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CHINA'S GLOBAL NAVAL STRATEGY AND EXPANDING FORCE STRUCTURE

Pathway to Hegemony

James E. Fanell

This article is derived from Captain Fanell's testimony at the hearing before the U.S. House of Representatives Permanent Select Committee on Intelligence on May 17, 2018. The full text of his original testimony more forcefully reflects his admonitions to the committee, and it is available online at https://intelligence.house.gov/uploadedfiles/james_e._fanell_hpsci _testimony_-_final_-_17may18.pdf.

hina's unilateral expansion into and through the international waters within the first island chain—or what Beijing now calls China's Blue Territories over the past six years has altered the strategic balance of power dramatically in the Indo-Pacific region.¹ That strategic balance has shifted in favor of the People's Republic of China (PRC) and against America's security and interests.

In addition to building a modern, blue-water navy, the PRC has taken a wide range of destabilizing actions that pose an increasing threat to global security. Among these actions are the construction of naval air stations in the South China Sea, including on Mischief Reef, which is located within the exclusive economic zone (EEZ) of the Philippines, a U.S. ally; its declaration of an air-defense identification zone (ADIZ) in the East China Sea near Japan; its claims of sovereignty over the Senkaku Islands; and its flat-out repudiation of the authority of the Permanent Court of Arbitration (PCA), the world's oldest standing international-law arbitral body.² The threatening actions also include China's unprecedented and increasing naval operations in the western Pacific, South Pacific, and Indian Oceans; the Mediterranean and Baltic Seas; the Arctic and Antarctic; and, finally, the Atlantic Ocean. These actions are clear empirical indicators of China's future malign intentions and actions.

These intentions and actions position China's military forces, particularly its navy, air force, missile forces, and rapidly expanding marine corps, as the arbiters of a new global order—one that stands opposed to U.S. national interests and

values and those of our friends and allies. China has spent billions of dollars on a military that can achieve the dreams of the Chinese Communist Party (CCP).

It is crucial to establish firmly and quickly why the PRC's rapid, global, and very expensive naval expansion matters. The CCP is engaged in a total, protracted struggle for regional and global supremacy. This supremacy is at the heart of the "China Dream."³ China's arsenal in this campaign for supremacy includes economic, informational, political, and military warfare. The campaign at its heart is opportunistic; we have witnessed already China's expansion into the vacuum of a diminishing U.S. presence in East Asia.

If one has not read Xi Jinping's words and realized the supremacist nature of the China Dream and carefully watched the nature of China's rise, then one innocently might ask the obvious question: Why does it matter that the PRC seeks regional, or even global, hegemony? That is, why does the world not simply abide a "rising China," a seemingly benign term so often employed by Beijing's propaganda organs and PRC supporters worldwide? After all, fewer would be concerned if, for instance, a "rising Brazil" or a "rising India" sought regional hegemony and proclaimed a desire to lead the world into the twenty-first century.

The answer goes to the core of China's leadership and how it behaves. Under the CCP, the PRC is an expansionist, coercive, hypernationalistic, militarily and economically powerful, brutally repressive, totalitarian state. The world has seen what happens when expansionist totalitarian regimes such as this are left unchallenged and unchecked. In a world under this type of hegemon, people are subjects—simply property—of the state, and ideals such as democracy, inalienable rights, limited government, and rule of law have no place.

Clear empirical indicators directly contradict the oft-quoted pledge by China's leaders to pursue a "peaceful rise," one in "harmony" with the rest of Asia and the world. By its expansionist actions and words, China has challenged the post–World War II norms of international behavior and, most importantly, the peace and stability that the Indo-Pacific region has enjoyed over the past seventy years.

For instance, in spite of the country's having a gross domestic product (GDP) per capita on par with that of the Dominican Republic, China's leadership has invested staggering amounts of national treasure in a world-leading complex of ballistic missiles, satellites, and fiber-linked command centers with little utility but to pursue military dominance aggressively.* Despite China's need to keep its children indoors because of hazardous levels of pollution, a health care system in crisis, toxic rivers, a demographic time bomb caused by government-directed population expansion and then forced contraction, and only one-third the GDP per capita of the United States, Beijing chooses to spend its precious resources on military force buildup.

^{*} For instance, the DF-21D anticarrier ballistic missile was designed by the People's Liberation Army specifically to destroy U.S. aircraft carriers in the western Pacific.

Much of that investment has gone into the People's Liberation Army Navy (PLAN). The momentum created by the PLAN's rapid advances in the maritime domain threatens to do for the rest of the world what the Communist Party has done for China Proper and its neighbors (Xinjiang and Tibet, Cambodia and Laos), establishing military, political, and economic domination, to varying degrees—as the PRC pursues what President Xi calls his China Dream.

The PLAN is China's point of the spear in its quest for global hegemony. As of 2018, the PLAN consists of over 330 surface ships and sixty-six submarines nearly four hundred combatants. As of May 4, 2018, the U.S. Navy consisted of 283 battle-force ships, including 211 surface ships and seventy-two submarines.⁴ By 2030, it is estimated the PLAN will consist of some 550 ships: 450 surface ships and ninety-nine submarines.⁵ These numbers are a current subject of debate in the halls of the Capitol and the Pentagon, and it remains unclear whether the U.S. Navy of 2030 will reach a total of even 355 ships and submarines.

