by his career experience in pushing for the JMSDF to be strengthened, he is also uniquely familiar with the role that a strong navy plays in protecting Japan's vital maritime lifelines.

From the viewpoint of Japanese politics, Prime Minister Shinzo Abe and his Liberal Democratic Party also want to change the way the JSDF works within Article 9, or to revise Article 9 in the first place. In particular, Abe's Liberal Democratic Party calls for the JSDF, including the JMSDF, to be given more freedom to operate and more equipment. Abe does not appear to want Japan to return to its pre-World War II military state, but he does want Japan to be able to protect the maritime commons without provoking a larger conflict.<sup>24</sup> On the other side of the debate, the majority of Japanese tend to push for adherence to Article 9 and oppose the expansion of the JSDF, at least in broad terms.<sup>25</sup>

The result of the tense debate about what Japan should do has been that Japan currently pursues a middle of the road strategy regarding its defense, acknowledging threats but not provoking a security dilemma. <sup>26</sup> This middle of the road strategy is seen in Japan's self-restraint in the disputed island issue with China, as Liff points out, and also with the enhancement of the Japan Coast Guard (JCG): while the JCG lacks the extensive capabilities of the JMSDF, its presence in the waters surrounding Japan allows the JMSDF to utilize its own major assets elsewhere <sup>27</sup> as Japan tries to promote "open and stable

<sup>&</sup>lt;sup>23</sup> Nicholas Szechenyi, "U.S.-Japan Alliance: Prospects to Strengthen the Asia-Pacific Order," in *Strategic Asia 2014-15: U.S. Alliances and Partnerships at the Center of Global Power*, ed. Ashely Tellis, Abraham Denmark, and Greg Chaffin (Seattle: National Bureau of Asian Research, 2014), 45.

<sup>&</sup>lt;sup>24</sup> "Statesmen's Forum: Shinzo Abe, Prime Minister of Japan," Center for Strategic Studies and International Studies, February 22, 2013, https://csis-prod.s3.amazonaws.com/s3fs-public/legacy\_files/files/attachments/132202 PM Abe TS.pdf.

<sup>&</sup>lt;sup>25</sup> Motoko Rich, "Shinzo Abe Announces Plan to Revise Japan's Pacifist Constitution," *New York Times*, May 3, 2017, https://www.nytimes.com/2017/05/03/world/asia/japan-constitution-shinzo-abe-military.html.

<sup>&</sup>lt;sup>26</sup> Richard J. Samuels, "Securing Japan: The Current Discourse," *The Journal of Japanese Studies* 33, no. 1 (Winter 2007), 124-152, Project Muse.

<sup>&</sup>lt;sup>27</sup> Richard J. Samuels, "New Fighting Power!' Japan's Growing Maritime Capabilities and East Asian Security," *International Studies* 32, no. 3 (Winter 2007), 83-112, Project Muse.

seas."<sup>28</sup> In other words, the JCG allows the JMSDF to utilize its assets farther from Japan to fulfill the middle of the road strategy more fully.

### 3. Policy and Equipment

Analysts generally agree that Japan faces an array of threats from China and North Korea. They all tend to agree that Japan should take the appropriate measures to counter new threats as they arise. But this discussion of policy also leads to a discussion about the particular equipment needed for the JMSDF to counter threats while keeping in line with stated policy. Generally, this literature focuses more on the question of what the JMSDF *is* doing in terms of equipment and less on what it *should* do.

Literature that does talk about what Japan should do includes Japan's involvement in BMD. There is not any literature that suggests Japan should not maintain a BMD shield, specifically when threats from North Korea are accounted for. Tatsumi, in particular, advocates for Japan to continually enhance its BMD capability,<sup>29</sup> although she does not explicitly discuss the JMSDF's role in that defense.

Many sources, such as Jane's, that look at JMSDF equipment appear to do so in a more technical light, focusing on specifications of equipment, speed, range, carrying capacity, etc., and do not discuss any of the politics embedded in the equipment.<sup>30</sup> This discussion typically answers one of two questions: how current and future equipment will counter specific threats or how this equipment could be modified to improve its capabilities.

One of the biggest and most controversial acquisitions the JMSDF has made in recent years has been the Hyuga and Izumo-class helicopter-destroyers. These 18,000-ton and 24,000-ton ships, respectively, are the largest Japan has built since World War II and

<sup>&</sup>lt;sup>28</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 4.

<sup>&</sup>lt;sup>29</sup> Tatsumi, "What North Korea's ICBM Means for Japan's Defense Planning."

<sup>30 &</sup>quot;Kongou Class," Jane's by IHS Markit, January 24, 2018, https://janes.ihs.com/Janes/Display/jfs\_1686-jfs\_; and "Murasame Class," Jane's by IHS Markit, January 24, 2018, https://janes.ihs.com/Janes/Display/jfs\_1688-jfs\_.

are designed to carry a large number of ASW helicopters.<sup>31</sup> The controversy that surrounds these ships is the potential acquisition of the F-35B, a short take-off and vertical-landing strike fighter, which raises the question of whether the Izumo-class DDHs will be modified to become small aircraft carriers.<sup>32</sup> Recently the Japanese government announced its interest in making such modifications,<sup>33</sup> intensifying the thought of Japanese aircraft carriers once again roaming the Pacific.

The nuclear and ballistic missile threat posed by North Korea has pushed Japan to seek the addition of two destroyers equipped with the AEGIS weapons system capable of engaging ballistic missile threats and made in the United States.<sup>34</sup> These ships are capable of conducting a variety of missions for the JMSDF, including ASW, anti-surface warfare, ballistic missile defense (BMD), and anti-air warfare in addition to maintaining general maritime security. The BMD system onboard these destroyers is very capable of defending Japan from North Korean ballistic missile threats, a capability proven during numerous tests conducted by Japan and the United States.<sup>35</sup> When combined with ground-based BMD systems, Japan maintains two layers of defense against ballistic missiles.<sup>36</sup>

The threat that China generally presents in the maritime domain further pushes Japan to maintain strong maritime capabilities to deter future defiance of international norms.<sup>37</sup> To do this, it would make sense for Japan to possess a fleet of surface combatants

<sup>&</sup>lt;sup>31</sup> Gamble, "Japan's Izumo-Class Helicopter Destroyer: An Aircraft Carrier in Disguise?"

<sup>&</sup>lt;sup>32</sup> "Japan Eyes Acquiring F-35Bs for Defence of Remote Islands, Says Report," Jane's by IHS Markit, February 12, 2018, http://www.janes.com/article/77869/japan-eyes-acquiring-f-35bs-for-defence-of-remote-islands-says-report.

<sup>33 &</sup>quot;Japan Eyes Introduction of Multipurpose Aircraft 'Mother Ship,' Purchase of Extra 100 F-35 Jets," *Japan Times*, November 27, 2018, https://www.japantimes.co.jp/news/2018/11/27/national/politics-diplomacy/japan-eyes-introduction-multipurpose-aircraft-mother-ship/#.W 1j5OhKhPY.

<sup>&</sup>lt;sup>34</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 2-3.

<sup>&</sup>lt;sup>35</sup> "Ballistic Missile Defense Intercept Flight Test Record," Missile Defense Agency, May 30, 2017, https://www.mda.mil/global/documents/pdf/testrecord.pdf.

<sup>&</sup>lt;sup>36</sup> Reiji Yoshida, "Japan May be Able to Shoot Down North Korean Missiles but Has No Legal Basis: Experts," *Japan Times*, August 16, 2017, https://www.japantimes.co.jp/news/2017/08/16/national/politics-diplomacy/japan-may-able-shoot-north-korean-missiles-no-legal-basis-experts/#.WrwMGojwZPY.

<sup>&</sup>lt;sup>37</sup> Yuki Tatsumi, "What Sort of Defense Build-Up Does Japan Really Need?," The Diplomat, June 30, 2016, https://thediplomat.com/2016/06/what-sort-of-defense-build-up-does-japan-really-need/.

capable of deterring an array of maritime threats, on the sea, above the sea, and below the sea. To do this, the JMSDF currently maintains 52 destroyers of varying sizes.<sup>38</sup> These ships all possess the ability to conduct the same operations as the AEGIS destroyers previously listed, except for BMD. With these ships, the JMSDF patrols the seas surrounding Japan to fulfill the NDPG mandate to keep Japan's maritime routes secure. Japan intends to counter China's increasing presence in the region by "ensuring maritime security" by "maintaining open and stable seas."<sup>39</sup>

#### D. POTENTIAL EXPLANATIONS AND HYPOTHESES

This thesis examines how well the changes to the JMSDF have countered the threats Japan faces, to arriving at its own conclusion on whether the JMSDF is doing just enough, not enough, or too much to counter the maritime threats Japan faces. Specifically, the thesis considers three possible conclusions about how the JMSDF responds to threats.

The first possible conclusion is that the Japanese government is simply acknowledging the threats it faces and taking the necessary steps to counter them, and not significantly more or less. This would be supported if the JMSDF's equipment and policy changes can be shown to clearly and directly counter each threat identified – as, for example, with the addition of BMD after North Korea first tested a ballistic missile in the late 1990s. Based on available information, it does appear to be the majority view that Japan is currently taking appropriate measures to counter threats. Nothing in terms of equipment and policy change seems to put the JMSDF in a position that *unquestionably* allows it to do more than simply defend Japan.

A second possible conclusion considered by this thesis is that the JMSDF is currently acquiring more equipment and taking a more aggressive approach to policy change than needed to effectively counter the threats Japan faces. This would be apparent if there are equipment purchases and/or policy changes that do not coincide with or are demonstrably an excessive response to a threat Japan has identified. One possible reason

<sup>&</sup>lt;sup>38</sup> "Japan-Navy," Jane's by IHS Markit, December 5, 2018, https://janes.ihs.com/Janes/Display/jwna0078-jwna.

<sup>&</sup>lt;sup>39</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 16.

why Japan would be taking this route is that the NDPG is overestimating the threats it faces. A second reason for unnecessary equipment and forward policy might be linked to political actors willing and able to develop the JMSDF into a regular navy and to get the JMSDF as close as possible to this desired end state prior to official changes.

The last possible conclusion considered is that Japan is not preparing the JMSDF to counter the maritime threats it faces. This would be the case if it were determined that the policies and equipment that the JMSDF has is inadequate in light of the threats from China and North Korea. If this is the case, there might be three main possible explanations. The first is that Japan's limit on its military budget is preventing it from buying the required gear to counter certain threats - that Japan acknowledges a given threat and states that it wants to counter it but cannot afford to buy required equipment. A second explanation (a possible but not strongly expected one) would be that Japan is not accounting for threats in the NDPG in the first place and subsequently is not taking the steps required to counter those unidentified threats. If this were the case, there would need to be evidence of threats not identified by the NDPG that subsequently do not have programs in place to counter. The last possible explanation might be that Japan is consciously trying to have the JMSDF appear as non-aggressive as possible in favor of non-military solutions to threats. This would be the case if it is found that Japan acknowledges threats in the NDPG but chooses not to change policies or buy equipment to counter the threat, and if this can be plausibly or directly linked to concerns about how the JMSDF is viewed.

In general, this thesis concludes that Japan is adequately meeting the threats it faces. Although, there have been times where the JMSDF had more than needed for the threat environment. One specific case of the JMSDF being over prepared was after the Cold War, when it retained the fleet it had built for the Cold War even though the threat disappeared. There have also been instances where the JMSDF was not prepared for a threat. This instance was seen after North Korea fired a ballistic missile over Japan and the JMSDF did not have the ability to shoot down the missile. During both instance Japan made corrections to the JMSDF that brought it back to the middle ground of being adequately prepared for threats.

#### E. RESEARCH DESIGN

Research focuses on the JMSDF's surface combatants. Specific programs that are reviewed are the BMD program and the two classes of flattop DDHs. BMD capabilities and the general surface force provide the best representation of the JMSDF's efforts to counter the maritime threats Japan has faced since the mid-1990s, particularly North Korea's missile threat and China's aggressiveness in the East and South China Seas. The BMD program is a direct counter to North Korea's ballistic missile program and threats. This might be seen as an "easy case" for the argument that the JMSDF is responding to threats appropriately. Looking at the JMSDF surface combatants provides insight as to how Japan counters general maritime threats, in an area where expectations are somewhat less clear about the appropriateness of Japan's response. The JMSDF's DDHs, finally, might be seen as a harder case for the "appropriate response" argument, since they are more often identified as a possible sign that Japan is buying equipment that provides more capability to the JMSDF than required, especially given their potential offensive capability, which some regard as a violation of Article 9.

An analysis of the policy guiding JMSDF operations focuses on how Japan utilizes its assets to provide deterrence. Since Japan does not utilize its military as a means of coercing other nations, this thesis will examine how the JMSDF is employed in general maritime operations to ensure the freedom of SLOC and maintenance of the current rules-based status quo. Analysis of JMSDF policies will come from authors with a focus on Japan, maritime security, and security in general, such as those listed in the literature review. Information regarding how equipment matches threats will primarily come from Jane's and other defense journals.

Looking across a range of JMSDF capabilities, operations, and overarching policy helps show whether Japan is under-, or over-responding threats, in an environment that includes both the confines of Article 9 as currently defined and pressures to break through Article 9's constraints. This also helps determine whether Japan may be placing more importance on one threat more than another.

Additionally, this thesis will make some assessments based purely on capabilities and some based on the intent implied by policy. Assessments based purely on the capabilities of ships will show how certain equipment acquisitions expand the JMSDF's defensive capabilities. But some acquisitions, like the flattop helicopter destroyers, could suggest that the JMSDF has acquired capabilities that far exceed its needs. In this case, the thesis will examine the intent of the purchase, and how it will be used operationally, to determine if the over-response conclusion holds true.

#### F. THESIS OVERVIEW AND DRAFT CHAPTER OUTLINE

This thesis is organized into six chapters, with the first offering a general overview of the thesis and a review of the current literature on the topic. The second chapter is a brief overview of the history of the JMSDF. This history will highlight how the JMSDF has dealt with the restrictions it has faced while trying to defend Japan. The next three chapters look at each of the three decades since the end of the Cold War and follow the same basic format. The third chapter looks at the threats that Japan faced from the end of the Cold War until the end of the 1990s. The focus of the fourth chapter is the decade of the 2000s. The fifth chapter is about the JMSDF from 2010 through mid-2018. First, each chapter notes the threats that Japan identified in government documents for that decade. Then, the chapter looks at the equipment that was acquired during that decade and how it compared to known threats. Next, the chapter looks at policy changes that affected how the JMSDF was able to operate. Finally, each chapter closes with a summary of how the main equipment acquisitions and policy changes contributed to Japan's defense and note any deficiencies. The final chapter summarizes the information of the previous three chapters showing that since the end of the Cold War the JMSDF has generally remained appropriately prepared to defend Japan from a variety of threats.

THIS PAGE INTENTIONALLY LEFT BLANK

#### II. HISTORY OF THE JMSDF

Before the Pacific campaign of World War II ended, the Allied powers had determined the fate of the Japanese Empire. The Potsdam Declaration called for the Imperial Japanese Navy and Army to be disbanded, as well as the surrender of all industry "which would enable her to re-arm for war." 40 When the instrument of surrender was signed onboard the USS Missouri in Tokyo Bay, Japan relinquished control of its national security to the United States military. Two years later, Japan formally adopted its constitution that aspires to promote international peace, renouncing war and the use of force to settle international disputes.<sup>41</sup> The constitution reflected the wording of the Potsdam Declaration and barred Japan from maintaining a military and the associated war potential. Without a military, Japan chose to utilize peaceful means to resolve disputes, engaging in conversation and not conflict. Adopting such a radical approach to foreign policy, at the time, was possible because the United States initially took responsibility for the defense of Japan. Lacking a military option in its foreign policy, Japan had to rely on diplomatic skill to avoid conflict. Without the United States providing Japan with a defense against invasions, Japan would have been surrounded by former enemies without a means to defend itself.

For an island nation like Japan, a naval force that can engage an enemy at sea before it reaches the homeland is crucial. Without one Japan would have to accept the chance that a conflict could take place on the Japanese islands and devastate its infrastructure. As the war was coming to a close and it was evident that Japan was going to lose, there were individuals in Japan who argued a small naval force should be maintained to protect Japan against the potential threats that were likely to exist in post-war Asia. 42 Mao Zedong and the Communists took over China in 1949, the relationship between the Soviet Union and

<sup>40 &</sup>quot;Potsdam Declaration," National Diet Library, July 26, 1945, http://www.ndl.go.jp/constitution/e/etc/c06.html.

<sup>&</sup>lt;sup>41</sup> Prime Minister of Japan and His Cabinet, "The Constitution of Japan."

<sup>&</sup>lt;sup>42</sup> James E. Auer, *The Postwar Rearmament of Japanese Maritime Forces, 1945-71* (New York: Praeger, 1973), 40.

the United States was becoming cold, and the Korean Peninsula was divided between the communists in the north and the anti-communists in the south, which would eventually result in a brutal war.

#### A. THE CREATION OF THE JAPAN MARITIME SELF-DEFENSE FORCE

With an expected heavy reliance on maritime trade to rebuild after the war, it was evident that Japan would require an organization to provide security for Japan's maritime commerce. 43 But after Japan surrendered to the Allies, any thought of maintaining even a small naval force to carry out such a mission was quickly pushed aside as the Allies began to rapidly demobilize the Imperial Japanese Navy, shutting down arms factories, and scrapping or sinking warships. 44 There were upwards of 66,000 various types of sea mines around Japan that had been laid by the Imperial Japanese Navy (IJN) and United States Navy (USN) throughout the war.<sup>45</sup> These mines presented a significant navigational hazard to the commercial ships that would be crucial to the rebuilding of the Japanese economy. To handle this hazardous situation about 350 small ships were spared from scrapping and manned by former IJN personnel, albeit stripped of their military rank, who had the necessary knowledge for the job. 46 By May 1946, all USN minesweepers had returned to the United States<sup>47</sup> which meant the small Japanese minesweeping force was faced with the large and complex task of minesweeping by itself. The American Commander of Naval Forces Japan wanted the minesweeping operation completed by November 1947 but the complexity of minesweeping and the vast area to be covered meant minesweeping operations continued through 1971.48 Despite minesweeping being a

<sup>&</sup>lt;sup>43</sup> Though the following section draws heavily upon Auer due to the detail provided, other relevant sources include James H. Buck "The Japanese Self-Defense Forces," *Asian Survey* 7, no. 9 (September 1967): 597-613, https://doi.org/10.2307/2642617; and Euan Graham, *Japan's Sea Lane Security*, 1940-2004 (New York: Routledge, 2006).

<sup>44</sup> Auer, Postwar Rearmament, 42-43.

<sup>45</sup> Yoji Koda, "Perspectives on the Japan Maritime Self Defense Force" (working paper, Sea Power Centre – Australia, 2012), 11.

<sup>46</sup> Auer, Postwar Rearmament, 52.

<sup>47</sup> Auer, 49.

<sup>48</sup> Auer.

predominantly military mission, the Japanese and Americans made sure that the Japanese minesweeping effort had as little an outward military appearance as possible. Japan's first post-war maritime organization was created to handle the threat posed to maritime commercial trade from sea mines laid during the war.

The Maritime Safety Agency was one of Japan's first major post-war enforcement organizations. The Maritime Safety Agency (MSA) got its start in 1948 in response to the unregulated and porous maritime environment that surrounded Japan in the absence of the IJN before and during the war. Without the IJN keeping threats away from Japan, it was subject to smuggling, illegal immigration, and attacks on Japanese fishermen. After pleading with the Allied Powers to allow Japan to protect itself from these threats, the Americans sent a U.S. Coast Guard Captain to Japan to help tackle the chaotic maritime environment. The situation he found after his arrival led him to propose that Japan an organization with "the purpose of protecting life and property and preventing, detecting, and suppressing violation of law at sea."49 The MSA functioned like any other coast guard with the exception that it incorporated the minesweeping task already underway. 50 To get started the MSA was outfitted with 28 former IJN auxiliary subchasers and former IJN personnel who possessed the requisite maritime knowledge to make the MSA effective.<sup>51</sup> Despite the fact that the MSA was intended to provide policing functions for Japan's maritime environment, some members of the ruling Allied Powers were suspicious of this new organization and feared it was the start of a new Japanese navy, although that was never the intent.<sup>52</sup> But to assuage critics and to allow the MSA to get started, further restrictions on the number of personnel, and number, net gross tonnage, speed, and armament of the MSA vessels had to be accepted.<sup>53</sup> These restrictions made it easy for smugglers to counter the MSA by using ships that went faster and/or had more firepower.

