



NATIONAL DEFENSE RESEARCH INSTITUTE

U.S.-Japan Alliance Conference

Meeting the Challenge of Amphibious Operations

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Published by the RAND Corporation, Santa Monica, Calif.

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Preface

In order to explore the origins, development, and implications of Japan's decision to establish an Amphibious Rapid Deployment Brigade (ARDB) within the Japan Ground Self-Defense Force (JGSDF), the RAND Corporation convened a public conference on March 6, 2018, at its offices in Santa Monica, California, that brought together leading U.S. and Japanese military and security experts to explore the issue. Among these experts were two of the leading Japanese generals responsible for helping to initiate and establish the ARDB, an expert scholar on Japanese security and defense policy, and a U.S. Marine general responsible for cooperating with the JGSDF in Okinawa. The scholars and practitioners who contributed to this event were asked to evaluate the reasons for the ARDB's establishment, its deterrence and defense capabilities, its relevance for humanitarian assistance and disaster relief missions, the extent to which it contributes to jointness within the Japan Self-Defense Forces, its relationship with and value to the U.S. Marine Corps, and ideas for the future evolution of Japan's amphibious operations capabilities.

This work was sponsored by the Government of Japan and conducted within the International Security and Defense Policy Center of the RAND National Security Research Division (NSRD). NSRD conducts research and analysis for the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the defense agencies, the Navy, the Marine Corps, the U.S. Coast Guard, the U.S. Intelligence Community, allied foreign governments, and foundations.

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Table of Contents

Preface	iii
Figures	v
Abbreviations	vi
1. Introduction	1
2. Japan’s New Defense Strategy in the Southwest Islands and Development of Amphibious Operations Capabilities	8
Introduction	8
The China Threat	8
Japan’s “Southwestern Wall Strategy”	9
The Amphibious Rapid Deployment Brigade	12
A Proposed Agenda for the ARDB’s Future Evolution	14
Conclusion	15
3. An Insider's View of the History, Evolution, and Prospects of Japan's Amphibious Rapid Deployment Brigade	16
“What Is the Counterpart of the U.S. Marine Corps in the Japan Self-Defense Forces?”	17
The Western Army Infantry Regiment and the Iron Fist and Dawn Blitz Exercises	18
The ARDB and HA/DR Missions	20
The Establishment of the ARDB and the Challenges Ahead	21
Conclusion	24
4. Japan’s Amphibious Joint Pain	25
Japan’s Quest to Develop Amphibious Operations Capabilities	26
Challenges to Jointness in the JSDF	32
Command and Control	32
Communications and Information-Sharing	35
Fires	37
Equipment	40
Conclusion	45
5. The ARDB, the USMC, the U.S.–Japan Alliance, and a Free and Open Indo-Pacific	47
Background	47
The Relevance of the Pacific to U.S. National Security	48
The U.S.–Japan Alliance and Japanese Forces’ Complementarity with the United States	49
Suggestions for the Way Forward	53
The Past Is the Key to the Future	57
6. Conclusion	59
References	61

Figures

Figure 2.1. Japan’s “Southwestern Wall Strategy”	10
Figure 2.2. Location of Yonaguni Island, the Southwest Islands, and Taiwan	11
Figure 2.3. The ARDB’s Disposition and Organization.....	14
Figure 4.1. Planned Deployments of JGSDF Units in the Southwest Islands	29
Figure 5.1. Deployment Status of Major Units in the Southwest Islands.....	56

Abbreviations

A2/AD	anti-access/area denial
AAV	amphibious assault vehicle
ARDB	Amphibious Rapid Deployment Brigade
ASM	air-to-ship missile
ATF	amphibious task force
ATLA	Acquisition, Technology, and Logistics Agency (Japan)
BMD	ballistic missile defense
C2	command and control
C4ISR	command, control, communications, computers, intelligence, surveillance and reconnaissance
CAS	close air support
DDH	helicopter destroyer
DOTMLPF-I	Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, and Interoperability
FY	fiscal year
HA/DR	humanitarian assistance and disaster relief
IAMD	integrated air and missile defense
ISR	intelligence, surveillance, and reconnaissance
JASDF	Japan Air Self-Defense Force
JCG	Japan Coast Guard
JGSDF	Japan Ground Self-Defense Force
JMSDF	Japan Maritime Self-Defense Force
JSDF	Japan Self-Defense Forces
JSO	Joint Staff Office (Japan)
JTF	joint task force
LCAC	landing craft, air-cushioned
LST	landing ship, tank
MARFORPAC	U.S. Marine Forces, Pacific
PLA	People's Liberation Army (China)
PRC	People's Republic of China

SAM	surface-to-air missile
SSM	surface-to-ship missile
USARPAC	U.S. Army Pacific
USMC	U.S. Marine Corps
USN	U.S. Navy
WAiR	Western Army Infantry Regiment

1. Introduction

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On March 27, 2018, the Japanese Ministry of Defense announced a major reorganization of Japan's Ground Self-Defense Force (JGSDF) that included the establishment of an Amphibious Rapid Deployment Brigade (ARDB).¹ This new unit, years in the making, was described by some in the media as a "Japanese version of the Marines"; *PLA Daily* quoted a Japanese Communist Party publication in labeling the development as "a major move to exacerbate military tensions in the Northeast Asia" and China's *Global Times* warned that the establishment of the ARDB highlighted the need for Asia to guard against the revival of Japanese "militarism."² What are the origins of Japan's quest for amphibious capabilities? What threats is the ARDB designed to respond to? Does the ARDB afford sufficient combat capability to deter; defend; or, if necessary, recapture remote islands in the country's Southwest Island chain if these are seized by Chinese forces? To what extent is the ARDB relevant for supporting non-combat operations, such as humanitarian assistance and disaster relief (HA/DR) missions? Is the creation of the ARDB spurring Japan's air, maritime, and ground forces to move toward greater interoperability and collaboration or "jointness" the way that ballistic missile defense cooperation with the United States has?³ And finally, what is the relationship of the ARDB to the U.S. Marine Corps (USMC)? Does it bolster, duplicate, or replace the need for U.S. Marines in Japan?

To explore the answers these questions, the RAND Corporation convened a conference on the ARDB in Santa Monica, California, on March 6, 2018, to examine the establishment of Japan's amphibious operations force from a variety of perspectives. Keynoting the event was Lieutenant General John A. Toolan, Jr. (USMC, retired), former Commander, U.S. Marine Forces, Pacific. Presenters included Lieutenant General Koichiro Bansho (JGSDF, retired), the

¹ Takateru Doi, "GSDF Establishes Single Command Center over All Regional Armies," *Asahi Shimbun*, March 28, 2018.

² "GSDF to Launch Japanese Version of Marines on Tuesday," Jiji Press via *Japan Times*, March 24, 2018; "Japan's Amphibious Fighting Force Comes into Final Stage," *PLA Daily*, April 10, 2018; Liu Lulu, "Asia Needs to Be Wary of Militarism Revival in Japan," *Global Times*, April 8, 2018.

³ The role of ballistic missile defense in breaking down stovepipes to information-sharing, eroding barriers to collaboration on defense industrial research and design, and sparking greater inter-service jointness and allied interoperability was explored in Michael D. Swaine, Rachel M. Swanger, and Takashi Kawakami, *Japan and Ballistic Missile Defense*, Santa Monica, Calif.: RAND Corporation, MR-1374-CAPP, 2001.

former Commander of the Western Army (under which the ARDB was established); Lieutenant General Koichi Isobe (JGSDF, retired), former commander of the Eastern Army and Vice Chairman of the Joint Chiefs of Staff; Jeffrey Hornung, a political scientist at RAND; and Major General Richard Simcock II (USMC, retired), former commander of the 3rd Marine Division on Okinawa. The papers that these presenters based their remarks at that conference on are captured in this document.

The English-language research literature on the JGSDF has grown in recent years,⁴ but the development of Japan's amphibious capabilities in general, and the ARDB specifically, have, to date, received attention primarily in brief U.S. military professional journals, policy commentaries, and media reports.⁵ These have helpfully characterized the ARDB's (1) origins with the need to respond to the rise of China, (2) relationship to the USMC, and (3) role as a deterrent and defensive force in the Japanese Southwest Islands chain. They have also highlighted continuing challenges to the further development of the ARDB, including strategy and doctrine, hardware, budgets, and inter-service rivalries.⁶ Some of these articles have pointed out that, despite Japan's efforts to develop a force posture that can provide advance situational awareness and sufficient deterrent capacity to dissuade adversaries such as China and North Korea from threatening its territory, the priority and role of amphibious capabilities in the nation's overall defense remains a work in progress.⁷ Although Tokyo has apportioned more funds for building new Japan Coast Guard (JCG) bases in vulnerable areas and is laying the groundwork for a dense network of coastal radar stations and anti-access/area denial (A2/AD) capabilities to protect Japan's outlying islands, additional resources, time, and effort are necessary to develop the full potential of Japan's existing and planned amphibious capabilities as a complement to these investments, including consideration of moving them closer to those areas threatened by China.⁸

⁴ David Hunter-Chester, *Creating Japan's Ground Self-Defense Forces, 1945–2015: A Sword Well Made*, Lanham, Md.: Lexington Books, 2016; Robert D. Eldridge and Paul Midford, eds., *The Japan Ground Self-Defense Forces: The Search for Legitimacy*, New York: Palgrave Macmillan, 2017.

⁵ Examples include Justin Goldman, "An Amphibious Capability in Japan's Self-Defense Force: Operationalizing Dynamic Defense," *Naval War College Review*, Vol. 66, No. 4, Autumn 2013; Grant Newsham, "Japanese Amphibious Development: The Bulldog and the Salamander," *Marine Corps Gazette*, December 2014b; Paul Kallander-Umezu, "Amphibious Forces, Joint Strategy Drive Japan," *Defense News*, May 27, 2015; Grant Newsham, "'Amphibiosity' in the Asia-Pacific," *Proceedings*, Vol. 141, No. 11, November 2015; Gidget Fuentes, "Iron Fist 2017: Japan Under Time Crunch to Establish New Amphibious Unit," *USNI News*, February 28, 2017; and Gidget Fuentes, "Iron Fist 2018 Ramps Up Training as Japan Readies 1st Amphibious Unit," *USNI News*, January 16, 2018.

⁶ Paul Kallander-Umezu, "Japan's Amphib Capabilities Struggle with Rivalries, Budgets," *Defense News*, October 7, 2015.

⁷ Grant Newsham, "Japan's Amphibious Force Still Well Outdistanced by China Rival," *Asia Times*, April 10, 2017b.

⁸ "Japan Coast Guard Seeks to Boost Response Time with New Bases for Large Patrol Ships," Kyodo, January 18, 2018; Toshi Yoshihara, *Going Anti-Access at Sea: How Japan Can Turn the Tables on China*, Washington, D.C.: Center for a New American Security, September 2014; Julian Ryall, "Japan Boosts Island Radar Surveillance to

As the papers in the following chapters make clear, the already-challenging natural environment around Japan—replete with earthquakes, tsunamis, and typhoons, among other dangers—has become even more challenging in recent years as the People’s Republic of China (PRC) grows increasingly threatening, especially in the maritime domain. Following an incident in 2010 in which the JCG arrested a drunk Chinese fisherman who twice rammed JCG patrol vessels seeking to escort his vessel out of the waters around the Senkakus Islands (which China also claims), and especially since Japan nationalized three of the five islands that were in private Japanese hands in 2012, Chinese fishing vessels have been showing up in greater numbers, backed by Chinese maritime militia, coast guard, and People’s Liberation Army Navy (PLAN) forces. In addition, in 2013 and again in 2017, China flew an unmanned aerial vehicle into the airspace around the Senkakus.⁹ In August 2016, an unusually large number of Chinese fishing vessels—estimated at more than 230 and exhibiting behavior suggestive of centralized coordination—carried out what some observers suspected might have been a dress rehearsal for a gray zone attack on the Senkakus.¹⁰ Moreover, according to at least one source, China reportedly plans to substantially expand the size and capabilities of its own amphibious forces over the coming years.¹¹

Indeed, China’s growing capabilities and increasingly provocative employment of its fishing fleet, maritime militia, coast guard, and armed forces have spurred a Japanese response that Minister of Defense Itsunori Onodera laid out in a 2012 article, noting that Japan’s evolving national security strategy and defense policy centers around three pillars: military self-strengthening, pursuit of closer cooperation with the United States, and promotion of deeper collaboration with partner nations and regional multilateral bodies and of respect for international norms and law.¹² In 2013, Japan issued a new set of *National Defense Program Guidelines*, the master document for Japan’s force development, and embraced the notion of a “seamless,” “dynamic joint defense” concept that called for integrating the three services, coordinating closely with the United States, and shifting the focus of the country’s defense from countering a Russian ground invasion from the North to protecting against air and maritime

Catch Chinese, North Korean Ships,” *South China Morning Post*, February 5, 2018; Matthew M. Burke and Hana Kusumoto, “Japan to Upgrade Island Air Defenses in Response to China,” *Stars and Stripes*, April 10, 2018; Takateru Doi, “Japanese ‘Marines’ Eyed for Okinawa Mission,” *Asahi Shimbun*, October 31, 2017.

⁹ “China Urged to Stop Drone Flights Near Senkaku Islands,” Kyodo, September 10, 2013; “Drone Joins Four Chinese Ships in Latest Senkaku Intrusion,” Kyodo, May 18, 2017.

¹⁰ “Japan Protests After Swarm of 230 Chinese Vessels Enter Waters Near Senkakus,” Kyodo, August 6, 2016. “Gray zone acts” are designed to change the status quo through steps that, while consequential, are nonetheless deliberately calculated to remain below a level that would trigger an armed response or permit the invocation of Article 5 of the U.S.–Japan Security Treaty.

¹¹ Minnie Chan, “As Overseas Ambitions Expand, China Plans 400 Per Cent Increase to Marine Corps Numbers, Sources Say,” *South China Morning Post*, March 13, 2017.

¹² Itsunori Onodera, “Strengthening Japan’s Defense Force,” *Asia-Pacific Review*, Vol. 20, No. 2, 2013.

threats from China in the Southwest.¹³ Particularly alarming to Japan in recent years has been China's growing employment of nominally civilian assets to achieve strategically significant outcomes without crossing the boundary that would permit the invocation of Article 5 of the U.S.–Japan Security Treaty, a phenomenon referred to as “gray zone” coercion. In 2015, the allies revised the U.S.–Japan Defense Guidelines to focus more on such maritime gray zone challenges.¹⁴ Since that time, the focus on cooperation to confront gray zone threats has continued to grow.¹⁵ Recognizing the substantial role played by preparation, pre-positioning, self-strengthening, and defense in deterring gray zone coercion, RAND organized a conference to take a closer look at the ARDB and its implications for the defense of Japan's Southwest Islands and for HA/DR, inter-service jointness, and cooperation between the Japan Self-Defense Forces (JSDF) and the USMC.

In his paper, Lieutenant General Bansho highlights the shifting nature of Japan's international security threat perceptions, with China and North Korea having replaced the Soviet Union as the main sources of concern among policymakers. The vulnerability of Japan's far-flung islands is a particular concern, especially the Senkakus, which China has sought to claim. In responding to this growing threat, Japan's strategists have developed a “Southwestern Wall strategy” that seeks to leverage the archipelago's geostrategic location and use A2/AD tactics to dissuade China from seizing Japanese territory while employing the ARDB to deter or defeat any threat and recapture any islands an adversary might seize. Bansho points out the need for continued focus on jointness among the three services of the JSDF and for continued emphasis on interoperability and collaboration between Japan and the armed forces of the United States, especially the USMC.

Lieutenant General Isobe's paper explores the historical roots of the ARDB's genesis and evolution. As he notes, it originated in the fortuitous combination of interest in military issues by then–Prime Minister Ryutaro Hashimoto; the personal experiences of Isobe himself (then a young officer in the JGSDF) as a recent graduate of the U.S. Marine Corps University in Quantico; outreach by the leaders of the U.S. Marine Forces Pacific and U.S. Army Pacific; and a combination of engagements by visionary Japanese defense leaders and their USMC counterparts, including Lieutenant Generals Toolan, Wallace “Chip” Gregson, and James Mattis (more than a decade before he assumed leadership of the U.S. Department of Defense).¹⁶ Noting

¹³ Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2014 and Beyond*, Tokyo, December 17, 2013b.

¹⁴ Japanese Ministry of Defense, *The Guidelines for Japan–U.S. Defense Cooperation*, Tokyo, April 27, 2015.

¹⁵ U.S.–Japanese cooperation to defend against gray zone challenges from China were the focus of a RAND conference in 2017. See Scott W. Harold, Yoshiaki Nakagawa, Junichi Fukuda, John A. Davis, Keiko Kono, Dean Cheng, and Kazuto Suzuki, *The U.S.–Japan Alliance and Deterring Gray Zone Coercion in the Maritime, Cyber, and Space Domains*, Santa Monica, Calif.: RAND Corporation, CF-379-GOJ, 2017.

¹⁶ Colonel Grant Newsham (USMC Reserve, retired) makes much the same point in highlighting the key role of specific individual defense leaders, including JGSDF Chief of Staff General Eiji Kimizuka and Vice-Admiral Hideaki Kaneda (JMSDF, retired), as critical in facilitating and protecting Newsham's own role as the first Marine

the painful history of combat between these former enemies, Isobe's essay highlights the healing that has occurred and the importance of relationship-building between the USMC and the JGSDF senior leaders whose engagements years before China's recent provocations laid the groundwork for the establishment of the ARDB as the leading edge of Japan's amphibious capabilities development. Together, these enemies-turned-allies have worked to support Japan's efforts to build a set of capabilities that can be employed to rescue civilians in danger and provide relief and recovery assistance to not only the Japanese but also other nations in the Indo-Pacific. Isobe also notes that, contrary to images of the ARDB as the leading edge of a revived Japanese militarism that appear in Chinese propaganda, Japan's amphibious capabilities are actually critical for responding to natural crises, such as the earthquake that struck Izu-Oshima in 2013, supertyphoon Haiyan that smashed into the Philippines in late 2013, and the temblor that rocked Kumamoto in 2016.

Turning from the history of the ARDB and the implications of preparations for amphibious operations for HA/DR missions to the question of how the ARDB's establishment might fuel a drive toward greater jointness in the JSDF, Jeffrey Hornung finds much to praise while noting continuing challenges. Pointing out the necessity of amphibious capabilities in a nation composed of more than 6,850 islands spread out over tens of thousands of square kilometers of territory, he finds that Japan already has much of the hardware needed to constitute an amphibious operations force in its military because of its preexisting need for air and maritime transportation (though some of the relevant capabilities the JSDF possess are not optimized for amphibious operations). Since deciding to stand up the ARDB, the JSDF have procured additional capabilities, such as amphibious assault vehicles and tilt-rotor aircraft, to facilitate rapid delivery of combat power to points distant from the main islands.

Although some key gaps in hardware remain, the more challenging aspects of bringing the JSDF to the point of mastering amphibious operations have to do with the challenge of overcoming deeply entrenched service cultures, identities, and mission prioritizations; ensuring sufficient attention to joint training for amphibious operations; developing strategy and doctrine for amphibious operations; and ensuring the software connectivity to enable all three services to work together seamlessly as one integrated force. As Hornung notes, the maritime and air self-defense forces, in particular, are each more focused on specific challenges within their domains, such as cooperating with the U.S. Navy to engage in surface and sub-surface defense or scrambling to conduct patrols and defend airspace, than they are on thinking about operating in tandem with their fellow services to conduct joint operations, such as fires support against landed enemy forces or close-air support. In addition to problems of inadequate training for jointness, there are issues surrounding many of the capabilities for C4ISR (command, control,

Corps Forces, Pacific, liaison officer in the JGSDF Ground Research Development Center, where he could proselytize the importance of developing an amphibious capability within the JGSDF. See Grant Newsham, "How Japan Got an Amphibious Rapid Deployment Brigade," *Asia Times*, March 27, 2018.

communications, computers intelligence, surveillance, and reconnaissance). These capabilities are imperfect, present in insufficient numbers, or even outright missing, but all are needed to put together and employ information as a common operating picture across air, maritime, and ground platforms, which means that the picture is flawed. While the stand-up of the ARDB is spurring additional attention to these challenges, it would be premature to say that the JSDF have solved, or will solve, this operational challenge. As Lieutenant General Isobe remarks in his own paper, the USMC took decades to work through and master the art of amphibious operations, and Japan is still at the outset of that process. Although the progress to date has been impressive, much more remains to be done and it would be premature to judge the likelihood of success at this point.