Numbers matter. In the past, it was fair to say that numbers of hulls, or even tonnage, were not a complete measure of force-on-force capabilities and that American technology would outweigh the PLAN's numbers. Today, that argument is no longer credible. From a technological standpoint, the PRC quickly has achieved parity with USN standards and capacities for warship and submarine production. PLAN ships and submarines do not have to match U.S. naval capabilities precisely; they only have to be good enough to achieve more hits and win any given battle. That said, the quality of PRC warships already presents a credible threat across the Indo-Pacific region today. Consequently, we should be gravely concerned about America's ability to deter or defeat the PRC's naval spear.

We do not have much time left—certainly not until the year 2030, when the PRC's navy will be double the size of the U.S. Navy. For reasons laid out below, the window of vulnerability—the decade of greatest concern—begins in less than twenty-four months. If some currently unintended event does not provoke a military confrontation before then, we have until 2020—the deadline that Xi Jinping has given the People's Liberation Army (PLA) to be ready to invade Taiwan. From that point on, we can expect China to strike.

My detailed assessment of this imminent and ever-increasing maritime threat follows, as well as my recommendations: the actions our country must take to avoid geopolitical defeat and a likely naval disaster, the likes of which we have not experienced since the early, dark days of World War II.

A CHINESE MARITIME DREAM

In 2013, as President Xi Jinping unveiled his China Dream in a speech to the PRC National People's Congress, China Central Television (CCTV) aired the week-long series *Shaping China's Tomorrow*, which explored what Chinese people think

about the Dream. It is noteworthy that CCTV began the series with the story of a PLAN East Sea Fleet–based executive officer just returned from his third escort mission in the Gulf of Aden. Lieutenant Commander Shi Lei related that when he joined the PLAN a decade prior, he never had envisioned sailing so far from land. But now he believes the PLAN one day will have a blue-water navy whose sailors can take on any mission on the open sea. Significantly, this CCTV series vignette symbolizes China's shift in maritime strategy over the past decade, from solely a near-seas, active-defense strategy to a national maritime strategy focused on responsibilities and presence across the global maritime domain. Not surpris-

The PLAN is China's point of the spear in its quest for global hegemony. . . . China's increasingly well-publicized naval presence and operations throughout Southeast Asia have contributed to a tectonic shift in this sensitive region, a shift toward Beijing and authoritarianism and away from the United States and its values of democracy and the rule of law. ingly, it aligned President Xi's call for China to become "a strong maritime power" with former president Hu Jintao's direction to "resolutely safeguard China's maritime rights and interests, and build China into a maritime power."⁶ Since the end of the Ninth Five-Year Plan in 2000, the PRC has

embarked on an ambitious naval-construction program that dramatically has increased the blue-water operations of the PLAN and the China Coast Guard (CCG) within the first and second island chains, while substantially increasing far-seas deployments around much of the globe.⁷

The theme of China's national rejuvenation only has strengthened during the first five years of President Xi's rule. For instance, at the Nineteenth National Party Congress of the CCP in October 2017, Xi Jinping stated, "The theme of the Congress is: remain true to our original aspiration and keep our mission firmly in mind . . . and work tirelessly to realize the Chinese Dream of national rejuvenation."⁸

Most importantly, realization by Xi and the CCP of the China Dream of national rejuvenation and restoration is linked to, and firmly dependent on, a global naval capability. The PRC has both the will and the means to push for rapid increases in the PLAN's order of battle in support of an expanding set of missions to fulfill the China Dream. Undergirding this thesis are China's present and future naval-construction capabilities and capacity; successful, ongoing expansion of naval operations; and official advocacy for a modern, global, naval force—one that already is posing a very serious challenge for its neighbors and the U.S. Navy.

This projection of China's maritime power relies on several assumptions. First, regardless of potential domestic, political, or economic difficulties, China's leaders will continue investment "in the Navy, Coast Guard, and maritime industries to more actively and effectively assert its security and economic interests in the coming decades."⁹ Second, China will continue to enjoy a military shipbuilding cost advantage over rivals.¹⁰ And third, China will master the technical advances required to overcome issues arising from the production and incorporation of advanced naval systems—from phased-array radars to nuclear reactors.

While Beijing prefers to achieve its strategic aims through military intimidation rather than combat, as it did at Scarborough Shoal in 2012, it is also clear that the PRC is prepared to use military force to achieve its strategic goals, as it already has done—with deadly effect—in the Paracel and Spratly Islands.¹¹ Those goals are, first, to consolidate the country's perceived territory, largely in the maritime domain of the first island chain—a precondition for compelling the submission of Taiwan—and, second, to exert its influence and power around the globe.

FORCE STRUCTURE EXPANSION AND MILITARY MODERNIZATION

Over the course of nearly two decades, the PLA has benefited from the CCP's military modernization effort, the largest by any nation since the end of World War II. This transformation has not been limited to the procurement of combat platforms such as ships, submarines, aircraft, tanks, and rockets, but also has encompassed areas ranging from combat-support services to command and control and civil-military integration.