<sup>&</sup>lt;sup>49</sup> Auer, 56.

<sup>&</sup>lt;sup>50</sup> Auer, 56.

<sup>51</sup> Auer, 57.

<sup>&</sup>lt;sup>52</sup> Auer, 57.

<sup>53</sup> Auer, 58.

When the MSA officially started, it was almost incapable of defending Japan against the threats it was supposed to stop.

The Korean War caught the United States off guard, especially considering U.S. combat forces had been reduced significantly in the previous five years. The bulk of forces the United States had in the Pacific were those stationed in Japan tasked with providing internal security and defense of Japan. The Korean War forced the United States to move those forces from Japan to Korea, leaving the former without the security blanket it had been promised by the United States. As U.S. naval forces turned their attention to the Korean Peninsula the MSA was left to defend Japan's coastal maritime environment with hardly enough ships, and the ones it had were slow and poorly armed to be remotely effective. General Douglas MacArthur, having previously given permission to Japan to organize a 75,000-member National Police Reserve, authorized the MSA to add an additional 8,000 members. 54 This increase in personnel was not intended to expand MSA capabilities, but to expand its capacity in the absence of the U.S. naval forces. Realizing the enormousness of the task it was faced with, the MSA additionally proposed changes to the laws governing the MSA to increase the allowed total tonnage of MSA vessels from 50,000 to 75,000 and remove restrictions on speed and armament.<sup>55</sup> The Korean War demonstrated that Japan could not rely solely on another country to provide defensive capability. The establishment of the National Police Reserve and the increase to the MSA were Japan's response to building a defensive network that could protect the island nation on its own.

While the idea that Japan should have a navy after the war remained in the shadows, Prime Minister Yoshida was skeptical of forming a military considering the results that militarism in Japan previously produced and his own personal history of being imprisoned by the military toward the end of the war.<sup>56</sup> Despite the known threats that Japan faced, building a defensive force was going to be an uphill battle. The uncertainty of how long

<sup>54</sup> Auer, 61-62.

<sup>&</sup>lt;sup>55</sup> Auer, 63.

<sup>56</sup> Auer, 72.

the United States would continue its occupation, and subsequently provide security, played a considerable role in the decision process. But Japan got a degree of support from a former foe, Admiral Arleigh Burke, who believed Japan would need a navy in the future and advocated for one.<sup>57</sup> With old destroyers from the United States-Russia lend-lease program sitting in Yokosuka,<sup>58</sup> a cadre of outstanding naval officers, and the skilled mariners of the MSA, the makings of a new Japanese navy were in place but Article 9 of the constitution was still a significant roadblock.

Prime Minister Yoshida remained committed to the idea that Japan would "increasingly assume responsibility for its own defense against direct and indirect aggression" as stated in the 1951 U.S.-Japan Security Treaty.<sup>59</sup> Over the next few years, the MSA was expanded and new organizations were created within it. Eventually one of those sub-organizations was removed altogether to become the Maritime Safety Force. This force did little to provide defense for Japan as it mainly consisted of the original minesweeping force.<sup>60</sup> Despite the attempt to build a defensive maritime force, Japan had only renamed an existing maritime organization. But the Maritime Safety Force was the result of decision to establish a new navy, so its creation can be considered the foundation of the new Japanese navy despite not having the ability to execute the mission of an actual navy.

On March 8, 1954, the United States and Japan signed the Mutual Defense Assistance Agreement, through which America would provide aid and some defensive capability to Japan, and in return, Japan would work towards building its own defensive strength.<sup>61</sup> This would eventually allow U.S. military forces to provide less direct defense of Japan and more indirect defense by keeping threats from ever reaching the future Japan Self-Defense Force. In line with the defense agreement, on June 9, 1954 the Japanese

<sup>57</sup> Auer, 73.

<sup>&</sup>lt;sup>58</sup> Auer, 73.

<sup>&</sup>lt;sup>59</sup> Auer, 84.

<sup>60</sup> Auer, 86-88.

<sup>61 &</sup>quot;U.S. and Japan Mutual Defense Assistance Agreement," Annenberg Learner, March 8, 1954, https://www.learner.org/workshops/primarysources/coldwar/docs/usjapan.html.

signed the Defense Agency Establishment Law which laid the groundwork for the three branches of the JSDF to be established.<sup>62</sup> On July 1, 1954, the Maritime Self-Defense Force was formally established.<sup>63</sup> The establishment of the JMSDF opened the door for further aid from the United States that included former USN ships. Less than ten years after the end of World War II, Japan once again had a recognizable naval force. Sixteen years later, still committed to the terms of the Mutual Defense Assistance Agreement, Japan wrote its first defense white paper titled "The Defense of Japan"<sup>64</sup> to create transparency for the JSDF's actions.

#### B. THE JMSDF THROUGH THE COLD WAR

An island nation is heavily reliant on maritime trade, which makes the protection of the SLOCs a necessity for successful maritime trade. This point is not lost on the Japanese who suffered greatly during World War II as Allied naval forces, particularly submarines, raided and sunk Japanese merchant ships transiting the same SLOCs the JMSDF was now tasked with protecting. The effectiveness of submarine warfare during World War II meant submarines and ASW (ASW) would continue to be part of every country's naval strategy. For Japan, the focus on ASW in SLOC defense was multi-faceted. First and foremost, it is a fundamental element of naval warfare and subsequently vital to the maritime component of Japan's homeland defense strategy. If Japan did not make this a priority, enemy submarines would be able to destroy any JMSDF ships that opposed an invasion virtually unimpeded. Second, it was focused on protecting the maritime trade routes that were vital to its eventual economic growth. Submarines had proven their effectiveness in disrupting maritime trade routes in all theaters of World War II. Last, but certainly not least, it supported the Japan-U.S. Alliance. Under the alliance, the USN would provide the striking capability the JMSDF lacked in a major regional crisis.<sup>65</sup> For its part,

<sup>62</sup> Auer, Postwar Rearmament, 99.

<sup>63</sup> Japan Ministry of Defense, *Defense of Japan 2008: Defense Chronology*, (Tokyo: Japan Ministry of Defense, 2008), http://www.mod.go.jp/e/publ/w\_paper/pdf/2008/45Defence\_Chronology.pdf.

<sup>64</sup> Japan Ministry of Defense, Defense of Japan 2008: Defense Chronology.

<sup>65</sup> Koda, "Perspectives on the Japan Maritime Self Defense Force," 4.

threat and help ensure that the SLOCs between the United States and Japan were open to allow follow-on forces to reach Japan.<sup>66</sup> These three intertwined elements made it logical for Japan to build its naval force with a heavy focus on ASW. Other key tasks that the JMSDF would have to adopt to be an effective deterrent included anti-surface warfare and anti-air warfare, along with the numerous other supporting mission areas. In the end, the JMSDF maintained all the same mission areas as the USN, with the exception of strike warfare since it did not fit within the definition of Article 9.

The focus of the JMSDF from the 1950s through the mid-1980s was building up the total number of JMSDF ships. This quantity-focused buildup produced approximately 60 ASW combatants along with submarines, mine countermeasure ships, and the associated support vessels.<sup>67</sup> But the quality of the force did not match that of navies like the United States or the Soviet Union. In the late 1970s, the JMSDF started an aggressive modernization program to improve the quality of the fleet's combat capability.<sup>68</sup> This quantity to quality shift would help the JMSDF become more lethal and efficient in the increasingly dynamic naval warfare arena. Specifically, the modernization program focused on bringing the JMSDF's missile systems, ASW systems, and the computers that controlled them up to modern standards.<sup>69</sup> This project lasted into the early 1990s and was done without reducing the strength of the force thanks to Japan's extremely healthy economy.

Despite Cold War tensions, an invasion by Soviet forces into Japan became less likely but the chances of a guerre de course remained. Japan's reliance on imported resources made the oil crises of the 1970s a wake-up call. While the oil crises were not direct threats to Japan's supply lines, they highlighted Japan's reliance on resources imported via the sea which were vital to its economic well-being. As a result, Japan took a

<sup>66</sup> Koda, 4.

<sup>67</sup> Koda, 5.

<sup>68</sup> Koda, 5.

<sup>69</sup> Koda, 6.

close look at how the JMSDF was operating. The policy of the time relegated the JMSDF's mission of sea-lane defense to the immediate area surrounding the main islands of Japan. When Prime Minister Suzuki visited President Ronald Reagan in 1981, he stated that Japan would "seek to make even greater efforts for improving its defense capabilities in Japanese territories and in its surrounding seas and air space." He later added the 1,000 nautical mile mark during a media session. This change in policy represents a significant shift in the operations of the JMSDF as it was given the ability to reach out farther than any other branch of the JSDF. Fortunately for the JMSDF, its planning since 1954 had built a maritime force that made a 1,000 nautical mile sea-lane defense a reachable goal.

During the 1980s, as President Ronald Reagan was building up U.S. forces, the JMSDF was also building a sizeable fleet. The 1977 National Defense Program Outline (NDPO) called for about 60 destroyers to outfit four flotillas and ten coastal defense divisions. The purpose of the JSDF during the Cold War was to prevent an armed invasion and counter aggression. Specifically for the JMSDF, maintaining a force that constituted a credible maritime defensive force and maintaining an adequate capability to defend SLOCs primarily through ASW. With the ships the JMSDF required to defend Japan, the JMSDF also provided warning and surveillance required of all the defense forces. ALOC defense was not just for ensuring Japan's maritime economic trade was not subject to what it went through during World War II, but also in place to ensure the United States military was able to move to and through Japan should the need arise. Since Japan restricted itself from possessing offensive war material, the alliance with the United States gave Japan pseudo-offensive capability in the event of a large-scale conflict.

<sup>70</sup> Peter J. Wooley, *Japan's Navy, Politics and Paradox, 1971-2000* (Boulder: Lynne Rienner, 2000), 70.

<sup>&</sup>lt;sup>71</sup> Steven R. Weisman, "Japanese Premier Vows 'Even Greater Efforts' on Defense," *New York Times*, May 9, 1981, https://www.nytimes.com/1981/05/09/world/japanese-premier-vows-even-greater-efforts-on-defense.html.

<sup>72</sup> Koda, "Perspectives on the Japan Maritime Self Defense Force," 9.

<sup>73</sup> Japan National Defense Council, *National Defense Program Outline* (Tokyo: National Defense Council, 1976), http://worldjpn.grips.ac.jp/documents/texts/docs/19761029.O1E.html.

<sup>74</sup> Japan National Defense Council, National Defense Program Outline

<sup>75</sup> Koda, "Perspectives on the Japan Maritime Self Defense Force," 4.

Throughout its early history, the JMSDF had a straightforward mission: defend the homeland, defend SLOCS, and support the alliance with the United States. These individual missions were all related to the same threat; the spread of communism by the Soviet Union. The Soviet threat was relatively simple in that it was mainly a conventional military threat like World War II, albeit with vastly improved weapons. This made the job of figuring out how to build an effective defensive naval force relatively simple: Japan needed to build a fleet that could compete in modern naval combat. With a clearly defined end state, the JMSDF got to work building such a fleet and by the end of the Cold War, it had largely succeeded. Aside from the American and Soviet navies, no other Pacific navy came close to the size and capability of the JMSDF at the end of the Cold War.

The 1990s presented new challenges to the JMSDF that would push it in a new direction. The new direction the JMSDF would take would not have been possible had it not invested in making qualitative improvements to its force to bring it on par, technologically, with other first-rate navies of the world. The collapse of the Soviet Union in 1991 meant Russia was unable to maintain its navy. With the threat from the Soviet fleet gone, the USN began drawing down its forces. The PLA(N) was growing in the 1990s but it was a significantly less capable force. As these changes were occurring, the JMSDF found itself among the preeminent naval forces in the Pacific, <sup>76</sup> all without having to make any changes to the plans in place.

<sup>76</sup> Wooley, Japan's Navy, 111.

THIS PAGE INTENTIONALLY LEFT BLANK

# III. THE JMSDF IN THE POST-COLD WAR SECURITY ENVIRONMENT

The end of the Cold War thrust the world into a new security environment that was no longer dictated by two superpowers. Instead of one major existential threat many smaller threats arose but the maritime environment was dominated by the U.S. Navy and generally safe. Despite the relatively safe security environment of the first decade after the Cold War, Japan continued to introduce new ships and weapons to its fleet. This was done in part to replace the ships that were reaching the end of their service life. But it was also to field ships that could perform several missions at once, opposed to the preceding ships which were designed primarily with one mission in mind. While the JMSDF ships were evolving, so to was the policy that guided that JMSDF. Japan was redefining what was necessary for the defense of Japan and the JMSDF began taking on missions that were not solely focused on defending Japan from a military threat. By the end of the 1990s, the JMSDF was more robust than its Cold War predecessor. This chapter focuses on how well this more robust posture synchronized with Japan's immediate post-Cold War threat environment.

### A. THE NEW THREAT ENVIRONMENT

When the Soviet Union collapsed, and the Cold War ended, the Soviet naval threat disappeared as well. Even though the Soviet fleet existed under the Russian Federation, the new state was unable to fund the fleet and it fell into disrepair. Coupled with the fact that the new Russian state was not the existential threat of its predecessor, the JMSDF suddenly became the second most powerful fleet in the Pacific after the USN.<sup>77</sup> Without the context of the Cold War the JMSDF, and JSDF in general, began operating without a defense policy to acknowledge the change in the security environment. But this did not mean the JMSDF began to stagnate since Japan still faced an array of threats. These mainly came from unresolved territorial disputes and diverse regional conflicts such as the continued tensions

<sup>77</sup> Wooley, Japan's Navy, 111.

on the Korean Peninsula.<sup>78</sup> Despite the lack of direction from a change to the 1976 NDPO, the JMSDF maintained its focus on the defense of Japan's SLOCs which were still important for Japan's continued economic prosperity. With the disappearance of the conventional military threat, the NDPO indicates that Japan's defense forces would be shifting some of their focus to providing aid and enhancing the security of the region as best as it could. With the ships it had acquired to meet its Cold War requirements the JMSDF was more than well equipped to operate in the new less volatile environment.

An update to the 1976 NDPO was released in 1995 to redirect the JSDF in the new security environment. The end of the Cold War meant the disappearance of the threat of a direct invasion and a shift in defense thinking towards ensuring stability, not just at home but abroad. The lack of a major maritime threat allowed the JMSDF's mission to be described very broadly, to ensure Japan had a maritime force for national defense, response to large-scale disaster, and to contribute to building a more stable security environment. For the JMSDF to fulfill its part, it was still required to maintain one escort flotilla always available to deploy, ships to cover the various coastal regions, submarines, helicopters, and minesweeping units to keep harbors and straits open, and fixed wing aircraft to conduct surveillance and patrols of the Japanese coast. Simply put, the JMSDF was expected to carry on as it had during the Cold War, but its focus was shifting to the south and away from the former Soviet bases in eastern Russia.

Overall, the 1996 NDPO portrayed a benign environment in the region. China was still over a decade away from becoming a significant naval threat. As a result of China's lack of military power projection, it was not regarded as a major threat and is not mentioned directly. But it was noted that "many countries in the region are expanding or modernizing their military capabilities." Tensions on the Korean Peninsula remained relatively normal as animosity from the Korean War kept the peninsula divided. North Korea did not possess

<sup>&</sup>lt;sup>78</sup> Ministry of Foreign Affairs of Japan, *National Defense Program Outline in and After FY1996*, (Tokyo: Ministry of Foreign Affairs of Japan, 1995), https://www.mofa.go.jp/region/n-america/us/q&a/ref/6a.html.

<sup>&</sup>lt;sup>79</sup> Ministry of Foreign Affairs of Japan.

<sup>80</sup> Ministry of Foreign Affairs of Japan.

a significant capability to strike mainland Japan having only conducted a total of 15 missile tests of short and medium range missiles. <sup>81</sup> Two years after the latest NDPO was, released North Korea launched a missile that overflew Japan and that North Korea claims carried a satellite. While the launch ultimately failed, it showed that North Korea's missile program was progressing, and Japan was well within the reach of North Korean missile technology. The event spurred Japan to begin investing in ballistic missile defense technology with the United States. This cooperative effort eventually led to the addition of ballistic missile defense capabilities to the JMSDF's AEGIS destroyers in the 2000s.

### B. JMSDF ORGANIZATION AND SHIPS

Once a nation identifies the actors that it deems as threats, it must look at the equipment that the threat nation possesses. This is a generally straightforward process, identifying specific military capabilities possessed by a potential adversary and acquiring equipment that can counter those capabilities. After identifying what military equipment a nation has, it must figure out how the nation intends to employ that equipment, its military doctrine. A nation's political will to use its military to advance it national goals is just as important as what the nation has. If a nation assumes another nation is a threat it must also assume that its military will be employed, otherwise the threatened nation risks its ability to effectively defend itself. After assessing the equipment and expected doctrine of a threat nation, the threatened nation must figure out how it intends to defend itself. This process involves identifying, purchasing, and organizing the equipment that, on paper, can defeat the enemy equipment. After the proper defensive equipment is identified, doctrine must be established to determine how to use the equipment tactically to maximize its effects. While tactical employment is equally as important as the equipment held, it will not be discussed in this thesis due to the limited information on specific JMSDF tactics and complexity of comparing them with threats.

How to properly equip and employ naval units is just as important for Japan, if not more due to the restrictions the JMSDF faces from Article 9. Considering the experience

<sup>81 &</sup>quot;The CNS North Korea Missile Test Database," Nuclear Threat Initiative, May 4, 2018, https://www.nti.org/analysis/articles/cns-north-korea-missile-test-database/.

of the IJN during World War II, specifically how it failed to adequately defend the Japanese merchant fleet from Allied submarines, an ASW oriented fleet was determined to be the ideal basis of the JMSDF. Additionally, the overall JSDF budget hovers around 1% of Japan's GDP,<sup>82</sup> meaning it does not have the funds to build a large Self-Defense Force with a variety of auxiliary capabilities. That the JMSDF must contend with the three other branches of the JSDF for these defense funds means it would not have the money to maintain, much less build, a large surface fleet. With these and other restrictions in place, the JMSDF must be even more cognizant of how it develops a fleet to ensure its effectiveness.

### 1. Cold War Influence on the JMSDF

The Soviet submarine threat of the Cold War threat necessitated that the JMSDF would, at a minimum, always have a portion of its force available for routine patrols. The JMSDF's solution to this was to divide its fleet into four equally sized escort flotillas, and several other divisions for specifically for coastal defense. The escort flotillas were tailored for ASW operations with their primary mission being to act "as a mobile operating ship unit in order to quickly respond to aggressive action and such situations at sea." These flotillas had to be capable of operating far from Japan and defending sea-lanes against Soviet naval threats, specifically Soviet submarines. While the coastal defense divisions were important to the JMSDF's overall homeland defense plan, the escort flotillas are the carry the lion's share of the JMSDF's deterrence operations.

As the submarine threat grew anti-ship cruise missiles also emerged as a new naval threat requiring new radars and weapons to counter. Realizing that cruise missiles were going to become a mainstay of naval warfare "the JMSDF thought then, thinks today, and expects to think in the future that the 'best' surface force is one that has true capabilities

<sup>82</sup> Crystal Pryor and Tom Le, "Looking Beyond 1 Percent: Japan's Security Expenditures," The Diplomat, April 3, 2018, https://thediplomat.com/2018/04/looking-beyond-1-percent-japans-security-expenditures/.