Finally, Major General Simcock's essay echoes and expands upon this last point, concluding that the ARDB has "come a long way in a very short time" but also noting that "amphibious operations are perhaps the most challenging of military operations and a long path remains ahead before Japan fields a fully viable ARDB, much less one that is maximally integrated within the JSDF and coordinated and interoperable with the USMC." Fortunately, he notes, "both nations agree on the broad, and many specific, strategic defense objectives within the region" and the USMC and U.S. Navy stand ready to continue partnering closely with the ARDB and the broader JSDF to help Japan master amphibious operations. Simcock argues that the "U.S. Marine Corps and U.S. Navy must be the lead services engaging with the ARDB and encouraging the Japanese to rapidly increase capabilities" across doctrine, organization, training, materiel, leadership, personnel, and facilities. The USMC and U.S. Navy can help facilitate rapid progress by Japan because of their "close contact with and proximity to the JSDF." Moreover, Simcock notes, this is not a case of the United States assisting an ally out of a spirit of generosity; rather "the USMC recognizes why the ARDB is important": If properly developed, it could help increase the deterrence and defense capabilities of the U.S.–Japan alliance across the Asian littoral and thereby contribute substantially to the goal of ensuring a free and open Indo-Pacific, a key U.S. policy goal.

As the essays make clear, the challenges that Japan faces in mastering the art of amphibious operations are substantial, but political leaders, Ministry of Defense bureaucrats, and leading officers in the JGSDF have been working hard to meet them, receiving substantial assistance from the United States and the USMC, specifically. At the same time, budgetary constraints; non-maritime threats, such as North Korea's ballistic missiles; and different histories and service cultures are among other factors that will continue to complicate efforts to further develop Japan's amphibious capabilities. Key questions for the future evolution of the ARDB and the role of amphibious operations in Japan's overall defense include:

- How will the amphibious mission compete for funding and attention with other priorities, such as air sovereignty, integrated air and missile defense, maritime superiority, sea

control, and network defense in the 2018 *National Defense Program Guidelines* and *Mid-Term Defense Program* processes?¹⁷

- Is the ARDB appropriately sized, staffed, equipped, and postured to deter conflict and to win if combat cannot be avoided? If not, what more does it need and how much will that cost?
- How does the JSDF approach to operating amphibiously match up to the Chinese People’s Liberation Army’s focus on a “system of systems” approach to war-fighting?¹⁸ Can the JSDF master jointness quickly enough to present a deterrent challenge to China’s own growing effort to fight jointly?
- If Japan decides to develop counter-strike capabilities, will the ARDB need to build a capacity for expeditionary warfare, and will Japan’s overall defense evolve in a direction more akin to, and complementary of, the USMC?¹⁹

These are just some of the questions that Japan’s focus on developing amphibious operations capabilities raise. Over the coming years, the ARDB, the JSDF more broadly, and the U.S.–Japan alliance will need to think through these issues and come to some conclusions. The papers below provide a good starting point for considering possible answers to those questions.

¹⁷ Yuki Tatsumi, “Japan’s Defense Policy Decisions in 2018,” *The Diplomat*, January 3, 2018.

¹⁸ Jeffrey Engstrom, *Systems Confrontation and System Destruction Warfare: How the Chinese People’s Liberation Army Seeks to Wage Modern Warfare*, Santa Monica, Calif.: RAND Corporation, RR-1708-OSD, 2018.

¹⁹ James L. Schoff and David Song, “Five Things to Know About Japan’s Possible Acquisition of Strike Capability,” webpage, Carnegie Endowment for International Peace, August 14, 2017.

2. Japan's New Defense Strategy in the Southwest Islands and Development of Amphibious Operations Capabilities

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Introduction

In recent years, the strategic environment surrounding Japan has grown more threatening. During the Cold War era, Japanese security planners focused primarily on the need to defend the country's northern front against a possible Soviet ground invasion. Since the end of the Cold War, the country's strategic defense emphasis has shifted from countering the Soviet threat from the North to dealing with air and maritime threats originating from the Southwest. One of Japan's primary concerns in this area is the prospect that China might seek to seize one or more of the strategically important islands in the Southwest Island chain (Nansei Shoto). How has the Japan Ground Self-Defense Force (JGSDF) responded to this shift in threat perception? What strategy and capabilities is it employing in response to China's growing pressure in this area? How does Japan view the role of cooperation with its U.S. ally in meeting the challenge of defending the Nansei Shoto? And what steps should come next?

This paper begins by laying out the threat that Japan perceives to the security of its Southwest Island chain from China's military developments. It then summarizes Japan's strategy for responding to that threat, noting the advantages and challenges of operating across a widely-dispersed archipelago. Next, it describes Japan's urgent efforts to build up defenses in the Southwest Islands, most notably its focus on establishing a capacity for conducting amphibious operations for island-recapturing. The paper then provides a positive agenda for the future evolution of Japan's amphibious forces before turning to some concluding thoughts.

The China Threat

China has been increasing its military budget and fielding many new capabilities in recent years, with a special focus on maritime and air operations. Chinese government vessels have entered Japan's territorial waters around the Senkaku Islands numerous times in recent years. Such activities have intensified significantly since September 2012, when the Japanese

government decided to nationalize the ownership of three of the Senkaku Islands.²⁰ Furthermore, provocative activities by the aircraft of the Chinese People’s Liberation Army (PLA) Navy (PLAN) and PLA Air Force (PLAAF) have intensified recently. The Japan Air Self-Defense Force (JASDF) had to scramble 851 times against Chinese aircraft in fiscal year (FY) 2016, the highest number since the JASDF was established and a 27-percent increase from 2008.²¹

These activities are affecting the regional military balance. Japan’s 2017 Defense White Paper pointed out that “China’s attempts to change the status quo in the East and the South China Seas based on its unique assertions which are incompatible with the existing order of international law, have become serious security concerns to the region including Japan and to the international community . . . increasing the risk of unintended consequences due to misunderstanding or miscalculation.”²²

Confronting a growing challenge from North Korea and China, Japan and the United States have to cooperate with each other to maintain the status quo in the East and South China Seas. The allies must coordinate to defend the rules-based international and regional order, establish and maintain the status quo, prevent coercion and intimidation, secure sea and air lines of communication for economic development through the freedom of navigation operations and other means, maintain U.S. forces’ forward presence, and preserve regional peace and stability by maintaining a favorable military balance.

In the pursuit of these goals, particular attention will need to be paid to Japan’s Southwestern region because this critical and strategically important area will play a major role in ensuring that the allies preserve a favorable balance of power in the Indo-Pacific. The next section describes Japan’s strategy for defending its Southwest Islands.

Japan’s “Southwestern Wall Strategy”

As an archipelagic nation, Japan is surrounded by the sea and has a coastline of approximately 30,000 kilometers around its roughly 6,900 islands. Among these, from the southernmost main island of Kyushu to Okinawa area, there are 2,852 remote islands, about 200 of which are inhabited. In order to deter—and, if necessary, respond—to any hostile activities or invasions of those islands, the Japan Self-Defense Forces (JSDF) have developed a strategy and program for strengthening the nation’s defense posture called the “Southwestern Wall strategy.”²³

²⁰ Japanese Ministry of Foreign Affairs, “Trend in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands and Japan’s Response,” April 5, 2018.

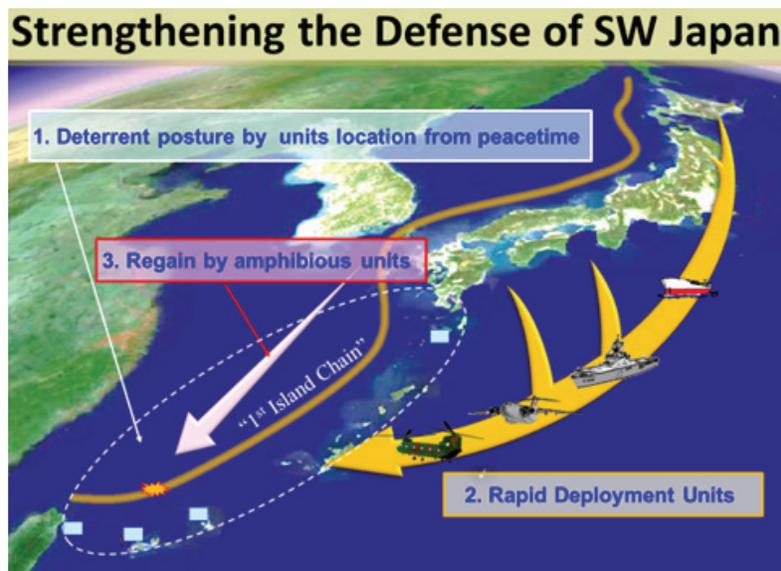
²¹ Japanese Ministry of Defense, “Strategic Environment Summary,” unclassified briefing given to RAND in 2017.

²² As quoted in Japanese Ministry of Defense, *Defense of Japan 2017*, Tokyo, 2017a, Chapter 2, Section 3.

²³ Koichiro Bansho, “Recent Strategic Environment & Defense of Japan,” *Bouei Kaigan [Defense Enlightenment]*, No. 43, February 28, 2017.

This strategy features several important aspects. In strengthening its defense posture, Japan aims first and foremost to protect the safety of its nationals and the sanctity of its territory. The “Southwestern Wall Strategy” focuses on improving Japan’s defense posture across the First Island Chain, seeking to secure relevant operational capabilities and facilities for the JASDF and the Japan Maritime Self-Defense Force (JMSDF). It also seeks to secure and protect U.S. forward presence and continuous command, control, communications, and computers plus intelligence, surveillance, and reconnaissance (C4ISR) capabilities.²⁴ The basic concept of the strategy is presented below in Figure 2.1.

Figure 2.1. Japan’s “Southwestern Wall Strategy”



SOURCE: Japanese Ministry of Defense, *JGSF: Japan Ground Self-Defense Force*, undated-a, p. 4.

The strategy centers around three key lines of effort.²⁵ The first step is to establish new JSDF camps and improve existing facilities across the Southwest Islands while further developing bases located on Okinawa. To maximize the deterrent advantages accorded to Japan by its control over this geostrategically important location, the JSDF aim to establish new units, expand the number and size of the units deployed to this area in peacetime, or both. JSDF units have to conduct persistent intelligence, surveillance, and reconnaissance (ISR) activities from peacetime through contingency by securing sea and air superiority. To this end, the first JGSDF ISR unit

²⁴ Andrew F. Krepinevich, Jr., *Archipelagic Defense, the Japan—U.S. Alliance and Preserving Peace and Stability in the Western Pacific*, Sasakawa Peace Foundation, August 2017, pp. 62–69.

²⁵ Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2014 and Beyond*, Tokyo, December 17, 2013b; Japanese Ministry of Defense, *Mid-Term Defense Program, FY 2014–FY 2018*, Tokyo, December 17, 2013a.

was established in March 2016 at Yonaguni Island, located at the extreme Southwestern end of Japan, just 110 km from Taiwan (see Figure 2.2).²⁶ The JGSDF Yonaguni Coastal Observation Unit has started its mission to conduct ISR and ensure the effective defense of the island. According to the 2013 *National Defense Program Guidelines* and the *Mid-Term Defense Program*, the JSDF will construct further camps and facilities on Amami-Oshima Island, Miyako Island, and Ishigaki Island, where JGSDF security units with surface-to-ship missile and surface-to-air missile batteries will be deployed; these units will be in charge of security and of Japan's initial response to any contingency involving the Southwest Islands.

Figure 2.2. Location of Yonaguni Island, the Southwest Islands, and Taiwan



The second line of effort is to enhance the ability of the JSDF to deploy and concentrate their defensive capabilities to any threatened areas in the Southwest Islands using modern equipment and specially trained units. If any indications of an imminent invasion are detected, units from across the three services of the JSDF (i.e., JGSDF, JMSDF, and JASDF) will be rapidly deployed from across Japan to that area to deter or counter an enemy invasion; should deterrence fail, they will defeat and expel any enemy forces as soon as possible. In late March 2018, the JGSDF established a new Ground Component Command and the Amphibious Rapid Deployment Brigade (ARDB). Japan has progressed steadily in developing a rapid deployment capability for amphibious operations, including by upgrading the JMSDF's transport ships,

²⁶ Japanese Ministry of Defense, 2017a.

introducing new V-22 tilt-rotor Osprey aircraft to the JGSDF, and by procuring C-2 transport aircraft for the JASDF.²⁷

The third line of effort focuses on establishing the ARDB, which is the first full-scale, amphibious operations-capable unit of the JSDF, inaugurated in early 2018.²⁸ In the event of an enemy invasion of Japanese remote islands occurring prior to deployment of the JSDF, the JSDF will conduct operations to regain those islands by landing JGSDF ARDB units jointly with support and coordination with the JMSDF and JASDF (and potentially as a part of a joint Japan–U.S. military operation). For this reason, a JGSDF press release (“Activation of the ARDB”) noted that “while strengthening the integrated capabilities . . . to interdict any attack on Japan’s remote islands at sea, the SDF will . . . develop sufficient amphibious operations [capabilities to enable] the SDF to land, recapture and secure without delay [any remote islands] in the case of an invasion.”²⁹

Having described Japan’s threat perceptions and strategy for responding, the next section lays out Japan’s efforts to build up its capacity to conduct island-recapturing operations.

The Amphibious Rapid Deployment Brigade

In March 2018, the JGSDF established the ARDB to focus on securing the safety of Japanese nationals living in the Southwest Islands and on recapturing any lost territories seized by an adversary. The ARDB is Japan’s first amphibious brigade in the post–World War II era. After the Cold War ended, the JSDF studied the options for defending the southwestern area and organized the Western Army Infantry Regiment (WAIr³⁰) as the unit specifically tasked with rapidly reacting to a contingency involving a remote island. The WAIr began by procuring several critical capabilities for conducting amphibious operations that the JGSDF did not previously possess. Over the course of a decade serving as the seed of the ARDB, the WAIr’s assiduous efforts put in place the hardware and software that the ARDB is organized around and fields today.

The newly-organized ARDB is a full-scale amphibious operations unit that belongs to the JGSDF under the command of the Ground Component Command. As State Minister of Defense Tomohiro Yamamoto said, “its primary mission is to conduct full-fledged amphibious operations for swift landing, recapturing, and securing in the case of illegal occupation of remote islands.”³¹

²⁷ JGSDF, “Activation of the Ground Component Command,” press release, April 6, 2018a.

²⁸ JGSDF, “Activation of ARDB,” press release, April 7, 2018b.

²⁹ Japanese Ministry of Defense, 2013b.

³⁰ The ‘i’ for “Infantry” in the abbreviation “WAIr” is deliberately placed in the lower-case in Japanese abbreviations of the unit’s name.

³¹ Japanese Ministry of Defense, “Remarks by State Minister of Defense Yamamoto at the Activation Ceremony of the ARDB,” April 7, 2018b.

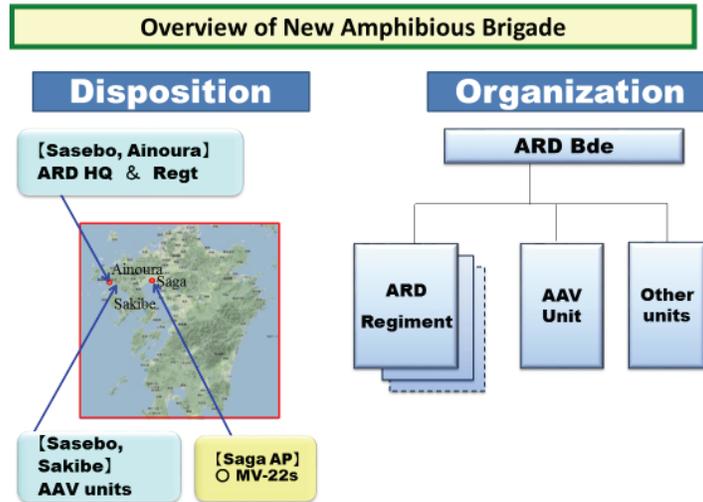
Some observers have asked whether the ARDB is an expeditionary unit or amphibious operations unit; others have erroneously described the ARDB as the “Japanese Marine Corps.” It is important to understand that the ARDB is not an expeditionary unit and therefore not the same as the U.S. Marine Corps (USMC), which is structured and trained to conduct expeditionary operations. Despite the close relationship and superficial similarities between the ARDB and the USMC, their roles and missions are quite different. The purpose of the ARDB is to strengthen the ability of the JSDF to deter Japan’s adversaries and, if necessary, defend and secure Japan’s remote islands. The USMC is one of four individual services of the U.S. military, whereas the ARDB by contrast is a part of the JGSDF. And the USMC is organized into Marine Air-Ground Task Forces, with organic assets for conducting operations on land, in the air, and at sea, whereas the ARDB needs to work in tandem with the JMSDF and the JASDF to achieve operational effects across those three domains.³²

Of course, the amphibious capabilities, high states of readiness, and focus on joint functions are common between the ARDB and the USMC. Furthermore, the ARDB will be expected to undertake a broad set of activities, such as humanitarian assistance and disaster relief (HA/DR) in peacetime missions, that the USMC also undertakes because of its unique capabilities.

Figure 2.3 shows the structure of the ARDB at the time of its formation in FY 2017. As is to be expected, the Japanese amphibious capability is just at the starting line in executing its mission to defend remote islands. The ARDB has activated two regiments and other relevant units, such as artillery, reconnaissance, communications, and logistics, altogether totaling around 2,100 soldiers on its way up to roughly 3,000 during the period of the next Mid-Term Defense Program. The JGSDF has been promoting educational and training activities in order to develop its amphibious operational and tactical capabilities. They are also facilitating realistic training and exercises to improve joint operational cooperation and interoperability with JMSDF, JASDF, and U.S. forces.

³² USMC, “America’s Expeditionary Force in Readiness,” in *U.S. Marine Corps, Concepts and Programs, 2013*, Washington, D.C., 2013.

Figure 2.3. The ARDB's Disposition and Organization



SOURCE: Japanese Ministry of Defense, undated-b, pp. 27–28.

A Proposed Agenda for the ARDB's Future Evolution

The formation and activation of the ARDB has made steady progress toward providing Japan with the ability to design and execute realistic amphibious operations in defense of Japan's territory, including remote islands. However, this should not be seen as the final goal for the ARDB. The JSDF—and the ARDB specifically—have to upgrade and improve their capabilities, benchmarking against the emerging security environment challenges, most notably those posed by China. The following agenda might be considered as next steps for the further development of Japan's amphibious capability against the backdrop of China's own investment in maritime and marine capabilities.

First, the ARDB should continue to strengthen its capabilities in terms of quality and quantity. From the current two regiments, the ARDB should grow to its planned-for three regiments as soon as possible. Additionally, the full complement of amphibious assault vehicles must be procured and upgraded to be suitable for Southwest Islands' operational environment. If possible, the ARDB, as a brigade-level component, should be upgraded to a division-level component with a more sophisticated command and control structure, such as a standing joint headquarters, to facilitate effective full spectrum operations.

Second, the JSDF need to organize and exercise in ways that will produce more of a joint force. Different from the USMC, Japan's amphibious structure is composed of capabilities drawn from the JGSDF, JMSDF, and JASDF. As a result, effective joint doctrine and joint operational concepts and a workable joint command and control structure are essential to operate effectively and win under conditions characterized by an adversary likely to be employing anti-access/area denial (A2/AD) and cross-domain or multi-domain warfare. A joint amphibious headquarters to

command and coordinate effective amphibious operations integrating the capabilities of forces across the JSDF will be needed in the near future.

Third, Japan–U.S. security cooperation will need to be strengthened further. From the earliest stages of formulating plans for the amphibious development of the JSDF, the USMC and other services of the U.S. forces have been providing substantial support and making important contributions in every fields. Recent efforts to conduct bilateral and multilateral exercises help enormously in improving the capability and operational effectiveness of the tri-service JSDF structure. In order to expand and evolve these results, both Japan and the United States should cooperate further on such challenges as the joint development of next-generation amphibious assault vehicles, C4ISR systems, bilateral operational concepts, and effective training opportunities.

Conclusion

The Indo-Pacific region and the global arena are becoming increasingly unstable and contentious. In such an environment, the significance of the Japan–U.S. alliance is continually growing; the alliance is critically important for contributing to deterrence and stability. Facing a complex strategic environment, what do Japan and the United States have to do to develop a suitable strategy and appropriate response measures? For its part, based within the framework of the Japan–U.S. security alliance, Japan needs to continue making its utmost efforts to develop the effectiveness of its strategic and operational defense capabilities. Amphibious operational capabilities will surely be a key component of the future deterrence and defense posture of the JSDF. As already described above, the recent activation of the ARDB demonstrates Japan’s strong intention to deter any adversary who might seek to seize one of Japan’s islands and establishes a credible anti-A2/AD strategy premised of a string of military installations along the Southwest Island chain supported by new units fielding upgraded rapid deployment capabilities.