Throughout these years, the PLA has been charged with the overarching goal of "realizing the Chinese Dream and the dream of building a powerful military."¹² President Xi has made clear that the CCP has "developed a strategy for the military under new circumstances, and ha[s] made every effort to modernize national defense and the armed forces."¹³

Military and Command Reorganization

Since taking office, President Xi has restructured the PLA in China's seven military regions into five theater commands. He also reorganized the Central Military Commission (CMC) by establishing and subordinating the army's service headquarters; raising the stature and role of the strategic missile, air, and naval forces; and establishing a Strategic Support Force (SSF) to integrate space-, cyber-, and electronic-warfare capabilities.¹⁴

Furthermore, by early 2016, President Xi had reorganized and streamlined the senior echelons of the PLA by discarding "the PLA's four traditional general departments in favor of 15 new CMC functional departments."¹⁵ To put a capstone on this transformation, Xi announced that the CMC would now be in charge of the "overall administration of the PLA, People's Armed Police, militia, and reserves," with the new theater commands (sometimes referred to as joint war zones) focusing on combat preparedness. Meanwhile, the various services would be responsible for the development of programs to man, train, and equip the force (in the United States, in relation to the National Guard, these are called the Title 10 authorities).¹⁶

Also of significant concern, Xi has placed authority over the CCG under the CMC. Thus, the CCG, Asia's largest coast guard, is no longer under the civilian command of the State Oceanic Administration. It now falls under Xi's direct command, through his control of the People's Armed Police.¹⁷

A closer examination of each of the PLA forces is necessary to understand and appreciate their rapidly expanding capabilities.

The People's Liberation Army Navy

Since 2000, the PRC has embarked on an ambitious naval-construction program that dramatically increased the PLAN's and the CCG's blue-water operations within the first and second island chains, while substantially increasing far-seas deployments around much of the globe.¹⁸

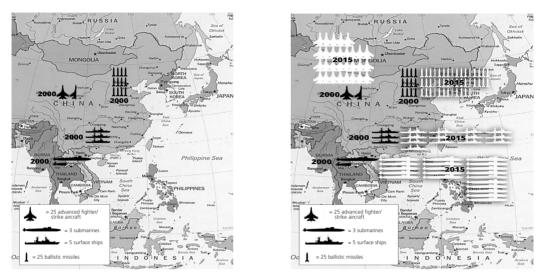
With the realization of the China Dream firmly linked to a global naval capability, China's leaders are on the cusp of achieving their military and economic goals. They are increasing the PLAN's order of battle rapidly in support of an expanding set of global missions to fulfill their China Dream of national restoration and rejuvenation, which will in turn fuel and secure their global economic expansion through the \$1.6 trillion Belt and Road Initiative (BRI). Previously called the One Belt One Road, and before that the Maritime Silk Road, the scope of the initiative spans eighty countries.¹⁹

While official Chinese documents describe the BRI as purely commercial and a win-win for participants, studies have shown that internal PRC discussion of the BRI characterizes it as a stealthy conduit of political influence and not only maritime but also naval expansion.²⁰ Between 2000 and 2014, China committed \$126 billion to the transport and storage sectors.²¹ These commitments led to port deals worldwide that provide extensive expansion opportunities. China's goals of present and future naval-construction capabilities and capacity; successful, ongoing expansion of naval operations; and official advocacy for a modern, global, naval force already are posing a challenge for the country's neighbors and the U.S. Navy.²²

The PLAN's expansion from 2000 to 2018 far exceeds the buildup in any other nation's navy in the post–World War II era, save for the U.S. Navy under President Ronald W. Reagan during the 1980s. For China's leaders to achieve their vision of a rejuvenated and restored China, they need a fleet that can expand China's interior lines out into the maritime domain.²³ In other words, they need naval, air, missile, and expeditionary forces that can take China's regional military

FIGURE 1 PLA MILITARY CAPABILITIES 2000

FIGURE 2 EXPANDING MILITARY CAPABILITIES 2015



Sources: Order of battle based on author's compilation of open-source data. Build rate derived from Ronald O'Rourke, China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress, CRS Report (Washington, DC: Congressional Research Service, 2014), pp. 27–29.

dominance and intimidation to the global realm. Because of atrophy of U.S. naval forces over the last decade, Beijing's goal is expected to be realized by 2020.

Concurrent with the PLAN modernization has been the changing pattern of its operations. Instead of continuing its role as a coastal naval force operating within fifty nautical miles (nm) of China's coast, today the PLAN has pushed out into the blue water of the Pacific Ocean and beyond (figures 1 and 2). An examination of PLAN blue-water operations during the past fifteen years reveals that "China's ambitious naval modernization has produced a more technologically advanced and flexible force." This evolving naval force will provide Beijing with the capability to conduct a military campaign successfully within the first island chain (for instance, to take Taiwan or the Senkaku Islands).²⁴

This transformation has required a new force structure, one that has increased both the number and the type of naval platforms. With respect to far-seas operations, the U.S. Office of Naval Intelligence (ONI) reported that the PLAN's "diversified missions and far seas operations" during the previous decade had stimulated an operational shift and catalyzed the acquisition of new multimission platforms.²⁵ These multimission platforms are perfectly suited for naval combat against naval forces tasked to defend Japan's southwest islands and Taiwan, and U.S. naval forces globally as well.²⁶ The PLAN's ability to confront and deny access to U.S. naval forces regionally is now widely recognized, but its ability to confront—and defeat—U.S. naval forces globally merits more attention than it has received.