<sup>83</sup> Japan National Defense Council, *National Defense Program Outline*.

against air-to-surface and surface-to-surface missiles and against submarines."<sup>84</sup> With this requirement in mind, the JMSDF had to organize its ships in a manner that would allow it to conduct ASW operations while defending against increasingly sophisticated air and missile threats. Careful analysis of the progression of naval technology led the JMSDF to adopt the 8–8 concept, eight destroyers with eight ASW capable helicopters.<sup>85</sup> When the Cold War ended and the existential threat from communism disappeared, militaries around the world began scaling down their forces and Japan was not different. For the JMSDF the cuts primarily affected the regionally focused destroyer divisions with three division removed, or about nine destroyers, but the four destroyer flotillas remained untouched.<sup>86</sup>

The eight destroyers that composed the escort flotilla included one DDH, two guided missile destroyers (DDG), and five additional destroyers. All the ships in the flotilla were ASW-capable to support the original primary mission of the flotilla, to hunt Soviet submarines that operated around Japan. The DDH was essentially like any of the other JMSDF destroyers except that it had enlarged aviation facilities to carry three helicopters. The two DDGs were equipped with long-range surface to air missiles to provide air defense for the entire flotilla in addition to their ASW role. The five additional destroyers would shoulder a large portion of the ASW mission. The preparations required for an entire escort flotilla to become fully operational takes time, and this requires the JMSDF to maintain four flotillas to ensure one flotilla was always available for operations while the other three were in various stages of training and maintenance.<sup>87</sup> Since the JMSDF has identified four escort flotillas as the minimum required for continuous defensive coverage, there is no evidence of a debate regarding this number. As a result, this makes the Escort Flotillas almost untouchable, since removing one would force Japan to accept gaps in its ASW and SLOC defense capability or create undue strain on the remaining three. As for the coastal

<sup>84</sup> Yoji Koda, "A New Carrier Race? Strategy, Force Planning, and JS *Hyuga*," *Naval War College Review* 64, no. 3 (Summer 2011): 49, https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=1574&context=nwc-review.

<sup>85</sup> Koda," 43.

<sup>86</sup> Ministry of Foreign Affairs of Japan, National Defense Program Outline in and After FY1996.

<sup>87</sup> Koda, "Perspectives on the Japan Maritime Self Defense Force," 6.

divisions, Japan was divided into 10 districts and each district was supported by three JMSDF destroyers which meant the JMSDF was operating around 62 surface combatants by the end of the Cold War.<sup>88</sup> The 1996 NDPO reduced the number of destroyers to approximately 50.<sup>89</sup> This reduction can be attributed to the absence of the Cold War threat and the new multipurpose destroyers being built allowing one ship to take the place two.

By the end of the Cold War, the JMSDF fleet was composed of a variety of ships, with several having been commissioned in the 1960s. At the simplest level, the ships of the JMSDF at the time helped fulfill the escort flotilla construct. In turn, this gave the JMSDF a minimum-necessary fleet size, but one that was still quite capable. Some of these ships were built before anti-ship cruise missiles became a major threat and did not have the ability to defend against that threat. Designed and built in an era when naval warfare required ships to physically see each other, the older ships of the JMSDF only possessed guns and torpedoes to defend themselves. Surface to air missile systems did not become commonplace for JMSDF ships until the 1980s. The vintage design of the ships made them more reminiscent of WWII era single mission ships and not the modern multi-purpose ships of the USN. But at the end of the Cold War the JMSDF had started to modernize its fleet by shifting "its [destroyer] fleet from conventional, (that is, WWII type manual combat information centre (CIC), gun only, and active ASW with steam/diesel powered ships), to new generation ships which had a computerised CIC, gun and missiles, active and passive ASW capability with a helicopter onboard, and propelled by gas turbine engines."90 This new generation of ships would help the JMSDF fulfill its 8-8 fleet concept as it acquired ships that could conduct ASW operations and simultaneously defend against air threats instead of relying on purpose build air defense destroyers. This modernization program helped the JMSDF become a naval force that had the capability to compete with any other modern navy.

<sup>88</sup> Koda, 9.

<sup>89</sup> Ministry of Foreign Affairs of Japan, National Defense Program Outline in and After FY1996.

<sup>90</sup> Koda, "Perspectives on the Japan Maritime Self Defense Force," 10.

# 2. New Ships for the JMSDF

The JMSDF is like any other navy in the world, in all but name. Ships have a limited lifespan that is a combination of the damaging effects of seawater on metal, general wear and tear on machinery and electronics, and the constant advancement of offensive and defensive weapon systems. This means that Japan is constantly playing a cat and mouse game in the military equipment world that requires new ships to regularly be acquired. This routine introduction of new ships allows the JMSDF to simultaneously introduce the latest defense technology to its fleet and phase out older ships that have reached the end of their service life. For new defense technology introduced to the JMSDF it also gives the opportunity to react to new threats by ensuring that new ships incorporate defensive systems capable of countering the new threat. Looking at the equipment that Japan acquired during the 1990s will show that even though the JMSDF had a fleet that was more than capable of handling the threats it faced at the time it continued to introduce new equipment that allowed the JMSDF to remain an effective maritime deterrent.

Despite the cuts the JMSDF was experiencing it was still steadily improving its fleet. Before the Cold War ended Japan began to show interest in the AEGIS combat system being installed on USN warships. AEGIS integrates the command and control and weapon systems, of a ship allowing the ship to simultaneously track and engage air, surface, and sub-surface threats. 91 The system allows a ship to operate in a more multifunction manner by aiding in the detection and classification of threats in complex environments, reducing the workload put on the crew. The United States approved the sale of AEGIS to the Japanese in 1988. 92 Japan decided to use the new system on a modified version of the USN's Arleigh Burke class destroyers that was just beginning construction. The Kongo class of the JMSDF is visually similar to and carries many of the same weapon systems as the Arleigh Burke class, but the Kongos are slightly bigger to accommodate an admiral's staff. The JMSDF commissioned four ships of the Kongo class between 1993 and 1998,

<sup>91 &</sup>quot;Aegis," Jane's by IHS Markit, October 23, 2018, https://janes.ihs.com/Janes/Display/1505034.

<sup>92 &</sup>quot;Aegis."

which allowed for each of the four escort flotillas to have an AEGIS destroyer in their composition.

The addition of the Kongo significantly increased the air defense capabilities of the escort flotillas. The JMSDF's previous version of DDGs for the JMSDF, the Hatakaze class, carried about 40 SM-1 surface to air missiles with a range of about 20 miles. 93 The Kongo class could carry up to 90 of the newer SM-2 surface to air missiles with a range of up to 70 miles. 94 The new SM-2 missiles incorporated the latest guidance, control, and rocket motor technology to make it more effective at countering new sea-skimming antiship cruise missiles that also featured reduced radar cross-sections and high-g maneuvers to decrease the chances of being intercepted. 95 The increased missile range and capacity allows the Kongo class destroyers to conduct area air defense so other destroyers in the flotilla can operate farther away while still remaining under the protection of the AEGIS destroyer.

The Kongo class destroyers were supplemented by the Murasame class destroyers. These destroyers were smaller in size but incorporated some of the features of the Kongo class such as the Vertical Launch System (VLS) and angled structure which help reduce the radar cross section of the ship. 96 The missile capacity of the Murasame class was much smaller, only carrying 16 surface to air missiles with a range of approximately eight nautical miles, meaning these ships only had the ability to defend themselves, unlike the Kongo. 97 But area air defense was not the intended mission for the Murasame class; instead, the class fills the role as the primary ASW assets of the escort flotilla. To accomplish the ASW mission the ships were equipped with a lighter sonar suite but still one of the latest Japanese-made sonar equipment of the time. In support of the ASW

<sup>93 &</sup>quot;Hatakaze Class," Jane's by IHS Markit, January, 24, 2018, https://janes.ihs.com/Janes/Display/jfs\_1687-jfs\_.

<sup>94 &</sup>quot;Kongou class."

<sup>95 &</sup>quot;Standard Missile-2 (SM-2) (RIM-66C/D/G/H/J/K/L/M; RIM-67B/C/D; RIM-156A/B)," Jane's by IHS Markit, June 21, 2018, https://janes.ihs.com/Janes/Display/jnw 0074-jnw .

<sup>96 &</sup>quot;Murasame class."

<sup>97 &</sup>quot;Murasame class."

mission, the ships were also equipped with a second 16 cell VLS for the sole purpose of carrying vertically launched anti-submarine rockets (VLA), a torpedo attached to a rocket. The anti-submarine rocket (ASROC) was not a new concept, having been used since the 1960s, but the new VLS allowed the Murasame to carry twice the amount of ASROC compared to previous ships. The new VLA also had increased range, going from just over five nautical miles to nine nautical miles. 98 The increased detection and engagement ranges of the new sonar suite and VLA gives the JMSDF the capability to keep threats farther from the escort flotillas.

As weapons technology evolved, so too, did naval warfare. Naval guns had been used in conflicts at sea for over 200 years prior to World War II, but those guns were replaced by airplanes that could strike an enemy fleet hundreds of miles away. Missiles worked their way into naval warfare during the Cold War and again changed how navies fight. Missiles are much smaller than airplanes and fly close to the surface of the ocean, making them difficult to detect with ship-based radars. The low flight profile of the missiles also means that it is not detected until it is much closer: approximately 20 miles for a lowflying missile compared to 100 miles or more for a high-flying aircraft. The JMSDF had been using the American made Harpoon anti-ship missile since the early 1980s on several surface combatants. For surface threats, the new Murasame class was equipped with the new indigenously made SSM-1B anti-ship missile. Even though the SSM-1B did not provide the JMSDF with a new capability, its production did show that Japan's defense industry can produce almost all the weapons the JMSDF required. Similar to the Harpoon, the SSM-1B flies at high sub-sonic speeds to a range of about 80 nautical miles. 99 Like many of the other weapon systems, the JMSDF acquired based on the Cold War threat, the Harpoon and SSM-1B helped make the JMSDF the dominant naval force in the region after the Cold War simply because no other navy in the region had a similar capability. So,

<sup>&</sup>lt;sup>98</sup> "RUR-5A ASROC/RUM-139A VLA/VLAAS," Jane's by IHS Markit, September 27, 2017, https://janes.ihs.com/Janes/Display/juws0453-jnw .

<sup>&</sup>lt;sup>99</sup> "Type 88 (SSM-1); Type 12; Type 90 (SSM-1B); SSM-2," Jane's by IHS Markit, June 21, 2018, https://janes.ihs.com/Janes/Display/jnws0147-jnw .

despite the considerable naval capability of the JMSDF in the 1990s, the general retention of these capabilities can be seen as a hedge against a potential future naval threat.

Since the 1996 NDPO did not directly name a country as a threat, the equipment that the JMSDF acquired during the 1990s was not purchased in response to a specific threat. But since the NDPO did state was that there was still a great amount of military capability and many nations were improving their military capabilities, there was a general threat that Japan faced. <sup>100</sup> As a result the ships, radars, sonars, missiles, and torpedoes the JMSDF added to its inventory were added because it was responding to the continued general threat that resulted from the existence of new weapon systems. To ensure Japan maintained an edge against a future naval threat, the JMSDF invested in these new systems to ensure it was maintaining the ability to counter any new weapon systems that could threaten Japan.

In 1998, a North Korean ballistic missile flew over Northern Japan splashing into the waters to the east. <sup>101</sup> Prior to the event Japan was slowly getting involved with the United States' BMD program, which included adding BMD to AEGIS equipped ships. The North Korea Missile test prompted Japan to increase its level of defense cooperation with the United States including increased investment in BMD research. <sup>102</sup> Several JMSDF destroyers would be upgraded to allow them to conduct ballistic missile defense similar to their counterparts in the USN. The ballistic missile defense mission fell within the scope of the JMSDF, in terms of the overall protection of Japan. As discussed in the next chapter, this mission brought the JMSDF to a level of sophistication that many other navies around the world do not possess.

# C. 1990s POLICY CHANGES

The 1990s saw many changes to policy regarding the use of the JMSDF. Without these policy changes the new ships and weapon systems that the JMSDF was acquiring

<sup>&</sup>lt;sup>100</sup> Ministry of Foreign Affairs of Japan, *National Defense Program Outline in and After FY1996*.

<sup>101</sup> Adam Liff, "Japan's Defense Policy: Abe the Evolutionary," *The Washington Quarterly* (Summer 2015): 82, http://dx.doi.org/10.1080/0163660X.2015.1064711.

<sup>102</sup> Liff, "Abe the Evolutionary," 82.

would not be as useful as they could be to counter the threats that Japan faced, and Japan would not be able to contribute to the promotion of a peaceful international environment. The Cold War pushed the JMSDF, like the rest of the JSDF, to improve its defensive posture. Out of the six points listed under "posture of national defense" in the 1976 NDPO, only the last point had no direct relation to national defense in terms of deterring armed conflict. That last point consisted of a single line stating that "Japan's defense structure must possess the capability to carry out disaster-relief operations in any areas of the country when required." The end of the Cold War, the Gulf War, and the increased need for peace operations all contributed to Japan expanding the role of the JMSDF in response to the new international environment. When a new NDPO was released in 1996 an increased priority was given to missions such as regional cooperation and disaster relief, but defense was still the priority for the JMSDF.

### 1. The First Post-Cold War Crisis

When Iraq invaded Kuwait in 1990, the world was faced with its first major post-Cold War incident. The world agreed that Iraq's actions were inconsistent with the international order. Japan was at odds about what to do: on the one hand, Iraq's actions were inconsistent with the peaceful world order; on the other Japan's constitution restricted it from using its forces for non-defensive purposes. On top of the invasion, some 800 Japanese nationals were stranded in Iraq and Kuwait after the invasion and while most were released 200, Japanese were used as human shields. <sup>104</sup> The JMSDF, and JSDF in general, that had come into being during the Cold War was not ready for the new international environment. During the Cold War, Japan was content and able to just focus on the defense of the homeland. Where other countries where building and maintaining large militaries in preparation for another World War II-like conflict, Japan was directing most of its resources toward growing the economy. Given its pacifist constitution, Japan was not able to deploy any forces to the Persian Gulf. Japan found itself under pressure to take a more

<sup>103</sup> Ministry of Foreign Affairs of Japan, National Defense Program Outline in and After FY1996.

<sup>104</sup> Wooley, Japan's Navy, 114.

active role in the international community in light of these events, not just for its own sake but the sake of the international community. 105

Not allowing itself to deploy the Self-Defense Forces to the Persian Gulf, but wanting to show its support for the coalition's effort to liberate Kuwait, Japan reconciled itself to showing its support using its economic power instead. Japan provided the enormous sum of approximately \$13 billion. \$106\$ To some in the international community and within Japan the financial support was not enough. When Kuwait placed an advertisement in The New York Times to thank the countries that helped liberate their country, Japan was left off the list, which undoubtedly struck a nerve. \$107\$ Since there had long been a desire to do more, after hostilities had ceased the JMSDF was ordered to assist with the mine clearing operations in the Gulf. After all, part of the JMSDF's mission was minesweeping and the laws governing the Japan Self-Defense Forces did not put a geographical constraint on this mission set. \$108\$ To help justify the deployment the JMSDF ships were sent to international waters in the Persian Gulf after hostilities had ended to clear navigational hazards. In this sense, the JMSDF deployment fell in line with the strictures of Article 9 and the JSDF legislation.

Japan's Gulf War experience was not so much a change in policy for the JMSDF since its deployment occurred after hostilities ended. Instead, it was a chance for the JMSDF to show its operational capability within the confines of Article 9 and the laws governing the Self-Defense Forces. But the entire incident did prompt Japan to consider how it could contribute to the peace and stability and maintain a positive image in the international community. Japan's reflection on its role in the international community was not superficial but rather was based on its idea of how the international community should function, through peaceful resolution of disputes. To this end, Japan sought to find a way to strengthen the international community to prevent threats from emerging in the future.

<sup>105</sup> Wooley, Japan's Navy, 114.

<sup>106</sup> Wooley, Japan's Navy, 90.

<sup>107</sup> Naoko Sajima and Kyoichi Tachikawa, *Japanese Sea Power: A Maritime Nation's Struggle for Identity*, (Canberra: Sea Power Centre-Australia, 2009), 76.

<sup>108</sup> Wooley, Japan's Navy, 56.

# 2. Moving to Make a Regional Difference

Following the Gulf War Japan realized, it was going to become more active in the international environment, and not just through economic support. Article 9 was generally interpreted as not allowing the JSDF to operate outside the confines of Japan's territorial claims, although an exception was made for the JMSDF so it could better protect Japanese maritime commercial interests. To allow the JSDF to get involved in helping regional stability the Japanese legislature passed a peacekeeping operations bill in 1992. While this bill was a significant change for the JSDF, it still placed heavy restrictions on the use of the JSDF in United Nations peacekeeping operations: a ceasefire had to be in place and both sides had to consent to the United Nations and Japanese peacekeepers presence, and the JSDF would only be allowed the minimum weapons necessary for self-defense. <sup>109</sup> Furthermore, if any requirements changed during the course of the operation Japan could withdraw its forces. <sup>110</sup> Finally, the bill initially restricted the JSDF to rear-area operations such as logistics and infrastructure repair. <sup>111</sup> Japan's effort to get involved in peacekeeping was seen as "an empty gesture that kept the military on too tight a rein," <sup>112</sup> but self-imposed restrictions were perhaps the only way to get enough domestic support for the bill.

Japan's first chance at peacekeeping operations came shortly after the peacekeeping bill was passed. Vietnam had invaded Cambodia in 1978 and in 1989, but upon UN urging, Vietnam agreed to leave Cambodia. The United Nations Transitional Authority in Cambodia was established early in 1992 after a ceasefire was signed the year before. The situation in Cambodia met the requirements of Japan's peacekeeping bill and it was decided that the JSDF would support the United Nations Transitional Authority in Cambodia. The mission would primarily be conducted by the Japan Ground Self-Defense Force, but the

<sup>109 &</sup>quot;Outline of Japan's International Peace Cooperation," Ministry of Foreign Affairs of Japan, May 14, 2015, https://www.mofa.go.jp/fp/ipc/page22e 000683.html.

<sup>110</sup> Ministry of Foreign Affairs of Japan, "Outline of Japan's International Peace Cooperation."

<sup>111</sup> Wooley, Japan's Navy, 121.

<sup>112</sup> Wooley, Japan's Navy, 121.

<sup>113 &</sup>quot;Cambodia – UNITAC: Summary," United Nations, accessed September 26, 2018, https://peacekeeping.un.org/mission/past/untacbackgr1.html.

initial stages of the operation required Japan Air and Maritime Self-Defense Force participation. For its part, the JMSDF started by transporting heavy lift CH-47 helicopters of the Ground Self-Defense Force to Thailand before being flown into Cambodia. <sup>114</sup> After moving the helicopters, the ships provided berthing and clean water for the Japanese troops building their camp in a Southwestern Cambodian port. <sup>115</sup> While its role was small relative to the overall operation, the JMSDF once again had proved its ability to successfully operate far from Japan.

# D. CONCLUSION: THE JMSDF'S FIRST STEPS IN THE POST COLD WAR WORLD

The end of the Cold War meant an end to the bi-polar world. In its place was a unipolar world run by Japan's key ally, the United States. Japan no longer faced an invasion threat, instead it faced the smaller threats posed by inter and intra-state conflicts that threatened the stability of a region. The small maritime threat Japan faced meant that by the end of the 1990s the JMSDF was sufficiently prepared to defend its interests in the region. On the other hand, it was just getting started with its efforts to help the international community.

The combination of the collapse of the Soviet Union and the JMSDF's modernization program meant the JMSDF surged far ahead of any other regional navy and was over-equipped at the start of the decade. But Japan recognized this over-response and reduced the number of destroyers within the JMSDF. The North Korea missile threat was still in its infancy to be of major concern, but the 1998 missile launch showed that the JMSDF was unprepared to help defend Japan from ballistic missiles. This was quickly remedied since the JMSDF was already taking the steps necessary to counter ballistic missiles with a joint Japan-United States research initiative. The JMSDF proved its ability to operate much farther from home with their minesweeping efforts in the Persian Gulf showing that they were ready to take on new operations away from Japan. The JMSDF

<sup>114</sup> Wooley, Japan's Navy, 123.

<sup>115</sup> Wooley, Japan's Navy, 123.

humanitarian efforts in Cambodia showed that the fleet could contribute to peace in more ways than just traditional defense.