Japan’s development of amphibious capabilities has acted as a catalyst to stimulate jointness within the JSDF and to deepen the interoperability of the JSDF with the U.S. military. As management guru Peter Drucker once argued, “the best way to predict your future is to create it.”³³ Together with its sister services and its partners in the USMC, the JGSDF is creating its own future in the form of a credible deterrent and a dynamic, joint defense capability for the Southwest Islands able to rapidly deploy and undertake a wide variety of amphibious operations. Although many steps remain to achieve truly joint, interoperable, and rapidly deployable amphibious capabilities, a solid foundation has been laid and the way ahead appears clear.

³³ Peter F. Drucker, *Management*, 2nd ed., New York: HarperBusiness, 2008.

3. An Insider's View of the History, Evolution, and Prospects of Japan's Amphibious Rapid Deployment Brigade

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On March 27, 2018, Japan's Minister of Defense Itsunori Onodera, addressing a press conference on major developments in the force structure of the Japan Ground Self-Defense Force (JGSDF), commented that "Today, the Ground Component Command and the Amphibious Rapid Deployment Brigade will be established. The JGSDF will carry out large-scale reorganization based on the current *National Defense Program Guidelines* and *Mid-Term Defense Program* in accordance with the security environment surrounding Japan. The Ground Component Command and the Amphibious Rapid Deployment Brigade [ARDB] are symbols of this reorganization. . . . The ARDB will be established with a strength of around 2,100 personnel. In the event of an invasion of a remote island, its task will be promptly landing on the island and regaining and securing it, so the ARDB is equipped with the amphibious operation function necessary for such activity. The brigade will continuously conduct training using equipment which will be introduced from now on, including the AAV-7 amphibious assault vehicle and the V-22 Osprey, in order to further strengthen the amphibious operation function."³⁴

As a retired general of JGSDF who has been dedicated to the development of the Japan's Marine Corps for nearly two decades, I draw on my experiences and perspectives to explore three key questions in this paper: how and why the ARDB has evolved, the effects that the ties between the Japan Self-Defense Forces (JSDF) and the U.S. Marine Corps (USMC) have had on shaping the evolution of Japan's amphibious capabilities development, and what tasks remain in consolidating the ARDB and Japan's amphibious capabilities. The paper first describes the policy origins of Japan's quest to build up an amphibious capability, then turns to the security challenges driving the ARDB's establishment, and concludes with some thoughts on roles and missions and future developments.

³⁴ Japanese Ministry of Defense, "Press Conference by Defense Minister Onodera (10:10–10:27 A.M., March 27, 2018)," March 27, 2018a.

“What Is the Counterpart of the U.S. Marine Corps in the Japan Self-Defense Forces?”

In January 1996, Ryutaro Hashimoto was inaugurated as the 82nd Prime Minister of Japan. At the time, I was studying at the U.S. Marine Corps Command and Staff College in Quantico, Virginia. In April 1996, Japan and the United States proudly announced the Japan–U.S. Joint Declaration on Security-Alliance for the 21st Century.³⁵ This declaration had a profound impact on the JSDF, expanding its mission set to include contributions to global public goods.

Following his inauguration, Prime Minister Hashimoto, who was keen on national security issues, would invite JSDF leaders to his residence from time to time for unofficial meetings to discuss defense and military issues with the men in uniform. One night, he asked them, “By the way, which service is the counterpart of the U.S. Marine Corps?” The four JSDF leaders—the Chairman of the Joint Chiefs and the three service chiefs—looked at each other, then replied, but their answers did not satisfy the Prime Minister. This kickstarted a chain of events that would lead to a growing effort to build up an amphibious operations capability within the JSDF and led to my own involvement in the creation of the ARDB.

For my part, after graduation from the U.S. Marine Corps’ Command and Staff College, I was assigned to the Policy and Programs Division of the Ground Staff Office in August 1996. During those days, the official protocol channel for contact with the U.S. Marine Corps ran through the Japan Maritime Self-Defense Force (JMSDF) because the Marine Corps falls under the Department of the Navy. On the other hand, in actual bilateral exercises, the counterparts were the JGSDF for ground combat and the Japan Air Self-Defense Force for air combat.

The day after Prime Minister Hashimoto posed his question to our nation’s self-defense force leaders, the Chief of Staff of the JGSDF, General Nobutoshi Watanabe, called me and said “You just graduated from the Marine Corps College. You are now the officer in charge of deciding which of Japan’s services is best suited to serve as the U.S. Marines’ counterpart.”

I immediately started working on the relationship between the JSDF and the USMC. I initiated numerous conferences with the staffs of the Maritime and Air Staff Offices and the Joint Secretariat; in July 1997, I reported the results of my consultations to the Chief of Staff, with the result that the JGSDF was officially selected to become the counterpart of the U.S. Marine Corps.

In July 2001, U.S. Marine Corps Forces, Pacific (MARFORPAC) Commander Lieutenant General Frank Libutti sent a letter to General Masahiro Nakatani, the Chief of Staff of the JGSDF, proposing the establishment of a trilateral dialogue among MARFORPAC; U.S. Army Pacific (USARPAC); and the Ground Staff Office of the JSDF.

³⁵ Japanese Ministry of Foreign Affairs, Japan–U.S. Joint Declaration on Security-Alliance for the 21st Century, April 17, 1996.

In December 2001, Libutti's proposal was realized in the form of a Senior Level Seminar involving the three groups. The first Senior Level Seminar was held in Tokyo. The U.S. participants were Lieutenant General Wallace "Chip" Gregson, who went on to serve as the Assistant Secretary of Defense for Asia-Pacific Security Affairs; General James Cartwright, who ultimately served as the Vice Chairman of the Joint Chiefs of Staff; and General James Battaglini, who was the Commanding General of the 3rd Marine Division in Okinawa. Attending on the JGSDF side were Major General Ryoichi Oriki, who went on to serve as Joint Chief of Staff; and Major General Eiji Kimizuka, who served as Joint Task Force commander for the March 11, 2011, earthquake aftermath, and ultimately served as Chief of Staff of the JGSDF. The Senior Level Seminars were designed to "promote mutual understanding between the JGSDF, MARFORPAC, and USARPAC, and to improve the effectiveness of the U.S.–Japan security alliance . . . [as well as] to deepen the strategic dialogue between the three services to help build a more capable and competent global partnership."³⁶ Indeed, based on my personal experience from the Japanese side, I can state unequivocally that the Senior Level Seminar greatly strengthened the ties among the three services and enabled the JGSDF to view the Asia-Pacific region from a much broader perspective.

The Western Army Infantry Regiment and the Iron Fist and Dawn Blitz Exercises

In March 2002, Japan took the next step toward an amphibious capability, establishing the Western Army Infantry Regiment (WAIr) at Camp Ainoura in Sasebo City, Nagasaki Prefecture.³⁷ The JGSDF originally intended to establish a second infantry regiment on Okinawa, but local sentiment was not seen as favorable to the further augmentation of the number of ground troops on Okinawa. As a result, this regiment was placed under the direct control of the Western Army Commander.³⁸ The regiment was designed to ensure Japan's ability to defend the remote islands of the Southwest Island chain, but was not initially designed to recapture islands because the knowledge and concepts needed for island-recapturing operations, or amphibious operations, did not exist in any doctrines or manuals of the JSDF, nor were our forces structured, postured, or positioned to execute such operations.

During the late 1990s and early 2000s, I served as Head of the Exercise Branch of the Ground Staff Office, where my responsibilities included budgeting, programming, and executing bilateral and multilateral exercises. At that time, I noticed that the Chinese military was

³⁶ Bernadette L. Ainsworth, "U.S., Japan Militaries Conclude Senior Level Seminars," U.S. Marine Corps Forces, Pacific, November 27, 2007.

³⁷ Japanese Ministry of Defense, *Defense of Japan*, 2002. Note that the JGSDF deliberately uses the lower-case "i" in its acronym for the Western Army Infantry Regiment (WAIr).

³⁸ Japanese Ministry of Defense, 2002.

modernizing rapidly, especially the People's Liberation Army's Navy (PLAN) and PLA Air Force (PLAAF). Looking at the trajectory of their military build-up, it was clear even then that the Chinese would inevitably seek to expand their area of operational activities out to and beyond the Southwest Islands of Japan. Recognizing the importance of island defense, the JGSDF identified the need to further strengthen its bonds with the USMC and to improve the capacity of the WAIr to engage in island defense. The Exercise Branch proposed a new type of bilateral exercises with the USMC focused on this type of operation. General Gregson played a crucial role in this process as the 3rd Marine Expeditionary Force Commander, strongly supporting this initiative. The result was the creation of the annual Iron Fist bilateral U.S.–Japan exercise.

In February 2005, at the official invitation of General Michael Hagee, the 33rd Commandant of the USMC, our then–Chief of Staff of the JGSDF, General Tsutomu Mori, visited Washington, D.C., and Quantico. I accompanied him as the Director of the Ground Staff Office's Policy and Programs Division. General Mori discussed various issues with General Hagee and General James Mattis, who was then serving as commanding general of Marine Corps Combat Development Command. The three leaders exchanged views of the Asia-Pacific region and agreed on the value of further deepening collaboration between the two forces, including through the Iron Fist exercise.

Following significant efforts by the Ground Staff Office and backed by the strong support of the USMC, the first Iron Fist exercise focused on island-retaking was conducted in January 2006 at Camp Pendleton, bringing tremendous insights into the challenges of amphibious operations and the importance of jointness across the JSDF. Additionally, since its establishment in March 2006, the Japanese Joint Staff had increased the momentum for strengthening not only the planning of joint operations but also the development of joint strategy and operational concepts.

During my tenure as Director of the J5 office, we studied intensively what aspects of the future operational environment the JSDF needed to plan against and worked on the problem of joint operational concept development. The Joint Staff clearly recognized the urgency of developing the capabilities needed for recapturing remote islands if they were seized by foreign forces and for responding to emerging threats in space and cyberspace. During that time, Major General John A. Toolan, who went on to become MARFORPAC Commander, was serving as Vice Commander of U.S. Forces Japan and was stationed at Yokota Air Base, Tokyo. He provided unsparing advice and support to the Joint Staff.

Prior to this time, amphibious operations capabilities had been seen as off-limits because they were considered to be expeditionary and therefore not commensurate with Japan's principle of "exclusively defensive defense." However, the changing situation in the areas around the Southwest Island chain ultimately shifted the terms of the debate. If a sovereign island of Japan were occupied by foreign forces, the JSDF would be called upon to recapture the island, meaning that an island-recapturing capability could no longer be considered exclusively expeditionary and came to be seen as a defensive capability. With the creation of the joint task force to respond to

the March 11, 2011, triple disaster, it became increasingly clear that amphibious capabilities could contribute to humanitarian assistance and disaster relief (HA/DR) missions, providing an additional impetus to and source of legitimacy to such capabilities.³⁹

Since the Iron Fist exercise was first held in 2006, it had been evolving, culminating in Japan's participation in Dawn Blitz in 2013, which was an epoch-making event in the history of the JSDF in terms of both inter-service cooperation across the JSDF and combinedness between the United States and Japan. It was the first time that the three services had ever acted together to plan an amphibious operation, which they did aboard the Landing Platform-Dock *Shimokita*; also noteworthy was the focus on firepower coordination, which is a key for success in landing operations. Furthermore, this Dawn Blitz exercise sent a clear and strong strategic message to neighboring countries that the U.S. forces and the JSDF conducted an island-retaking operation side by side.

As Vice Chief of the Joint Staff, I had an opportunity to observe Dawn Blitz 2013 personally. I was amazed seeing JGSDF CH-47 Chinook helicopters and JMSDF Landing Craft, Air-Cushioned departing from the *Shimokita* and heading for San Clemente Island. On San Clemente, I reunited with General Toolan, then the Commander of the 1st Marine Expeditionary Force, for the first time since he left Tokyo. It was a rewarding moment for both of us, and, later, he kindly invited the Japanese delegation to his residence for dinner and discussion, further building bonds of friendship and comradery. It was obvious to me that the amphibious capability of the JSDF was drastically improving through training and exercises with our USMC partners, as well as through actual participation in HA/DR operations. The importance and role of these missions in informing Japan's thinking about amphibious operations are explored further in the next section.

The ARDB and HA/DR Missions

Let me touch briefly on the HA/DR aspects of the ARDB from my experience as Commander of the Eastern Army from August 2013 to August 2015. In 2013, shortly after the conclusion of the Dawn Blitz exercises, the JSDF were forced to respond to two HA/DR situations, one domestic and the other overseas. The first was *Operation Tsubaki Rescue*, and the second was *Operation Sankai*, one month later.

In October 2013, a typhoon hit the Izu islands. On Izu-Oshima, massive flooding and storm surge occurred, and 39 people were missing. Because the Izu islands were in the area of responsibility of the Eastern Army, I immediately deployed my forces from Tokyo by helicopters and C-1 cargo planes. Considering the challenges of responding to a disaster on remote islands, Defense Minister Onodera ordered me to lead a joint task force (JTF) in an effort to draw on

³⁹ The 31st Marine Expeditionary Unit conducted a HA/DR type landing operation during Operation Tomodachi. See Garry J. Welch, "Navy-Marine Corps Team Brings Crucial Disaster Relief to Isolated Island," 31st Marine Expeditionary Unit, March 27, 2011.

whatever capabilities were needed from across the JSDF. I named it JTF Tsubaki because *tsubaki* means camellia, the flower that is the symbol of Izu-Oshima. I was aware that this operation was the first joint HA/DR-type operation carried out by the JSDF on a remote island. From the standpoint of deployment to the island by sea and air, I thought the JSDF would gain important operational experiences from carrying out this mission, so the Ground Research Development Command embedded lessons-learned collectors in the operations. This decision helped to inform and substantially improve the next HA/DR mission that the JSDF responded to—the catastrophe of Super Typhoon Haiyan that slammed into the Philippines in November 2013, killing more than 6,000 people.

The JSDF responded to that disaster with Operation Sankai. *Sankai* is Tagalog for the concept of friendship, or *tomodachi* in Japanese. We decided on this name based on Japan's own recent experience as a recipient of HA/DR assistance from our U.S. ally. In March 2011, facing the unprecedented triple disaster of a 9.0 Richter-scale earthquake, a 60–130-foot-high tsunami moving faster than the speed of a commercial airliner, and the meltdown of the Fukushima Daiichi nuclear power plant, U.S. Forces Japan provided enormous support to my nation under the name *Operation Tomodachi*. Now, the JSDF were going to provide support to the people of the Philippines in responding to their own national catastrophe, and the Defense Minister once again ordered the establishment of a JTF. JTF Sankai collaborated with the 3rd Marine Expeditionary Force and the Philippines armed forces.

These operations provided important lessons and insights into the value of tri-service coordination and interagency cooperation and of links with civilian non-governmental organizations that will improve the ARDB's readiness, responsiveness, and ability to work jointly with partners in the future. Although maintaining readiness for a contingency in the Southwest Island chain will remain the priority, the ARDB could conceivably be employed in HA/DR missions together with the 3rd Marine Expeditionary Force in the future.

The Establishment of the ARDB and the Challenges Ahead

The *2013 National Defense Program Guidelines*—Japan's master document for force development and planning—authorized the creation of the ARDB as an outgrowth of our investments in learning about and developing amphibious operations and as a reflection of the insights gained from interactions with our USMC partners and our deployments in joint task forces to respond to natural disasters.⁴⁰ This ultimately led to the founding of the ARDB in March 2018.

The work of fully standing up the ARDB will not be finished in a day, a year, or perhaps even a decade. It will take many decades for Japan to perfect its amphibious operations

⁴⁰ Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2014 and Beyond*, December 17, 2013b.

capabilities, much as it has taken the USMC, which has developed and refined its operational expertise for more than 240 years. The ARDB will surely be faced with many issues and challenges; indeed, these issues and challenges will not be for the ARDB to confront alone but for the JSDF to grapple with as a whole.

One of the most pressing questions confronting the JSDF and the Ministry of Defense is the challenge of clarifying the key underlying orientation to amphibious operations. Are they primarily about island defense, as in the earliest thinking by the JSDF about the role of amphibious forces? Or about retaking islands? Or expeditionary operations, like those of the USMC?

The prototype of the amphibious operations originates in the 1920s. One U.S. Marine officer foretold that warfare in the Pacific theater, if it ever came, would begin with a Japanese raid on U.S. forward bases. He insisted on the need for building up offensive assault landing operations capabilities that could be directed against enemy bases rather than merely adopting a posture appropriate for conducting defensive operations aimed at protecting America's own naval bases. His name was Earl H. Ellis, and ultimately Major Ellis's thinking about amphibious warfare and naval strategy, encapsulated in his *Advanced Base Operations in Micronesia*, shaped the way that the United States employed its forces during its "island-hopping" campaign against Japan in World War II.⁴¹

Professor Ikujiro Nonaka, a Japanese organizational theorist and professor emeritus at the Graduate School of International Corporate Strategy of Hitotsubashi University, best known for his study of knowledge management, has been enthusiastic about the USMC as a learning organization. In his book *Amerika Kaiheitai (The United States Marine Corps)* he praised Major Ellis's achievement, noting, "Amphibious operations could not have been developed merely as an extension of the past experiences of the Marine Corps. It was not an evolutionary shift based on marginal improvements; it was a revolutionary breakthrough which emerged suddenly."⁴²

In my own previous writings on Japan and the ARDB in the *Marine Corps Gazette*, I characterized the challenge of conducting amphibious operations in this way:

An amphibious operation is an extremely complicated operation. We can say it is an ultimate or high-end joint operation. The reason why I say ultimate and extremely complex is that the operational space rapidly changes in accordance with the operations' progress. I would name the operations "simultaneous equations composed of three-dimensional spatial axes and timing axis." Ground, sea, or air combat operations are relatively simple because the major player or component is definite. In an amphibious operation, the main operational space quickly transfers from maritime-undersea, to sea-air, to seashore, and to ground.

⁴¹ Earl H. Ellis, *Advanced Base Operations in Micronesia*, Washington, D.C.: Department of the Navy, 1921.

⁴² Nonaka Ikujiro, *Amerika Kaiheitai [The United States Marine Corps]*, Tokyo: Chuko-shinsho, 1995, p. 176.

Amphibious operations require the most appropriate command and control (C2) structure as every-time phase transfers.⁴³

In my view, doctrine and C2 are the two most critical elements for success in amphibious operations.

On the Marine Corps' approach to combat operations, its core doctrinal document MCDP-1 *Warfighting* says:

Doctrine establishes a particular way of thinking about war and a way of fighting. . . . In this manner, doctrine provides the basis for harmonious actions and mutual understanding. . . . Our doctrine does not consist of procedures to be applied in specific situations so much as it sets forth general guidance that requires judgement in application."⁴⁴

Doctrine, then, serves as the foundation of orchestrated efforts and mutual understanding. The ARDB is neither a Marine Expeditionary Brigade nor a Marine Expeditionary Unit. The mission and organization of the ARDB are quite different from those of the USMC. Cultivating Japan's amphibious operational capability cannot be accomplished only by establishing the ARDB. The JSDF overall will need to develop a doctrine for Japan's amphibious operations and will need to adapt that doctrine to suit Japan's constitutional, legal, strategic, and operational needs and situation.

With respect to command and control, USMC doctrine states, "In order to generate the tempo of operations we desire and best cope with the uncertainty, disorder, and fluidity of combat, command and control must be decentralized."⁴⁵ This approach encourages subordinate commanders or commanders in the field to act on their own discretion rather than wait for higher command echelons' detailed instructions. It is the underlying philosophy for amphibious operations because a prominent characteristic of such operations is an all-service-involved high-end joint operation in a rapidly changing operational environment. The establishment of an effective and suitable C2 structure is critical for successful operations. Timely and strict C2 is key. Each component should synchronize efforts to the clearly defined mission. Once a C2 structure is set up, each subordinate commander should follow the commander. Such a culture should be encouraged to take root in the JSDF. As has been noted, however, inculcating such a new and dynamic culture of devolved C2 and operational flexibility will take time—as the saying goes, "Rome was not built in a day."

⁴³ Koichi Isobe, "The Amphibious Operations Brigade: The Establishment of the JGSDF Brigade and Its Challenges," *Marine Corps Gazette*, Vol. 101, No. 2, February 2017, p. 27.

