Taiwan's Naval Role in the Rebalance to Asia

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he Asia-Pacific region is of vital and growing importance for American foreign policy. The Obama Administration recognized this and announced a national "pivot" or "rebalance" to Asia in 2011. However, Washington has been slow to fill-in the details of its new strategy. This is disappointing, but it should not be surprising. Large bureaucracies are rarely adept at keeping up with rapidly changing environments. Part of the problem is the lack of a consensus and the amount of time it takes leadership circles to build one. Part of the problem is the lack of expertise. After decades of intense focus on Europe, Russia and the Middle East, many American foreign policy elites simply do not understand Asia and find the learning curve steep. Complicating matters, the past few years have witnessed a series of crises at home and abroad that have caught the government and public by surprise. From sequestration and the government shutdown to ISIS and Ebola, unforeseen events have shattered the concentrations of many American decision makers, robbing them of the time needed to conduct long-term strategic thinking.

Perhaps as a result, too little thought has gone into the key role that the United States' Asian allies and security partners could play in making the rebalance a success. Many governments in Asia now view Washington's much anticipated rebalance policy as more aspirational than real. How can there be a true regional strategy, they ask, if it does not include us? This situation is concerning because so much is at stake. China is engaged in an ambitious national armament program, and it is pursing muscular foreign policies that show its emergence as a major power will

come with attempts to shift power balances through military means. This is not conducive to peace and stability. Historically, power balances that are not carefully measured and maintained have a strong tendency to result in war. The United States needs to get its rebalance strategy right, and that means working more closely with allies and friends.

A comprehensive strategy for Asia begins with a careful assessment of the region's geography and politics, which directly influence the trends we see unfolding today. Once the geostrategic contours of the region are mapped out, it quickly becomes clear that Taiwan may be the single most underappreciated asset that the United States has for the rebalance to Asia.¹

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Taiwan's strategic location in the heart of East Asia and the Western Pacific gives it an importance that far exceeds its population and geographic size. Moreover, Taiwan is a likeminded democracy, making it a natural partner for the United States government. Some Americans view Taiwan as a strategic liability or a "troublemaker" who gets in the way of better U.S.-China relations. They are wrong. Taiwan is a responsible and worthy ally, and one that contributes tremendously to the American goals of establishing a peaceful, prosperous, and rules-based order in Asia.

Recent examples of Taiwan's contributions abound. For starters, President Ma Ying-jeou's East China Sea Peace Initiative and the subsequent fisheries agreement with



Japan in April 2013 represent landmark achievements in regional maritime diplomacy. When Typhoon Haiyan devastated parts of the Philippines in November 2013, it was Taiwan that was first to respond with boots-on-the-ground humanitarian aid. Taiwan has also worked hard to reduce cross-Strait tensions. After years of steady progress, Taiwan sent an official emissary to Nanjing in March 2014 for its first ever government-to-government summit with China. This relieves the world of its most dangerous flash point...at least temporarily.

Unfortunately, there is little chance that Taiwan's diplomatic gestures of neighborly goodwill will be able to correct Asia's perilous course toward instability. The main problem is China, whose rapid military build-up is fast eroding the defensive positions of numerous states around its periphery, including Taiwan. Beijing has made it clear that the principal long-term objective of its military is attaining the ability to apply overwhelming force against Taiwan during a conflict, and in a manner that would keep American forces out. In the meantime, China is engaging in military and paramilitary operations in the East China Sea and the Philippine Sea to undermine the U.S.-Japan and U.S.-Korea alliances; and it is working along similar lines in the South China Sea as part of its Taiwan policy.

Why do Chinese political and military actions focus so intensely on Taiwan? Because China's authoritarian leadership is deeply insecure. Beijing views Taiwan, which exists as a free and independent sovereign state, to be a grave threat to the communist party's totalitarian grip on power. China refuses to give up the use of force to settle disputes and its military posturing remains aggressive despite the relative thaw in cross-Strait relations. Recently, for example, the Chinese People's Liberation Army (PLA) launched ballistic missiles against mock-up targets resembling homes in a residential district of

Taipei. And, on August 26th, 2014, PLA intelligence gathering aircraft violated the Taiwan Strait centerline four times in a single day. While events in the East and South China Seas distract public attention, China continues to aim its most menacing military activities at Taiwan.

Given the trends, it is time for American policymakers and strategists to ask: What are Taiwan's self-defense capabilities and how might they help the United States prevent or if necessary defeat a Chinese attack? What is the ability of Taiwan to assist American forces during coalition operations? What more can be done? This article provides a brief assessment of Taiwan's defense capabilities and potential role in the United States rebalance to Asia. In particular, it will focus on what Taiwan can contribute in the maritime domain and what Washington should do to improve naval coordination with Taipei.