Considering Japan did not face any major traditional naval threats during the 1990s, the JMSDF was well equipped to counter the maritime threats Japan faced. In terms of preventing threats from arising though, the JMSDF was ill-prepared to contribute to the region.

THIS PAGE INTENTIONALLY LEFT BLANK

### **IV. 2000s JMSDF**

The 2000s was a quite volatile time for Japan compared to the 1990s. The end of the previous decade saw advent of a significant jump in North Korean missile capabilities which would continue throughout the 2000s. As North Korea continued to improve its missile capability, Japan and the JMSDF spent the much of the decade playing catch up and trying to implement an effective defense against ballistic missiles. The September 11<sup>th</sup> attacks brought international terrorism to the forefront in the international community. Not wanting to get a second black eye for failing to respond to an international crisis adequately, Japan pushed through new laws that would allow the JMSDF to take a supporting role in the Global War on Terror. China's economic growth continued and with it came an expansion of its navy. Although the Chinese navy would not represent a significant threat to Japan's sovereignty during the 2000s it was becoming evident that it would be a significant regional actor in the future. In response to a growing Chinese navy that had unknown intentions, the JMSDF steadily improved its ships to make sure it possessed the capability to defend against new threats as they emerged. The 2000s would be a decade of many changes for the JMSDF.

# A. THE RISE OF NON-STATE THREATS AND THE RETURN OF STATE BASED THREATS

The start of the 21<sup>st</sup> century brought the new threat of large-scale terrorism into the fold with the September 11<sup>th</sup> attacks in the United States. Those attacks forced countries to reevaluate how to defend themselves from non-state actors. This threat proved to be tricky for Japan to handle. Restricted in the use of the JSDF to combat the terrorist networks, Japan's traditional diplomatic efforts were unlikely to be effective against an ideological threat from a non-state actor. The thought that Japan could be the target of terrorism was not lost on the Japanese government: the September 11<sup>th</sup> attack showed that if a powerful nation like the United States could be attacked by a stateless organization then surely Japan could suffer a similar fate. But the Government of Japan seemed to think the chances of a terrorist attack in Japan were still low considering Japan's initial action in the Global War on Terror was the implementation of The Anti-Terrorism Special Measures Law in October

2001. The purpose of the law was to allow the JSDF to support the United States and coalition forces in a very limited manner and not about how Japan could or would directly contribute to the stopping international terrorism. Furthermore, the 2005 NDPG does not specifically call out a terrorist threat to the country; instead, it makes the broader statement that the threat of terrorism "directly affect[s] its own peace and security." <sup>116</sup> Given the JSDF's lack of operations in the Middle East, compared to the United States, Japan was not high on the list of targets for al-Qaeda. But its support for the United States-led efforts in Afghanistan and Iraq ensured that Japan was at least a secondary target for the main international terrorist organization of the decade. <sup>117</sup>

Piracy was another non-state affiliated threat that began to threaten Japanese commercial interests. Compared to terrorism, piracy is even less of an existential threat to Japan. In relation to Japan's economic security, piracy posed little threat to Japan's well-being. The threat was so small that the 2005 NDPG only mentioned piracy once, and that was in relation to the Association of Southeast Asian Nations' "multilateral efforts to deal with common agendas." The most significant part of the piracy threat for Japan was that it created a small risk to Japanese citizens who travelled through pirate-infested waters during the course of their work. Despite the small threat, it provided Japan the opportunity to show that it could contribute to maintaining the stability of the international community.

North Korea caught the general public off guard in 1998 when it launched a Taepodong missile over Japan. At the time, it was not assessed that North Korea had a missile capable of reaching Japan, although Japanese and American intelligence services were expecting the launch of a new North Korean missile. While the North Koreans claimed dubiously that the launch was intended to put a satellite into orbit, the firing

<sup>116</sup> Japan Ministry of Defense, *National Defense Program Guidelines*, *FY2005*- (Tokyo: Japan Ministry of Defense, 2004). http://www.mod.go.jp/e/d act/d policy/pdf/national guidelines.pdf, 7.

<sup>117</sup> Joseph Ferguson, "Al Qaeda's Threat to Japan: Tokyo's Wake Up Call To The War On Terrorism," The Jamestown Foundation, January 30, 2004, https://jamestown.org/program/al-qaedas-threat-to-japan-tokyos-wake-up-call-to-the-war-on-terrorism-2/.

<sup>118</sup> Japan Ministry of Defense, National Defense Program Guidelines, FY2005-, 7.

<sup>119</sup> John Gittings, "North Korea Fires Missile Over Japan," *The Guardian*, September 1, 1998, https://www.theguardian.com/world/1998/sep/01/northkorea.

showed that the rogue state's missile technology was moving at a rate the rest of the world had not expected.

Japan had been considering BMD even before the September 1998 Taepodong launch and authorized a small amount funding, relative to the whole project, for BMD in the FY1998 budget. <sup>120</sup> The launch drew attention to the JSDF's inability to defend Japan from a missile attack. This would spur Japan into investing more in ballistic missile defense technology. In 1999, the JSDF began working with the United States to develop a ballistic missile defense system, which led to the acquisition of the PAC-3 PATRIOT missile system in the 2005. <sup>121</sup> In 2003, it was decided that the JMSDF would also participate in defending Japan from ballistic missiles by upgrading the AEGIS destroyers with BMD capability that the USN was adding to its destroyers. This upgrade would provide an additional layer of defense for Japan against ballistic missiles. In 2006, North Korea successfully tested its first nuclear device <sup>122</sup> adding another dimension to the threat that North Korea posed to Japan. Reflecting the increased threat North Korea now posed to Japan, the 2005 NDPG directly listed North Korea's nuclear and ballistic missile programs as a "destabilizing factor to regional and international security." <sup>123</sup>

China's continued economic rise allowed it to develop its military forces but at the start of the decade it was not yet apparent how it was going to participate in the regional and international environment. While the Chinese Navy had ships and submarines capable of operating far from the Chinese coast, overall it lacked the ability to conduct major operations outside of its coastal regions. As a result, China did not pose enough of a maritime threat to require a significant amount of attention from the JMSDF to start the new millennium. But the PLA(N) was growing and capability warranting more and more

<sup>120 &</sup>quot;Japan Plans Ballistic Missile Defence Decision," Jane's by IHS Markit, February 25, 1998, https://janes.ihs.com/Janes/Display/jdw00609-jdw-1998.

<sup>121 &</sup>quot;US and Japan Conclude Patriot Missile Deal," Jane's by IHS Markit, July 19, 2005, https://janes.ihs.com/Janes/Display/jdin02409-jdin-2005.

<sup>122</sup> Ju-min Park, "Factbox: North Korea's Missile and Nuclear Tests," Reuters, April 6, 2017, https://www.reuters.com/article/us-northkorea-missiles-bargaining-factbo/factbox-north-koreas-missile-and-nuclear-tests-idUSKBN178127.

<sup>123</sup> Japan Ministry of Defense, National Defense Program Guidelines, FY2005-, 2.

attention as the decade progressed. In 2004, a Han-class nuclear submarine was unexpectedly detected transiting through Japan's territorial waters despite an agreement between the two countries to provide advance notice of such actions. <sup>124</sup> This incident and the overall increase in Chinese naval activity led Japan to note in its 2005 Defense of Japan White Paper that China was "aiming to extend the space for offshore defensive operations while integrated combat capabilities are enhanced in conducting offshore campaigns." <sup>125</sup> While China apologized for the incident, it would prove to be a harbinger of the events that would occur less than 10 years later.

Even without the knowledge of things to come, China's growth caused enough concern that a paragraph was added to the 2005 NDPG to note China's growing military capabilities and that its actions would need to be monitored. With the Chinese navy showing increased maritime activity, it was clear that China was working towards possessing a strong naval force that could project power. But China's intentions for its growing naval force were unclear and required Japan to focus more on Chinese naval activity in attempt to determine the underlying strategy. Overall though, Chinese naval activities during the 2000s were not significant enough to be considered a direct threat to Japanese sovereignty.

# B. JMSDF EQUIPMENT

The JMSDF continued to replace its older single mission ships with new multipurpose ships to expand the capability of the escort flotillas as part of its modernization efforts. The 1998 North Korean missile test that overflew Japan spurred the JMSDF into adding a ballistic missile defense capability to its four AEGIS destroyers. The JMSDF's BMD mission provided Japan with an additional layer of defense against ballistic missiles in concert with the Japan Air Self Defense Force's ground-based Patriot PAC-3

<sup>124</sup> Richard Samuels, *Securing Japan: Tokyo's Grand Strategy and the Future of East Asia*, (Ithaca: Cornell University Press, 2007), 143.

<sup>125</sup> Japan Ministry of Defense, *Defense of Japan 2005: Security Environment Surrounding Japan*, (Tokyo: Japan Ministry of Defense, 2005), http://www.mod.go.jp/e/publ/w\_paper/pdf/2005/1.pdf.

<sup>126</sup> Japan Ministry of Defense, National Defense Program Guidelines, FY2005-, 2-3.

<sup>127</sup> Japan Ministry of Defense, Defense of Japan 2005: Security Environment Surrounding Japan.

missiles. 128 The addition of BMD to the JMSDF's mission set is one of the few changes made in direct response to a specific known threat. While the JMSDF regularly changes in response to the threat environment, it is also looking to the future to plan for a fleet that stands the best chance in the future threat environment. In the first half of the decade, the JMSDF was still operating on the 1996 NDPO which required a fleet of approximately 50 destroyers. When the 2005 NDPG was released, it reduced the number of destroyers in the JMSDF to 48. Even though the total number of ships was being reduced, this did not mean the JMSDF was shedding capabilities because at the same time the total tonnage of JMSDF ships was increasing. 129 This small change is due in part to the adoption of multi-purpose ships over single mission ships that started in the late 1980s to early 1990s. The other part of the reduction is linked to a reduction of the coastal divisions from seven to five as a reflection of Japan's reduced threat perception. By the time the 2005 NDPG was released Japan still did not face a significant maritime threat even to its remote islands, and this further justified the reduction of coastal divisions and subsequent reduction of total destroyer numbers. The most radical change came when the JMSDF commissioned a new and drastically different replacement for the Haruna class DDH, the JS Hyuga. Despite the perception that Japan had acquired an aircraft carrier, but it was actually a move to enhance the JMSDF's ASW capability.

### 1. Ballistic Missile Defense for the JMSDF

One of the most prominent changes to the JMSDF during the first decade of the new millennium was the decision to add the ballistic missile defense mission to the four Kongo class AEGIS destroyers in the wake of the North Korean missile that overflew Japan. At the time, sea-based BMD was still in the early development stages and the United States had only conducted its first tests in 1994, only four years before the Taepodong

<sup>128</sup> Japan Ministry of Defense, *Defense of Japan 2017: Effective Deterrence and Response*, (Tokyo: Japan Ministry of Defense, 2017), http://www.mod.go.jp/e/publ/w\_paper/pdf/2017/DOJ2017\_3-1-2 web.pdf, 327.

<sup>129</sup> Alessio Patalano, "Japan as a Seapower: Strategy, Doctrine, and Capabilities Under Three Defence Reviews, 1995-2010," *Journal of Strategic Studies* 37, no. 3 (April 2014): 428-429, https://doi.org/10.1080/01402390.2014.904788.

launch in North Korea. <sup>130</sup> Shortly after the North Korean missile test, Japan increased its cooperation with the United States on missile defense, but still in a limited capacity. Internal debates within the Japanese government restrained Japan's participation in BMD at first but by 2003, in the face of the growing threat from North Korea's nuclear and missile programs, it was decided that the JMSDF's AEGIS destroyers would be upgraded. The upgrade would modify the radar and fire control systems of the AEGIS ships and eventually procure SM-3 anti-ballistic missiles. <sup>131</sup> The JS Kongo was the first to complete the upgrade and successfully intercept a test target with an SM-3 in 2007, the remaining three ships were upgraded at a rate of one per year until 2010. <sup>132</sup>

In addition to the BMD upgrades that the Kongo class destroyers were receiving, the JMSDF launched an improved version of its AEGIS ship with the Atago class. Upgrades to the ship include a hangar for embarked ASW helicopters, changes to the VLS system that increased the missile capacity from 90 to 96, an improved version of the SPY-1D radar, and a new sonar suite. 133 Despite the fact that both ships were built after the JMSDF decided to add BMD to the previous AEGIS destroyers, the ships were not originally built to conduct the BMD mission. A total of two of this new class of ships were commissioned by the JMSDF as part of the continuing effort to increase the capability of the entire JMSDF fleet. These two new AEGIS destroyers brought the JMSDF's total to six to be spread throughout the four escort flotillas. The addition of the two Atago destroyers another sign of the JMSDF making incremental improvements to its fleet to equip it with latest capabilities to keep up with evolving maritime threats, a common theme among world navies trying to maintain a military advantage. Although in the case of BMD the introduction of the equipment was more reactionary since Japan did not begin heavy investment into the program until after the 1998 Taepodong missile launch.

<sup>130 &</sup>quot;Aiming High: Aegis Ballistic Missile Defense," Jane's by IHS Markit, December 18, 2008, https://janes.ihs.com/Janes/Display/jdw38613-jdw-2009.

<sup>131 &</sup>quot;Japanese DDGs to Get BMD Mission," Jane's by IHS Markit, September 24, 2004, https://janes.ihs.com/Janes/Display/jmr00824-jmr-2003.

<sup>132 &</sup>quot;Kongou class."

<sup>133 &</sup>quot;Improved Aegis Destroyer Launched," Jane's by IHS Markit, September 9, 2005, https://janes.ihs.com/Janes/Display/jdw11991-idw-2005.

# 2. Evolution of JMSDF Destroyers

The smaller multi-purpose destroyers were also being improved to further increase the fleet's capability. Improvements to JMSDF destroyers come in two forms; the first is software and hardware upgrades of certain systems on ships already in service. These improvements focus on improving the ship's capability considering known adversary weapons. For example, if country X acquires a new ASCM that is more difficult to engage, then the JMSDF acquires a new defensive missile that can successfully engage the new ASCM. Then the older ships in the JMSDF fleet will need to be upgraded to fire the new defensive missile, if possible. The second form of improvement is to build a new class of ships. If a country is trying to keep the cost of a new ship class low, it is best to utilize a previously used hull design to reduce research and development costs. The new ship class will then incorporate the latest sensors and weapons, such as the new defensive systems previously discussed, into the new ship class. The JMSDF been relying heavily on these two forms of ship improvement since the end of the Cold War, utilizing the ships built in the 1990s as the basis of subsequent ships.

The five new Takanami class destroyers are an example of the second form of improvement, utilizing the previously built Murasame class as the basis for the new class. Many of the systems found in the Murasame destroyers were carried over to the Takanami destroyers, incorporating any software or hardware upgrades made since the Murasame destroyers were commissioned. Two of the main changes that the Takanami destroyers incorporated were improvements to its gun and missile systems. The main gun on the Murasame destroyers was a 3-inch naval gun that could fire 85 rounds per minute to an effective range of 8.6 nautical miles. <sup>134</sup> The Takanami destroyers had a 127mm naval gun that could shoot 45 rounds per minute to an effective range of 12.4 nautical miles. <sup>135</sup> The gun on the Takanami destroyers also fired a shell that was five times heavier than the Murasame's. The increased range and shell weight of the Takanami's gun was a significant addition to the JMSDF's surface warfare capability despite the lower rate of fire.

<sup>134 &</sup>quot;Murasame class."

<sup>135 &</sup>quot;Takanami Class," Jane's by IHS Markit, September 12, 2018, https://janes.ihs.com/Janes/Display/1355626.

The Takanami destroyers also incorporated a 32-cell MK 41 VLS to shoot both anti-air missiles and ASROCs. The Murasame had one 16-cell MK 48 launcher for anti-air missiles and one 16-cell MK 41 launcher for anti-submarine rockets. Utilizing a 32-cell MK 41 launcher allows the Takanami destroyers to have greater control over their payload depending on the mission. By 2009, the Takanami destroyers were modified to fire the Evolved Sea Sparrow Missile. An improvement to the Sea Sparrow, the ESSM is "intended to improve ship self-defence capability, especially against smaller, more manoeuvrable anti-ship missiles capable of approaching at low altitudes. This is achieved through higher manoeuvrability, improved sensors, and a more lethal warhead." The ESSM is small enough that four missiles can fit into a single MK 41 VLS cell, allowing the Takanami destroyers to carry even more air-defense missiles than its predecessor. Even though both the Murasame and Takanami destroyers are multi-purpose ships, the Takanami brings greater flexibility to the JMSDF.

# 3. Did Japan Just Build an Aircraft Carrier?

On March 18, 2009, the JMSDF commissioned a new DDH in Yokohama that was unlike any of the ships Japan had commissioned since World War II, and at 18,000 tons it was also the largest ship Japan had commissioned since. 137 The new ship, the Hyuga, was commissioned to replace the Haruna-class DDHs. While the Haruna class looks like a normal destroyer with a larger hangar and flight deck, the Hyuga looks more like a small aircraft carrier, with a flat deck that runs the length of the ship and the bridge in an island tower offset to the right side of the ship. Many consider the ship to be an aircraft carrier, but the JMSDF calls it a helicopter-capable destroyer for use in ASW operations. 138 The Hyuga is equipped with a sonar suite and torpedo tubes which gives the ship an ASW capability, whereas typical aircraft carriers rely on other ships to conduct the ASW mission.

<sup>136 &</sup>quot;RIM-7 SeaSparrow and RIM-162 Evolved SeaSparrow Missile (ESSM)," Jane's by IHS Markit, October 16, 2018, https://janes.ihs.com/Janes/Display/1499576.

<sup>137 &</sup>quot;Helicopter Carrier Commissioned: MSDF's Largest Combat Vessel May Raise Concerns Within Asia," *Japan Times*, March 19, 2009, https://www.japantimes.co.jp/news/2009/03/19/national/helicopter-carrier-commissioned/#.W9nyWGhKhPY.

<sup>138 &</sup>quot;Japan's First ASW Carrier Enters Service," Jane's by IHS Markit, March 18, 2009, https://janes.ihs.com/Janes/Display/jni72690-jni-2009.

The Hyuga also has a 16-cell MK 41 VLS that can fire ASROCs and ESSM like the other destroyers in the JMSDF. At 646 feet long, the Hyuga is shorter than the other helicopter carrying ships and lacks a ski ramp at the bow to assist aircraft taking off, making the ship virtually unable to operate fixed wing aircraft like a traditional aircraft carrier. Additionally, the flight deck has a CIWS gun mount, for missile defense, at the bow that would get in the way of a fixed wing aircraft taking off. So, despite the Hyuga's physical appearance, it is difficult to classify it as a true aircraft carrier.

The concept of flying helicopters from ships to conduct ASW is about as old as helicopters themselves. As submarines grew quieter and became more prolific in world navies, new ways to counter the threat were sought. Helicopters proved to be an effective way to quickly respond to and verify possible submarine contacts. As the cat and mouse game of ASW and stealthier submarines continued, more helicopters were needed to search for and track submarines. Large ships with big displacements were ideal for helicopter operations for two reasons. First, the greater displacement of a ship makes it less susceptible to the motion of ocean, which translates into a flight deck that is not moving around significantly making landings much easier. Second, the larger ship provided more space available for a flight deck that can support multiple helicopters operating at the same time. This second point is part of the reasoning for why the JMSDF adopted a traditional aircraft carrier look with the Hyuga, which has four landing spots spread down the port side of the ship. 139 Other requirements the Hyuga was expected to meet included spaces for a Flag Information Center and Joint Task Force Headquarters, the communication capability to support them, and a hangar that was tall enough to allow rotor work to be conducted on the largest helicopter in service, the American MH-53E. 140 The result of these requirements led to a ship that resembled an aircraft carrier but had the capability to

<sup>139</sup> Koda, "A New Carrier Race?," 51.

<sup>140</sup> Koda, "A New Carrier Race?, 50-52.

actively hunt, track, and if necessary attack submarines, which made it unlike any other aircraft carrier in the world. 141

With this radical new design, by JMSDF standards, the Hyuga-class could deploy with up to ten helicopters while the older DDHs could only carry three. When the ship deploys with the Escort Flotilla it would typically carry ASW helicopters to support the flotilla's primary mission. With the increased number of helicopters available for an escort flotilla, it could search a wider area than before and verify the existence of submarines faster. The increased ASW capacity that the escort flotillas received with the new ship could not have come at a better time as Chinese naval activity in the East Sea was increasing as evident with the 2004 incident of a Chinese nuclear sub transiting Japan territorial waters.