⁴⁴ USMC, *Warfighting*, Washington, D.C.: Department of the Navy, U.S. Marine Corps Doctrinal Publication-1, 1997.

⁴⁵ USMC, 1997.

Conclusion

My own path crossed with that of the USMC at so many points. Our fathers' and grandfathers' generations fought each other on the beaches and in the jungles of the vast Pacific theater. More than 70 years have passed since that time and now the United States and Japan share common values and interests and are determined to act in support of a free and open Indo-Pacific region. At the beginning of this paper, I mentioned I studied at Marine Corps University in Quantico, Virginia, in 1996. At that time, the only Japanese family living in Quantico was mine; today, five JGSDF families are living there. They will form the nucleus of the officer corps that will develop the future doctrine for, and nurture the growth of, the ARDB. I am convinced that although the challenges remaining for Japan's amphibious operations are substantial, the prospects of surmounting them are bright, and Japan will continue to draw inspiration and assistance from our close partner, the United States Marine Corps.

4. Japan's Amphibious Joint Pain

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The Japan Self-Defense Forces (JSDF) are a capable, modern organization. Composed of three separate services, the JSDF rose from the ashes of Imperial Japan's military and reconfigured their primary mission to that of exclusively self-defense (*senshu bōei*). Over the course of the Cold War, rather than working on inter-service interoperability, the services built strong connections with their U.S. counterparts. The Japan Maritime Self-Defense Force (JMSDF) has worked closely with the U.S. Navy since the 1950s; the Japan Air Self-Defense Force (JASDF) has done similarly with the U.S. Air Force since the 1970s; and the Japan Ground Self-Defense Force (JGSDF) has slowly built up ties with the U.S. Army and the U.S. Marines Corps since the 1980s.⁴⁶ This is important because the JSDF developed in ways to complement U.S. forces in the region and do things the U.S. military does not do, and the three services focused on building interoperability with their U.S. counterparts.⁴⁷ Although this helped individual service relationships within the construct of the U.S.–Japan alliance, it also left the three JSDF services relatively isolated from one another.

After the end of the Cold War, Japan found itself facing new threats from China and North Korea. These challenges forced the three JSDF services to work more jointly. In this paper, I examine one aspect of these challenges and the response of the JSDF: the JSDF efforts to build amphibious capabilities to defend against Chinese provocations and possible seizure of Japanese territory. The question I seek to answer is to what extent, if any, Japan's quest to develop amphibious capabilities is spurring jointness within the JSDF. To conduct this research, I focused on English and Japanese primary sources, including government publications, policies, and interviews with both active and retired military officers in the U.S. and Japanese armed forces. For all active personnel, these interviews were conducted on a strict not-for-attribution basis. I also relied on secondary sources, such as reports by think tanks and op-eds by regional experts and retired military officers.

In this paper, I provide a brief history of Japan's development of amphibious capabilities, then examine four primary challenges to jointness among the JSDF. These challenges are in the areas of command and control, communications and information-sharing, coordinating fires, and JSDF equipment. I argue that the development of Japan's amphibious capabilities is stimulating

⁴⁶ Fumio Ota, "Jointness in the Japanese Self-Defense Forces," *Joint Force Quarterly*, Winter 2000–2001, p. 60.

⁴⁷ Interview with Major General Richard Simcock II (USMC, retired), March 5, 2018.

a shift toward greater jointness among the three JSDF services, but it remains a slow process fraught with many challenges.

Japan's Quest to Develop Amphibious Operations Capabilities

The Japanese archipelago is a vast area with numerous land features separated by wide swathes of water. Composed of 6,852 islands within a claimed 4,470,000-square-km Exclusive Economic Zone, the JSDF and the Japan Coast Guard (JCG) are responsible for defending thousands of potential invasion points, a large airspace, and hundreds of thousands of square kilometers of waters.⁴⁸ Its Southwestern area is particularly spread out. With a distance of 1,100 km from the southern point of Kyushu to the westernmost inhabited island of Yonaguni, the Southwest Island chain known as the Nansei Shotō is composed of 55 islands and islets.⁴⁹ Nearby, and uninhabited, are a set of five islands and three islets known collectively as the Senkaku Islands, which are administered by Japan but also claimed by both China and Taiwan.⁵⁰

Over the past 15 years, there has been a rapid increase in Chinese fishing vessels and aircraft prodding Japanese territorial waters and airspace. These activities have largely focused on the Senkaku Islands, which have come to represent the regional struggle between these two Asian powers.⁵¹ Although a point of contention between Beijing and Tokyo since 1971, a turning point came in 2010 when a Chinese fishing trawler collided with two JCG vessels. In the aftermath, China confronted Japan in multiple domains, including by increasing its presence around the Senkakus using maritime law enforcement vessels, fishing vessels, and even military ships and planes in the waters around and skies above the islands.⁵² Tokyo views these activities as deliberate challenges to the status quo that undermine Japanese sovereignty and security.⁵³

⁴⁸ Japan Institute of Country-ology and Engineering, “Umi ni Kakomareteiru Kuni [A Country Surrounded by Water],” in *Kokudo wo Shiru/Igai to Shiranai Nihon no Kokudo* [Understand our National Territory/Unexpectedly Unknown Things of Japanese Territory], Japan Institute of Country-ology and Engineering (JICE), webpage, undated-b; Japan Institute of Country-ology and Engineering, “Tō Zai Nan Boku ni Nagai Yuminari no Kokudo [National Territory that Stretches Far East-West-South-North],” *Kokudo wo Shiru/Igai to Shiranai Nihon no Kokudo* [Understand Our National Territory/Unexpectedly Unknown Things of Japan Territory], webpage, undated-a. Some of Japan's maritime claims are either disputed or not recognized by other states.

⁴⁹ Encyclopedia Britannica, “Ryuku Islands,” web entry, undated.

⁵⁰ Their English variant name is Pinnacle Islands.

⁵¹ Analysis of the strategic competition between Japan and China includes Jeffrey Reeves, Jeffrey Hornung, and Kerry Lynn Nankivell, *Chinese-Japanese Competition and the East Asian Security Complex: Vying for Influence*, New York: Routledge, 2017; James Manicom, *Bridging Troubled Waters: China, Japan, and Maritime Order in the East China Sea*, Washington, D.C.: Georgetown University Press, 2014; and Richard C. Bush III, *The Perils of Proximity: China-Japan Security Relations*, Washington, D.C.: Brookings Institution Press, 2013.

⁵² Michael J. Green, Kathleen Hicks, Zack Cooper, John Schaus, and Jake Douglas, *Countering Coercion in the Maritime Asia: The Theory and Practice of Gray Zone Deterrence*, Washington, D.C.: Center for Strategic and International Studies, 2017, pp. 66–94.

⁵³ Japanese Ministry of Foreign Affairs, *National Security Strategy*, Tokyo, December 17, 2013, pp. 12–13.

In looking at the changing regional security situation, Tokyo realized “the qualitative and quantitative capabilities of the defense force underpinning the JSDF activities were not necessarily sufficient.”⁵⁴ Based on this recognition, the 2013 *National Defense Program Guidelines* called for building a “Dynamic Joint Defense Force” as the cornerstone of Japan’s peace and security. This evolved from the 2010 *Guidelines* that called for building a “Dynamic Defense Force.”⁵⁵ The 2013 *Guidelines* recognized that, with limited resources at Japan’s disposal, it was necessary to make the future JSDF more effective “to carry out various activities seamlessly and flexibly based on joint operations.”⁵⁶ In building this force, the *Guidelines* placed an emphasis on

developing advanced technology and information, command and communications capabilities and achieving readiness, mobility, flexibility, sustainability, robustness and connectivity in terms of both tangible and intangible resources while giving consideration to the establishment of broad infrastructure for logistical support.⁵⁷

This was new for Japan, and it demonstrated that Tokyo was serious about enhancing the deterrence and response capability of the JSDF. Tokyo realized that not only was the Nansei Shotō vulnerable, but the JSDF services were individually and collectively unprepared to handle China’s challenges to Japanese control. This meant deterring China’s increased activity and, failing that, defending against an attack and conducting an operation to retake islands should they be captured. Therefore, Tokyo accelerated efforts to bolster the ability of the JSDF to conduct island defense operations. The 2013 *Mid-Term Defense Program* contained capabilities meant to bolster island defenses, such as amphibious assault vehicles (AAVs), V-22 Osprey tilt-rotor aircraft, CH-47JA transport helicopters, unmanned aerial vehicles and airborne early warning aircraft, and C-2 transport aircraft.⁵⁸

Importantly, building off almost a decade of work, the JGSDF embarked on an effort to establish amphibious capabilities in the form of a 2,100-member Amphibious Rapid Deployment Brigade (ARDB), which was stood up in March 2018.⁵⁹ Once complete, its total strength will

⁵⁴ Japanese Ministry of Defense, *Defense of Japan 2017*, Tokyo, 2017a, p. 220.

⁵⁵ Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2011 and Beyond*, Tokyo, December 17, 2010.

⁵⁶ Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2014 and Beyond*, Tokyo, December 17, 2013b, p. 4.

⁵⁷ Japanese Ministry of Defense, 2013b.

⁵⁸ Japanese Ministry of Defense, *Medium Term Defense Program (FY 2014–FY 2018)*, Tokyo, December 17, 2013a.

⁵⁹ Japanese Ministry of Defense, “Bōuei Daijin Rinji Kisha Kaiken Gaiyō [Summary of the Minister of Defense’s Special Press Conference],” Tokyo, September 7, 2016.

increase to approximately 3,400.⁶⁰ Unlike the U.S. Marine Corps, the ARDB is not expeditionary; instead, its purpose is to defend—and, if necessary, retake—Japanese islands. The ARDB is the first of three brigades planned for the Western Army. It is composed of two amphibious regiments (set to grow to three, eventually), one AAV-7 amphibious assault battalion, one field artillery battalion, one reconnaissance company, a signal company, an engineer company, and a logistics support battalion.⁶¹ The unit is based at multiple stations in western Japan. The headquarters is at Ainoura, near Sasebo in Nagasaki prefecture, but its composite units are spread out at Ainoura, Sakibe (also Nagasaki prefecture), and Kusu and Yufuin in Ōita prefecture. There are also amphibious education units located at some stations in Nagasaki and Ōita prefectures. The objective of establishing the ARDB is for the JSDF to acquire the capabilities “to land, recapture and secure without delay any remote islands that might be invaded.”⁶² The 640-strong Western Army Infantry Regiment (WAiR), a battalion-sized light infantry regiment established in 2002 to specialize in amphibious operations, is the core of the ARDB.⁶³

In addition to the ARDB, the JGSDF is strengthening its presence throughout the Nansei Shotō to support broader JSDF efforts to protect Japanese territory from Chinese provocations. Toward this end, the JGSDF is establishing a series of camps throughout the island chain. In March 2016, the JGSDF began operations of a Coastal Observation Unit and logistics facility on Yonaguni, the closest inhabited Japanese island to Taiwan. Manned with about 160 personnel, the unit is a permanent intelligence-gathering facility that provides constant monitoring of activities in the East China Sea. The JGSDF plans to open similar facilities on neighboring islands in the coming several years. On Amami-Oshima, the JGSDF plans to establish a guard unit by March 2019 to man a logistics facility, mobile warning and control radar system, and surface-to-air missile (SAM) and surface-to-ship missile (SSM) batteries.⁶⁴ This guard unit will consist of about 550 infantry personnel. On Miyako, a larger presence of about 700–800 personnel will man similar facilities by the same date.⁶⁵ By 2021, another will be completed on Ishigaki, with a plan to station 500–600 personnel manning similar capabilities.⁶⁶ These planned deployments are captured in Figure 4.1.

⁶⁰ Koichi Isobe, “The Amphibious Operations Brigade: The Establishment of the JGSDF Brigade and Its Challenges,” *Marine Corps Gazette*, Vol. 101, No. 2, February 2017; email correspondence with anonymous retired JGSDF officer, September 27, 2017.

⁶¹ Isobe, 2017; email correspondence with Anonymous H, March 18, 2018.

⁶² Japanese Ministry of Defense, 2013a, p. 5.

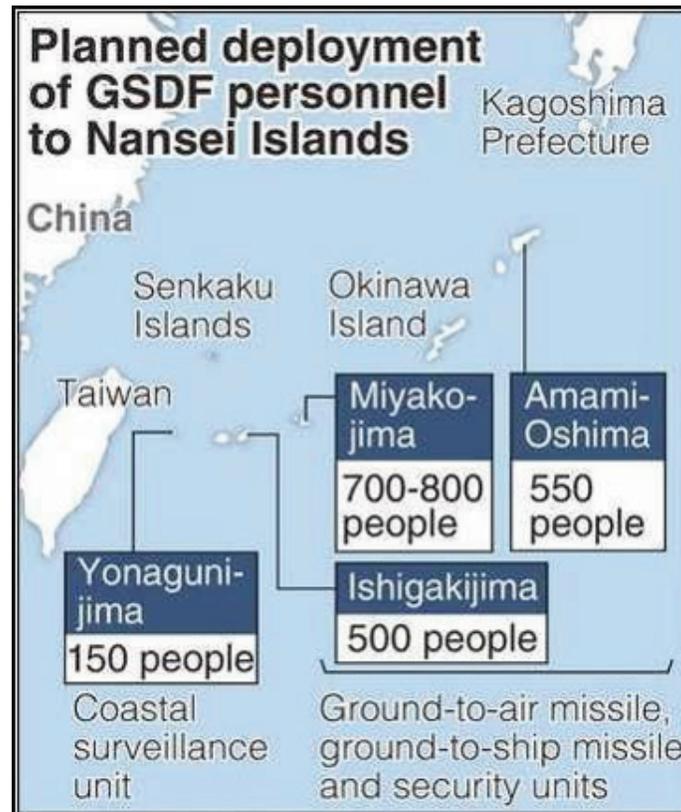
⁶³ In the U.S. Marines Corps context, 640 people would be roughly battalion-sized, not a regiment. The use of the term *regiment*, which is normally a unit consisting of several battalions, therefore differs from its U.S. counterpart.

⁶⁴ Specific figures drawn from documents received from the Japanese Embassy and U.S. Army Japan.

⁶⁵ Specific figures drawn from documents received from the Japanese Embassy and U.S. Army Japan.

⁶⁶ Specific figures drawn from documents received from the Japanese Embassy and U.S. Army Japan.

Figure 4.1. Planned Deployments of JGSDF Units in the Southwest Islands



SOURCE: Image courtesy of Yomiuri Shimbun, November 25, 2015.

The types of missiles to be deployed are important, because the range of these fires and proximity to the Senkaku Islands mean they can be employed as part of a joint fires package in an amphibious operation to assist ARDB forces. The Ministry of Defense has announced that it will deploy Type-88 SSM and the more advanced Type-12 SSM batteries on Miyako and Amami-Oshima. With maximum ranges of 180 km and 200 km, respectively, these missiles can fire upon enemy ships approaching Japanese territory further out from shore.⁶⁷ The arsenal of missiles is expected to grow. Not only will the Type-12 replace all Type-88 SSMs at some point, but the Ministry of Defense is developing a new missile with a maximum range of 300 km to deploy on Miyako and other major islands within this southwestern corridor.⁶⁸ The current plan is for this to be fielded by 2023.⁶⁹ In addition to more Type-11 short-range SAMs, the JGSDF is

⁶⁷ These figures are open-source ranges. IHS Markit, “SSM-2,” *Jane’s Weapons: Naval*, September 6, 2017a; IHS Markit, “Type 12,” *Jane’s Weapons: Naval*, September 6, 2017b; IHS Markit, “Type 88 (SSM-1),” *Jane’s Weapons: Naval*, September 6, 2017c; IHS Markit, “Type 90 (SSM-1B),” *Jane’s Weapons: Naval*, September 6, 2017d.

⁶⁸ IHS Markit, “Japan—Army,” *Jane’s World Armies*, March 15, 2018b.

⁶⁹ Email correspondence with Anonymous F, September 22, 2017.

procuring an upgraded Type-03 middle-range SAM to deploy on the outposts planned for Ishigaki, Amami-Oshima, and Miyako by 2021.⁷⁰ With an enhanced interception ability capable of tracking multiple targets simultaneously and intercepting both fighter aircraft and high-speed cruise missiles, the Type-03, in particular, reinforces the air defense of Japan's Southwest Islands. Requests for both types of missiles were included in the fiscal year (FY) 2018 budget request.⁷¹ Combined, the JGSDF is using Japan's geography to its advantage, creating its own anti-access/area denial (A2/AD) strategy vis-à-vis China.⁷² Because the ARDB will not be effective if the assets carrying the ARDB forces are destroyed before making landfall, these JGSDF fires help to defend against potential security threats to the JMSDF on the water or the JASDF in the sky, which are integral components to protecting the ARDB as it transits to the area where the island has been seized. Because all JSDF services will need to operate within the range of Chinese forces coming from mainland China, these missiles support this effort.

For the ARDB's missions of defending or retaking Japanese islands (and for amphibious operations more generally) to succeed, the three JSDF services must cooperate seamlessly and quickly to tackle the changing operational challenges in the air and on the sea and the ground. Jointness is indispensable in this effort because each service can do what the others cannot.⁷³ Amphibious operations are extremely complex and therefore challenging. For Japan to succeed in overcoming the tyranny of distance to deploy its troops and equipment ashore as one package, all services across multiple domains must act as one.⁷⁴ Both the Ministry of Defense and the JSDF are aware of this. The 2017 *Defense of Japan* states that both are "making efforts to strengthen the foundation of the joint operations as well as to enhance the functions of the Joint Staff in light of the current security environment."⁷⁵

This will not be easy for forces that have not traditionally worked together in a joint manner, but there is some historical basis to be guardedly optimistic. In direct response to the ballistic missile threat from North Korea, as demonstrated by the 1998 Taepodong that overflew Japan, Tokyo decided to build a ballistic missile defense (BMD) system.⁷⁶ The current system is

⁷⁰ Dylan Malyasov, "Japan Deploying Type 3 Missile System in Okinawa Prefecture," *Defense Blog*, August 23, 2016.

⁷¹ Japanese Ministry of Defense, *Waga Kuni no Bōei to Yosan: Heisei 30 Nendo Gaisan Yōkyū no Gaiyō* [*Defense Programs and Budget of Japan: Summary of FY 2018 Request Estimates*], Tokyo, 2017d, p. 7.

⁷² Toshi Yoshihara, *Going Anti-Access at Sea: How Japan Can Turn the Tables on China*, Washington, D.C.: Center for a New American Security, September 2014.

⁷³ Grant Newsham, "Developing a Maritime Security Coalition Architecture for the Indo-Pacific," News18.com, November 1, 2014a.

⁷⁴ Other domains include cyber, space, and electronic warfare, but these will not be covered in this paper.

⁷⁵ Japanese Ministry of Defense, 2017a, p. 314.

⁷⁶ Masayuki Rokuhata, "Kitachōsen no Dandō Misairu Kaihatsu Oyobi Waga Kuni no Taiō no Hensen [North Korea's Ballistic Missile Development and Our Country's Changing Response]," Defense Structure Improvement Foundation, undated.

composed of two tiers: The JMSDF operates the Aegis system on its destroyers and the JASDF operates Patriot Advanced Capability–3 missile batteries. The two forces also conduct routine intelligence, surveillance, and reconnaissance (ISR) operations around the Japanese archipelago, even sharing tasks on daily schedules, thereby allowing one service to cover the tasks of the other should either be unable to conduct an assigned task for any reason. The Link 16 tactical data link system enables the services to share data across different platforms.⁷⁷ Operationally, their efforts are jointly conducted under a BMD joint task force (JTF) with the Air Defense Commander of the JASDF at Yokota serving as joint operations commander and with command and control (C2) centralized through the Japan Aerospace Defense Ground Environment radar network.⁷⁸ Although not joint in the sense that all three JSDF services are operating together under a joint command, it stands as the only example of long-term, successful joint operations that the JSDF have conducted to date. For more than a decade, the JMSDF and JASDF have come together on C2, communications and data-sharing, intelligence-sharing, and ISR for daily operational necessities.

The history of successful joint operations of all three JSDF services is even shorter. Throughout the 1990s and early 2000s, the JSDF engaged in peacekeeping and other non-combat, humanitarian operations around the world. These include the inaugural deployment of the JSDF to Cambodia in 1992, followed by operations in Mozambique, Rwanda, the Golan Heights, East Timor, Iraq, and the Indian Ocean. Although the services occasionally deployed together, they operated independently. They were not operating under any joint commander; instead, they operated in parallel. Additionally, until 2011, the JSDF did not operate jointly even when conducting disaster relief operations. For example, in response to the 1995 Kobe earthquake (called the Hanshin-Awaji earthquake), no JTF was established. Instead, all the services have been involved in responding to natural disasters in Japan, and when two or three services were involved at the same time, they operated in parallel.