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Taiwan's Evolving Maritime Defense Capabilities

Taiwan is an island trading nation that is dependent on the sea for its security and prosperity. To defend itself, Taiwan has been investing heavily in capabilities intended to ensure that China is not able to execute an amphibious assault or blockade against its beaches and ports. This is no easy task. Taiwan faces a Chinese adversary that is close to its territory and equipped with dozens of attack submarines and surface ships; hundreds of strike aircraft, armed drones and cruise



missiles: thousands of ballistic missiles: tens of thousands of sea mines; and hundreds of thousands of amphibiously oriented troops. What's worse, the PLA has an offensive first strike doctrine.

Taiwan's response to its maritime defense challenges, which are arguably the most stressful in the world, has been remarkably thoughtful. Instead of attempting a wasteful naval arms race with China, Taiwan has concluded that, despite the considerable differences in national defense resources available, it can continue to maintain a relatively favorable balance against China if it invests wisely. Taiwan's strategists have carefully studied areas where they have comparative advantages. The principal selfdefense advantages Taiwan has are its favorable geography, its professional military, and its singularity of purpose.

As a status quo state that is content with its existing territorial borders, Taiwan can deter conflict simply by convincing China's leadership that the costs of any fight would outweigh the hoped-for benefits. Taiwan's strong relationship with America gives it a powerful advantage in this regard. While not technically a mutual defense treaty, the U.S. Taiwan Relations Act (Public Law 96-8) makes it clear that the American military would intervene in the event of outright Chinese aggression against Taiwan.

To further advance its comparative advantages, Taiwan has been focusing on improving its military capabilities in several key areas. Here we will discuss three: maritime domain awareness, sea denial, and air and missile defense. These self-defense capabilities do more than just enhance Taiwan's security; they make it an indispensible partner for the United States Navy.

Maritime Domain Awareness

Taiwan's political and military leaders understand that knowledge of Chinese forces, plans and intentions alone may not be enough to deter war or win a campaign, but it could play a decisive part. Maritime domain awareness, which is a more comprehensive form of naval intelligence, plays a critically important role in the defense of Taiwan.2 Related capabilities include a large number of advanced intelligence, surveillance, and reconnaissance (ISR) assets. These give Taiwan the ability to track Chinese fleets above, on, and under the surface of its surrounding seas.

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Taiwan has invested heavily in surface scanning, over-the-horizon, and ultra-high frequency surveillance radars. These work with Taiwanese sonar arrays, listening posts, satellites, early-warning planes, unmanned reconnaissance aircraft, cyber units, and human agents to monitor Chinese naval activity. Like governments everywhere, Taipei places a premium on vigilance to avoid strategic and operational-level surprise. The severe naval challenges facing Taiwan greatly heighten the importance of information.

Taiwan's ability to integrate all sources of information gives it a critical advantage. Taiwan's naval maritime domain awareness capabilities have been traditionally unified by indigenous command, control, communications, and intelligence network. This high-tech system lets commanders share a common operational picture. First established in the early 1980s, and continually upgraded

since, Taiwan's maritime domain awareness architecture is centered at the ROC Navy Headquarters' Combat Operations Center in Taipei. The system's powerful computers receive and process a vast quantity of naval data to produce an integrated picture of the sea area around Taiwan, including the Taiwan Strait and the Chinese coastline. It can operate both independently and jointly with air force, army, and coast guard systems, which together form a national defense information system. This system is centered at the Tri-Service Command Center, a massive tunnel complex in Taipei near the ROC Navy Headquarters building. According to PLA assessments, Taiwan's maritime domain awareness system has many back-ups, making it a daunting target. In a war, Taiwan's maritime domain awareness network would be an invaluable source of intelligence for the U.S. Pacific Command in Hawaii.

Sea Denial

Taiwan's navy, ROCN, recognizes that it does not have the resources to match the PLA Navy ship-for-ship or submarine-for-submarine. However, that does not mean Taiwan is losing control over its surrounding waters. To the contrary, Taiwan is using a long-range, missile-centric strategy to ensure that it can deny any Chinese naval fleet access to its territorial waters. The strategy works because Taiwan has home-built the advanced systems needed to see and strike an invasion force from great distances. It also works because Taiwan has decided it would not wait for Chinese troop transport ships to get close to its beaches before it began to sink them.

According to Taiwan's contingency plans, a counter-amphibious operation would likely involve lethal strikes on PLA units at their coastal embarkation points. These strikes would grow in intensity as Chinese ships crossed the Taiwan Strait centerline, and the

battle would crescendo decisively 20-30 kilometers away from Taiwan's coast, if not before. In its annual Han Kuang national defense exercises in 2013, Taiwan's military publically demonstrated how it would defend against a Chinese invasion. During the drill a highly coordinated joint force unleashed a spectacular series of missiles, rockets, artillery, mines, decoys and electronic jammers at a simulated Chinese invasion fleet. The result? Not a single "red team" naval infantryman made it to shore.³ Taiwan knows that only by refusing to cede the initiative can it keep its heavily populated northwestern coastline from becoming a future battlefield.