The ship could also be used for humanitarian missions and embark heavy lift utility helicopters to deliver supplies to the affected region. During the relief efforts following the Great East Japan Earthquake, the Hyuga played a significant role, acting as a control ship, conducting search and rescue, and utilizing its flight deck for the movement of personnel and material. While the humanitarian mission was secondary, the requirements that dictated the design of Hyuga made the ship an ideal platform for the role.

Even though some may classify Hyuga as an aircraft carrier, it lacks the features and capabilities typically associated with one, such as the ability to launch fixed wing aircraft. The ship also possesses capabilities that are more akin to a traditional destroyer with its sonar system and ability to fire ASROC. Regardless of how others classify Hyuga, the ship enhances the JMSDF's ASW capability by allowing an escort flotilla to sail with more ASW helicopters than it previously could. Even though Japan did not face a prominent submarine threat during the 2000s like it did during the Cold War, submarines were becoming quieter and any increase in ASW capability and/or capacity was useful.

<sup>&</sup>lt;sup>141</sup> For a detailed history of the development of helicopters as ASW platforms and the JMSDF's history with helicopter destroyers, see Yoji Koda's "A New Carrier Race? Strategy, Force Planning, and the JS Hyuga".

<sup>142</sup> Japan Ministry of Defense, *Defense of Japan 2011: Special Feature Response to the Great East Japan Earthquake*, (Tokyo: Japan Ministry of Defense, 2011), http://www.mod.go.jp/e/publ/w\_paper/pdf/2011/04SpecialFeature.pdf, 9.

### C. JMSDF POLICY CHANGES

The first decade of the new millennium again saw the JMSDF trying to define its role in the international community within the confines of Article 9. The minimal threat of a direct attack on Japan, North Korean ballistic missiles being the big exception, allowed the JMSDF to focus its efforts on meeting the second objective of Japan's basic security policy principles: "improve the international security environment so as to reduce the chance that any threat will ever reach Japan in the first place." <sup>143</sup> The rise of terrorism and piracy created opportunities for the JMSDF to show how Japan can contribute to maintaining stability. The Global War on Terror gave Japan a second chance to support a major international military effort after a too little, too late response to the Gulf War. Within a month of the September 11<sup>th</sup> attacks Japan would pass a law allowing the JMSDF to provide logistics support to USN warships heading to the Middle East. One of the oldest maritime crimes reared its ugly head towards the end of the decade when piracy off the coast of Somalia rapidly increased. These two issues threatened Japan and the international community to different degrees. But neither could be countered with the mere existence of the JMSDF's inventory of the latest ships, sensors, and weapons. To counter these threats Japan would have to revise the way it operated, passing new laws that would allow the JMSDF to contribute to both efforts.

Anti-Terrorism and anti-piracy are interesting policy changes for the JMSDF. Terrorism represents a relatively small naval threat. Piracy, while a big naval threat, like the PLA(N), is a nuisance that can have a greater effect on Japanese businesses and citizens. As such, these two threats do not direct shape the structure of the JMSDF. Instead, terrorism and piracy are threats that the JMSDF can respond to with its existing capabilities. The JMSDF was ideally suited to contribute to the fight against both threats since it routinely operates outside of the Japanese islands. Allowing the JMSDF to contribute to these fights also added to Japan's international reputation by showing that it was willing and able to help build a more stable international environment.

<sup>143</sup> Japan Ministry of Defense, National Defense Program Guidelines, FY2005-, 3.

#### 1. Anti-Terrorism

Without being able to directly combat terrorist networks with the JSDF, Japan found other ways to support the Global War on Terror. In October 2001, the Diet passed the Anti-Terrorism Special Measures Law allowing the JSDF to provide logistical support to nations engaged in combating terrorism. <sup>144</sup> Under this law, the JSDF could only operate in areas where combat was not taking place or expected to take place and was banned from providing logistical support that would directly support combat operations, such as providing ammunition or fuel to an aircraft about to conduct military operations. The JMSDF for its part would almost continually deploy one supply ship and one escort destroyer to the Indian Ocean that would provide fuel to USN ships transiting to and from the Middle East. The law allowed Japan to remain in line with Article 9 by not engaging in war but still contribute to the security of the international environment with support to other militaries. Although small, relative to the overall effort, the JMSDF's contribution to the Global War on Terror was a huge step forward considering almost ten years prior it was unable to help with the Gulf War.

The Antiterrorism Special Measures Law expired in November 2007, and this forced the JMSDF to temporarily stop its Indian Ocean refueling missions. There was still a need to conduct the mission as the Global War on Terror continued and the Replenishment Support Special Measures Law was passed in January 2008 which was set to expire the following year. When the law was set to expire in 2009, the Japanese government decided "in order to play a responsible role in international society, it needed to continue replenishment support activities which had become an important basis for counterterrorism maritime interdiction operations." <sup>145</sup> To allow the JMSDF to continue the refueling missions in the Indian Ocean the law was extended until January 2010. As maritime operations related to the Global War on Terror slowed down the need for JMSDF

<sup>144 &</sup>quot;The Anti-Terrorism Special Measures Law," Prime Minister of Japan and His Cabinet, October 2001, http://japan.kantei.go.jp/policy/2001/anti-terrorism/1029terohougaiyou\_e.html.

<sup>145</sup> Japan Ministry of Defense, *Defense of Japan 2009: Efforts to Support International Peace Cooperation Activities*, (Tokyo: Japan Ministry of Defense, 2009), http://www.mod.go.jp/e/publ/w\_paper/pdf/2009/33Part3\_Chapter3\_Sec1.pdf, 289.

ships to conduct refueling operations also slowed. As a result, the Japanese government did not renew the Replenishment Support Special Measures Law, bringing an end to one of the JMSDF's main contributions to the Global War on Terror. During the course of the refueling mission from December 2001 to January 2010, the JMSDF conducted 939 refueling missions totaling over 134 million gallons of fuel. The knowledge and experience gained by the JMSDF during the refueling mission in the Indian Ocean would help it understand logistical requirements necessary for distant maritime operations. This knowledge would be invaluable when Japan began deploying JMSDF ships to Gulf of Aden in 2009 to conduct anti-piracy patrols.

# 2. Anti-Piracy and CTF-151

Piracy around the world has always flourished in regions where local governments lack the resources to stop it. Piracy does not create an existential threat to any major nation, but it could affect businesses that rely on maritime trade when goods are stolen and/or ransoms demanded. While the amount of maritime trade that could be affected by piracy is relatively small compared to Japan's overall trade, the nuisance caused by it cannot be overlooked. More importantly, piracy can also threaten the safety of a nation's citizens who work onboard ships that transit areas afflicted by piracy. When the safety of a nation's citizens is threatened in international waters, the government has an obligation to protect its citizens, especially if the ship they are on is registered to the country in question. In addition to the noted issues caused by piracy, a country like Japan is reliant on maritime trade for its energy needs. This also makes piracy a strategic issue for Japan, albeit a small one.

There are two regions affected by piracy that Japan cares about: the Gulf of Aden and Southeast Asia. In Southeast Asia, the focus is on the Strait of Malacca, through which an abundance of Japanese trade transits. Even though the Strait of Malacca is a main artery for Japanese trade, the JMSDF does not play a major role in anti-piracy operations in the

<sup>146</sup> Japan Ministry of Defense, *Defense of Japan 2010: Efforts to Support International Peace Cooperation Activities*, (Tokyo: Japan Ministry of Defense, 2010), http://www.mod.go.jp/e/publ/w\_paper/pdf/2010/34Part3\_Chapter3\_Sec1.pdf, 345.

region for two reasons. First, Japan occupied much of Southeast Asia during World War II and the use of any Japan Self Defense Forces in Southeast Asia is a contentious issue. For that reason, much of the anti-piracy work Japan undertakes in Southeast Asia is done by civilian organizations. <sup>147</sup> The second reason has to do with the difference of governance in the nations bordering the waters. Surrounding the Strait of Malacca are three stable countries, Indonesia, Malaysia, and Singapore, which have robust naval forces that can combat piracy. In the Gulf of Aden, however, one of the main bordering countries, Somalia, has been considered a failed state since the early 1990s. The other two states, Yemen and Djibouti, were not much better in the late 2000s. By 2009 Somalia was ranked number one on the Fragile State Index, Yemen was 18<sup>th</sup>, and Djibouti was 73<sup>rd</sup>. <sup>148</sup> By comparison Indonesia was 61<sup>st</sup>, Malaysia was 114<sup>th</sup>, and Singapore was 160<sup>th</sup>. <sup>149</sup> Acts of piracy of the coast of Somalia and in the Gulf of Aden jumped from 44 in 2007 to 217 in 2009, while total acts of piracy in Southeast Asia dropped from 70 to 45 in that same time frame. <sup>150</sup> Between history, the status of local governments, and the trends in piracy it was obvious where Japan would decide to help fight piracy.

With piracy off the coast of Somalia affecting much of the world by the end of the 2000s, the need for an organized international effort to combat the issue reached a critical point. The international community began ramping up their anti-piracy efforts with the establishment of Combined Task Force 151 in January 2009 to combat the growing piracy threat in the Gulf of Aden and Indian Ocean, particularly off the coast of Somalia. <sup>151</sup> Japan initially did not participate with Combined Task Force 151; instead, the JMSDF began conducting anti-piracy patrols and escorts on its own in March 2009 and did not join the

<sup>147</sup> Yoichiro Sato, "Southeast Asian Receptiveness to Japanese Maritime Security Cooperation," Asia-Pacific Center for Security Studies, September 27, 2007, https://apcss.org/Publications/Maritime%20security%20cooperation%20Japan-SE%20Asia%20Sato.pdf.

<sup>148 &</sup>quot;Fragile States Index," The Fund for Peace, accessed October 29, 2018, http://fundforpeace.org/fsi/.

<sup>149</sup> The Fund for Peace, "Fragile States Index."

<sup>150</sup> Japan Ministry of Defense, *Defense of Japan 2010: Anti-Piracy Efforts*, (Tokyo: Japan Ministry of Defense, 2010), http://www.mod.go.jp/e/publ/w paper/pdf/2010/29Part3 Chapter1 Sec4.pdf, 243.

<sup>151 &</sup>quot;CTF 151: Counter-Piracy," Combined Maritime Forces, accessed October 15, 2018, https://combinedmaritimeforces.com/ctf-151-counter-piracy/.

multinational effort until December 2013.<sup>152</sup> Japan passed the "Act of Punishment and Countermeasures against Piracy" which took effect in July 2009 allowing the JMSDF to "protect any ship from pirates regardless of her flag."<sup>153</sup> Between 2009 and 2015, the JMSDF escorted 3,577 ships through the Gulf of Aden.<sup>154</sup> While piracy is a nuisance and not an existential threat to Japan its effect on the international community and livelihood of Japanese civilians and businesses warranted an appropriate response. The JMSDF's antipiracy operations in the Gulf of Aden have shown that it can adequately respond to a range of threats to Japanese interests and provided the organization with valuable overseas operational experience, like the 2009 Indian Ocean refueling operations. Furthermore, it shows the international community that Japan is serious about contributing to the future stability of the international community.

### D. CONCLUSION: THE JMSDF'S ROLE CONTINUES TO EXPAND

Between the growing North Korean nuclear and missile threat, the Global War on Terror and the rise of piracy in the Gulf of Aden, the 2000s could be considered much more volatile than the 1990s. The evolutionary advancement of the Murasame class to the Takanami class allowed the JMSDF to constantly field the latest naval technology giving it the ability to counter the latest naval threats. These new destroyers provided the JMSDF with the latest naval weapon systems that were becoming more necessary to have in light of China's increased maritime activities and unknown intentions. In addition to the evolutionary advancement of the JMSDF's multipurpose destroyers, it invested heavily in building a BMD capability by upgrading four of its AEGIS destroyers to undertake the mission by 2010. The addition of BMD to the JMSDF fleet was the most significant equipment advancement the JMSDF made in response to a threat. The JMSDF BMD mission also added another layer of defense in addition ground-based inceptors deployed by the Japan Air Self Defense Force within Japan. China's slowly growing naval power

<sup>152 &</sup>quot;Japan's Actions Against Piracy off the Coast of Somalia," Ministry of Foreign Affairs of Japan, accessed September 16, 2018, https://www.mofa.go.jp/policy/piracy/ja\_somalia\_1210.html.

<sup>153</sup> Ministry of Foreign Affairs of Japan, "Japan's Actions against Piracy off the Coast of Somalia."

<sup>154</sup> Ministry of Foreign Affairs of Japan, "Japan's Actions against Piracy off the Coast of Somalia."

was epitomized when a Chinese nuclear submarine was detected transiting through Japanese territorial waters. In response to this steadily growing, but not yet significant, naval threat the JMSDF commissioned a new class of DDHs to expand its ASW capability.

Non-state actors presented a unique challenge for Japan, one that it could not counter militarily like other nations. These threats could not be countered by weapons alone, so the JMSDF was allowed to participate in a variety of international efforts as a result of policy changes. Refueling operations in the Indian Ocean to support the Global War on Terror were authorized shortly after the September 11<sup>th</sup> attacks. These missions allowed Japan to contribute to the effort while remaining true to Article 9 of the Japanese Constitution. By the end of the decade, Japan was sending JMSDF ships to the Gulf of Aden to curtail a growing piracy threat in that region. These two changes in policy allowed the JMSDF to show the Japanese flag in volatile areas around the world. With JMSDF ships operating far from home contributing to "improving the international security environment," 155 Japan was showing the world its commitment to the international order.

As such, these policies were appropriate responses to the evolving threat environment that Japan was facing. Overall, the JMSDF equipment and policy changes made the JMSDF sufficiently capable of operating in the increasingly active maritime environment.

<sup>155</sup> Japan Ministry of Defense, National Defense Program Guidelines, FY2005-, 3.

# V. CURRENT JMSDF (2010 AND ON)

Japan's neighbors have changed a lot during the current decade. Kim Jong Un became the leader of North Korea and was more unpredictable than his father. His reign started with significant provocations but in the past year he has taken a milder tone as he works with the United States and South Korea in an effort to reduce tensions on the Korean Peninsula. China's economic growth during the previous decades helped build a larger and stronger navy that was making waves in the South China Sea and East China Sea. The JMSDF continued to commission ships that featured the latest naval weapon systems and upgraded more AEGIS destroyers to be BMD capable. The JMSDF's role in the region continued to expand as well, with the authorization to participate in collective self-defense and deployments to the Indian Ocean to conduct training exercises with regional maritime partners. During the 2010s, the JMSDF's operational abilities have expanded in response to new requirements to adequately provide maritime defense for Japan.

#### A. THREATS TO JAPAN IN THE 2010s

Starting off the new decade the 2010 NDPG continued to acknowledge the complexity of the post 9/11 world, where internal state conflict based on religious and cultural disputes has negative impacts on regional stability. The document also brings up territorial disputes that allow countries to secure economic rights to in the maritime environment as a source of regional disputes that contribute to instability. North Korea is the first state in the region listed in the 2010 NDPG as a source of regional instability. North Korea's continued nuclear and ballistic missile programs along with its general provocations made North Korea, in the eyes of Japan, "an immediate and grave destabilizing factor to regional security." For China, the 2010 NDPG expanded its assessment. The document reiterated the 2005 NDPG's concern of China's growing

<sup>156</sup> Japan Ministry of Defense, *National Defense Program Guidelines for FY2011 and Beyond* (Tokyo: Japan Ministry of Defense, 2010), http://www.mod.go.jp/e/d\_act/d\_policy/pdf/guidelinesFY2011.pdf, 2-3.

<sup>157</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2011 and Beyond, 4.

military and increased maritime activity. But it also noted that China does not reveal much about its activities or intentions which in turns causes concern. For Russia, it is noted that while its military may have contracted in size, it continues to remain active in the region.

#### 1. North Korea

Events on the Korean Peninsula changed significantly after the 2010 NDPG was released. North Korea was being led by the young and inexperienced Kim Jong Un. Eager to make his mark, Kim Jong Un was making drastic changes to the leadership and began accelerating North Korea's nuclear and ballistic missile programs with the ultimate goal of making a ballistic missile capable of reaching the United States with a nuclear warhead. This also put Japan at great risk as North Korea was still bitter about Japan's occupation of the Korean Peninsula. Between the 2010 NDPG and subsequent 2013 NDPG, North Korea launched six short-range ballistic missiles and two space vehicles, one of which was a failure. Despite the failure, it was evident that North Korea was making progress with its missile technology that warranted Japan to call North Korea "a serious and imminent threat to Japan's security" in the 2013 NDPG. The situation on the Korean Peninsula was becoming much more volatile than it had been.

On March 26, 2010, the ROKS Cheonan was operating off the west coast of the Korean Peninsula within the territorial waters of Baekyrong Island, south of the Northern Limit Line, when an underwater explosion occurred breaking the ship in two pieces. <sup>160</sup> The incident resulted in the sinking of the patrol craft and the death of 46 Republic of Korea sailors. Following the incident South Korea organized a Joint Investigation Group composed of military and civilian experts from South Korea, the United States, Australia, the United Kingdom, and Sweden. <sup>161</sup> In September 2010, six months after the incident, the investigation concluded based on the physical evidence and relevant intelligence that

<sup>158</sup> Nuclear Threat Initiative, "The CNS North Korea Missile Test Database."

<sup>159</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 3.

<sup>160</sup> Ministry of National Defense Republic of Korea, *Joint Investigation Report on the Attack Against ROK Ship Cheonan* (Seoul: Myungjin Publication Inc., 2010), 36.

<sup>161</sup> Ministry of National Defense Republic of Korea, Joint Investigation Report, 28.

the ROKS Cheonan was sunk by a North Korean torpedo fired from a North Korean submarine. <sup>162</sup> This incident is one of the few examples, since the end of World War II, of one state engaging another in direct naval combat in territorial waters. The overwhelming evidence pointing to North Korea's involvement made it clear to Japan that North Korea possessed the willingness to carry out military attacks against a country it declared to be an enemy. Having previously made threats to conduct missile attacks on Japan the threat from North Korea now carried increased weight.

Part of the reason for North Korea's increased belligerence can be attributed to the death of Kim Jong-II and the ascension of his son, Kim Jong-Un, to power. Kim Jong-II was announced to succeed his father as the head of North Korea in 1974<sup>163</sup> giving him 20 years to establish himself within the North Korean system and figure out his leadership style. Kim Jong-Un on the other hand had at best 10 years. After a brief stint of schooling in Switzerland, Kim Jong-Un returned to North Korea in 2000 where he attended the military academy in Pyongyang until 2006. <sup>164</sup> Some analysts allege that Kim Jong-Un was part of the March 2010 sinking of the South Korean naval ship Cheonan and the November 2010 shelling of Yeonpyeong in an attempt to establish his credibility with the North Korean military. <sup>165</sup> Within North Korea, Kim Jong-Un secured his place by removing generals who were believed to be a threat to his power and going so far as having an uncle executed with an anti-aircraft gun due to his growing influence, ambition, and connections to China. <sup>166</sup> While not directly attributed to the change of power in North Korea, the 2013 NDPG notes North Korea's increased hostile rhetoric towards Japan and others in the region. <sup>167</sup> Kim Jong-Un's rise to power created more uncertainty in regards to the North

<sup>162</sup> Ministry of National Defense Republic of Korea, Joint Investigation Report, 220-223.

<sup>163</sup> Victor Cha, *The Impossible State: North Korea, Past and Future* (New York: HarperCollins, 2013), 79.

<sup>164</sup> Cha, The Impossible State, 86-87.

<sup>165</sup> Cha, The Impossible State, 87.

<sup>166</sup> Choe Sang-Hun, "In Hail of Bullets and Fire, North Korea Killed Official Who Wanted Reform," *New York Times*, March 12, 2016, https://www.nytimes.com/2016/03/13/world/asia/north-korea-executions-jang-song-thaek.html.