In their article "Taking Stock of China's Growing Navy: The Death and Life of Surface Fleets," James R. Holmes and Toshi Yoshihara correctly assert that the PLAN is "particularly well-suited to seize islands."²⁷ They hypothesize that PLAN assault forces will be led by surface combatant strike groups composed of the service's premier combatant, the Type 052D Luyang III–class guided-missile destroyers, along with the Type 054C Luyang II–class guided-missile destroyers, the Type 054A Jiangkai III–class guided-missile frigates, and the Soviet-built *Sovremenny*-class destroyers.

With their superior arsenal of antiship cruise missiles (ASCMs), these surface action strike groups can provide withering naval gunfire support for an amphibious landing force. They have great range, speed, and survivability. These combatants also would provide a sea-based air defense that would constrain or even preclude U.S. or allied air operations near an amphibious operation.²⁸ Given China's superior number of advanced surface combatants, "it is far from clear that the United States retains its accustomed supremacy," especially in a Taiwan invasion or Senkaku Islands campaign in which naval warfare will determine mission success.²⁹

Regarding the Senkakus, PLAN forces have increased their operations in and around the islands since 2012, in addition to activity by China's Maritime Law Enforcement, the People's Armed Forces Maritime Militia (PAFMM) ships, and the largest civilian fishing fleets on the planet. Prior to 2012, PLAN warships generally patrolled on the west side of the median line between China and Japan; since 2012, Chinese warships have been operating for sustained periods east of the median line. This trend culminated on June 19, 2016, when the Japanese destroyer *Setogiri* confirmed that a PLAN Jiangkai I–class frigate had entered the contiguous zone of the Senkaku island of Kuba.³⁰

Following this pattern, the PRC also has been tightening the noose around Taiwan over the last two years. In April 2018, the PLA engaged in its largest-ever attack exercises in the Taiwan Strait, and in the first live-fire exercises there since 2015. In addition, People's Liberation Army Air Force (PLAAF) nuclear-capable aircraft circled the island repeatedly during the month in efforts to intimidate the Taiwan government and populace. Other PLAAF aircraft circling Taiwan included multiple fighter jets, H-6K bombers, and early-warning airplanes.³¹ PLA forces involved in the assault exercises reportedly included some ten thousand personnel, seventy-six fighter jets, forty-eight naval vessels, a nuclear-powered submarine, and the PLAN's aircraft carrier *Liaoning* (CV 16), which conducted its first carrier strike group operations in the waters of the Philippine Sea just east of Taiwan.³²

The challenge for the defending force of allied and U.S. warships operating within the first island chain is compounded by China's ability to bring the firepower of all three of its fleets into the sea area around these islands. In addition, China's naval firepower will come from a densely populated submarine force armed with supersonic, sea-skimming, 290 nm–range YJ-18 ASCMs, as well as air-delivered ASCMs from the PLAAF.

With these surface, subsurface, and air forces on hand in the East China Sea, the PLAN has the capability to conduct a short, sharp war to fulfill its pledge of taking Japan's Senkaku Islands. The United States and its allies have insufficient capabilities in the region and easily could lose a conventional war in the Senkakus if China strikes first. Taiwan would pose greater challenges for the PRC, but the PRC now has a significant capability to launch a devastating no-warning attack on the island democracy.

Further, while the PLAN's forays by flotillas into European and African waters have drawn public attention, of greater concern is the PRC's increasing ability to sustain those forces from a widening web of PRC-controlled naval logistic bases from Southeast Asia to the Mediterranean. These ports have been developed for military purposes, and many will control strategic choke points such as the Strait of Malacca and the Suez Canal. Most of China's port deals are for a period of ninety-nine years or more.³³

The commander of U.S. Pacific Forces warned Congress in early 2017 that China's naval "presence and influence are expanding," thanks in large part to the commercial network created by the BRI. The PRC is using state-owned companies and politically linked private firms to create a network of facilities designed to provide logistic support to deployed PLAN warships, employing a "first civilian, later military" approach to port development across the region. Chinese warships already are taking advantage of the dual-use possibilities of commercial ports, bolstered by laws that oblige Chinese transportation firms working overseas to provide replenishment for navy vessels.³⁴

PLAN Amphibious Forces

Perhaps the most important aspect of any successful Chinese maritime sovereignty campaign involves the act of physically occupying islands within the first and second island chains. The key to holding these contested islands is the ability to move forces ashore successfully to seize and hold the ground.

China continues to build and train its naval and amphibious forces in the art of expeditionary warfare, a skill set easily applied to regional island-seizure or global force-projection campaigns. In addition to the Taiwan Strait live-fire exercises alluded to previously, Chinese marines recently conducted amphibious assault exercises in the South China Sea using amphibious dock landing ships, air-cushion landing craft, and shipborne helicopters.³⁵ This type of training is ubiquitous across the East and South China Seas and is the most tangible evidence of the PLA's preparation to conduct such a mission.