In support of its sea denial strategy
Taiwan has developed and acquired landattack cruise missiles, which are capable of
reaching all the Chinese naval bases from
Shanghai to Guangzhou. Taiwan's air force,
ROCAF, has begun equipping itself with
stealthy glide bombs that can soar hundreds of
kilometers into denied airspace to rain
penetrating sub-munitions down on targets.
Taiwan has further bolstered its coastal
defenses by developing super-sonic anti-ship
missiles. These are deployed in mountainside
bunkers, on mobile truck launchers, and
aboard surface ships and fast attack boats.

Finally, in case all else fails, Taiwan's army has hundreds of mobile rocket launchers and self-propelled artillery that can "sanitize" large swaths of sea space with guided munitions and shotgun-like projectiles filled with tens of thousands of ball bearings.



HF-III supersonic anti-ship missile is an important countermeasure against invading enemy warships. This picture shows one of the test flights of the indigenously-made missile. (Source: CSIST)



By creating no-go zones around its critical sea lines of communication, Taiwan can break through any potential Chinese invasion or blockade attempt. Many of the same capabilities would be useful for the United States in protecting Okinawa and the Philippines from possible Chinese naval assaults. Taiwan's only major naval weakness is its lack of new submarines. Fortunately, after years of research and development work, Taiwan's government has announced it will soon start building them.

Air and Missile Defense

To make sure China cannot defeat its navy from the air, Taiwan is working with the United States to construct the most resilient air and missile defense system in the world. Taiwan's air and missile defenses protect its critical maritime defense infrastructure, including its naval bases and civilian port facilities. Air surveillance and early-warning is provided by a dense network of radars that are located on mountain peaks to extend their range of view. Taiwan has also built ballistic missile defense (BMD) radars into hardened bunkers or made them mobile to increase their odds of surviving PLA surprise attacks. In 2012, Taiwan introduced a revolutionary new radar into its early-warning system. Known as the Surveillance Radar Program (SRP), this enormous radar is capable of tracking stealth aircraft and cruise missiles in addition to ballistic missiles. Theoretically, the SRP can also track Chinese naval satellites and ships at sea. Taiwan now has the most powerful ground-based radar system ever built, and, with the right software upgrades, it could soon operate at even greater capacity.

In response to China's ballistic missile build-up, Taiwan is investing heavily in BMD missile systems in addition to radars. Taiwan is also improving its air defense systems for countering saturation attacks by cruise

missiles. manned aircraft, and drones. Taiwan's armed forces currently have three Patriot missile batteries around Taipei, and will soon get seven more for overlapping coverage of central and southern Taiwan. Even more importantly, Taiwan has developed a cutting-edge BMD missile system called the TK-3, and plans to deploy at least 12 new batteries. Taiwan's indigenous missile defenses are comparable to Patriot systems in terms of capability, but more cost effective to buy, maintain, and upgrade. Taiwan also has longrange air defense missile batteries deployed on its outer islands, giving it the ability to shoot at Chinese fighters as soon as they take-off from coastal airbases.

ROCN is an important player in Taiwan's air and missile defense system. Taiwan has four guided missile destroyers that are armed with American-made SM-2 air defense missiles. In addition, ROCN has eight guided missile frigates that are armed with SM-1 air defense missiles. Taiwan plans to develop ships with Aegis-like radars and seabased BMD missile capabilities. With China fielding anti-ship ballistic missiles (ASBMs) for targeting American aircraft carrier groups in Taiwan's Western Pacific, defense investments are good news for the United States. Chinese ASBMs would have to go through Taiwan's airspace on the way to their targets. With the right combination of highpowered BMD radars and interceptors, Taiwan's military can serve as a shield to help protect deployed American naval task forces during a contingency.



All of the ROCN's major warships, such as the Keelung-class destroyer in this picture, serve as an important component in the maritime awareness. (Source: Shu Hsiao-huang, ODS staff)

Policy Recommendations

Taiwan has a critical role to play in the maritime component of the United States rebalance to Asia. As a capable naval partner, Taiwan can provide the Pacific Command with intelligence and early-warning information. Taiwan's maritime domain awareness capabilities can be linked with U.S. Navy systems to form a common operational picture. In addition, Taipei can contribute to international efforts in response to natural disasters and humanitarian crises. Given the increasingly unstable regional environment, it is imperative that like-minded maritime states with shared defense interests continue to advance their ability to work together as coalition partners. By working together with allies and partners like Taiwan, the United States can improve its response to a growing number of potential natural and man-made disasters in Asia.