<sup>167</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 2.

Korea question for Japan. Combined with the hostile rhetoric, aggressive missile tests, and continued nuclear tests North Korea was the most credible threat to Japan by the middle of the 2010 decade. This very real threat allowed the JMSDF to continue to acquire ballistic missile defense upgrades for its AEGIS destroyers.

# 2. China and its Growing Maritime Claims

China was still significantly increasing its naval operations and more actively asserting its influence in the region, although its intentions remained unclear. The biggest change to the assessment of China came from its increased naval activity that included incursions into Japanese territorial seas. Starting in late 2012 Chinese ships, government and civilian, went from almost zero territorial sea incursion to averaging 17 per month. <sup>168</sup> These incursions in the East China Sea along with the actions in the South China Sea indicated to the Japanese that China was attempting to "change the status quo by coercion." <sup>169</sup> As a result, Japan decided that it needed to add an additional coastal division to go from five to six to increase its maritime defensive posture. To increase the size of the coastal division the older destroyers of the escort flotillas have been moved to the coastal division as they have been replaced by new multipurpose destroyers that were being commissioned. As noted in previous chapters and will be noted later in this chapter, these new destroyers are better able to search for enemy submarines and have increased anti-air capability.

The most significant maritime threat Japan faces in the region comes from China as it lays claim to vast expanses of the South China Sea with its 9-dash line and in the East China Sea. Although the 9-dash line does not cover any Japanese claims it is still a concern for Japan whose SLOCs transit through South China Sea. This fact continues to drive Japan's interest in China's actions related to the South China Sea. China's claims have created uncertainty as multiple countries try to push back against China's claims. To

<sup>168 &</sup>quot;The Numbers of Chinese Government and Other Vessels That Entered Japan's Contiguous Zone or Intruded into Territorial Sea Surrounding the Senkaku Islands," Ministry of Foreign Affairs of Japan, September 6, 2018, https://www.mofa.go.jp/files/000170838.pdf.

<sup>169</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 3.

reinforce its position the Chinese have built islands on reefs inside the 9-dash line that now have runways and large amounts of infrastructure to support military operations. From these islands, China uses its naval force to harass vessels of other nations that also lay claim to the waters. These naval forces are backed by China's increased military funding that is developing asymmetric capabilities designed to deny other countries' militaries from accessing and deploying in the area. <sup>170</sup>

In 2013 the Philippines took the issue of China's extensive claims in the South China Sea to an international tribunal, specifically challenging China's claims that small partially submerged rocks and reefs entitles it to maritime boundary claims from territorial seas up to Exclusive Economic Zones. <sup>171</sup> In 2016, the tribunal ruled that none of the islands were entitled to EEZs and at best could claim territorial waters but at the end of the day, it invalidated the majority of China's maritime claims within the 9-dash line. 172 China has since ignored that ruling and continues to act as though its maritime boundary claims are still valid. Japan does not take a position on the maritime and territorial claims in the South China Sea but does hope for peaceful resolution to the disputes. 173 Japan's interest in the South China Sea lies in access to fisheries and oil deposits by working with the nations that rightfully have a claim to the waters. From Japan's point of view, China is attempting to take "unilateral actions in an attempt to change the status quo by coercion based on their own assertions, which are incompatible with the existing order of international law, the maritime and aerial domains." 174 Not only has China's assertiveness in the South China Sea created uncertainty, it also directly threatens Japan's economic well-being by putting Japan's SLOCs and economic access to the South China Sea at risk. Japan relies heavily

<sup>170</sup> Japan Ministry of Defense, National Defense Program Guidelines for FY2014 and Beyond, 3.

<sup>171</sup> Ted L. McDorman, "The South China Sea Arbitration," American Society of International Law, November 18, 2016, https://www.asil.org/insights/volume/20/issue/17/south-china-sea-arbitration.

<sup>172 &</sup>quot;Philippines v. China: Arbitration Outcomes," Asia Maritime Transparency Initiative, July 12, 2016, https://amti.csis.org/arbitration-map/.

<sup>173</sup> Reinhard Drifte, *Japan's Policy Towards the South China Sea – Applying "Proactive Peace Diplomacy?*," PRIF Report No. 140 (Frankfurt: Peace Research Institute Frankfurt, 2016), http://www.hsfk.de/fileadmin/HSFK/hsfk\_publikationen/prif140.pdf.

<sup>174</sup> Shinzo Abe, *National Security Strategy* (Tokyo: Prime Minister of Japan and His Cabinet, 2013), http://japan.kantei.go.jp/96 abe/documents/2013/ icsFiles/afieldfile/2013/12/17/NSS.pdf.

on SLOCs that transit through the South China Sea for the importation of natural and energy resources from the Middle East<sup>175</sup> and for the exporting of Japanese made products.

Although China and Japan are not directly in a dispute in the South China Sea, they do have competing claims over in the East China Sea. Both countries claim ownership of the Senkaku Islands, called the Daioyu in China, but that conflict typically has not reached the intensity of the current South China Sea dispute. 176 China mainly tries to assert its claim by referring to historical rights dating back to at least the 1500s. But under the current and recognized international order, Japan assumed responsibility of the islands in 1972 after the American occupation of the Ryukyu Islands and Senkaku Islands ended and has administered the islands since. 177 This in a way gives Japan the upper hand based on the current international system which generally views territorial possessions based on events after World War II. Regardless of how the international community views the issue, China still maintains its claim is legitimate and attempts to force the issue through the increased number of Chinese ships that enter the contiguous zone and territorial waters of the Senkaku Islands. These incursions started in late 2012 with Chinese ships making an average of 65 incursions into the Senkaku contiguous zone and 10 incursions into the territorial sea per month. 178 While these incidents are mostly handled by the JCG they represent a possible naval threat that the JMSDF should be prepared to With the JMSDF actively operating around the Senkaku Islands China has more trouble asserting its claim without potentially provoking a conflict. With this in mind, one of the missions of the JMSDF is to support South China Sea coastal nations build their navies to put up a credible defense.

<sup>175</sup> Abe, National Security Strategy.

<sup>176</sup> China's lack of aggressive action around the Senkaku Islands could be related to the fact that the nations bordering the South China Sea are not first world countries like Japan with naval forces that are comparable to the PLA(N).

<sup>177 &</sup>quot;Senkaku Islands Q&A," Ministry of Foreign Affairs of Japan, April 13, 2016, https://www.mofa.go.jp/region/asia-paci/senkaku/qa 1010.html.

<sup>178</sup> Ministry of Foreign Affairs of Japan, "The Numbers of Chinese Government and Other Vessels that Entered Japan's Contiguous Zone or Intruded into Territorial Sea Surrounding the Senkaku Islands."

Chinese A2/AD systems, from long-range radars to long-range anti-ship cruise missiles have created a very complex situation in the region. All told, these military systems give China the ability to greatly influence the maritime areas over 1,000 nautical miles off the coast if it chose. These A2/AD systems are not intended to target commercial shipping but rather to deny foreign navies access to the areas covered. In the worst-case scenario, this access denial combined with the growing naval forces would allow the Chinese to attempt to dictate the terms of use for the waters it controls, and its dominance of the economic resources contained in the area. While the chances of such a scenario are low, the fact that China has the capability to do so drives Japan to make sure the JMSDF possesses the capability to defend Japan's commercial shipping and vital SLOCs against possible Chinese intervention.

#### B. JMSDF SHIPS

The JMSDF continued to update its ships by introducing improved versions of previous ships. The new ship classes incorporated the latest defense technology advancements to allow the JMSDF to continually field some of the best defensive equipment available. These evolutionary modifications of JMSDF ships were becoming linked more to the rise of China and its aggressive maritime posture in the South and East China Seas than to a general threat associated with the constant progression of weapons technology, although the latter part still held true. With China's activities becoming more aggressive the reasoning behind the regular acquisition of new ships with the latest defensive equipment became more tangible. Even though Japan recognized the possibility of growing instability in the region over the next decade, it decided it could reduce the coastal divisions from five to four considering the significantly reduced threat of invasion since the end of the Cold War. The escort flotilla composition remained unchanged, but ships were still being replaced by newer and more capable classes.

In addition to the general advancement of naval weapons technology, ballistic missiles and BMD technology was also evolving. New missiles were incorporating high-speed maneuverability making them increasingly difficult to intercept, and BMD

technology was forced to keep up. The cooperative effort of Japan and the United States has been key to Japan maintaining a credible defense against ballistic missiles.

# 1. JMSDF Destroyer Evolution Continues

The current decade has seen two separate evolutionary iterations of the original Murasame class destroyers. The first iteration was originally funded at the end of the previous decade but the first ship of the new Akizuki class was not commissioned until 2012. Building off the Takanami class the Akizuki class retained many of the same weapon systems as its predecessor including the VLS, SSM-1B launcher, and torpedo tubes. But the main gun was changed to the Mk 45 Mod 4 5-inch gun that the USN uses. Curiously, this change could be considered a downgrade from the Takanami class as the Mk 45 only fires 20 rounds per minute opposed to the 127mm's 45 rounds per minute. It is unclear why this change was made despite the slower rate of fire. While the VLS was the same between the two classes, the Akizuki was designed to fire ESSM from the start, 179 whereas the Takanami and Murasame classes were modified to fire ESSM between 2007 and 2014. Most of the upgrades to the Akizuki can be found in its radars and sonars. Instead of the rotating radar array of the Murasame and Takanami classes, the Akizuki class used the Japanese made FCS-3 phased array radar. The phased array radar allows the ship to get more accurate data off air contacts providing increased situational awareness. 180 The Akizuki class' sonars appear to be improved versions of the previous systems, although the details of the improvements are unavailable.

The Akizuki was then upgraded to the Asahi class with the first ship being commissioned in March 2018. The Asahi class is almost identical to the Akizuki class in terms of weapons, radars, and sonars. Whereas the Akizuki class had two of its FCS-3

<sup>179</sup> "Akizuki Class," Jane's by IHS Markit, June 13, 2017, https://janes.ihs.com/Janes/Display/jfs\_a797-jfs\_.

<sup>&</sup>lt;sup>180</sup> A rotating radar array can only update information on an air target once per revolution when the array is pointed at the target. A phased array uses digital beamforming to look in all directions all the time meaning target information can be updated faster.

<sup>&</sup>lt;sup>181</sup> "Japan Commissions First Asahi-class Destroyer," Jane's by IHS Markit, March 13, 2018, https://janes.ihs.com/Janes/Display/FG\_872199-JDW.

radar arrays on the forward superstructure and two on the aft superstructure, the Asahi class has all four FCS-3 arrays mounted on the forward superstructure. This is mainly a stylistic change and does not provide any notable improvement to the radar's functionality. The most notable modification of the Asahi class is the use of a hybrid prolusion system where gas turbine engines are used to generate electrical power and then an electric motor is used to rotate the props. But this modification has little to do with the combat capability of the ship.

# 2. Upgrades and Additions to the AEGIS Destroyers

Japan's AEGIS destroyers were also upgraded into a new class incorporating the steady improvements to its weapon systems. The two ships of the Improved Atago class will replace the pre-AEGIS DDGs Hatakaze and Shimakaze. 182 With these two new ships, the JMSDF's total number of AEGIS destroyers increases to eight, allowing each escort flotilla to have two. Like the Asahi class the Improved Atago class, or Maya class, 183 will feature a similar hybrid gas turbine and electric propulsion system. While the Asahi class did not receive any major upgrades to its combat systems the Maya class has. Retaining the same guns and missiles as the Atago, the Maya class incorporates the latest version of AEGIS which allows the ship to conduct the BMD mission from the start. The two ships of the Atago class were upgraded to support BMD in 2018. 184 Additional combat systems upgrades included in the Maya class are, the cooperative engagement capability (CEC) allowing Maya to share surveillance and targeting information with other CEC capable ships. 185 With this system if one CEC capable ship tracks an enemy missile but is unable to engage it would share the targeting data with another CEC capable ship that may not be able to see the incoming missile but is able to fire an intercepting missile. Finally, the new

<sup>182 &</sup>quot;Improved Atago (27DDG) Class," Jane's by IHS Markit, August 6, 2018, https://janes.ihs.com/Janes/Display/jfs\_c326-jfs\_.

<sup>&</sup>lt;sup>183</sup> JMSDF ship classes are named after the first ship in the class. The first ship of the Improved Atago class has been named Maya.

 $<sup>^{184}</sup>$  "Atago Class," Jane's by IHS Markit, June 5, 2018, https://janes.ihs.com/Janes/Display/jfs\_5544-jfs\_.

<sup>185 &</sup>quot;Japan Launches First Improved Atago-class Destroyer," Jane's by IHS Markit, July 30, 2018, https://janes.ihs.com/Janes/Display/FG\_990545-JDW.

combat system of the Maya class can fire the new SM-6 missile although it is not known if the JMSDF will purchase this missile. <sup>186</sup> If the JMSDF did acquire the missile, it would have a weapon which has an estimate range of 200 nautical miles and limited BMD capability. <sup>187</sup>

The steady improvements of JMSDF's ships is a sign that the JMSDF is acting in much the same way as any other navy, within the confines of Article 9 and the laws governing the JSDF. The steady upgrades to the original Murasame class destroyers have given Japan a fleet of destroyers that remains on par with many other navies. The enhanced capabilities of the Akizuki and Asahi classes gives Japan the ability to conduct missions as complex as tracking improved Chinese submarines down to simple anti-piracy escort missions in the Middle East. The eventual introduction of the two Maya class destroyers will bring the JMSDF's total number of BMD capable destroyers to eight. With these eight BMD ships, Japan has a stronger and more flexible defense against ballistic missiles that can intercept a North Korean ballistic missile well before it reaches Japan. The introduction of CEC gives the JMSDF the ability to integrate more at-sea sensors to build a better idea of the situation and target threats at longer ranges. If the JMSDF were also to acquire SM-6, it would be able to engage aerial targets at over twice the distance than it currently is able. These improvements have provided the JMSDF with similar capabilities as the USN or PLA(N), albeit at a smaller scale.

## 3. The Izumo Class Helicopter Carriers

With both Hyuga class DDHs in service, the JMSDF still had two of the 1980s-era Shirane class DDHs. To replace the Shirane class the JMSDF built two Izumo class DDHs, that, like the Hyuga, were flattop DDHs that looked more like a small traditional aircraft carrier. But at 813 feet, <sup>188</sup> the Izumo was almost 200 feet longer than the Hyuga, which

<sup>186 &</sup>quot;Japan Launches First Improved Atago-class Destroyer."

<sup>&</sup>lt;sup>187</sup> "Standard Missile-6 (SM-6)/Extended Range Active Missile (ERAM)," Jane's by IHS Markit, October 17, 2018, https://janes.ihs.com/Janes/Display/jnw 0076-jnw .

 $<sup>^{188}</sup>$  "Izumo Class," Jane's by IHS Markit, June 5, 2018, https://janes.ihs.com/Janes/Display/jfs\_b312-jfs\_.

made it roughly the size of the American Wasp and America class amphibious assault ships that launched fixed wing strike aircraft.

When the Izumo was commissioned in 2015, the United States Marine Corps was starting to operate F-35B fighter aircraft from the decks of the Wasp and America class ships and Japan was in the process of getting its first F-35A fighter. Even though the F-35A is designed to take off from regular land-based runways, the connection was quickly made that Japan's acquisition of the F-35 and Izumo meant it was gearing up to obtain a true aircraft carrier. Since then the debate has continued and as of the writing of this thesis, Japan slowly expressed its interest in the idea, culminating in an announcement in late November 2018 that the Ministry of Defense is indeed interested in upgrading the Izumo class DDHs to operate the F-35B. 190

The new Izumo flattop DDHs do not possess the same weapon systems of the previous Hyuga class DDHs. While the Hyuga had a small 16-cell VLS to fire ASROCs and six torpedo tubes, the Izumo does not have either. The Izumo class only possesses a bow-mounted sonar, <sup>191</sup> that is at a minimum a passive system that would allow the ship to detect very loud acoustic signals, like an incoming torpedo. Additionally, the Izumo's air defense capability has been downgraded from ESSM to two SeaRAM launchers that carry 11 of the much shorter ranged missiles. The limited sonar capabilities, compared to other JMSDF destroyers, suggest that the flattop DDHs will not be used like the previous DDHs to go out and search for enemy submarines. Instead, the passive sonar systems are likely a defensive system to provide warning of an incoming torpedo. If the bow mounted sonar systems indeed lack an active search and attack capability, it is likely that these ships will operate more like a USN aircraft carrier with its primary mission to carry aircraft while the other ships in the flotilla attempt to keep submarine threats at a distance and defend against virtually all other threats. To compensate for the minimal sonar capability of the ship itself,

<sup>189</sup> Gamble, "Japan's Izumo-Class Helicopter Destroyer: An Aircraft Carrier in Disguise?"

<sup>190 &</sup>quot;Japan Eyes Introduction of Multipurpose Aircraft 'Mother Ship,' Purchase of Extra 100 F-35 Jets."

<sup>191 &</sup>quot;Izumo Class."

the Izumo class DDHs ASW capability is augmented with a large compliment of ASW helicopters that can go out and search for and track enemy submarines.

Despite the current operational status, the idea that an Izumo class DDH can be converted into a launching platform for short takeoff and vertical landing F-35Bs remains, given its design bearing a striking resemblance to an aircraft carrier. The controversy was further fueled by Japan's interest in purchasing F-35Bs for remote island defense. 192 The argument was also broached after the Hyuga was commissioned, but at the time there was no indication that the JSDF considered buying F-35Bs and at the time the idea of F-35Bs on a JMSDF DDH was unlikely to become a reality. <sup>193</sup> It is not clear whether these aircraft would fly from small airfields on those remote islands or operate from a DDH. It would make more sense for the aircraft to fly from the Izumo class DDHs as required for island defense since the DDH would bring the necessary maintenance facilities whereas unless facilities are built on the remote islands the aircraft will have limit support. The Japanese Ministry of Defense also had the builder of the two ships conduct a study on the feasibility of converting the ships into actual aircraft carriers to support of U.S. military operations by providing an extra landing platform for U.S. Marine Corps F-35Bs that require emergency landings. 194 The ship builder's report concluded that the two ships can be converted to support F-35B operations but it is also reported that the ship had always been designed support the aircraft. 195 When combined, all of these points continue to drive the interest in what Japan will do with its DDHs.

Even if Japan purchased F-35Bs and converted the two Izumo class DDHs into actual aircraft carriers, it does not mean Japan is on a path to disrupt the current status quo of the region. The combination of the aircraft and ship could be used to enhance the JMSDF's ability defend the Japanese homeland and conduct SLOC defense. For homeland defense, this combination would allow Japan to add another layer of defense by giving the

<sup>192 &</sup>quot;Japan Eyes Acquiring F-35Bs for Defence of Remote Islands."

<sup>193</sup> Koda, "A New Carrier Race?," 56.

<sup>194</sup> Franz-Stefan Gady, "Study: Japan's Largest Warship Can Support F-35B," The Diplomat, May 2, 2018, https://thediplomat.com/2018/05/study-japans-largest-warship-can-support-f-35b/.

<sup>195</sup> Gady, "Japan's Largest Warship Can Support F-35B."

Japan Self-Defense Force the ability to intercept threats at a much greater range from the homeland than what the Japan Air Self Defense Force can do with just fixed wing fighter aircraft operating from bases in Japan. And like the Japan Air Self Defense Force, F-35Bs operated by the JMSDF could be relegated to defensive purposes only. For both homeland defense and SLOC defense the addition of the F-35B to the JMSDF inventory would allow the JMSDF to interdict hostile ships or aircraft at ranges well over the current capability. JMSDF destroyers can attack hostile surface ships with anti-ship missiles out to 81 nautical miles. <sup>196</sup> The F-35B's combat radius of 450 nautical miles <sup>197</sup> gives the JMSDF another layer of defense that overall allows the JMSDF to keep potential threats much farther from Japan. Putting the combat capability of the F-35 aside, the sensors of the aircraft would help the JMSDF capture more data about what is happening in the maritime regions that it is most worried about.