Things changed following the March 11, 2011, triple disaster: earthquake, tsunami, and nuclear power plant meltdown, together directly killing 15,893 people.⁷⁹ With the effect of the earthquake stretching across multiple prefectures, the Japanese government required a full-scale, whole-of-government response. On March 14, the government established the first JSDF JTF under the leadership of Lieutenant General Eiji Kimizuka of the JGSDF's Northeastern Army. It

⁷⁷ Link 16 is used on aircraft, ships, air defense and missile defense systems, and to a limited degree, weapons. The data-sharing can be rudimentary in nature, such as finding a jet, or as sophisticated as target handoff/pairing, where one aircraft will share its targeting information with another aircraft that does not have it. When different services have the same Link 16 system, this enables data-sharing from aircraft-to-ship and vice versa.

⁷⁸ Yoshikazu Watanabe, Masanori Yoshida, and Masayuki Hironaka, *The U.S.-Japan Alliance and Roles of the Japan Self-Defense Forces: Past, Present and Future*, Washington, D.C.: Sasakawa Peace Foundation USA, 2016, p. 29.

⁷⁹ There are 2,553 people still unaccounted for. "Six Years After: 34,000 People in Tohoku Region Still in Makeshift Housing Units," *Asahi Shimbun*, March 11, 2017.

lasted 174 days and, at its peak, oversaw a total of 107,000 JSDF personnel from all services, 540 aircraft (fixed and rotary), and 59 ships.⁸⁰ Widely hailed as a success, the JSDF have since conducted three operations using the JTF model, including in response to a deadly typhoon striking Izu-Oshima Island in 2013, an earthquake that struck Kumamoto in 2016, and its first overseas JTF to respond to Typhoon Haiyan in the Philippines in 2013.

Challenges to Jointness in the JSDF

These examples demonstrate that the JSDF can operate jointly, but to date has done so only in response to natural disasters. Amphibious operations, which involve an adversary, rapidly changing conditions, and operations across multiple domains, are an entirely different type of operation and more difficult than HA/DR operations. As one analyst has characterized them, amphibious operations are “the equivalent of ‘cross-fit’ training . . . [that exercise] all the main ‘muscle groups’ including sea, ground, and air.”⁸¹ Given this difficulty, it is not surprising that jointness in amphibious operations is difficult to achieve. While the JSDF have moved toward greater jointness, albeit in an ad hoc manner, challenges remain that are likely to inhibit further progress without a concerted effort by all three services. Four areas deserve attention.

Command and Control

To conduct an amphibious operation, it is imperative for all three services to act as a unified whole. Although the ability of the ARDB to move its forces from point A to point B and retake an island from enemy forces will be the centerpiece of this, these forces cannot act alone. Securing the cooperation of the JMSDF and JASDF is an essential component for an amphibious operation to succeed, particularly if enemy forces engage in a saturation-type operation near the island to prevent JSDF forces from advancing.⁸² This places the onus on the three JSDF services to coordinate their activities. Toward this end, the JSDF benefits from having the *Hyūga*-class and *Izumo*-class helicopter destroyers (DDHs). The ships were not built with multi-service operations in mind, but both classes of ships, given their technical data link systems and sheer size to house commanders and requisite staff, can serve as C2 platforms for amphibious operations. In contrast, the three *Ōsumi*-class LSTs (landing ship, tank), despite the expectation of playing a key role in any amphibious operation, cannot handle C2 functions due to limited

⁸⁰ Kazumasa Imai, “Higashi Nihon Dai Shinsai ni Okeru Jieitai no Katsudō, Nichi-Bei Kyōryoku: Jieitai no Saigai Haken to Beigun no Tomodachi Sakusen no Kadai [SDF Activities and Japan–U.S. Cooperation in the Great East Japan Earthquake: Issues of the SDF’s Disaster Dispatch and U.S. Operation Tomodachi], *Rippō to Chōsa*, No. 329, June 2012; Japanese Ministry of Defense, “Higashi Nihon Dai Shinsai (Heisei 23-nen 3-gatsu 11-nichi) ni Okeru Saigai Haken Katsudō [Disaster Dispatch Activities in the Great East Japan Earthquake (March 11, 2011)],” Tokyo, December 26, 2011.

⁸¹ Newsham, 2014a.

⁸² A *saturation operation* is an asymmetric tactic of overwhelming more-sophisticated capabilities by swarming smaller, sometimes inferior, capabilities against them.

connectivity. Nor can JMSDF destroyers. While these ships have the data link technical capabilities, they are not designed for amphibious operations. Only the DDH has the combination of data link capability, size, and applicability to an amphibious operation to play the vital role of C2.

Although these platforms can perform C2 functions for amphibious operations, there are challenges. For an operation that assumes enemy forces will land on an island and be supported by capabilities in the air and on the sea, a JSDF commander will face an operation that the JSDF have never confronted before, and how well the JSDF can perform C2 during a joint amphibious operation is unknown and untested. For example, if the *Hyūga*-class or *Izumo*-class DDHs are to serve as C2 platforms, are the JMSDF's airspace control measures designed to support the launch of multiple aircraft or waves of aircraft? More broadly speaking, are the three services comfortable with one of the other two services commanding their forces in a joint task force role?

Perhaps the biggest question is whether the JSDF can, and are willing to, shift C2 during an operation, as needed. An amphibious operation likely will consist of deploying the ARDB along with ISR, minesweeping, air- and sealift, cyber support, and the requisite firepower assets from all three services. This operation must be under one commander, agreed upon in advance. Once these capabilities are assembled, these forces will move as one amphibious task force (ATF) to the island or islands under attack. The ATF commander will be responsible for the units while in transit and control the battle space from the ocean bed to the airspace above the forces.⁸³ Once the ATF reaches its target and ARDB troops make landfall, command could then transition to the ground forces ashore.⁸⁴ During the battle, this C2 could even transfer back between them. The JGSDF and JMSDF understand these differences in C2, the difference between “supported” versus “supporting” commands, and the necessity of shifting command. The issue has even been “well studied” within the services, and a JTF is expected to be formed for any amphibious operation.⁸⁵ It is unclear, however, what conclusions have been reached. For example, is there a clear understanding of which service will command? Are the JMSDF and JASDF comfortable in allowing the JGSDF to command their units in a supporting role? Without delineating this—and training for it in exercises—prior to an operation, the responding JSDF units will be forced to make ad hoc operational decisions in a conflict environment. This is a recipe for disaster.

One potential reason behind this unresolved issue of delineating C2 lies in the exercise culture of the JSDF. Most JSDF exercises are executed with a pre-made plan, no free-play injects, and no stress or attempts to really test the unit along all war-fighting functions.⁸⁶

⁸³ If we use the same nomenclature as the U.S. Marine Corps, this individual would be called the Commander, Amphibious Task Force.

⁸⁴ Using the same nomenclature as the Marines, this individual would be called the Commander, Landing Force.

⁸⁵ Email correspondence with Anonymous A, February 25, 2018.

⁸⁶ Email correspondence with Anonymous B, February 28, 2018.

Exercises are conducted at a “basic level,”⁸⁷ and the injection of uncertain scenarios or situations are rare.⁸⁸ Instead, the JSDF usually make a battle plan prior to the exercise and execute it like a script, including C2. This prevents the JSDF from exercising in unpredictable environments that necessitate changing C2.⁸⁹ Interviewees for this paper explained that the JSDF understand the importance of this issue, but they do not appear to have exercised transferring C2 among the services. Although there are two amphibious operations held annually with the United States, Iron Fist and Keen Sword, they are primarily JGSDF exercises with small, token JMSDF and JASDF participation. These are held in the United States and expensive for Japan to hold regularly with large numbers of personnel or equipment, and neither of these test C2 transitions at a level needed for real war-fighting, if at all.⁹⁰

In fact, despite the push to develop amphibious capabilities, the three services have rarely conducted any joint exercises among themselves to train for amphibious operations. The earliest known example was on a small Japanese island named Eniyabanare in 2014 to simulate the recapture of a remote island.⁹¹ But even as a joint exercise, its size was small, involving 1,300 personnel, two JMSDF destroyers, two JASDF F-2 jets, a landing craft, air-cushioned (LCAC) for troops and amphibious vehicles, a minesweeper, and some helicopters. If Japan wants to test its forces under conditions more closely simulating actual conditions of an amphibious operation, it would require at least one or two JMSDF flotillas (8–16 destroyers), two or three LSTs, approximately five to ten minesweepers, and “far more” jets than just two F-2s.⁹² In terms of personnel, 1,300 people is small. Even a U.S. Marine Expeditionary Unit with 2,500 personnel would not be enough to conduct this sort of operation.⁹³ Still, this exercise was important because it marked the first joint exercise focused on retaking an island. This exercise, however, has not been the norm. Since then, there is nothing in the public record of repeating this exercise on this scale, although in 2015 about ten JASDF personnel participated with more than 1,300 JGSDF and JMSDF personnel and assets in an exercise on the same island.⁹⁴ The only other example is the annual joint exercise that fluctuates between field-training exercises and command-post exercises. While joint, they do not always focus on amphibious operations (though the 2015 joint exercise did).⁹⁵ The norm for amphibious exercises tends to involve a

⁸⁷ Email correspondence with Anonymous A, February 25, 2018.

⁸⁸ Interview with Anonymous D, February 26, 2018.

⁸⁹ Interview with Simcock, March 5, 2018.

⁹⁰ Interview with Simcock, March 5, 2018.

⁹¹ “With Wary Eye on China, Japan Drill Simulates Retaking Island,” Reuters via *Voice of America*, May 22, 2014.

⁹² Email correspondence with Anonymous A, April 24, 2018.

⁹³ Interview with Simcock, April 25, 2018.

⁹⁴ “(Tai Chū Ro) Amami Shotō de San Jieitai Gōdō Jōriku Enshū (Kaiheitai) [(Against China and Russia) Three Self-Defense Forces Joint Landing Practice on Amami Islands],” *Naver Matome*, September 7, 2015.

⁹⁵ “Heisei 27 Nendo Jieitai Tōgō Enshū [SDF Joint Practice in FY2015],” *BoueiNews.com*, November 15, 2015.

small number of JGSDF and JMSDF personnel and assets, such as a 2017 island defense exercise in Shizuoka prefecture involving about 150 people, one *Ōsumi*-class LST, an LCAC, and rubber boats.⁹⁶

Communications and Information-Sharing

For any military operation, timely, reliable, and effective communication and information-sharing among units is vital to success. Despite having different hardware, the three JSDF services can and do use similar radio frequencies. This is important because this theoretically enables the three services to communicate among themselves. In an operation, this is crucial to gaining a rudimentary understanding of the operational situation. For clarity on where friendly and enemy forces are, it is necessary to have interoperable tactical data-sharing systems across aircraft, ships, and air and missile defense systems. The JMSDF and JASDF benefit from having the Link 16 common secure tactical data-sharing system, allowing the two services to instantaneously transfer information and have a shared situational awareness of any operation.

Still, challenges remain that prevent the JSDF from moving toward greater jointness, particularly with the JGSDF. As each service was established, it built its own communication systems, target symbols, and message formats.⁹⁷ This meant the services could not communicate among themselves on common voice devices. Compounding the problem, the services tend to use different radio frequencies. For example, the JMSDF tends to use high-frequency or ultra-high-frequency transmissions; the JGSDF mainly uses very high-frequency transmissions.⁹⁸ Although a joint frequency within the same band is provided for exercises, the issue is not resolved.⁹⁹ Another problem is that the actual hardware used to communicate within each service differs, a fact that carries implications for the power this equipment can generate. There are even some legal restrictions on JGSDF communications equipment that prevent long-distance communications.¹⁰⁰ One example mentioned several times during the author's research demonstrates the extent of this problem. In one exercise focused on island defense, the JMSDF and JGSDF did not share common communication equipment. JGSDF personnel tasked with landing on an island were transported on a JMSDF ship, but the two services' communication equipment could not operate together and JGSDF personnel had to bring their own equipment

⁹⁶ “Jieitai ga Jōriku Kunren wo Kōkai [SDF Put Landing Exercise on Public Display],” *Sankei News*, November 12, 2017.

⁹⁷ Ota, Winter 2000–2001, p. 58.

⁹⁸ Email correspondence with Anonymous A, March 26, 2018. The JGSDF uses very high frequency because it is less affected by terrain than ultra-high frequency. Although the JMSDF also uses very high frequency for various purposes, it is too crowded with users in Japan and therefore not easy for the Ministry of Internal Affairs and Communications to allocate to JMSDF. Furthermore, because ships do not have to worry about mountains and other terrain issues, ultra-high frequency is used.

⁹⁹ Interview with Anonymous C, February 26, 2018.

¹⁰⁰ Email correspondence with Colonel Grant Newsham (USMC, retired), February 28, 2018.

aboard for use on the ship.¹⁰¹ Compounding matters, JGSDF personnel who had landed could not speak to JSDF personnel on the ship because the JGSDF equipment could not generate enough power to transmit signals over a long distance despite using a very high frequency transmitter. The JMSDF had to move its ship closer to the island, and by the time JGSDF forces could finally talk to one another, the ship was so close it would have been exposed to enemy fire during a real operation.¹⁰²

The challenge is even more pronounced in tactical data-sharing. Despite the JASDF and JMSDF sharing Link 16 capabilities, the JGSDF does not operate Link 16. This makes it difficult for the JMSDF and JASDF to share data with JGSDF in the same battlespace, which impedes instantaneous shared situational awareness and targeting data. For example, the JMSDF cannot talk to JGSDF SSMs to transmit data or coordinate operations. Also, although the JASDF and JGSDF can share information between the SAM systems they operate, the JASDF relies on voice radio to share global positioning coordinates for JGSDF locations of personnel on land.¹⁰³ Taken together, the JGSDF cannot talk to or exchange data with the JMSDF or JASDF reliably or communicate directly between JMSDF or JASDF sensors and JGSDF shooters. This is dangerous in a fast-paced operation, such as retaking an island, though it can be overcome. During the Cold War, the information gathered from the JASDF's E2-Cs could not be shared with JMSDF ships in the waters because the JASDF's Time Division Data Link system was incompatible with the JMSDF's Link 11 data link system.¹⁰⁴ This has since changed with the common adoption of the Link 16 system.¹⁰⁵ In the years ahead, this is likely to change further, when the JGSDF moves SSM batteries to the Nansei Shotō and/or acquires and operates Aegis Ashore. Because both of these moves will introduce missile capabilities that need to be integrated with the existing two-tier BMD system, the JGSDF will need to procure a data link system able to connect with JMSDF/JASDF assets.¹⁰⁶ In so doing, the three services will then be linked by the same tactical data link system, moving them toward greater jointness.

¹⁰¹ Interview with Anonymous A, January 30, 2018; interview with Anonymous C, February 26, 2018.

¹⁰² The JGSDF personnel conducting amphibious operations cannot carry big communications gear; instead, they carry handhelds or backpack communications gear. If these personnel can carry high-power communications gear, this problem would be solved.

¹⁰³ Email correspondence with Anonymous G, March 3, 2018.

¹⁰⁴ Email correspondence with Anonymous G, March 26, 2018.

¹⁰⁵ Interview with Anonymous C, February 26, 2018. Not all MSDF ships have Link 16. For ships that still have the older Link 11 system, they send information to ships Link 16-capable, such as the *Hyūga*-class or *Izumo*-class DDHs, which then send to the JASDF via Link 16. Another interviewee noted that the JASDF's E2-Ds cannot exchange data with JMSDF ships and refuse to install the requisite equipment to rectify the problem. Email correspondence with Anonymous B, April 8, 2018.

¹⁰⁶ Japanese Ministry of Defense, *Defense Programs and Budget of Japan (Overview of FY2017 Budget Bill)*, Tokyo, 2017b, p. 12.

Fires

Individually, the three JSDF services possess significant firepower that can strike enemy forces that are trying to invade or have already seized a Japanese island. The JMSDF has an array of SSMs and short-range SAMs throughout its fleet. It also fields an air-to-ship missile (ASM) on its P3-C maritime patrol aircraft and is developing new, longer-range SAMs.¹⁰⁷ The JASDF also has Type-80 and Type-93 ASMs. The range for these precision-guided missiles is about 20–30 km.¹⁰⁸ Like the JMSDF, the JASDF is working on a new-generation missile: the Experimental Air-to-Surface Missile 3, which is an upgrade to both ASM variants in the JASDF's current arsenal. Importantly, the JASDF is acquiring weapons meant to assist in amphibious operations. In FY 2019, it will acquire its first air-to-surface missile to deploy on its F-35s. The missiles have a range of roughly 500 km.¹⁰⁹ The JASDF is also considering acquisition of the Joint Air-to-Surface Standoff Missile to deploy on its F-35 fleet. This missile has an even longer range at about 1,000 km.¹¹⁰ Importantly, the JGSDF also has the Type-03 SAM, Type-88 SSM, and the Type-12 SSM, which is an upgraded Type-88. As previously outlined, the JGSDF will deploy these fire units throughout the Nansei Shotō over the next couple of years, thereby adding an extra layer of fires throughout the island chain. Collectively, the JSDF are assembling the necessary capabilities that they can use to deter or defeat an invading Chinese force.

One remaining challenge is how the JSDF will control these disparate fires and use them in a joint manner. In an amphibious operation, the three services will likely employ a combination of fires. This means there is a potential for fires to target one specific geographical location from JMSDF surface ships, JASDF assets in the air, JGSDF attack aviation, and ARDB forces near or on an island. The use of beyond visual range missiles in sea or air space can be very useful in a wartime situation, but this is an extremely complex operation that demands the JSDF services to plan, coordinate, control, and execute fires jointly so as not to inadvertently hit friendly forces or commercial traffic in the same sea or airspace. As previously noted, the three JSDF services currently lack the ability to communicate and instantaneously share data, which means they cannot employ the same operational picture, making not just coordinated firing difficult, but even complicating targeting identification. Yet, to succeed, all participating units must have good communications, data links, and sensors, both to instantaneously locate and hit the invading enemy forces and to avoid hitting fellow JSDF personnel. Importantly, the concept of “combined arms” and “coordinating fires” is not well understood. There is no joint fire support command,

¹⁰⁷ While Japan uses the terminology *anti-ship missile*, most other countries use *anti-ship cruise missile*.

¹⁰⁸ Yukio Tajima, “Japan Eyes Air-to-Surface Missiles That Would Put North Korea in Range,” *Nikkei*, December 6, 2017.

¹⁰⁹ Tajima, 2017.

¹¹⁰ Tajima, 2017.

control, and coordination doctrine with associated joint tactics, techniques, and procedures.¹¹¹ Instead, each JSDF service has a slightly different take on execution and who controls what, with the services tending to “deconflict” fires for safety purposes rather than “coordinate” fires to produce an effect in combination with maneuver and other war-fighting functions.¹¹² This is dangerous in an operation because if fire support agencies are not centrally coordinated by one fires coordination team, there is a possibility of indirect fire assets firing into an airspace while friendly assets are flying into it, putting JSDF forces at risk of getting hit by their own side’s weapons.

The mission of close air support (CAS) deserves special attention. In CAS, all contributing services “make up an orchestra-like ensemble” that needs to work as a unified whole, with some person acting as “conductor” in the form of terminal control.¹¹³ In the U.S. military, terminal control can be provided by on-the-ground personnel in any of the services who are qualified to direct aviation-delivered ordnance. Being able to do this is extremely difficult—to coordinate and to execute. To become proficient in CAS requires dedicated exercising and training for this mission by all services. The JASDF possess CAS capabilities in the F-2, Mark-82 bombs, and Joint Direct Attack Munitions. The JASDF also has conducted training that enables it to designate and mark a target, bring in fixed-wing air support, and bomb that target. The challenge comes in that CAS itself has not been prioritized as a focus for JASDF training. As recently as 2012, according to one observer, the JASDF did not even have a good sense of how CAS worked.¹¹⁴ Instead, CAS was, and still is, largely treated as a tertiary mission in JASDF training. This has resulted in a low sophistication level in CAS proficiency.¹¹⁵ While JASDF pilots may be proficient in intercepting enemy planes and conducting air combat, it is not certain that they can conduct CAS without endangering fellow JSDF personnel on the ground or sea below. CAS is not as easy as simply “load[ing] on bombs and drop[ping] ‘Danger Close’ to friendlies in combat.”¹¹⁶ JSDF operators will need to be fully trained for this mission, a requirement that will involve practice with flexibility and changing target location, composition, indirect fire systems dropping out at the last minute, and multiple marks (visual signals to help a pilot find a target) to ensure there is a backup in case one goes down.¹¹⁷

¹¹¹ Email correspondence with Anonymous B, February 28, 2018.