One facet of President Xi's transformation of the PLA includes a dramatic expansion of the People's Liberation Army Marine Corps (PLAMC) to one hundred thousand personnel—an enormous increase for a nation ostensibly devoted to the Five Principles of Peaceful Coexistence and, in reality, threatened by no other nation. According to reports in the *South China Morning Post*, "two special warfare brigades ha[ve] already been incorporated into the PLAMC, raising the forces' complement of soldiers to 20,000."³⁶ These new PLAMC forces will be dispatched to far-flung installations such as Gwadar, Pakistan, and the new PLAN base in Djibouti. In these locations, they effectively will threaten America's African and South Asian allies and buttress China's allies operating in these regions, including Russia, Pakistan, and Iran. They also threaten Taiwan and the Senkakus with potential invasion, as well as islands and countries in East Asia and Southeast Asia more generally. Growth in PLAMC personnel is necessary to tip the balance of power in these regions from favoring the United States and its allies to favoring China's growing maritime and territorial ambitions.

To provide the amphibious lift needed for this vastly expanded marine corps, China is producing an increasing number of large, high-end, amphibious warships and is intent on building many more over the near term. According to the ONI, as of 2015 the PLAN has fifty-six amphibious warships, ranging from a few World War II–era landing ships to four of the large, modern Yuzhao-class Type 071 amphibious transport dock ships that provide a substantially greater capacity and more formidable capability than older landing ships.³⁷ The Yuzhao-class ship is designed for a wide range of island campaigns, including against Taiwan or the Senkakus or in the South China Sea, and force projection into the Indian Ocean and globally. It can hold up to four of the new air-cushion landing craft as well as four or more helicopters, along with armored vehicles and troops.³⁸

Not content with the Yuzhao, China has announced it "has started building a new generation of large amphibious assault vessels that will strengthen the navy as it plays a more dominant role in projecting the nation's power overseas."³⁹ The PLAN commander, Vice Admiral Shen Jinlong, reportedly visited the Hudong-Zhonghua Shipbuilding Company in Shanghai in March 2017, where the new ship, identified as the Type 075 landing helicopter dock, is under construction.⁴⁰

The Type 075 is much larger than any other amphibious warship previously built for the PLAN and is suited specifically to an opposed island-seizure campaign and global force projection. It can carry a much larger number of attack and transport helicopters (as many as thirty) and has the ability to launch six helicopters simultaneously.⁴¹ For a PRC amphibious assault force, this greatly enhanced heliborne assault capability is critically important. For example, in a regional Senkaku Islands seizure campaign, the closest PLA airfield to the Senkaku Islands from which the PLA could launch attacking helicopters is more than 180 nm away. The Type 075 will provide the critical element for the PLA to be able to project boots on the ground to targeted islands throughout the western Pacific and pose a credible threat to military targets globally.

At the current rate of amphibious assault ship production, the PLAN and the PLAMC will be well resourced and ready to take islands within the first island chain—or objectives as far away from the PRC's shores as needed—by the early 2020s.

While a detailed PRC shipbuilding plan for the next fifteen years has not been made public, analysis of available evidence permits extrapolation of the numbers of ships and submarines China will need by 2030 to achieve its national maritime goals. The following priorities are my assessment of what is most important for China's future naval trajectory and its justification for a 550-ship/submarine fleet: (1) near-seas active-defense operations, (2) far-seas operations, (3) "goodwill" deployments, (4) surge operations, (5) the BRI, (6) carrier strike group operations, (7) amphibious assault group operations, and (8) submarine-launched ballistic-missile patrols.⁴²

The People's Liberation Army Air Force

On November 23, 2013, the PRC abruptly declared an ADIZ in the East China Sea.⁴³ While Beijing portrayed the ADIZ as being about protecting China's mainland, the zone represents the importance the regime places on the air domain in any attempt to take Taiwan or the Senkaku or Spratly Islands.

Since the East China Sea ADIZ declaration, the PLAAF has increased the scope and scale of flights in and around the Senkaku Islands. In December 2012, a Chinese maritime surveillance aircraft entered the Senkaku Islands' territorial airspace for the first time in fifty years.⁴⁴ This event, which went unopposed except for public statements, ushered in an era of expanded PLAAF activities in the East China Sea, where fighter, airborne warning and control, and signal- and electronic-intelligence aircraft and unmanned aerial vehicles have expanded their air operations farther southeast toward the Senkaku Islands.⁴⁵

As a result of this strategy shift, Japan Air Self-Defense Force (JASDF) fighters increased their reactions to Chinese aircraft probing Japan's ADIZ, from approximately three hundred events in 2012 to nearly seven hundred in 2016.⁴⁶ And while JASDF reactions to the PLAAF were fewer in 2017, owing in large part to the CCP's Nineteenth National Party Congress, the overall increase in PLAAF air activity directed toward Japan's airspace caused the JASDF to double the number of its interceptors from two to four fighter aircraft, a clear indication of Japan's concern about the strategic trend line of the PLAAF.⁴⁷

In addition, the PLAAF has completed an aggressive transition from being an exclusively territorial air-defense force to one that routinely operates over the vast

distances of the high seas within the first and second island chains. For instance, in 2013, the PLAAF began flights into the western Pacific Ocean via the Miyako Strait and since then has averaged between five and six events per year, with multiple aircraft.⁴⁸ The aircraft types conducting flights have included bomber, fighter, refueling, electronic-intelligence, and airborne early warning aircraft—attesting to the comprehensive nature of how China would employ airpower to help secure and maintain its control over the Senkaku Islands.