The issue with Japan operating a DDH like an actual aircraft carrier is that it gets into the grey-zone of what is considered defensive and offensive. An Izumo class ship that carries F-35Bs technically has a significant strike capability that does not exist when the Izumos carry ASW helicopters. As the distance from Japan that the ship and aircraft combination increases, Japan gets into an area that looks more like power projection than it looks like homeland defense or SLOC protection.

The critical piece of this development will be how Japan chooses to employ the combination. Until Japan buys F-35Bs and modifies Izumo class to handle the aircraft, it is difficult to say how Japan will make use of this new capability. But the mere thought that Japan will someday soon have an actual aircraft carrier raised concern among Japan's neighbors. In 2017 when reports were coming out that Japan was considering buying the F-35B and pairing it with the Izumo, China urged Japan to "act cautiously in the area of military security." 198

<sup>&</sup>lt;sup>196</sup> "Type 88 (SSM-1); Type 12; Type 90 (SSM-1B); SSM-2."

<sup>197 &</sup>quot;Lockheed Martin F-35 Lightning II," Janes by IHS Markit, January 23, 2018, https://janes.ihs.com/Janes/Display/jawa1347-jawa.

<sup>198 &</sup>quot;China Urges Japan to 'Act Cautiously' on Considerations to Refit Izumo Class for F-35B," Jane's by IHS Markit, December 27, 2017, https://janes.ihs.com/Janes/Display/FG 707352-JNI.

#### C. POLICY CHANGES

Since 2010, the JMSDF has experienced several policy changes that have expanded its ability to participate in the international environment. Two of those changes in particular are noteworthy: asserting the right to participate in collective self-defense and the security cooperation deployments to the Indian Ocean. While collective self-defense is authorized under international law, Japan had barred itself from participating because it determined "that collective self-defense exceeded the scope of a landmark 1954 constitutional interpretation allowing Japan only to develop and employ military capabilities not exceeding the minimum level necessary for self-defense." 199 Japan's decision to allow the JSDF to participate in collective self-defense came with a number of restrictions that makes the decision seem more of a symbolic change than an actual change. On the other hand, Japan decided to send several JMSDF ships to the Indian Ocean in 2017 and 2018 to train with regional partners. On these deployments, the JMSDF helped build the naval capacity of those regional partners. In this latter policy change, Japan has shown that its commitment to the region is not just symbolic. Either way, both examples show that the JMSDF is adapting to the environment around it to find the best way to create a stable environment for all.

#### 1. Collective Self Defense Allowed

In 2015, the Japan Diet passed the Legislation for Peace and Security. The legislation contained one of the most significant changes to the JSDF since its inception; the JSDF could participate in collective self-defense, albeit with many limitations. The legislation provides the JSDF with a legal basis to respond to situations that fall short of war.<sup>200</sup> For the JMSDF to participate in collective self-defense at sea three conditions must be met: "(1) Japan's 'national survival' ... must be threatened by a 'clear danger' ..., (2) no alternative means of addressing the threat can exist, and (3) whatever force Japan uses

<sup>199</sup> Liff, "Abe the Evolutionary," 86.

<sup>200</sup> Ryo Hinata-Yamaguchi, "Japan's Defense Readiness: Prospects and Issues in Operationalizing Air and Maritime Supremacy," *Naval War College Review* 71, no. 3 (Summer 2018), https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=5124&context=nwc-review.

must be limited to the minimum necessary."<sup>201</sup> With these tight restrictions in place, Japan is still not in a position to use the JSDF to back its diplomatic efforts the way other countries do. The first restriction in particular is the most significant of the three since a threat to Japan's survival sets a high bar. Many incidents the JSDF may face overseas will likely not present any direct threat to Japan meaning the JSDF would not be able to help a partner nation. Although this new interpretation of the constitution has yet to be tested, it is a sign that Japan is improving its defensive capability by allowing the JSDF to play a stronger role in its defense alliance with the United States. By extension, collective self-defense gives the JSDF the ability to contribute more directly to the ensuring a stable international environment.

The collective self-defense authorization gives the JMSDF a greater ability to help the United States maintain the status quo in the region. This policy change gives the JMSDF more opportunities to assist its regional partners when a crisis occurs, albeit nowhere near the same as the United States. Japan maintains some rigid restrictions on the use of collective self-defense designed to prevent it from getting wrapped up in other countries' conflicts. Regardless, the move is still significant because it does point to Japan's willingness to participate in the international community like any other nation. This strengthens Japan's relationships with partner nations to build a stronger regional community that can resist coercion by other nations.

In that same vein, the decision is like the 2017 decision to send JMSDF to the Indian Ocean to work with regional partners, in that both decisions are attempts to show Japan's commitment to regional stability. At the same time, this move could serve as a fuel in the ongoing tensions with China and North Korea as those two nations see the move as a military escalation on Japan's part.<sup>202</sup>

<sup>201</sup> Adam Liff, "Policy by Other Means: Collective Self-Defense and the Politics of Japan's Postwar Constitutional Reinterpretations," *Asia Policy*, no. 24 (July 2017): 160, http://dx.doi.org/10.1353/asp.2017.0035.

<sup>202</sup> Christopher W. Hughes, "Japan's Strategic Trajectory and Collective Self-Defense: Essential Continuity or Radical Shift?," *The Journal of Japanese Studies* 43, no. 1 (Winter 2017): 126, Project Muse.

# 2. Indian Ocean Deployments

In 2017, the JS Izumo, the lead ship of the latest class of DDHs, traveled to the Indian Ocean where it participated in an ASW-focused Malabar exercise with the United States and Indian navies. <sup>203</sup> The deployment of JMSDF ships to areas far from Japan is not new as Japan has participated with Combined Task Force 151 anti-piracy operations in the Middle East since 2013. But the deployments are significant considering the Izumo class ships are the largest naval ships Japan has built since World War II. Additionally, the ships transited through the South China Sea where China claims ownership over large swaths of the maritime environment. But the JMSDF ships did not transit within the claimed 12 nautical mile territorial waters of any of the disputed islands. While the USN routinely conducts such transits to show China it does not support China's claim, such action would go against Japan's constitutional requirement to solve issues diplomatically.

In June 2018, Japan's Defense Minister Itsunori Onodera attended the Shangri-La Dialogue to discuss security issues in Asia. While discussing the North Korea threat Defense Minister Onodera also took time to talk about Japan's contribution to the stability of the Indo-Pacific region. Onodera highlighted the importance of the region, not just for Japan but for the entire world stating:

The Indo-Pacific is increasingly becoming the centre of the global economy, and we hope to contribute to efforts to maintain it as a free, open and rule-based global commons that can bring wealth and prosperity to all countries in the region. Japan seeks to enhance a free and open Indo-Pacific as part of its regional strategy, and we will do so with maximum regard and respect to ASEAN's centrality and unity, so that it will help further the development of ASEAN, which is central to security in the Indo-Pacific. <sup>204</sup>

Two months later the JS Kaga, an Izumo class DDH, departed Japan with two escort destroyers to start the JMSDF's second multi-month deployment to the Indian Ocean in

<sup>203</sup> Ankit Panda, "Japan to Dispatch Izumo-class Carrier to South China Sea, Indian Ocean," The Diplomat, July 4, 2018, https://thediplomat.com/2018/07/japan-to-dispatch-izumo-class-carrier-to-south-china-sea-indian-ocean/.

<sup>&</sup>lt;sup>204</sup> Itsunori Onodera, "De-Escalating the North Korea Crisis" (speech, Shangri-La Dialogue, Singapore, June 2, 2018), https://www.iiss.org/events/shangri-la-dialogue/shangri-la-dialogue-2018.

support of Japan's regional strategy highlighted by Defense Minister Onodera. <sup>205</sup> A JMSDF spokesman said the intent of the deployment is to "contribute to a 'free and open' Indo-Pacific." <sup>206</sup> This Indian Ocean deployment marks the second year in a row that the JMSDF has sent a DDH to the Indian Ocean. For Japan, it is the chance to show its commitment to regionally stability by conducting training exercises with other nations. During the deployment, the three JMSDF ships stopped in Indonesia to conduct training with the Indian, Singaporean, Sri Lankan, the Philippine, and Indonesian navies. <sup>207</sup> But the deployment has drawn criticism, specifically from China after the Kaga conducted an ASW exercise with a JMSDF diesel submarine, the JS Kuroshio, in an area believed to be within China's 9-dash line. In China's view, the exercise showed that Japan's lack of respect for the resolution of the South China Seas issue through negotiations. <sup>208</sup> Prime Minister Abe denies that the exercise was intended to send a message to any nation. <sup>209</sup> Regardless of whether or not Japan was trying to send a message to China, both deployments and the ASW exercise show that the JMSDF has the ability to operate throughout the region when it is needed.

The JMSDF has been deploying to the Indian Ocean regularly since it started assisting the United States in the Global War of Terror in 2001. Since then the presence of JMSDF ships in the Indian Ocean has become relatively commonplace. But those deployments consisted of a supply ship and one or two destroyers whose primary mission was to protect the supply ship. The deployment of the JS Kaga and JS Izumo are not like the logistical support missions that started in 2001. The consecutive deployments of the JMSDF's largest ships is representative of Japan's growing defense policy. Twenty years ago, the current flattop DDHs were barely concepts. Twenty years ago, the JMSDF rarely

<sup>&</sup>lt;sup>205</sup> Panda, "Japan to Dispatch Izumo-class Carrier to South China Sea, Indian Ocean."

<sup>&</sup>lt;sup>206</sup> Hana Kusumoto and Caitlin Doornbos, "Japan to Deploy Helicopter Carrier for Two-month Indo-Pacific Mission," Stars and Stripes, August 23, 2018, https://www.stripes.com/news/japan-to-deploy-helicopter-carrier-for-two-month-indo-pacific-mission-1.543888.

<sup>207 &</sup>quot;Maritime Diplomacy," Jakarta Globe, September 18, 2018, https://jakartaglobe.id/eyewitness/maritime-diplomacy/.

<sup>&</sup>lt;sup>208</sup> "JMSDF Submarine Takes Part in South China Sea Exercise," Jane's by IHS Markit, September 17, 2018, https://janes.ihs.com/Janes/Display/1841112.

<sup>&</sup>lt;sup>209</sup> "JMSDF Submarine Takes Part in South China Sea Exercise."

deployed its ships farther than 1,000 nautical miles from Tokyo. These deployments show that Japan is committed to using the JMSDF to support the status quo through the physical presence of the JMSDF in the area and by supporting nations with less developed naval forces through training exercises. As the JMSDF works with more regional naval forces to build their capabilities, it is arming more nations with the skills to push back and deter China from continuing its attempts to change the status quo through coercion.

#### D. CONCLUSION: DEVELOPMENTS SINCE 2010

So far, the 2010s have seen a great deal of change. China's military reached a point where it could begin aggressively attempting to enforce its claims in the South and East China Sea. From 2012 on, Japan has seen regular incursions of Chinese government vessels in the waters around the Senkaku islands. North Korea experienced a leadership change that called the fragile stability of the Korean Peninsula into doubt. This has been replaced with renewed hopes for peace on the peninsula as North Korea has, within the last year, stated that it is open to the idea of officially ending the Korean War. This past year has been relatively calm, lacking the typical bellicose rhetoric and hostile actions that had become commonplace.

In response to China's increased naval activity over the past six years, the JMSDF has continued to introduce new ships with some of the best weapon systems available. North Korea's provocative actions, that include multiple long-range missile tests and hostile rhetoric, gave Japan the push to upgrade all of its AEGIS destroyers to conduct BMD. Additionally, the JMSDF will be adding two more AEGIS destroyers that will be BMD capable from the start, increasing the JMSDF's total of BMD capable ships to eight. The equipment of the JMSDF continued to improve as weapons technology advanced. The biggest change has been the Ministry of Defense's recent announcement that it would like to buy F-35Bs and upgrade the Izumo class DDHs to operate the aircraft. This move could push the JMSDF into the over-response to threats category, but it really depends on how Japan intends to use the combination. Presently, the JMSDF has built a fleet that is just right for the current environment; not too big to be considered a threat, but also not so small and incapable that it is overlooked.

Policy updates have continued to expand the JMSDF's operational ability. First, by officially allowing collective self-defense and then sending JMSDF ships to the Indian Ocean to participate in training exercises with multiple countries. Both policy changes have shown that Japan is committed to building a strong regional community. Overall, all the changes and advancements made within the JMSDF have increased its ability to contribute more to promoting a safe and secure region. As international cooperation becomes the preferred way to create regional stability, these policy changes help Japan participate in the maintenance of the regional order. These two policy changes are appropriate responses to the changing threat environment and excellent first steps to help Japan take a more active role in the region.

THIS PAGE INTENTIONALLY LEFT BLANK

## VI. CONCLUSION

This thesis set out to determine how Japan was responding to the threats it has identified over the last three decades. Three options were considered for Japans response: an over, under, or a just right response. Based on the evidence presented in this thesis, the JMSDF is appropriately responding to threats. While constrained by the current interpretations of Article 9, the JMSDF's defensive capability has kept pace with the threat environment surrounding Japan.

The weapon systems purchased and policies implemented have all been measured responses to the changing security environment Japan faces. Ballistic missile defense was added to JMSDF AEGIS destroyers in response to the 1998 North Korean rocket launch that overflew Japan. After the September 11<sup>th</sup> attacks in the United States, Japan passed the Anti-Terrorism Special Measures Law to allow the JMSDF to support the American led global war on terror by supplying fuel to USN warships transiting to and from the Middle East. While the law did not allow the JMSDF to participate in combat operations, the logistical support the JMSDF provided demonstrated Japan's was willingness to contribute to the maintenance of the international environment. The various laws that have been passed to allow the JMSDF to conduct anti-piracy missions took Japan's participation in the international environment one step further by allowing the JMSDF to deploy to piracy hotspots to protect Japanese shipping. Since these changes were made in light of the changing threat environment, they constitute appropriate responses for the JMSDF.

Over the last three decades, there has not been a case where Japan implemented a policy or bought equipment that deliberately went above and beyond the minimum necessary defense capability required of the JMSDF. Japan did find itself in the over-response category when it attained a relative naval superiority in the region after the Cold War, but that was not an intentional move. Instead, it was the result of the disappearance of the Soviet naval threat of the Cold War. As a result of the lower threat environment, the 1996 NDPO reduced the size of the JMSDF from approximately 60 destroyers to 50. Subsequent NDPGs would again reduce the number of destroyers in the JMSDF's inventory. However, once it was apparent that China's naval expansion represented a threat

to Japanese maritime interests, the 2013 NDPG authorized the JMSDF to increase the number of destroyers in its inventory. These changes to the total JMSDF fleet size show how it has changed to maintain a fleet that is just right for the threat environment.

The recent announcement by the Ministry of Defense to turn the Izumo into a true aircraft carrier could fall into the over-response to threats category. Aircraft carriers are typically a power projection tool that infers an offensive capability for the country that possesses it. Pairing the capabilities of the F-35B with the Izumo class helicopter carriers could give Japan a legitimate offensive strike capability that is possessed by very few nations. If the JMSDF used the modified Izumo class as a power projection tool, without any reinterpretation or change to Article 9, then the change would certainly be an over-response to the threat environment. But since there have been no indications that Japan will turn the JSDF into a military allowing it to be used as a diplomatic tool, it is unlikely that an Izumo aircraft carrier will be used to project power in the name of Japan. In other words, without a policy change accompanying the Izumo class modifications allowing the JSDF to possess war material, the Izumo will still be a defensive weapon. If the modifications to the Izumo occur they will not be an over-response to the threat environment, instead they will be to build the JMSDF's defensive capabilities.

As Japan continues to move towards acquiring an aircraft carrier capability, the possibility exists that other countries will perceive the move as Japan becoming more militaristic. It is already evident that China is suspicious of Japan's intentions with the Izumo class, and this sentiment could spread to other countries if Japan's intentions for the conversion are unclear. This in turn could serve to increase the tension between Japan and its neighbors reducing the stability of the region. How this situation truly unfolds in the following years will be of great interest.

The JMSDF's regular introduction of new ships, weapons, and sensors cannot be considered an over response to threats. These purchases are necessary to maintain optimum defensive capabilities within the JMSDF. With each purchase, the JMSDF is ensuring that the best defense capabilities are introduced to the fleet to counter the latest naval weapons that pose a threat to Japan. In terms of overall numbers, the JMSDF possesses enough ships to maintain an adequate defensive posture. With one escort flotilla typically available

throughout the year, Japan is unable to use the JMSDF in anything more than its primary role of defense of Japan and its SLOCs. Despite the presence of some of the latest defensive systems, the small overall size of the JMSDF could also be considered a gap in Japan's maritime defense considering the larger size of the PLA(N). But Japan is not expecting China to launch an invasion against the main Japanese islands. A more likely scenario, albeit still unlikely, is an attempt by China to seize a remote Japanese island. In this case, the JMSDF would be well equipped to repel such an attack. Furthermore, the United States would likely get involved under the terms of the Japan-U.S. alliance. Since there is a low expectation of a full force invasion from China, building a fleet capable of fighting the PLA(N) head to head is not necessary and would be an over-reaction to the China threat.

While some policies and equipment introduced have given the JMSDF capabilities it did not have before, these new capabilities were introduced in response to threats Japan identified and not in excess of what was needed. Equipment purchases have been made to keep pace with the advancement of weapons systems. The JMSDF routinely upgrades its ships and deploys new ship classes to ensure that the latest defensive systems are introduced to the fleet. If anything, these changes to the JMSDF can be seen as rectifying gaps in its defensive posture. In the case of the growing anti-ship cruise missile threat posed by China, the JMSDF upgraded its ships to fire ESSM. This new missile allowed JMSDF to carry more defensive missiles, and it provided a better defense against the increasingly sophisticated Chinese anti-ship cruise missiles.

There are also no indications that Japan deliberately ignored a threat creating a gap in defensive capability or under-responded to a threat. The only instance where it could be said that the JMSDF was not capable of defending against a threat was when North Korea launch a rocket that flew over Japan in 1998. Prior to this incident, Japan was beginning to look into BMD by allocating a small amount of funding to assist in the program started by the United States. But since the North Korean missile threat was not considered to be fully developed, Japan was not willing to commit to the larger investment required to purchase BMD systems for the JMSDF. Additionally, sea-based BMD was still in its infancy, meaning the technology was not even available at the time for the JMSDF to adopt. However, once the 1998 test made the threat apparent, the JMSDF became central to the

development of BMD capabilities, and the JMSDF AEGIS destroyers were upgraded to conduct the BMD mission.

Looking at how Japan uses its capabilities, rather than just what those capabilities are, better describes how the JMSDF is responding to the threats it faces. From this perspective, the most progressive policies of JMSDF, such as the authorization to participate in collective self-defense and deploying DDHs to the Indian Ocean to conduct training exercises, do not give Japan an implicit offensive combat capability. Instead, these policies have given the JMSDF more freedom to work with other nations and help strengthen the capabilities of smaller navies in the region. Since Japan has not signaled that it will use the JMSDF in anything more than its current defensive role, it is difficult to say that the JMSDF is over-responding to threat. Policy changes have given the JMSDF the ability to forge closer partnerships and have expanded the JMSDF's operational reach allowing it to defend Japanese interests as far as the Gulf of Aden.

During the Cold War, the JMSDF was solely focused on defending against Soviet naval power. Maintaining the balance between pro-Western and communist nations was carried out mostly by the United States. After the Cold War, the decreased American naval presence pushed the Japan to use the JMSDF in a new way. The JMSDF became involved in proactive measures focused on training with other nations to build their capabilities and build strong partnerships. Through these efforts, Japan planned to create stability by preventing conflicts from arising in the first place. Building up the navies of the smaller countries in the region provides a check against China's coercive tactics. This strategy is similar to the strategies of many other nations who seek to build partnerships against common foes. Since Japan cannot use the JMSDF in the same aggressive way as a country like the United States, where the threat of the use of force is real, the JMSDF's partnership exercises are just as effective.