¹¹² Email correspondence with Anonymous B, February 28, 2018.

¹¹³ Email correspondence with Anonymous B, April 8, 2018.

¹¹⁴ Email correspondence with Newsham, February 28, 2018.

¹¹⁵ Email correspondence with Anonymous B, February 28, 2018. A complex problem set requiring multiple targets to be suppressed while one is marked for CAS strike is beyond their current capability unless everything is scripted in advance and no surprise injects are made in an exercise.

¹¹⁶ Email correspondence with Lieutenant General Dan “Fig” Leaf (USAF, retired), February 27, 2018.

¹¹⁷ Email correspondence with Anonymous B, February 28, 2018.

Coordinated firing exercises among all three JSDF services are very limited.¹¹⁸ When live firing exercises occur, they are generally just between two services. For example, live firing is practiced at the Rim of the Pacific and Dawn Blitz exercises between the JGSDF and JMSDF, but these are only JMSDF ships firing in support of JGSDF infantry troops on land.¹¹⁹ Such exercises have not traditionally included coordinated firing by JGSDF SSM batteries on enemy ships, and the JMSDF has usually approached these exercises as training to support the JGSDF on an island rather than having the JGSDF also train to support JMSDF assets near land. This is because the JMSDF has traditionally viewed amphibious operations as essentially involving the JMSDF helping the JGSDF ashore. Small steps toward change are occurring, however, as a JGSDF SSM battery is going to participate in the 2018 Rim of the Pacific exercise for the first time to coordinate firing with the JMSDF and U.S. Army.¹²⁰ Similar advances are taking place for the JASDF and JGSDF, which also exercise simulated firing, including the JASDF Patriot systems, JGSDF SAMs, and JASDF air-to-air missiles with JMSDF SAMs. But as these examples show, most simulated firing exercises tend to be between two services, not tri-service training. An exception is the regular simulated anti-ship missile-firing exercise involving JASDF ASMs, JMSDF SSMs, and JGSDF SSMs.¹²¹ One challenge with these, however, is that they usually are not specifically designed around contingencies premised on amphibious operations. Rather, they are small parts of larger exercises that are scripted with few unexpected interjections.

Like the need to transfer C2 during an operation, the need to exercise controlling fires is something the JSDF are aware of. The problem goes beyond the issue of scripted exercises to the fact that the JSDF lack a training area to exercise these disparate fires together. Even though Japan has thousands of islands, there are few suitable for practicing these fire elements simultaneously in an amphibious operation scenario. Not only does the island have to be uninhabited and far from islands that are inhabited, it has to have the right geological features in the water and land to allow for ship-to-shore assaults without damaging equipment. It also must have political support of the prefectural government to allow, or at least not block, such an exercise from occurring. To date, no location has been identified that matches all of these conditions in Japan, with the result that there are no regular live fire exercises for the JSDF to jointly train for these types of missions.

¹¹⁸ Interview with Anonymous C, February 26, 2018; interview with Anonymous D, February 26, 2018; interview with Anonymous E, February 26, 2018; email correspondence with Anonymous G, March 3, 2018.

¹¹⁹ Interview with Anonymous E, February 26, 2018. Reportedly, the JGSDF and JMSDF are working to develop closer relations on mutual coordinated fire-support.

¹²⁰ Japanese Ministry of Defense, “Summary of Defense Minister’s Meeting with Journalists on June 15, 2018,” Tokyo, June 15, 2018c.

¹²¹ Email correspondence with Anonymous A, February 26, 2018.

Equipment

The primary missions of the three JSDF services have not been conducive to building jointness because each service has tended to see its role as defending its specific domains.¹²² This led to procurement decisions that have prevented the JSDF from becoming more joint. The objective of the JGSDF throughout the Cold War period was to prevent the invasion of Japanese territory by the Soviet Union from the north.¹²³ Accordingly, the JGSDF adopted a forward deployment strategy focused on Hokkaido and developed a defense capability centered around heavily armored divisions with tanks and long-range artillery.¹²⁴ The JMSDF's initial purpose was minesweeping and defending Japan's coasts from a maritime invasion, but as the Cold War wore on, the JMSDF took on an extended mission to protect the sea lines of communication in the waters surrounding Japan and to enable open-sea, anti-submarine warfare missions.¹²⁵ An added factor was that the JMSDF was designed to operate in combination with the U.S. Navy, so that Japanese assets could protect high-value U.S. naval assets.¹²⁶ This meant the JMSDF poured its resources into submarines, minesweepers, and anti-submarine warfare platforms, such as helicopter destroyers. Finally, the JASDF's core mission arguably has continued unchanged: early warning surveillance and rapid reaction in defense of Japanese airspace.¹²⁷ This meant a focus on defensive capabilities centered on interceptor aircraft and less of a focus on multirole combat aircraft or transport aircraft. This is evident in its current composition, where nine fighter-interceptor squadrons dominate the fleet, supported by three Airborne Early Warning squadrons, three ground attack squadrons, three transport squadrons, one reconnaissance squadron, and one tanker-transport squadron.¹²⁸

Amphibious operations were never part of the calculus. Yet, even prior to the JGSDF decision to develop amphibious capabilities, the JSDF already had most of the necessary equipment to conduct such operations. This was the result of ad hoc cooperation between the JMSDF and JGSDF.¹²⁹ The JMSDF already had the necessary ship-to-shore connectors in its three *Ōsumi*-class LSTs and six LCACs, two of which can fit in one *Ōsumi*-class LST at a time.

¹²² Watanabe, Yoshida, and Hironaka, 2016.

¹²³ Japanese Ministry of Defense, *Basic Policy on National Defense*, Tokyo, May 20, 1957.

¹²⁴ Watanabe, Yoshida, and Hironaka, 2016, p. 9.

¹²⁵ Watanabe, Yoshida, and Hironaka, 2016, pp. 16–17.

¹²⁶ Email correspondence with Anonymous A, March 30, 2018. Today, the Ministry of Defense is reportedly studying whether to equip the JMSDF's next round of Aegis-equipped destroyers and E2-D Hawkeyes with the Cooperative Engagement Capability to extend sensing and targeting. See Ben Rimland, "Japan MOD to Explore Acquisition of Cooperative Engagement Capability," *NavyRecognition.com*, April 2018.

¹²⁷ IHS Markit, "Japan—Air Force," *Jane's World Air Forces*, March 15, 2018a.

¹²⁸ IHS Markit, 2018a.

¹²⁹ Grant Newsham, "Deepening Australia-Japan Defense Cooperation-Using Amphibious Ships Instead of Submarines," *Delhi Defence Review*, March 17, 2017a.

As already mentioned, the *Hyūga*-class and *Izumo*-class DDHs can act as C2 platforms for operations, but they also are capable air platforms for JGSDF/JMSDF helicopters and for the larger JGSDF Ospreys. This latter capability was demonstrated in 2013 when a U.S. Marine Corps MV-22 Osprey landed on the JS *Hyūga* (DDH-181) for the first time.¹³⁰ These *Hyūga*-class and *Izumo*-class DDHs, alongside the *Ōsumi*-class LSTs, are also capable of fulfilling a crucial sealift capability to transport materials and personnel, supported by JASDF C-2s and JGSDF CH-47 providing airlift capabilities. The JSDF could even count on the JGSDF's AH-64D Apache helicopters to provide some measure of CAS. Missing were capabilities that could rapidly assault beaches from the ocean and a flexible airlift option to transport large numbers of personnel and equipment from either ships or shore. The decision to procure the AAV-7 and V-22 Ospreys filled these gaps.

While these platforms can theoretically be combined to provide Japan a nascent amphibious capability, the fact that they were not designed for amphibious operations means that the JSDF would still suffer from key shortfalls if they seek to undertake island-recapturing operations. For example, although the *Hyūga*- and *Izumo*-class DDHs can serve as C2, air- and sealift platforms, they are not optimal for amphibious operations because they lack floodable well decks to handle AAVs and LCACs, and the *Hyūga*-class lacks equipment to support the LCAC. Moreover, although the *Hyūga*-class can carry one Osprey on the back deck, the deck is too small to operate more than one. With a wider deck, the *Izumo* can operate five Ospreys from its deck, but like the *Hyūga*, there are only two *Izumo*-class ships in service. Given the deck sizes and lack of foldable blades on the helicopters, the timing and coordination to operate multiple aircraft from the DDHs is incredibly complicated, limiting their effectiveness as air platforms. Additionally, while both classes of DDHs can refuel Ospreys and JGSDF/JASDF helicopters, the fuel types these assets use are different. Although the JGSDF/JASDF Ospreys' or helicopters' JP-4 fuel is compatible with the JMSDF's JP-5, over time this mixing of fuels strains and wears down the equipment.¹³¹

The *Ōsumi*-class LST, considered the backbone of the amphibious operations capabilities of the JSDF, also has challenges. First off, there are only three of these ships in the entire JMSDF fleet. More are needed to handle the ARDB, particularly if one considers damaged LSTs or ships taken out simply due to routine maintenance. Moreover, the *Ōsumi*-class DDHs have a limited capacity to serve as the main ship-to-shore connector because they do not have large storage areas (particularly for ammunition), fit only 2 LCACs, and are not configured for the JGSDF's

¹³⁰ "MV-22 Osprey Lands on JMSDF Helicopter Destroyer Hyuga," NavalToday.com, June 18, 2013.

¹³¹ JP-5 is less volatile than JP-4 and is designed for naval use for safety reasons. If mixing of fuels happens on an irregular basis, this should not be problematic for the Ospreys or helicopters. However, running on fuels different from what the engines are tuned for on a long-term basis can cause problems in the equipment, such as early deterioration, different temperatures, and carbon build-up, to name a few. When switching fuel types regularly, it is best for equipment maintenance to drain the tanks and recalibrate the engines before flying. For long-term operations, it is best if one fuel type is used. Email correspondence with Lieutenant Colonel Rusty Evers (USAF, retired), March 3, 2018.

AAVs. Currently, each LST can carry only between nine and 13 AAVs.¹³² Finally, the ship's back ramp is unable to handle the AAVs. Realizing this, the Ministry of Defense included funds in the FY 2018 defense budget to re-engineer the LSTs.¹³³

Finally, the JGSDF Apaches can provide some measure of CAS, but Apaches were not designed for maritime use. Their lack of rotor stops and foldable blades means they are not only dangerous to use on decks but also difficult to load in the JMSDF's DDH platforms and take up a lot of space below deck. Worse, because they take time to get the blades assembled and ready for an attack mission, it may be "unrealistic to operate [them] from *Hyūga* or *Izumo*" class ships.¹³⁴ Also, they were not designed to withstand saltwater environments or landing hard on bouncing ships.¹³⁵ Equipment that is not designed for saltwater environments can corrode very quickly—in as little as a week—leading to problems with avionics.¹³⁶

The biggest challenge to overcoming these problems is likely to be the highly differentiated and deeply entrenched individual service cultures of the JASDF, JMSDF, and JGSDF. When the three services were created, they were given specific missions that led to differences in threat perceptions and strategies.¹³⁷ Despite the rapidly evolving threat environment, the JMSDF remains focused primarily on assisting the U.S. Navy, protecting maritime shipping, and defending Japan's coasts. This results in a heavy focus on destroyers and ship-based patrol helicopters to defend territorial waters and secure sea lanes; a submarine fleet to conduct underwater ISR and patrol the seas around Japan; a large fleet of fixed-wing patrol aircraft to conduct wide-area maritime ISR; and minesweeper units to safeguard Japanese waters and harbors.¹³⁸ Attention to surface capabilities designed for rapid movement and transporting ground forces quickly to an outlying island has not been prioritized to date. This means that such capabilities as littoral combat ships and small, high-speed destroyers suited for surface combat closer to shore are either few in number or lacking entirely, as is the case for auxiliary ships, such as oilers, and replenishment ships designed to support distant operations. While the JMSDF is upgrading the *Ōsumi*-class LSTs to improve their amphibious capabilities and allow them to embark AAV-7s and V-22 Ospreys, the JMSDF has not considered new LSTs, including a next-generation LST designed for landings without docks and with the ARDB's AAVs in mind.¹³⁹

¹³² Email correspondence with Anonymous B, February 28, 2018; email correspondence with Newsham, 2018. Newsham says he suspects that, given the tight confines, the number will probably be closer to eight.

¹³³ Japanese Ministry of Defense, 2017d, p. 7. The Shimokita has already been upgraded.

¹³⁴ Interview with Anonymous E, February 26, 2018.

¹³⁵ Email correspondence with Newsham, 2018.

¹³⁶ Interview with Simcock, March 5, 2018.

¹³⁷ Ota, 2000–2001, p. 58.

¹³⁸ IHS Markit, "Japan—Navy," *Jane's World Navies*, March 21, 2018c.

¹³⁹ The *Ōsumi*-class was designed for a peace-time transport role, thus a dock-to-dock environment. It was not designed to beach itself in the manner of a true LST.

And although the JMSDF bought six KC-130Rs from the United States in recent years, the service removed the refueling apparatus, thereby preventing the JMSDF from playing any aerial refueling role for any aircraft in amphibious operations.¹⁴⁰

Similarly, the JASDF continues to focus on detecting and responding to airspace violations and spends very little time on planning or training for support of ground and maritime forces, reflecting what one expert called “its longstanding preference for dogfighting at 30,000 feet.”¹⁴¹ While F-2s are suitable for CAS missions, they are incapable of aerial refueling because the jets have an antenna installed in front of the refueling receptacle. This is problematic for amphibious operations when CAS is required because it means F-2s are unable to loiter for a long time in a given area. Instead, they will have to scramble from a base (most likely Naha, if the contingency is in the Nansei Shotō) and show up at a certain time. This prevents the F-2s from “stacking” in airspace close to the operation and being ready for immediate response. With the near-exclusive focus on air superiority and platforms and weapons designed for that mission, other hardware items that would be useful in amphibious operations have tended to be ignored, including large transport aircraft capable of rapid strategic airlift to move large systems, such as the JGSDF’s maneuver combat vehicle, to one of Japan’s many far-flung islands and tanker/transport aircraft useful for sustaining operations far from the main Japanese islands.¹⁴² Additionally, the JASDF until recently tended to ignore suggestions that it procure air-to-surface weapons, and the F-35B, which with its short takeoff/vertical landing capabilities would be best suited for use on a modified *Izumo*-class DDH.¹⁴³ These ideas would bring much-needed airpower to support amphibious operations but run counter to traditional JASDF procurement trends.

Arguably, the JGSDF has come the farthest in thinking about equipment and jointness. With the loss of the Soviet Union, its assumed enemy, the JGSDF “lost its direction, for a time, in its defense build-up.”¹⁴⁴ In the wake of the Soviet collapse, the JGSDF reconfigured itself to fit a changing threat environment and tried to become more mobile and flexible, developing the

¹⁴⁰ Email correspondence with Anonymous B, February 28, 2018.

¹⁴¹ Grant Newsham, “Japanese Amphibious Development: The Bulldog and the Salamander,” *Marine Corps Gazette*, December 2014b, p. 73.

¹⁴² With the maneuver combat vehicle weighing in at 26 tons, it is likely that the ASDF’s C-2 can transport only one at a time.

¹⁴³ Ryou Aihara, “F35B Tōsai Kenkyū, Bōeisō Meigen Goeikan Izumo ‘Kūboka’ [Research on Carrying the F35B, Minister of Defense States, Making the Izumo Destroyer an Aircraft Carrier],” *Asahi Shimbun*, March 3, 2018. There would be numerous challenges—questions of command and control, differences in service culture, and operational hardware challenges, to name just a few—were the JSDF to operate F-35Bs as JASDF platforms flying off JMSDF ship decks. While these would not be impossible to overcome, they would certainly require some substantial changes in how the services have operated together so far. To date, the Ministry of Defense has stated that its examination of the steps required to enable the *Izumo*-class DDH to support F-35Bs was undertaken in consideration of the prospect that Japan might need to support U.S. flight operations in a rear-area capacity during a contingency, and not with the intent for the JSDF to operate F-35Bs off of the *Izumo*. See Takateru Doi, “Study Looked at Turning the *Izumo* into a Flattop to Help the U.S. in War,” *Asahi Shimbun*, April 28, 2018.

¹⁴⁴ Watanabe, Yoshida, and Hironaka, 2016, p. 10.

capacities needed to respond to a variety of contingencies, such as natural catastrophes, terrorist attacks, guerrilla warfare, and even the seizure of outlying islands.¹⁴⁵ Since 2013, the JGSDF has been reducing the number of tanks and heavy artillery in its arsenal, transitioning toward units that are lighter and more mobile. Compared with approximately 700 tanks and 600 pieces of artillery in FY 2013, the JGSDF is transitioning toward a force of the future, built around approximately 300 tanks and 300 pieces of artillery.¹⁴⁶ These numbers are both 100 pieces lower than those contained in the 2010 *National Defense Program Guidelines*. The JGSDF is also reducing the number of brigades and divisions from its regionally deployed units and expanding its rapid deployment units from the current one armored division and Central Readiness Force to three rapid deployment divisions, four rapid deployment brigades, one armored division, one airborne brigade, one helicopter brigade, and one amphibious rapid deployment brigade.¹⁴⁷

Despite these advances toward a more fleet and flexible force, much work remains to be done. The JGSDF is procuring equipment to get troops from ship to shore, such as the AAV-7 and V-22 Osprey, but if the JGSDF wants to use its Apaches from JMSDF platforms, or CH-47s in marine environments, the aircraft need to undergo marinization to add weather-proofing, electronic shielding, and rotor stops. Additionally, any attack helicopters should be retrofitted with foldable blades to make them compatible with operations from a sea-based platform. Finally, despite its effort to place missile batteries throughout the Nansei Shotō, the JGSDF still needs the requisite sensors and targeting capabilities to look over the horizon.¹⁴⁸

If the government's intent is to develop a Dynamic Joint Defense Force that can respond rapidly to contingencies on outlying islands, a greater focus on inter-service jointness in procurement is needed. The JSDF needs assets that can act as the sinews between their existing separate service capabilities and turn these assets into joint capabilities. The reluctance to prioritizing jointness by each service reveals a fundamental truth. There is no overarching entity with a broad view of capabilities needs for amphibious operations or for jointness that has any power to force the individual services to develop or procure equipment that supports jointness. As one interviewee commented, the services are “not getting . . . [the] big picture for amphibious operations” that they need to design a more efficient force.¹⁴⁹

To overcome this obstacle, the Joint Staff Office (JSO) was established in 2006 with a mission to focus on jointness. But while the JSO undertakes functions relating to JSDF operations, it leaves issues such as personnel affairs and the build-up of defense capabilities to the individual services.¹⁵⁰ The JSO established an Amphibious Development Office in 2017, but

¹⁴⁵ IHS Markit, 2018b.

¹⁴⁶ Japanese Ministry of Defense, 2017a, p. 223.

¹⁴⁷ Japanese Ministry of Defense, 2017a.

¹⁴⁸ Email correspondence with Anonymous B, April 8, 2018.

¹⁴⁹ Interview with Anonymous D, February 26, 2018.

¹⁵⁰ Japanese Ministry of Defense, 2017a, p. 315.

it is a very small organization tasked mainly with operational coordination, such as exercise schedules.¹⁵¹ Each individual JSDF service is still in charge of its own capability development.¹⁵² The JSO can only make recommendations to the services on what equipment they should procure; it cannot force them to procure specific capabilities.

The establishment of the Acquisition, Technology and Logistics Agency (ATLA) was another attempt to rectify this issue. Established on October 1, 2015, ATLA was meant to accomplish five missions. Aside from strengthening defense equipment and technology cooperation with external partners, its remit included streamlining the procurement process to make the acquisition of equipment more efficient; helping the JSDF services respond to operational needs; maintaining and strengthening defense production and technological bases; and striving to reduce development, production, and procurement costs while ensuring smooth and effective auditing and inspection of defense industrial development.¹⁵³ Although the goal was to improve efficiency and eliminate organizational bureaucracy and duplication, ATLA was also seen as helping encourage greater rationality across the defense development and budgeting process with an eye toward encouraging greater jointness. Because it has only been three years since ATLA's establishment, this understandably remains a work-in-progress.¹⁵⁴

Conclusion

Japan only began its push to develop amphibious capabilities in the last decade. The JSDF have already made substantial progress; a major reason for this is that much of the JSDF arsenal was already applicable to amphibious operations. But being able to bring these pieces together and work as a unified force takes time. The good news is that the new capabilities and upgrades of the JSDF that retroactively enable different platforms from the three services to work together in an amphibious operation point to the JSDF becoming more capable of operating jointly. For example, JMSDF escort flotillas have been reorganized into destroyer escort and guided-missile escort groups to enable more rapid and flexible deployments.¹⁵⁵ The JMSDF has also been taking on additional responsibilities of training for minesweeping for amphibious operations (in addition to still carrying out its traditional minesweeping missions).¹⁵⁶ And the JMSDF is building a new maritime operations center building at the Fleet Headquarters in Yokosuka to

¹⁵¹ Newsham, 2014b, p. 73. This office was originally established in the Ground Staff Office but later transferred to the JSO's J-5 and, as of 2017, the J-3.