Adding complexity to the air domain, the PLAAF conducted "its first-ever exercise over the western Pacific via the Bashi Channel" in late March 2015.⁴⁹ Despite PLAAF public assertions that these drills were routine and not targeted against "any particular country, regions or targets," there is little doubt that PLA air forces, including the PLAAF and the People's Liberation Army Naval Air Force (the PLAN's naval aviation branch, the PLANAF), entering the Philippine Sea via the Bashi Channel or the Miyako Strait provide the PLA with considerable operational and tactical flexibility in any island-seizure attack campaign within the first island chain.⁵⁰

The PLAAF announced in mid-September 2016 that it would conduct regular exercises flying past the first island chain.⁵¹ True to its word, the PLAAF has conducted flights through the Miyako Strait and the Bashi Channel, such as on March 3, 2017, when China sent thirteen aircraft through the Miyako Strait.⁵² According to the Japanese Ministry of Defense, this was "the largest number of foreign planes Japan has scrambled jets for since such data first became available in 2003."

The PLAAF also now routinely sends bombers to threaten Japan, Guam, and other Association of Southeast Asian Nations (ASEAN) allies. In March 2018, the PLAAF sent six H-6K bombers; one Tu-154; and one Y-8 intelligence, surveillance, and reconnaissance (ISR) aircraft through the Miyako Strait into the western Pacific to exercise what the PLAAF stated was "long-range operational capabilities." In reality, these were attack training profiles for strikes on Guam, while sending Su-35 fighters on their first combat patrol over the South China Sea.⁵⁴ And most recently, on May 11, 2018, the PLA's Eastern and Southern Commands dispatched two groups of H-6K bombers, accompanied by KJ-2000 airborne early warning aircraft and Su-35 and J-11 fighters, in clockwise and counterclockwise patterns from the Chinese mainland through the Miyako Strait and the Bashi Channel, demonstrating the PLAAF's ability to operate under "high-sea conditions" against Taiwan.⁵⁵

The increasing proximity of Chinese aircraft to the Senkaku Islands is of particular significance. According to Japan's Ministry of Defense, China has increased the number of PLAAF aircraft that fly south of 27 degrees north latitude, an unspoken demarcation line that Japan considers to be a defensive borderline.⁵⁶ JASDF tactical objectives are designed to keep Chinese planes from flying within a minimum protective air umbrella of approximately 60 nm from the Senkaku Islands.

The combined failure of Japan and the United States to defend this line sends China the message that our resolve to defend the Senkakus themselves may be weak. The same can be said for our ability to defend the airspace around Taiwan and, worse still, in the South China Sea.

China easily could begin a campaign to take Japanese islands, Taiwan, or the islands of the South China Sea by exploiting and surprising local air commanders. Specifically, the PLAAF could launch a large number of fighters and other aircraft toward Okinawa via the Miyako Strait and up through the Bashi Channel, with the goal of diverting, diffusing, and degrading U.S. and allied defensive efforts to establish airspace control. On these islands, an assault by the main invasion force, either airborne from helicopters or seaborne, would be conducted concurrently. And both this combined-arms diversion and the main assault would take place under the cover of one of the most sophisticated missile and rocket forces on the planet.

Finally, if there was any doubt about the PRC's intention to develop the capability for global power projection, specifically nuclear power, one need look no further than PLAAF commander Ma Xiaotian's December 2016 assertion that "China is developing next-generation long-range bombers," expected to be designated the H-20 bomber. This new bomber, according to Rear Admiral Yin Zhuo, director of the PLAN's Expert Consultation Committee, would be on par with the U.S. Air Force B-2 stealth bomber.⁵⁷ This was reinforced again in May 2018 when the Xi'an Aircraft Industrial Corporation revealed a mysterious, new-model jet, rumored to be the PRC's new stealth bomber.⁵⁸

People's Liberation Army Rocket Forces

In terms of kinetic fires, and per the Chinese military doctrine of joint-fire strike campaign, Beijing likely would use its extensive ballistic- and cruise-missile arsenal, from the People's Liberation Army Rocket Forces (PLARF), PLAAF, PLANAF, and PLAN, to disrupt U.S. rear-area operations in Japan and throughout the area of operations. Specifically, in a Senkakus or Taiwan attack scenario, Japan and the United States should expect attacks against military bases on the main Japanese island of Honshu, the Ryukyus, and Guam, where the majority of Japanese and U.S. military strength resides. In his article "Has China Been Practicing Preemptive Missile Strikes against U.S. Bases?," Commander Thomas Shugart, USN, convincingly argues that "the greatest military threat to U.S. vital interests in Asia may be one that has received somewhat less attention: the growing capability of China's missile forces to strike U.S. bases." The purpose of these supporting fires, as articulated in joint-fire strike campaign doctrine, would be to coordinate and synchronize antiship ballistic and cruise missiles, land-attack cruise missiles, air strikes with precision-guided munitions, and counter-C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) strikes with specialized weapons. These fires would facilitate the main objective of seizing Taiwan or the Senkaku Islands and isolating Japanese, Taiwan, and U.S. military forces arrayed across the region.