This thesis focused on threats identified by the Japanese government and how the JMSDF equipment and policy adapted to those threats. In doing so, this paper left out he internal political debates that also play a fundamental role in how the JMSDF functions. The intentional avoidance of internal political debates was done to highlight how the JMSDF has been able to provide Japan with an adequate maritime defense force within the

self-imposed political constraints. The gradual changes of the JMSDF were not made in a vacuum but instead were the results of political debates on the role of the JMSDF. These political debates will remain a crucial part of the JMSDF's future especially as Japan continues to debate the future role of the JSDF. Follow on research should include these findings and consider the political debates that were happening concurrently.

In terms of the overall defense of Japan, this thesis only covers a portion Japan's defense. The nature of the JMSDF's work to defend maritime SLOCs requires that it operates far from Japan and is subject to much higher visibility outside of Japan. This makes it a better representation of how Japan is adapting to the changing threat environment. Japan's defense is not shouldered solely by the JMSDF, but the JMSDF is the branch that is most often seen outside of Japan. The Ground Self Defense Force and Air Self Defense Force spend much more of their time on or close to Japan making them less visible to the international community. While not as visible as the JMSDF, they are also changing to meet the evolving threats Japan faces. Additional research along the same lines as this thesis that includes the Ground and Air Self Defense Forces could provide greater insight into whether Japan is on a path to normalization.

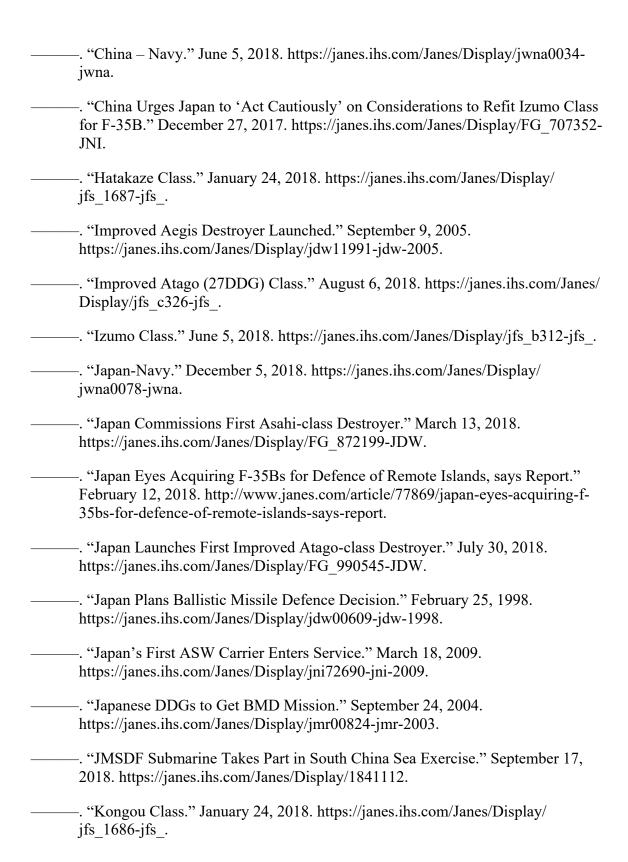
The JMSDF's future has not been written, but if the past three decades are representative of the future it is likely that the JMSDF will continue to meet the maritime threats that face Japan. Nothing more and nothing less. It is probable that the JMSDF's capabilities will continue to expand, both in terms of equipment and policy. At the same time, expect to see Japan remain true to fundamental purpose of Article 9, which is to prevent war from being an option in the course of diplomatic disputes.

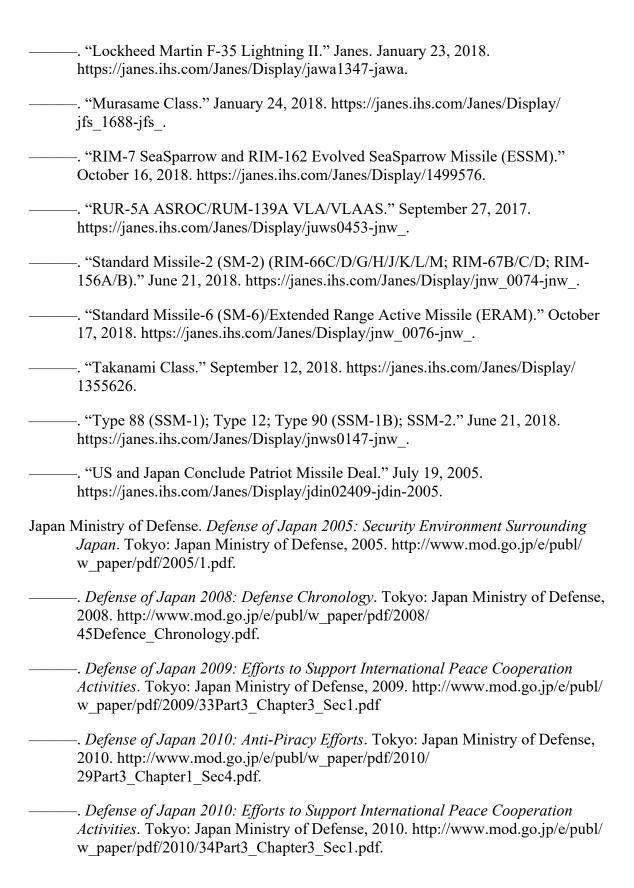
THIS PAGE INTENTIONALLY LEFT BLANK

# LIST OF REFERENCES

- Abe, Shinzo. *National Security Strategy*. Tokyo: Prime Minister of Japan and His Cabinet, 2013. http://japan.kantei.go.jp/96\_abe/documents/2013/\_\_icsFiles/afieldfile/2013/12/17/NSS.pdf.
- Annenberg Learner. "U.S. and Japan Mutual Defense Assistance Agreement." March 8, 1954. https://www.learner.org/workshops/primarysources/coldwar/docs/usjapan.html.
- Asia Maritime Transparency Initiative. "Philippines v. China: Arbitration Outcomes." July 12, 2016. https://amti.csis.org/arbitration-map/.
- Auer, James E. *The Postwar Rearmament of Japanese Maritime Forces, 1945–71.* New York: Praeger, 1973.
- Auslin, Michael. "Japan's National Power in a Shifting Global Balance." In *Strategic Asia 2015–16: Foundations of National Power in the Asia-Pacific*, edited by Ashley Tellis, Alison Szalwinski, and Michael Wills, 56–89. Seattle: National Bureau of Asian Research, 2015.
- Buck, James H. "The Japanese Self-Defense Forces." *Asian Survey* 7, no. 9 (September 1967): 597–613. https://doi.org/10.2307/2642617.
- Center for Strategic Studies and International Studies. "Statesmen's Forum: Shinzo Abe, Prime Minister of Japan." February 22, 2013. https://csis-prod.s3.amazonaws.com/s3fs-public/legacy\_files/files/attachments/132202\_PM\_Abe\_TS.pdf.
- Cha, Victor. *The Impossible State: North Korea, Past and Future.* New York: HarperCollins, 2013.
- Combined Maritime Forces. "CTF 151: Counter-Piracy." Accessed October 15, 2018. https://combinedmaritimeforces.com/ctf-151-counter-piracy/.
- Drifte, Reinhard. *Japan's Policy Towards the South China Sea Applying "Proactive Peace Diplomacy?"* PRIF Report No. 140. Frankfurt: Peace Research Institute Frankfurt, 2016. http://www.hsfk.de/fileadmin/HSFK/hsfk\_publikationen/prif140.pdf.
- Ferguson, Joseph. "Al Qaeda's Threat to Japan: Tokyo's Wake Up Call to The War on Terrorism." The Jamestown Foundation. January 30, 2004. https://jamestown.org/program/al-qaedas-threat-to-japan-tokyos-wake-up-call-to-the-war-on-terrorism-2/.

- Fund for Peace. "Fragile States Index." Accessed October 29, 2018. http://fundforpeace.org/fsi/.
- Fujishige, Atsuhiko. "New Japan Self-Defense Force Missions Under the 'Proactive Contribution to Peace' Policy: Significance of the 2015 Legislation for Peace and Security." Center for Strategic and International Studies. July 21, 2016. <a href="https://www.csis.org/analysis/new-japan-self-defense-force-missions-under-%E2%80%9Cproactive-contribution-peace%E2%80%9D-policy">https://www.csis.org/analysis/new-japan-self-defense-force-missions-under-%E2%80%9Cproactive-contribution-peace%E2%80%9D-policy</a>.
- Gady, Franz-Stefan. "Study: Japan's Largest Warship Can Support F-35B." The Diplomat. May 2, 2018. https://thediplomat.com/2018/05/study-japans-largest-warship-can-support-f-35b/.
- Gamble, Matthew. "Japan's Izumo-Class Helicopter Destroyer: An Aircraft Carrier in Disguise?" Center for International Maritime Security. April 11, 2016. http://cimsec.org/japans-izumo-class-helicopter-destroyer-aircraft-carrier-disguise/24130.
- Gittings, John. "North Korea Fires Missile Over Japan." *The Guardian*, September 1, 1998. https://www.theguardian.com/world/1998/sep/01/northkorea.
- Graham, Euan. Japan's Sea Lane Security, 1940–2004. New York: Routledge, 2006.
- Hinata-Yamaguchi, Ryo. "Japan's Defense Readiness: Prospects and Issues in Operationalizing Air and Maritime Supremacy." *Naval War College Review* 71, no. 3 (Summer 2018). https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=5124&context=nwc-review.
- Hughes, Christopher W. "Japan's Strategic Trajectory and Collective Self-Defense: Essential Continuity or Radical Shift?" *The Journal of Japanese Studies* 43, no. 1 (Winter 2017): 93–126. Project Muse.
- Jakarta Globe. "Maritime Diplomacy." September 18, 2018. https://jakartaglobe.id/eyewitness/maritime-diplomacy/.
- Jane's by IHS Markit. "Aegis." October 23, 2018. https://janes.ihs.com/Janes/Display/1505034.
- ———. "Aiming High: Aegis Ballistic Missile Defense." December 18, 2008. https://janes.ihs.com/Janes/Display/jdw38613-jdw-2009.
- ------. "Akizuki Class." June 13, 2017. https://janes.ihs.com/Janes/Display/jfs\_a797-jfs\_.
- ——. "Atago Class." June 5, 2018. https://janes.ihs.com/Janes/Display/jfs\_5544-jfs\_.







Johnson, Jesse. "North Korea Threatens to Make Japan and U.S. Bases 'Disappear." *Japan Times*, November 20, 2017. https://www.japantimes.co.jp/news/2017/11/20/national/north-korea-threatens-make-japan-u-s-bases-disappear/#.Wrrge4jwZPY. Koda, Yoji. "A New Carrier Race? Strategy, Force Planning, and JS Hyuga." Naval War College Review 64, no. 3 (Summer 2011). https://digital-commons.usnwc.edu/cgi/ viewcontent.cgi?article=1574&context=nwc-review. -. "Japan's Perceptions of Interests in the South China Sea." Asian Policy, no. 21 (January 2016): 29–35. https://doi.org/10.1353/asp.2016.0011. —. "Perspectives on the Japan Maritime Self Defense Force." Working paper, Sea Power Centre – Australia, 2012. Kusumoto, Hana, and Caitlin Doornbos. "Japan to Deploy Helicopter Carrier for Twomonth Indo-Pacific Mission." Stars and Stripes. August 23, 2018. https://www.stripes.com/news/japan-to-deploy-helicopter-carrier-for-two-monthindo-pacific-mission-1.543888. Liff, Adam. "The 2015 US-Japan Guidelines for Defense Cooperation: Toward 'A More Balanced and Effective Alliance." Pacific Forum. April 23, 2015. https://www.pacforum.org/analysis/pacnet-27-2015-us-japan-guidelines-defensecooperation-toward-more-balanced-and-effective. —. "Japan's Defense Policy: Abe the Evolutionary." The Washington Quarterly 38, no. 2 (Summer 2015): 79–99. http://dx.doi.org/10.1080/0163660X.2015.1064711. -. "On the Verge of History? Japan's 2016 Election and Prospects for Article 9 Revision." Pacific Forum. July 11, 2016. https://www.pacforum.org/analysis/ pacnet-56-verge-history-japans-2016-election-and-prospects-article-9-revision. -. "Policy by Other Means: Collective Self-Defense and the Politics of Japan's Postwar Constitutional Reinterpretations." Asia Policy, no. 24 (July 2017): 139– 172. http://dx.doi.org/10.1353/asp.2017.0035. -. "Self-Restraint' With Japanese Characteristics." Asia Maritime Transparency Initiative. March 10, 2016. https://amti.csis.org/self-restraint-with-japanesecharacteristics/. McDorman, Ted L. "The South China Sea Arbitration." American Society of International Law. November 18, 2016. https://www.asil.org/insights/volume/20/ issue/17/south-china-sea-arbitration. Ministry of Foreign Affairs of Japan. "Japan's Actions Against Piracy off the Coast of Somalia." Accessed September 16, 2018. https://www.mofa.go.jp/policy/piracy/ ja somalia 1210.html. -. "Outline of Japan's International Peace Cooperation." May 14, 2015. https://www.mofa.go.jp/fp/ipc/page22e 000683.html.

- "Senkaku Islands Q&A." April 13, 2016. https://www.mofa.go.jp/region/asia-paci/senkaku/qa\_1010.html.
  "The Numbers of Chinese Government and other vessels that Entered Japan's Contiguous Zone or Intruded into Territorial Sea Surrounding the Senkaku Islands." September 6, 2018. https://www.mofa.go.jp/files/000170838.pdf. *National Defense Program Outline in and After FY1996.* Tokyo: Ministry of Foreign Affairs of Japan, 1995. https://www.mofa.go.jp/region/n-america/us/q&a/ref/6a.html.
- Ministry of National Defense Republic of Korea. *Joint Investigation Report on the Attack Against ROK Ship Cheonan*. Seoul: Myungjin Publication Inc., 2010.
- Missile Defense Agency. "Ballistic Missile Defense Intercept Flight Test Record." May 30, 2017. https://www.mda.mil/global/documents/pdf/testrecord.pdf.
- National Diet Library. "Potsdam Declaration." July 26, 1945. http://www.ndl.go.jp/constitution/e/etc/c06.html.
- Nuclear Threat Initiative. "The CNS North Korea Missile Test Database." May 4, 2018. https://www.nti.org/analysis/articles/cns-north-korea-missile-test-database/.
- Onodera, Itsunori. "De-escalating the North Korea Crisis." Speech at Shangri-La Dialogue, Singapore, June 2, 2018. https://www.iiss.org/events/shangri-la-dialogue/shangri-la-dialogue-2018.
- Oros, Andrew. *Japan's Security Renaissance: New Policies and Politics for the Twenty-First Century.* New York: Columbia University Press, 2017.
- Panda, Ankit. "Japan to Dispatch Izumo-class Carrier to South China Sea, Indian Ocean." The Diplomat. July 4, 2018. https://thediplomat.com/2018/07/japan-to-dispatch-izumo-class-carrier-to-south-china-sea-indian-ocean/.
- Park, Ju-min. "Factbox: North Korea's Missile and Nuclear Tests." Reuters. April 6, 2017. https://www.reuters.com/article/us-northkorea-missiles-bargaining-factbo/factbox-north-koreas-missile-and-nuclear-tests-idUSKBN178127.
- Patalano, Alessio. "Seapower and Sino-Japanese Relations in the East China Sea." *Asian Affairs* 45, no. 1 (January 2014): 34–54. https://doi.org/10.1080/03068374.2013.876809.
- ——. "Japan as a Seapower: Strategy, Doctrine, and Capabilities Under Three Defence Reviews, 1995–2010." *Journal of Strategic Studies* 37, no. 3 (April 2014): 403–441. https://doi.org/10.1080/01402390.2014.904788.

- Prime Minister of Japan and His Cabinet. "The Anti-Terrorism Special Measures Law." October 2001. http://japan.kantei.go.jp/policy/2001/anti-terrorism/1029terohougaiyou e.html.
- -----. "The Constitution of Japan." November 3, 1946. https://japan.kantei.go.jp/constitution\_and\_government\_of\_japan/constitution\_e.html
- Pryor, Crystal and Tom Le. "Looking Beyond 1 Percent: Japan's Security Expenditures." The Diplomat. April 3, 2018. https://thediplomat.com/2018/04/looking-beyond-1-percent-japans-security-expenditures/.
- Rich, Motoko. "Shinzo Abe Announces Plan to Revise Japan's Pacifist Constitution." *New York Times*, May 3, 2017. https://www.nytimes.com/2017/05/03/world/asia/japan-constitution-shinzo-abe-military.html.
- Sajima, Naoko, and Kyoichi Tachikawa. *Japanese Sea Power: A Maritime Nation's Struggle for Identity*. Canberra: Sea Power Centre-Australia, 2009.
- Samuels, Richard J. "Japan's Goldilocks Strategy." *The Washington Quarterly*, 29, no. 4 (Autumn 2006): 111–125. Project Muse.
- ——. "New Fighting Power!' Japan's Growing Maritime Capabilities and East Asian Security." *International Studies* 32, no. 3 (Winter 2007): 83–112. Project Muse.
- ------. "Securing Japan: The Current Discourse." *The Journal of Japanese Studies* 33, no. 1 (Winter 2007): 124–152. Project Muse.
- ———. Securing Japan: Tokyo's Grand Strategy and the Future of East Asia. Ithaca: Cornell University Press, 2007.
- Sang-Hun, Choe. "In Hail of Bullets and Fire, North Korea Killed Official Who Wanted Reform." *New York Times*, March 12, 2016. https://www.nytimes.com/2016/03/13/world/asia/north-korea-executions-jang-song-thaek.html.
- Sato, Yoichiro. "Southeast Asian Receptiveness to Japanese Maritime Security Cooperation." Asia-Pacific Center for Security Studies. September 27, 2007. https://apcss.org/Publications/Maritime%20security%20cooperation%20Japan-SE%20Asia%20Sato.pdf.
- Szechenyi, Nicholas. "U.S.-Japan Alliance: Prospects to Strengthen the Asia-Pacific Order." In *Strategic Asia 2014–15: U.S. Alliances and Partnerships at the Center of Global Power*, edited by Ashely Tellis, Abraham Denmark, and Greg Chaffin, 35–59. Seattle: National Bureau of Asian Research, 2014.
- Tatsumi, Yuki. "What North Korea's ICBM Means for Japan's Defense Planning." The Diplomat. December 12, 2017. https://thediplomat.com/2017/12/what-north-koreas-icbm-means-for-japans-defense-planning/.

- ———. "What Sort of Defense Build-Up Does Japan Really Need?" The Diplomat. June 30, 2016. https://thediplomat.com/2016/06/what-sort-of-defense-build-up-does-japan-really-need/.
- United Nations. "Cambodia UNITAC: Summary." Accessed September 26, 2018. https://peacekeeping.un.org/mission/past/untacbackgrl.html.
- Weisman, Steven R. "Japanese Premier Vows 'Even Greater Efforts' on Defense." *New York Times*, May 9, 1981. https://www.nytimes.com/1981/05/09/world/japanese-premier-vows-even-greater-efforts-on-defense.html.
- Wooley, Peter J. *Japan's Navy, Politics and Paradox, 1971–2000.* Boulder: Lynne Rienner, 2000.
- Yoichiro Sato, "Southeast Asian Receptiveness to Japanese Maritime Security Cooperation," Asia-Pacific Center for Security Studies, September 27, 2007, https://apcss.org/Publications/Maritime%20security%20cooperation%20Japan-SE%20Asia%20Sato.pdf.
- Yoshida, Reiji. "Japan May be Able to Shoot Down North Korean Missiles but Has No Legal Basis: Experts." *Japan Times*, August 16, 2017. https://www.japantimes.co.jp/news/2017/08/16/national/politics-diplomacy/japanmay-able-shoot-north-korean-missiles-no-legal-basis-experts/#.WrwMGojwZPY.
- Zhen, Lin. "Is China's Nuclear Attack Submarine Too Easy to Detect?" *South China Morning Post*, January 29, 2018. https://www.scmp.com/news/china/diplomacy-defence/article/2130870/chinas-nuclear-attack-submarine-too-easy-detect.

THIS PAGE INTENTIONALLY LEFT BLANK

# INITIAL DISTRIBUTION LIST

- Defense Technical Information Center
   Ft. Belvoir, Virginia
- 2. Dudley Knox Library
  Naval Postgraduate School
  Monterey, California