¹⁵² Interview with Anonymous A, January 30, 2018.

¹⁵³ Japanese Ministry of Defense, "Missions of ATLA," undated-b.

¹⁵⁴ Crystal Pryor, "Japan's New Approach to Defense Technology," *The Diplomat*, November 24, 2015.

¹⁵⁵ IHS Markit, 2018c. Each flotilla typically comprises a helicopter carrier, two guided missile destroyers, five ASW/general-purpose destroyers, and/or frigate escorts. In addition, each flotilla has embarked helicopters. These are supported by an amphibious ship and several mine-countermeasures vessels and/or patrol craft.

¹⁵⁶ Email correspondence with Anonymous A, March 26, 2018.

establish a posture for a more effective and smoother response to various situations in close cooperation with the JGSDF, JASDF, U.S. Forces Japan, and relevant government offices.¹⁵⁷ The JASDF has also taken steps to work more closely with the JGSDF, reconfiguring a part on its C-1s to facilitate JGSDF airborne operations after soliciting input from the JGSDF and the JSO.¹⁵⁸ Still, exercises that are more joint and more realistic, with relevance to amphibious operations, are critical; without this, conducting C2 and controlling fires will remain elusive for the JSDF. Importantly, the mindset of the JSDF services is changing. In addition to JSDF personnel gaining improved understandings of the other JSDF service cultures through greater learning opportunities at staff colleges, there are greater opportunities for serving in joint billets. This was boosted tremendously by the 2013 *Mid-Term Defense Program*, which stated the JSDF would station JGSDF, JMSDF, and JASDF personnel in the main headquarters of each of the other services.¹⁵⁹ This is important because jointness now matters, even if it is not yet mandatory, for promotions.¹⁶⁰

Despite progress toward jointness in amphibious operations, considerable challenges remain. In this paper, I explored four key issues relating to joint amphibious operations, but many other challenges exist. For example, how capable are the JSDF in establishing a joint task force to oversee an entire amphibious operation? How capable and trained are the JSDF to conduct information environment operations to support amphibious operations? This domain includes cyber, electronic warfare, and space, for example—important areas to control so that Japan can maintain dominance in jamming, cyber, and anti-satellite capabilities. How much have the JSDF trained for handling casualties in a combat zone? What is the status of the development of an amphibious strategy and doctrine? And how capable are the JSDF services of cooperating closely with the JCG, which is Japan’s first line of defense should China undertake aggression and attempt to seize an island?¹⁶¹

The ARDB represents a significant step forward in Japan’s ability to conduct amphibious operations and has spurred a shift toward greater jointness, although this remains a slow process fraught with many challenges. Japan will need to continue addressing these questions if it is to master amphibious operations and meet its defense needs in the rapidly changing security environment of Northeast Asia.

¹⁵⁷ IHS Markit, 2018c.

¹⁵⁸ Interview with Anonymous A, January 30, 2018; interview with Anonymous D, February 26, 2018.

¹⁵⁹ Japanese Ministry of Defense, 2013a, p. 10.

¹⁶⁰ Email correspondence with Anonymous G, March 3, 2018.

¹⁶¹ Lyle J. Morris, “Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia,” *Naval War College Review*, Vol. 70, No. 3, Spring 2017; Celine Pajon, “Japan’s Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?” *Asia Policy*, No. 23, January 2017.

5. The ARDB, the USMC, the U.S.–Japan Alliance, and a Free and Open Indo-Pacific

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Japan’s development of an amphibious capability for defending and re-taking islands represents an opportunity for the United States Marine Corps (USMC) to deepen its ties with the Japan Self-Defense Forces (JSDF) and expand cooperation on deterrence, defense, humanitarian assistance and disaster relief (HA/DR), and other key tasks. This paper reviews the opportunities that Japan’s investment in amphibious capabilities presents for the USMC and assesses the next steps the United States should take to maximize the prospects of achieving a set of long-held goals in the realm of amphibious operations. It argues that Japan’s capabilities development represents an important opportunity for the United States to bolster its ally in building interoperable amphibious forces to defend, support, and help provide relief to friendly nations across the Indo-Pacific and offers suggestions about what the United States should encourage Japan to do in order to maximize the utility and value proposition of its investment in amphibious capabilities.

Background

To counterbalance China’s growing ability to threaten Japanese control over the Southwest Islands (Nansei Shoto; also known as the Ryukyu Islands) and the sea lines of communication that connect Japan with the Indian Ocean and the greater Middle East, Tokyo has recognized the need for an amphibious capability that can operate in concert with other JSDF capabilities. Japan is now in the final stages of standing up an Amphibious Rapid Deployment Brigade (ARDB) within the Japan Ground Self-Defense Force (JGSDF). The USMC should partner with Japan’s ARDB as it matures within the JGSDF (and the broader JSDF) to create an asymmetric amphibious advantage along the first island chain.¹⁶² Such a partnership could foster concept development and capability modernization required to operate in areas contested by peer competitors.

Provided that the ARDB and the Japan Maritime Self-Defense Force (JMSDF) fully cooperate, this should give the JSDF the ability to conduct operations in coastal areas—the

¹⁶² This idea has also been advocated by Grant Newsham, “‘Amphibiosity’ in the Asia-Pacific,” *Proceedings*, Vol. 141, No. 11, November 2015.

littorals. This is essential for an island nation’s military. Previously, the JSDF could not operate in large parts of the map and were unable to move troops, equipment, and supplies from ship to shore—by force, if necessary—(and back) without painstaking effort and having a port available.

The U.S. and Japanese main objective should be to rapidly improve ARDB capabilities to conduct amphibious operations across the range of military operations. The USMC is uniquely qualified to assist the ARDB and to help Japan improve its ability to operate jointly with the USMC and the U.S. Navy (USN). The challenge now is to fully develop the ARDB while also improving its ability to operate with the USMC/USN team. By working closely together, the two sides will develop complementary capabilities. It is incumbent on the United States to encourage Japan to procure equipment and develop the doctrine that will provide benefits for both sides. The V-22 Osprey tilt-rotor aircraft is an example of the kinds of capabilities that, if jointly shared across U.S. and Japanese forces, will enhance deterrence, defense, and response time. There are many other areas—such as counter-mine operations, amphibious assault vehicle (AAV) development, and anti-ship missile capability—that will act as combat multipliers for both forces.

The Relevance of the Pacific to U.S. National Security

As the 2017 *National Security Strategy of the United States* lays out, “the U.S. interest in a free and open Indo-Pacific extends back to the earliest days of our Republic,” and, in that context, the United States welcomes and supports the “strong leadership role of our critical ally, Japan.”¹⁶³ The 2018 *National Defense Strategy of the United States* of the United States built on that assessment, explaining that the central challenge to U.S. prosperity and security is “the re-emergence of long-term, strategic competition by . . . revisionist powers. It is increasingly clear that China and Russia want to shape a world consistent with their authoritarian model—gaining veto authority over other nations’ economic, diplomatic, and security decisions.”¹⁶⁴ China, in particular, received explicit attention in the National Defense Strategy, which described Beijing as

leveraging military modernization, influence operations, and predatory economics to coerce neighboring countries to reorder the Indo-Pacific region to their advantage. As China continues its economic and military ascendance, asserting power through an all-of-nation long-term strategy, it will continue to pursue a military modernization program that seeks Indo-Pacific regional hegemony in the near-term and displacement of the United States to achieve global preeminence in the future.¹⁶⁵

¹⁶³ White House, *National Security Strategy of the United States*, Washington, D.C., December 2017.

¹⁶⁴ U.S. Department of Defense, *National Defense Strategy of the United States*, Arlington, Va., 2018.

¹⁶⁵ U.S. Department of Defense, 2018.

The Indo-Pacific, as the *National Security Strategy* and *National Defense Strategy* recognize, is a critical region to the national security of the United States, and maintaining a free and open global commons in that region is a particularly important goal for U.S. policy. Illustrating this point, ten of the world's top 20 countries as measured by total size of gross domestic product (using a purchasing power parity metric) either access global markets via the Pacific Ocean or have significant borders on that body of water.¹⁶⁶ Additionally, 16 out of the 20 busiest container seaports in the world (as measured by 20-foot equivalent unit volume) are in the Pacific.¹⁶⁷ At the same time, this image of the Indo-Pacific as being busy should not be taken to mean that the world is shrinking or distances are shortening; the Indo-Pacific is still a huge maritime space, and it takes a modern ship 13–21 days to transit the roughly 6,700 miles from San Diego to Taiwan.

Another important angle that is gaining importance is the role of the Asian-American population (24 million estimated in 2018) in the United States. These ties bind our citizens and society to the region in ways that have been deepening quickly over the last two decades. Since 2000, Asian-Americans have been the fastest growing U.S. demographic. To put this in perspective, if Asian-Americans were a country, they would rank 14th largest in population size among the 36 nations in the U.S. Pacific Command's area of responsibility, on par with Australia (24 million) and larger than Taiwan (23 million), Sri Lanka (21 million), and Cambodia (16 million). Thanks to this community, the United States is not only a resident Indo-Pacific power, it has deep and abiding ties to the region.

As recent authoritative U.S. policy statements make clear, the Indo-Pacific is a critical area of the world for U.S. national security, national interests, and even U.S. identity. At the same time, China is likely to be a long-term competitor with ambitions for regional hegemony for years to come, and its military capabilities and organization require that the United States take steps to modernize its forces, together with such key allies as Japan, in order to keep pace with this strategic challenge. The U.S.–Japan alliance is a critical element to maintaining regional stability. Specifically, the Commandant of the USMC has directed that the Corps orient itself toward the Pacific in order to develop and field amphibious forces that can operate in contested areas and against a peer competitor, such as China, while cooperating with regional partners, such as Japan, the strongest U.S. ally in this new strategic environment.

The U.S.–Japan Alliance and Japanese Forces' Complementarity with the United States

Japan's new ARDB holds the potential to bolster U.S. force posture and capabilities in the Asian littoral. As the 2018 National Defense Strategy notes, “[f]or decades the United States has enjoyed uncontested or dominant superiority in every operating domain. We could generally

¹⁶⁶ Central Intelligence Agency, *World Factbook*, undated.

¹⁶⁷ World Shipping Council, “Top 50 World Container Ports,” website, undated.

deploy our forces when we wanted, assemble them where we wanted, and operate how we wanted. Today, every domain is contested—air, land, sea, space, and cyberspace.” In responding to this new reality, the *National Defense Strategy* points out that

[m]utually beneficial alliances and partnerships are crucial to our strategy, providing a durable, asymmetric strategic advantage that no competitor or rival can match. . . . When we pool resources and share responsibility for our common defense, our security burden becomes lighter. Our allies and partners provide complementary capabilities and forces along with unique perspectives, regional relationships, and information that improve our understanding of the environment and expand our options.¹⁶⁸

The challenge that both the United States and Japan face is that neither of the two countries’ defense budgets fully resource their respective strategies. In the United States, the Budget Control Act of 2011 (also referred to as *sequestration*) and continuing resolutions continue to put substantial downward pressure on defense innovation and modernization. Across the Pacific in Japan, Tokyo continues to refine its outlook on self-defense capabilities that are congruent with its legislative authorities and evolving security environment within the framework of a defense budget and force posture that had been largely static until the past half-decade, when Tokyo began to respond more actively to the increased threat environment posed by Chinese and North Korean capabilities and activities.

The net result is a pair of well-crafted strategies that are under-resourced and insufficiently coordinated to meet the threat. Defense experts in Japan estimate that 40 percent of key defense hardware to be introduced by the end of fiscal year (FY) 2018 has not been fully budgeted.¹⁶⁹ Similarly, approximately 20 percent of the U.S. defense budget remains unfunded as a result of the Budget Control Act.¹⁷⁰ This suggests, as the focus on alliances and partnerships in the *National Defense Strategy* makes clear, that developments such as Japan’s fielding of the ARDB, if executed in close partnership with the USMC, present a low-cost and high-impact option for enhancing the security of both Japan and the United States.

The ARDB is an important piece of the Nansei Shoto defense puzzle, but it is not the only piece. In some quarters, there’s a sense that the ARDB is all that is needed. Effective Nansei Shoto defense, however, requires a joint effort by the JGSDF, the JMSDF, the Japan Air Self-Defense Forces (JASDF), and close cooperation with the Japan Coast Guard.¹⁷¹ Submarines,

¹⁶⁸ U.S. Department of Defense, 2018.

¹⁶⁹ “Nearly Half of Japan’s Defense Priorities Underfunded,” *Nikkei Asian Review*, January 6, 2018.

¹⁷⁰ Dakota L. Wood, *2018 Index of U.S. Military Strength*, Washington, D.C.: The Heritage Foundation, 2018, p. 309; James Mattis, U.S. Secretary of Defense, letter to U.S. Senate Armed Services Committee Chairman John McCain, via USNI News.com, September 8, 2017; William J. Perry and John P. Abizaid, *Ensuring a Strong U.S. Defense for the Future*, Washington, D.C.: U.S. Institute of Peace, 2014.

¹⁷¹ Unlike the U.S. Coast Guard, which is a part of the U.S. military during wartime, the Japan Coast Guard operates exclusively as a civilian maritime law enforcement agency and is housed in the Ministry of Land, Infrastructure, and Transportation. The challenges that this poses for coordination in the event of a maritime gray

surface combatants, and advanced combat aircraft are just as important as the ARDB would be, assuming they are all part of a unified effort.

The roles, missions, posture, structure, limitations, and implications for the various service branches of the JSDF of Japan's emerging amphibious self-defense capacity-building efforts have not been definitively laid out in any publicly available documents to date. The Japanese Ministry of Defense's 2013 *National Defense Program Guidelines* merely state that the "Self-Defense Force will . . . develop sufficient amphibious operations capability . . . [to enable] the SDF to land, recapture and secure without delay . . . any remote islands" in the case of an invasion.¹⁷²

This is too narrow a focus, however. The ARDB, using its mobility and long-range precision-guided weapons, should be viewed as one part of a broader, comprehensive defense posture for the Nansei Shoto (and other threatened territory). The ARDB can be part of a broader anti-access and area denial concept of operations for the Nansei Shoto and should serve primarily as a deterrent and defensive force rather than as a reactive capability to be employed once territory is lost.¹⁷³

The ARDB is also useful beyond Japan's immediate territory. For example, if properly linked with the JMSDF, the ARDB can conduct training, exercises, and even HA/DR operations throughout the Asia-Pacific region. The ARDB's usefulness in combined operations with U.S. forces, and even other friendly militaries, is especially worth highlighting in this regard.

An appropriately constituted and postured JSDF amphibious force, including ships and other hardware, could operate with or augment U.S. forces in the Indo-Pacific. JSDF amphibious forces could also cooperate more closely with Australian, Indian, and other nations' amphibious forces. While this will not happen overnight (especially given potential political and legal constraints), it is not unthinkable if the right steps are taken; indeed, Japan's interpretation of

zone contingency (in which an adversary attempts to use non-military personnel to achieve strategic effects by remaining below the threshold where a legally-defined armed attack on Japan would trigger the invocation of the U.S.–Japan alliance treaty's Article V commitments) has been explored in recent works, including Scott W. Harold, Yoshiaki Nakagawa, Junichi Fukuda, John A. Davis, Keiko Kono, Dean Cheng, and Kazuto Suzuki, *The U.S.–Japan Alliance and Deterring Gray Zone Coercion in the Maritime, Cyber, and Space Domains*, Santa Monica, Calif.: RAND Corporation, CF-379-GOJ, 2017; Celine Pajon, "Japan's Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?" *Asia Policy*, No. 23, January 2017; and Lyle J. Morris, "Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia," *Naval War College Review*, Vol. 70, No. 3, Spring 2017.

¹⁷² Japanese Ministry of Defense, *National Defense Program Guidelines for FY 2014 and Beyond*, Tokyo, December 17, 2013b. Aspects of the ARDB's capabilities, roles, and missions have been laid out at Japanese Ministry of Defense, "Press Conference by Defense Minister Onodera (10:10–10:27 A.M., March 27, 2018)," March 27, 2018a. See also Japanese Ministry of Defense, *Japan's Security and Defense Policy*, white paper, 2014.

¹⁷³ One recent study advocating this concept of operations is Toshi Yoshihara, *Going Anti-Access at Sea: How Japan Can Turn the Tables on China*, Washington, D.C.: Center for a New American Security, 2014. For a Japanese perspective on how the allies can operate in an increasingly contested maritime domain, see Sugio Takahashi, *Counter A2/AD Cooperation in Japan–US Defense Cooperation: Toward "Allied AirSea Battle,"* Arlington, Va.: Project2049 Institute, FutureGram 12-03, April 18, 2012.

what forces it can possess and how they can be employed has always been fluid and responsive to the external threat environment.¹⁷⁴

First, we should review the characteristics of the ARDB and the basic concept of how it will operate within the JSDF. Then we will look at how the USMC and the USN can work jointly with the ARDB, the JGSDF, and the rest of the JSDF to develop a joint defense plan for the Nansei Shoto.

Japan's Ministry of Defense *National Defense Program Guidelines* of 2013 (covering FY 2014–2018) called for the establishment of an ARDB by March 2018 to be headquartered at Camp Ainoura (Sasebo) in Nagasaki Prefecture on Kyushu, the southernmost of the four main home islands of Japan. Tokyo is also reportedly considering a proposal to move ARDB forces to Okinawa by 2024.

By the time it reaches its planned full operational capability in approximately March 2024, the ARDB will consist of three Amphibious Assault Regiments (about the same size as a USMC Battalion Landing Team, approximately 1,500 personnel), an AAV Regiment (30 AAV-7A1s), and other units to perform various functions, such as field artillery, reconnaissance, engineering, communications, and logistics. The total planned-for end-strength will be approximately 3,300 personnel.

In terms of maritime lift, the ARDB is expected to deploy via a mix of amphibious *Ōsumi*-class tank landing ships (the JMSDF maintains three such vessels) and slightly older *Hyūga*-class helicopter destroyers (the JMSDF possesses two such ships), or from the newest and largest *Izumo*-class helicopter destroyer (although these vessels were designed for anti-submarine warfare, not amphibious operations).

The ARDB will have some organic aviation capability, including four AH-64 Apache attack helicopters, four CH-47JA Chinook heavy-lift helicopters, and up to 16 V-22 Osprey tilt-rotor aircraft by 2024. It is worth noting that although the ARDB will lack the Aviation Combat Element of a standard USMC Air-Ground Task Force (MAGTF), the MAGTF model might not fit amphibious operations with Japanese characteristics.

If the ARDB is augmented by up to two Marine Expeditionary Units that have developed enough interoperability to conduct operations together either within the Nansei Shoto or in other regions in the Indo-Pacific (for example, to conduct HA/DR operations), the complementary capabilities of the alliance will be substantial. Such a combined U.S.–Japan force would field up to 13 amphibious ships; it also would be defended by 12–20 F-35s and be capable of embarking 3,000 personnel and of delivering rapid response via up to 30 V-22s. It would also possess a host of other capabilities. This type of capability would send a strong signal to allies, partners, and adversaries throughout the region.

¹⁷⁴ Adam P. Liff, “Policy by Other Means: Collective Self-Defense and the Politics of Japan’s Postwar Constitutional Reinterpretations,” *Asia Policy*, No. 24, July 2017.

Suggestions for the Way Forward

Although this combined U.S.–Japanese amphibious force might sound ambitious, it is achievable. The following are some options that would provide a pathway to an interoperable U.S.–Japanese amphibious force that is integrated, supported, and nested within the broader JSDF, U.S. Forces Japan–JSDF, and overall U.S.–Japan alliance constructs.