However, Beijing's strategic designs extend well beyond the first island chain. For instance, in April 2018, the PLARF announced the establishment of a new DF-26 brigade and its deployment to an undetected site. The DF-26, with a range of nearly 2,200 nm, is the PRC's second anticarrier ballistic missile. The first, the DF-21D, with a range of nearly 1,000 nm, when deployed to Hainan Island, places the entirety of the South China Sea within weapons range. Ultimately, both of these "carrier killer" missiles demonstrate the PRC's commitment to power projection against the U.S. Navy. Interestingly, the PLARF also noted that "it has been sparing no effort to foster the capability to conduct nuclear retaliation and intermediate- and long-range precision strikes and has obtained a succession of breakthroughs in new weapons' research and development."⁶⁰

Given the recent deployment of the YJ-12B surface-to-surface and HQ-9 surface-to-air missiles to the PRC's artificial island bases in the Spratlys, it is entirely conceivable that the PRC's rocket forces could be used in a similar fashion to deploy ballistic-missile systems to China's emerging overseas military bases in Djibouti and Pakistan and elsewhere along the course of the BRI.⁶¹

PLA Informatization Department and Strategic Support Force

PLA strategy addresses informatization in both its offensive combat and counterintervention operations. *Informatization*—"the ability to transmit, process, and receive information"—is a vital enabler and is at the core of everything the PLA wants to accomplish. These missions include blue-water naval confrontations, amphibious assaults to take islands, high-tech missions in space and cyberspace, long-range precision kinetic and nonkinetic strikes, and naval war-at-sea operations.⁶²

Reforms to the PLA informatization department began in 2015 and are expected to be complete by 2020, when lines of responsibility between it and the SSF are further delineated. The SSF's mission reportedly is focused on "strategic-level information support" for "space, cyber, electronic, and psychological warfare."⁶³ One of its main missions will be strategic denial of the electromagnetic spectrum.⁶⁴

The SSF is a critical factor for joint operations through this mission of strategiclevel information support. The SSF also has assumed responsibilities for strategic information warfare. China's cyber forces would play a critical role in any counterintervention strategy against the United States, Taiwan, and Japan in any island-seizure conflict. These same cyber forces will support PLAN operations against U.S. forces and those of supporting friends and allies globally in other scenarios. The two organizations responsible for this, the Third Department of the PLA General Staff Headquarters (3PLA) and the Fourth Department (4PLA), are both subordinated to the SSE.⁶⁵

China has invested heavily in countersatellite electronic-warfare capabilities to force a "no satellite, no fight" environment on the United States. The SSF has consolidated the management and control over space-based ISR assets. Equally troubling, it also may have nonkinetic antisatellite capabilities, such as directedenergy weapons.

SSF and the Fight for Public Opinion. In any conflict within the Indo-Pacific region or globally, the PRC's fight for public opinion will constitute the second battlefield, on which it will wage a wide range of political warfare (PW) operations. Accordingly, the overall PW effort, and the SSF's support for it, requires special attention.

Guided by the doctrinal principle of "uniting with friends and disintegrating enemies," the PRC continuously employs active PW measures to promote its rise and to combat perceived threats. Its PW operations employ strategic psychological operations (psyops) to propagate the CCP's narrative of events, actions, and policies to lead international discourse and influence policies of friends and foes alike. These PW operations at first may appear to be benign soft-power activities, but under scrutiny they often include coercive persuasion campaigns intended to manipulate international perceptions.⁶⁶

Chinese strategic literature particularly emphasizes the role of psyops, legal warfare, and public opinion warfare—collectively known as the three warfares—to subdue an enemy ahead of conflict or ensure victory if conflict breaks out. According to available literature and experience, it is certain that the PRC will engage in "hybrid warfare" similar to, but likely more sophisticated than, that employed in Russia's 2014 seizure of Crimea. The PRC will augment conventional military operations with nonconventional operations, such as subversion, disinformation and misinformation (now commonly referred to as "fake news"), and cyber attacks. The operationalization of psyops with cyber warfare is key to this strategy.⁶⁷ China has empowered its psychological warfare forces fully, most notably at the three warfares base (or 311 base) in Fuzhou. These forces are subordinate to the SSF and integrated with China's cyber forces.

While the CCP's effective use of PW operations goes back to the beginning of the party, its operations—particularly its efforts to build what amounts to fifth columns overseas, through the CCP's United Front Work Department—took on

new impetus with Xi Jinping's ascension to the leadership of party and government in 2012 and 2013, respectively. The United Front is the CCP organization that forges domestic and international political coalitions for influence operations worldwide. In Xi's view, the time had come for a strong and confident China to move beyond former Chinese paramount leader Deng Xiaoping's advice to hide its assets and bide its time. Delegates to the party Central Committee's Eighteenth National Congress were lectured on the importance of United Front work, and the bureaucracy hastened to comply.⁶⁸

Prior to initiating an offensive or other military confrontation, China will use worldwide psyops and public opinion warfare as part of a concerted PW campaign. It will employ Chinese United Front organizations and other sympathizers, along with both Chinese and other nations' mass-information channels such as the Internet, television, and radio.

The focus of these influence operations will be to support China's position and demonize, confuse, and demoralize the United States and its supporting friends and allies. Internally, this campaign will be important in mobilizing mass support for the righteous action, while externally the campaign will attempt to gain support for China's position from those nations undecided about which side (if any) to support. In addition to standard propaganda, disinformation will be employed, such as false reports of surrender of national governments or forces, fabricated atrocities and other violations of international law, and other untrue reports intended to undermine decision-making by the United States and its friends and allies. Also, United Front organizations, working or in parallel with the PAFMM, China's merchant marine, and its massive fishing fleets, may instigate incidents and other actions that disrupt USN and friendly-force maritime operations.