The United States and Taiwan have a strong defense and security relationship overall, but the relationship is weak in the naval arena. Much more can and should be done. First, the two navies should aim to share their respective maritime domain awareness information. This would allow them to seamlessly work together as coalition partners during a crisis. While shared digital data links are in place, serious human "software" challenges persist. These challenges can only be surmounted through improved government-to-government, military-tomilitary, and people-to-people contacts. In this regard, Washington bureaucrats should stop isolating Taiwan from bilateral and multilateral exercises in order to appease or "reassure" China. Such a policy, in effect, undermines American maritime security interests in Asia. U.S. Navy ships should visit Taiwanese ports, and the Pentagon should invite Taiwan to the next Rim of the Pacific

Exercise in 2016. The stakes are too high for Washington to continue policy behavior that diminishes the Pacific Command's ability to work with democratic allies.

It is well known that the United States has plans for fighting alongside Taiwan in the event that known contingencies occur. ensure that these plans could be successfully executed, admirals at the two-star rank and above should regularly visit counterparts in Taiwan and learn about the Western Pacific battlespace firsthand. Nobody understands the local landscape better than Taiwan. As a means of building further trust interoperability, the Pacific Command should expand and deepen its military exchanges with Taiwan as part of the rebalance to Asia.

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Taiwan should be a hub for training personnel in the Chinese language and culture. Taiwan's National Defense University and other professional military education institutions should be leveraged by American naval officers and civilians studying regional maritime security affairs.

Next, the United States government should ensure that Taiwan's most advanced early-warning radar, the SRP, has software properly enabled so that it has a maritime, air and space tracking capability. This would allow Taiwan to contribute to the shared monitoring of Chinese warships, space debris, and naval ocean surveillance satellites. In addition, the U.S. Navy should strengthen its relationship with Taiwan in the area of integrated undersea surveillance systems. A joint seabed sonar system could be a key component of an all-hazards situational awareness network in the Western Pacific to

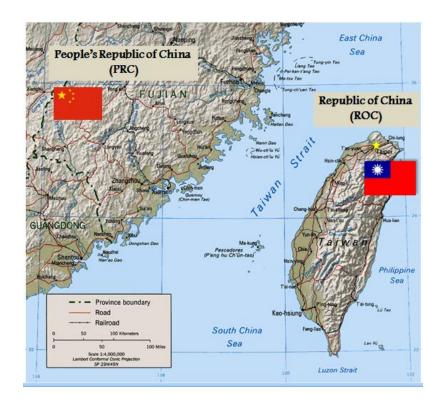
monitor earthquakes, tsunamis. illegaltrafficking, adversary surface ships, and submarines.

Finally, Washington should let Taiwan know it intends to approve licensing for American industrial participation in Taiwan's defense submarine program. indigenous Taiwan has an urgent requirement for new submarines that can conduct anti-surface and anti-submarine operations. Submarines are also a critical part of an integrated intelligence architecture. The strategic benefits of new diesel-electric submarines and the range of missions they could undertake as part of coalition operations merit full U.S. support for Taiwan's new submarine program.

Conclusion

There is no way to know if China will attack Taiwan in the coming years. What is certain is that a better defended Taiwan is much less likely to become a target. If Taipei is strong enough, no rational leader in Beijing would ever attempt to settle sovereignty disputes by force. Taiwan's maritime defense capabilities, especially in the areas of intelligence, sea denial, and air and missile defense, significantly reduce the possibility of a cross-Strait conflict. By enhancing its selfdefense capabilities, Taiwan contributes to improved regional stability and supports American security interests in Asia. Going forward, the United States needs to make significant improvements in its naval coordination with Taiwan as part of the rebalance to Asia. Doing so will help keep the Asia-Pacific region peaceful and prosperous for decades to come.

Ian Easton is a research fellow at the Project 2049 Institute. This piece was originally published in Taiwan's **Defense Security Brief** on February 15, 2015.



Notes



¹ To prevent confusion and for reading convenience, in this article the Republic of China (ROC) is referred to as "Taiwan," while the People's Republic of China (PRC) is referred to as "China."

² For more on this topic, see Ian Easton and Randall Schriver, Standing Watch: Taiwan and Maritime Domain Awareness in the Western Pacific (Arlington, Virginia: Project 2049 Institute, December 2014). This section and the policy recommendations that follow it are drawn from the study.

³ For a detailed account of the exercise, see "Penghu Wude Joint Counter Amphibious Exercise (澎湖五 德聯信聯合反登陸操演)," Quanqiu Fangwei Zazhi (Defence International), May 2013, p. 32-40.