Japan and the United States need to develop a bilateral defense plan that features a combined role for the ARDB/JMSDF and USMC/USN team. The bilateral Japan defense plan is currently undergoing a significant rewrite. This would be a good place for an integrated U.S.–Japanese planning team to articulate detailed missions, command relationships, logistics support, fires integration, allied/coalition relationships, battlespace management, and integration of JSDF joint capabilities as they would be envisioned within the defense of the Nansei Shoto. During this rewrite, requirements for combined training, modernized capabilities, integrated headquarters, combined/joint doctrine, and other requirements for successful operations within the contested littorals of the Nansei Shoto should be considered and laid out. This is not an easy task; it requires commitment from both nations and will certainly involve navigating substantial challenges and overcoming obstacles.¹⁷⁵ The USMC is ideally positioned to energize the amphibious portion of the planning.

The JSDF have developed some amphibious experience of their own through combined exercises with the USMC over the past decade, including through such exercises as Iron Fist, Keen Sword, Dawn Blitz, and Yamasakura. Although these field exercises have provided some experience, the JSDF should identify some training areas within the territorial waters of Japan, similar in concept to San Clemente Island in Southern California, that offer cost-effective training opportunities for amphibious operations. Ideally, such a training area would be developed within the four main islands of Hokkaido, Honsho, Shikoku, and Kyushu, although an alternative might be to locate the training area on one of the lower-profile islands in the Philippine Sea, such as those in the Commonwealth of the Northern Marianas Islands (Guam, Tinian, or Pagan). Because of the complexity and risk associated with amphibious operations, they require continuous training and refinement.

Japan and the United States should also look seriously at establishing a Combined Joint Task Force. Ideally, this would be a standing task force with assigned units from each JSDF service (including the JGSDF's ARDB) and from U.S. forces. This combined-force headquarters should be located at Camp Courtney, adjacent to the 3rd Marine Expeditionary Force Headquarters,

¹⁷⁵ The challenges to closer operational U.S.–Japan defense integration have been laid out in Jeffrey W. Hornung, *Modeling a Stronger U.S.–Japan Alliance: Assessing U.S. Alliance Structures*, Washington, D.C.: Center for Strategic and International Studies, November 2015. Separately, as Hornung and Mochizuki have argued, while the recent reforms of Japan's interpretation of Article 9 of its constitution have loosened constraints on the JSDF, there is still a long way to go before Japan will be able to operate with the United States in ways akin to other U.S. allies. Jeffrey W. Hornung and Mike M. Mochizuki, "Japan: Still an Exceptional Ally," *Washington Quarterly*, Vol. 39, No. 1, Spring 2016.

which is already linked with the USN Command (Combined Task Force 76) on Okinawa. U.S. and Japanese leaders should take advantage of all opportunities to station U.S. Marines and ARDB forces at the same locations, something that several other studies have already advocated.¹⁷⁶

Combined bases with Marines and Japanese forces living and working side-by-side would pay huge dividends. This takes imagination, but anywhere from Camp Ainoura in Kyushu down to Yonaguni at the far end of the Nansei Shoto, near Taiwan, would work. Both sides should be flexible on the size and location of such proposed joint facilities; even small detachments would be valuable, and deployment of an ARDB unit to Camp Hansen in Okinawa is reportedly under consideration.¹⁷⁷ Another relatively easy first step in this regard would be to put an ARDB AAV detachment at Camp Schwab in Okinawa or to move a USMC Combat Assault Battalion detachment to Camp Ainoura with the ARDB. This would result in both daily interactions as well as engagements on specific, critical mission training, such as improving ARDB AAV skills and taking advantage of AAV linkage opportunities.

The USMC recognizes why the ARDB is important. Logically, the next step for the allies is to take advantage of the Marines' more than eight decades of experience at amphibious operations; there is no sense in the Japanese reinventing the wheel. The JGSDF has moved expeditiously in bringing the ARDB into existence. But now that it has been stood up, it can improve much faster if it operates in constant partnership with the USMC and receives more and continuous Marine (and Navy) coaching. This requires USMC advisers to work closely with the ARDB and the JSDF amphibious force. Similarly, USN advisers will be beneficial to the ARDB and Mine Warfare Command. The Mine Warfare Command, located at Funakoshi, Yokosuka, Kanagawa Prefecture, is the JMSDF's answer to the Amphibious Squadron. Its commander has been triple-hatted with the added responsibilities of Commander, Amphibious Task Force and Commander, Amphibious Force. The Mine Warfare Command has been aggressive in pursuing an operational amphibious capability, attempting to secure new training venues, and overseeing the upgrade of the *Ōsumi*-class to be able to launch and recover AAVs. Solidly-linked U.S.–Japanese forces also have a deterrent effect that is compounded by strengthened political ties whenever military forces are operating closely and competently together. This is exactly what a joint ARDB/JMSDF capability closely tied with the USMC and USN would represent.

Operationally, the United States and Japan need to work together on fires integration, particularly on the conduct of shore-to-ship live missile training.¹⁷⁸ The USMC does not have

¹⁷⁶ See, for example, Dennis Blair and James Kendall, *US Bases in Okinawa: What Needs to Be Done, and Quickly*, Washington, D.C.: Sasakawa Peace Foundation USA, December 2015; and Commission of the Future of the Alliance, *The U.S.–Japan Alliance to 2030: Power and Principle*, Washington, D.C.: Sasakawa Peace Foundation and the Center for Strategic and International Studies, 2016.

¹⁷⁷ See Takateru Doi, “Japanese ‘Marines’ Eyed for Okinawa Mission,” *Asahi Shimbun*, October 31, 2017.

¹⁷⁸ Several recent studies have advocated that the United States should develop and deploy shore-based anti-ship cruise missiles as part of a deterrent or defense capability to counter China's growing naval power. See, for example,

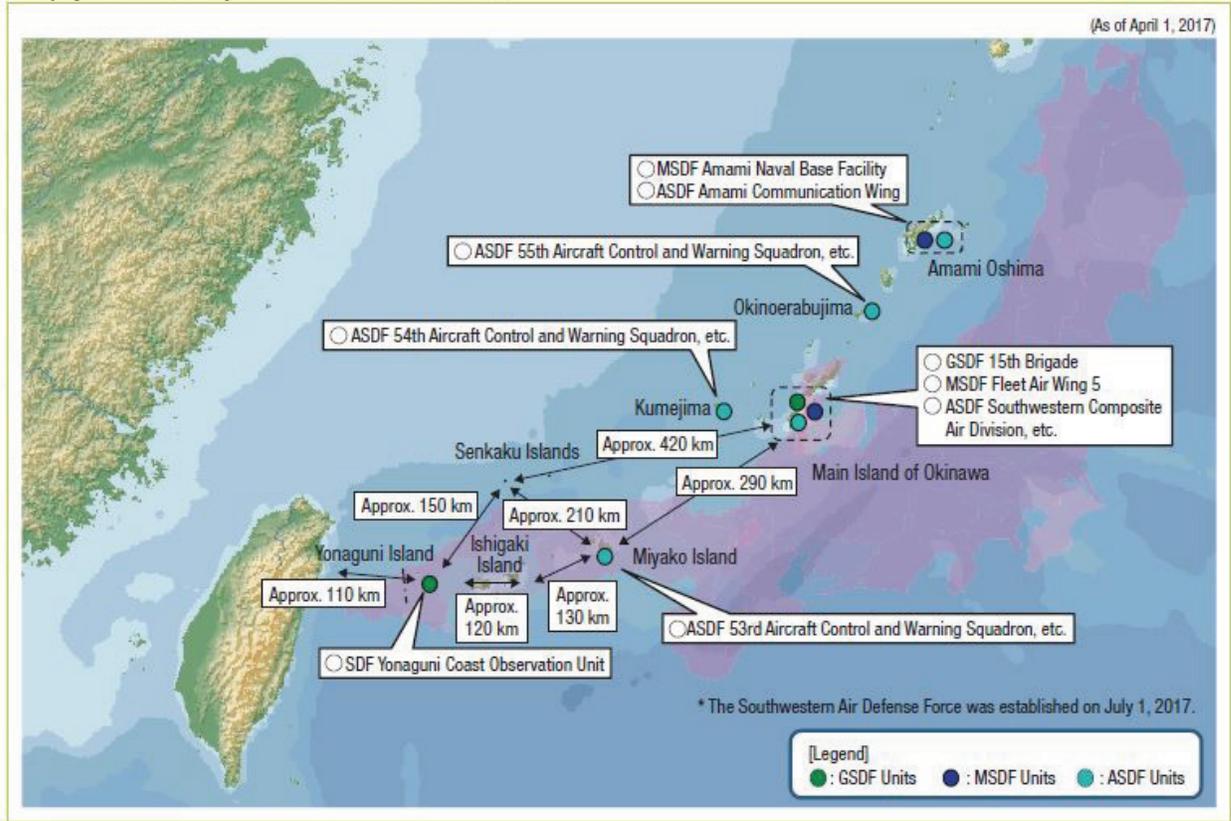
anti-ship cruise missiles, and if it were to acquire such and cooperate with Japan on operating this capability, it would be a dramatic enhancement to the allies' deterrent posture in the Southwest Islands. Such anti-ship cruise missiles would be integrated into a broader shore- and sea-based integrated air and missile defense (IAMD) system. However, the complementary effects of U.S. intelligence, surveillance, and reconnaissance (ISR) coupled with an integrated fires network, the anti-ship missile proficiency, and the shore-based IAMD system of the JSDF could isolate any portion of the Nansei Shoto of the allies' choosing. However, this is a very tough skill that requires extensive training to develop.

The United States could redirect additional alternative shipping platforms. These would include Maritime Pre-Positioning Ship Squadron platforms, expeditionary fast transport ships, expeditionary staging bases, and expeditionary transfer docks. Sea-Based Maritime Pre-positioning Force operations are challenging. Unfortunately, there are a limited number of regional ports capable of handling the deep draft ships that are useful for this type of operation. But a combination of alternative platforms can provide deep logistics stocks, personnel berthing, and intra-island mobility that could function within the aforementioned integrated air and missile defense system's protective bubble.

The Marine Corps should consider reorienting its Unit Deployment Program Infantry Battalions, currently stationed on Okinawa, to redistribute and partner with JGSDF units positioned on Yonaguni, Ishigaki, Amami, Miyako, and Kumejima islands (Figure 5.1). One or two Joint-High Speed Vessels or Expeditionary Fast Transport vessels could provide surface mobility between these locations and embark sufficient—though light—capabilities to augment various missions ranging from air defense, ISR, long-range fires, force protection, and amphibious training. An additional Unit Deployment Program battalion could rotate through Sasebo/Camp Ainoura to conduct training with the brigade's headquarters and improve both unit-level training readiness and combined interoperability. This will not happen quickly and requires disciplined planning among all parties, but it would support a redesigned bilateral defense plan, assist in the full development of the ARDB, and posture allied forces for any variety of missions within the Western Pacific.

Andrew F. Krepinevich, Jr., "How to Deter China—The Case for Archipelagic Defense," *Foreign Affairs*, March/April 2015; Terrence K. Kelly, Anthony Adler, Todd Nichols, and Lloyd Thrall, *Employing Land-Based Anti-Ship Missiles in the Western Pacific*, Santa Monica, Calif.: RAND Corporation, TR-1321-A, 2013; and Eric Lindsey, *Beyond Coastal Artillery—Cross-Domain Denial and the Army*, Washington, D.C.: Center for Strategic and Budgetary Assessments, 2014.

Figure 5.1. Deployment Status of Major Units in the Southwest Islands



SOURCE: Japanese Ministry of Defense, *Initiatives to Protect the Lives and Property of the People as Well as Securing the Territorial Land, Water, and Airspace*, Tokyo: white paper, 2017c.

The USMC should seriously consider experimenting with the Type-12 surface-to-ship missile (SSM) that Japan has fielded, and support research and development of Japan’s next-generation SSM. The USMC should also invest in an MV-22B transportable variant of this next-generation missile to make the Osprey a more lethal component of the overall force. As an aside, the USMC is currently researching the viability of a naval strike missile, but there are no plans to field one to USMC rocket artillery units. Given its commonality with the JSDF, the Type-12 SSM might be a better alternative.

Mitsubishi Heavy Industries is investing in research and development of a more survivable AAV, independent of Defense Ministry funding. The objective is to build an AAV that can move through the water at 20 to 25 knots. Some close observers believe that Mitsubishi Heavy Industries might have the technology and resources to produce an affordable next-generation AAV with greater water speed, range, and landward maneuverability than the current USMC

AAV-P7/A1.¹⁷⁹ The Marine Corps should explore every opportunity to support both Mitsubishi and JSDF efforts to develop a next-generation AAV.

Japan's ARDB will be a critical capability within the next iteration of the U.S.–Japan Bilateral Defense Plan. It has come a long way in a very short time, yet amphibious operations are perhaps the most challenging of military operations and a long path remains ahead before Japan fields a fully viable ARDB, much less one that is maximally integrated within the JSDF and coordinated and interoperable with the USMC. Fortunately, both nations agree on the broad, and many specific, strategic defense objectives within the region. The USMC has been reoriented to the Pacific. It is modernizing itself while engaging in the combined training and development of interoperable capabilities with the JSDF. This sends a strong signal to our adversaries while fortifying our relationships with all five of America's Indo-Pacific treaty allies and assuring emerging security partners that the United States is both committed to free and open access to the global commons and the best guarantor of freedom and prosperity across the Indo-Pacific region.

The Past Is the Key to the Future

Since the end of World War II, the bedrock of Japan's national security has been the U.S.–Japan alliance. It has been a mutually beneficial arrangement whereby the United States underwrites Japan's security in exchange for an unsinkable, forward-deployed aircraft carrier in northeast Asia, heavily subsidized by one of the world's most prosperous economies. Put simply, the Japanese and U.S. commitment to maintaining peace and security in the Indo-Pacific has led to more than 50 years of miraculous economic, social, and political development.

Growing regional threats, specifically from China, North Korea, and Russia, coupled with the erosion of both the technological and economic leads enjoyed by the alliance since the 1950s have accelerated the process of Japan's military normalization. As the alliance reorients itself to confront these challenges, the roles and capabilities of the JSDF are appropriately being increased. The alliance must focus on its comparative advantages if it is to maintain the deterrent effect necessary to check regional adversaries. Warfare in the 21st century is bigger in every way—it sees, shoots, and reaches farther, wider, and faster. It is time competitive. The years that conflict might have unfolded over in the past are likely to be compressed into months, weeks, or even days in the conflicts of the future. The greatest potential for timely alliance growth lies in the expanded capabilities of the JSDF.

The role of the U.S.–Japan alliance and, perhaps more importantly, how that role is executed day to day, will be critical to overall success. Close contact with and proximity to the JSDF are required for the USMC and USN to most effectively share and further develop the insights into

¹⁷⁹ Tim Kelly and Nobuhiro Kubo, "Mitsubishi Is Building an Amphibious Assault Vehicle That Aims to Be Three Times Faster Than the One Used by the U.S. Marines," Reuters, June 23, 2015.

amphibious operations that these two services have acquired over two centuries of combined efforts. Some of the proposed changes may be seen in some quarters in Japan as politically, legally, or even constitutionally unacceptable. Overcoming a mindset of resistance to change and adapting Japan's regulatory environment to support amphibious operations will require determined and visionary leadership that clearly, respectfully, and convincingly explains the need for evolving new capabilities and support structures to meet the growing threats facing Japan. A good road map to guide the two countries along the next steps of their cooperation is the Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, and Interoperability (DOTMLPF-I) process.

The USMC and USN must be the lead services engaging with the ARDB and encouraging the Japanese to rapidly increase capabilities in each of the DOTMLPF-I areas. These two services can be of tremendous assistance to the newly formed ARDB in (1) establishing techniques, tactics, and procedures; (2) assisting with issues related to manning, training, and equipping the force and related to thinking through aspects of policy and regulation; and (3) executing what the U.S. armed services call Title 10 responsibilities (i.e., the roles, missions, and organization of the armed services). Few, if any, will challenge the fact that amphibious operations are the most complex of any military operations. Often, these complex operations are accompanied by an unavoidably complex command and control structure that must be understood and complied with to avoid rapid and virtually assured failure. The USMC and USN were able to develop and battle test different methods of command and control structures that they can use to assist the ARDB as it implements, trains, and executes real-world operations.¹⁸⁰

In addition to command and control, there are other war-fighting functions, such as fires, maneuver, logistics, and force protection, where the USMC and USN possess critical lessons learned that they can share with the JSDF generally and the JGSDF's ARDB specifically to aid these organizations in the development of their own successful concepts and procedures.

The U.S.–Japan alliance must evolve in order to endure. The United States and Japan depend on each other and the greater region depends on these two countries. Like-minded nations in the Indo-Pacific look at the endurance of the U.S.-Japan alliance for more than 50 years as a symbol of strength and resolve. They see promise in the future of that alliance, knowing the bond is tested and unbreakable. Together, if they take the appropriate steps to improve themselves and enhance their coordination, Japan and the United States can help realize an Indo-Pacific that is open and free and all countries cooperate to advance common interests and deter threats to the peace.

¹⁸⁰ For example, in the realm of command and control, the USMC and USN have developed the Commander, Amphibious Task Force (CATF) vs. Commander, Landing Force (CLF) distinction, whereby the CATF is in charge of operations and provides command, direction, overwatch, air cover and fire support to the CLF as it moves to establish and defend a beachhead, after which the CLF becomes the lead organization with the CATF moving to a supporting role. See U.S. Department of Defense, *Amphibious Operations*, Washington, DC: Joint Publication 3-02, July 18, 2014.

6. Conclusion

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As this study goes to press, the ARDB is just a few months old, but its rapid stand-up is already proving prescient. China's decision to bring its Coast Guard under military command has further reinforced the gray zone challenges Japan faces around the Senkakus and in the broader Southwest Island chain.¹⁸¹ The impetus for amphibious capabilities focused on joint interoperable deterrence and defense of Tokyo's maritime claims has taken on increased importance against a backdrop of an increasingly aggressive Chinese fishing fleet that has reportedly been using lasers to blind U.S. military pilots, suggesting that China's maritime gray zone activities may be entering a new and more risk-acceptant phase following the PLA's seizure of a U.S. Navy drone in late 2016.¹⁸² Whether this could mean an increased willingness to attempt to erode Japan's control over its remote islands is unclear; what is clear, however, is the importance of following through on the recommendations of the authors of the papers in this volume.

All of the authors note the importance of increased joint planning; training and exercises; and a focus on the enabling technologies, platforms, and weapons that will facilitate effective amphibious operations. Such steps, if undertaken promptly and in coordination with the United States, could help to head off any perception by China that it could overwhelm Japan's local deterrent forces quickly and at a low cost. As Hornung notes, however, jointness takes time and the JSDF alone are not well-positioned to undertake deterrence of Chinese gray zone forces if Beijing seeks to employ nominally-civilian fishing vessels against the Japan Coast Guard, a maritime law enforcement agency that, at present, coordinates with the JSDF only in extreme circumstances—and then more in principle than in practice.¹⁸³ Given that Japan is revising its *National Defense Program Guidelines* and *Mid-Term Defense Program*, now is the time for Tokyo policymakers to act on the recommendations to prioritize amphibious operations as a spur to jointness. The Diet should also ensure that the Ministry of Defense has the guidance and

¹⁸¹ Lyle J. Morris, "China Welcomes Its Newest Armed Force: The Coast Guard," *War on the Rocks*, April 4, 2018.

¹⁸² Jamie Seidel, "Chinese Fishing Boats Are Blinding US Military Pilots with Lasers," *News.com.au*, June 25, 2018; Christopher P. Cavalas, "China Grabs Underwater Drone Operated by U.S. Navy in South China Sea," *Defense News*, December 16, 2016.

¹⁸³ Takashi Funakoshi, "Chinese Fishing Fleet Only Sails to Senkakus Under Order of Beijing," *Asahi Shimbun*, September 10, 2017.

resources that it needs to support the rapid evolution of the ARDB toward its planned end-strength (and should examine whether any plus-ups are required to ensure that the final sizing of the ARDB is sufficient to the missions it faces). It will be critical for the Government of Japan to further improve coordination among the Ministry of Defense; the Ministry of Land, Infrastructure, and Transportation (where the JCG is housed); and the Cabinet so that communications and decisionmaking during a crisis unfolds along pre-planned and pre-exercised pathways. At the same time, the JSDF (especially the JGSDF's ARDB) and the USMC should continue and accelerate training and exercises together on island-defense and island-recapturing to reinforce deterrence and defense interoperability. As both General Isobe and General Simcock note in their essays, only a strong U.S.–Japan alliance that regularly practices for both low- and high-end contingencies and is undergirded by close personal relationships built over years of interactions among commanders, officers, and enlisted personnel will be effective at ensuring the continuation of the peace that has served the region so well for decades. The findings of this conference volume help point the way toward such a future.

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