This PW campaign will continue through the military confrontation and after—regardless of the success or failure of the operation.

SSF Impact. In a further move that leaves no doubt about the role the CCP envisions for its United Front in the battle for public opinion, on February 17, 2017, Xi issued a directive to cultivate greater support among the members of the estimated sixty-million-strong Chinese diaspora worldwide. He called for "closely uniting" with overseas Chinese in support of the Chinese Dream, as part of the greater efforts and activities of the United Front. Xi stressed that "to realize the great rejuvenation of the Chinese nation, we must work together with our sons and daughters at home and abroad. . . . It is an important task for the party and the state to unite the vast number of overseas Chinese and returned overseas Chinese and their families in the country and play their positive role in the great rejuvenation of the Chinese nation."⁶⁹

Xi and the CCP will exploit these overseas Chinese citizens to weaken military and political adversaries worldwide and advance the CCP's political and military objectives.⁷⁰ Prime among these efforts will be lobbying for the establishment of more PRC military bases.

Ultimately, the purpose of these SSF suborganizations is to ensure the sanctity of national- and theater-level command and control as well as to enhance the war-fighting effectiveness of each of the individual services. Whether in a preferred short, sharp regional war to seize islands or in another confrontation that may take place globally, these invisible forces will provide precise situational awareness, target identification of opposing forces, network-defense capabilities, and real-time command and control that will enable the PLA to take and hold military objectives. They also will work to subvert, discourage, and confuse the national leadership and operational forces of the United States and its supporting friends and allies.

As an example of these efforts, in 2014 the PLA established a permanent joint operations command (JOC) center responsible for integrating the operations of its army, navy, and air forces. It was the first time such a JOC had been established, and the center was seen as boosting "the unified operations of Chinese capabilities on land, sea, air, and in dealing with strategic missile operations."⁷¹ When these actions are combined with President Xi's other PLA reforms, it seems clear that China's ability to command and control all its forces and disrupt opposing forces in a military confrontation is well established and practiced.

THE PRC'S GLOBAL STRATEGY AND PRESENCE

China's expanding naval force structure has allowed it to project power on an increasingly global scale. On its path to global maritime hegemony, the PLAN began as a marginally capable, coast-hugging, brown-water force. After American forces departed most of Southeast Asia in the 1970s, China tentatively pushed out into the blue waters of the South China Sea. By the 1980s, China's naval forces began conducting small-scale, routine operations in both the South and East China Seas. This situation remained static and mostly benign through the 1990s, but by 2000 the PRC's strategic goals became clear.

Over the past decade, we have seen the PLAN routinely operate and deploy warships as far away as the Indian Ocean and the Mediterranean, Baltic, and Arctic Seas. In fact, by 2015 China was making moves to acquire berthing in the Azores—about a third of the way to the U.S. East Coast from Portugal—as well as operating hydrographic research ships in the South Atlantic—a harbinger of future PLAN submarine operations in the North Atlantic.

In a reversal of old geopolitical truisms, China's trade is leading the flag, as well as vice versa. China has sealed long-term port deals that span the globe, including in Australia, Cambodia, Indonesia, Malaysia, Brunei, Myanmar, the Strait of Malacca, Bangladesh, Sri Lanka, Pakistan, Djibouti, Tanzania, Mauritius, Namibia, and Greece. In addition, China currently is negotiating port deals in the Maldives, Scandinavia, and Greenland.

These ports already have started to provide critical berthing and logistics support to China's merchant marine and the PLAN, including refueling, provisions, and maintenance. China's merchant marine ships, meanwhile, are not regular commercial-transport ships. Since 2015, they have been required by Chinese law to be built to military specifications. The year prior, China coordinated many of its merchant marine ships to push back forcibly against Vietnamese vessels protesting Chinese oil exploration in Vietnam's EEZ.⁷²

Vital strategic arteries are a focus of PRC control and acquisition planning. Chinese business interests have heavy influence over the Panama Canal, as evidenced by a milestone treaty signed by Panama and China in 2017. The treaty, which came into force in May 2018, is designed to promote maritime and port development by the PRC in Panama.⁷³ Further, the PLAN has berthing agreements in Malaysia near the Strait of Malacca, it operates a military base in Djibouti, which is at a choke point for the Suez Canal and the Red Sea, and the commander of the U.S. Southern Command recently testified before Congress that it is "worth paying attention to" the prospect of the PRC building a naval facility in the Western Hemisphere.⁷⁴ At the current rate, this Western Hemisphere PRC naval facility is not a matter of if, but when.

Of equal concern, influential PRC and Thai political leaders are conducting advanced planning for a PRC-built canal across the Kra Isthmus of Thailand that simultaneously would diminish Singapore's economic and political viability while cutting travel time by three days compared with transit through the Malacca Strait. Since the Malacca Strait currently handles approximately 40 percent of global trade flows, this would increase PRC commercial power vastly.⁷⁵ It also would fund, justify, and facilitate PLAN naval operations between the Indian Ocean and the Gulf of Siam. A similar canal has been proposed for Nicaragua.⁷⁶

Since 2008, China has conducted nonstop antipiracy operations in the Gulf of Aden. These operations have been a boon for the PLAN's development as a bluewater naval fighting force and also have provided a portal for Chinese influence into the Middle East balance of power. For instance, since 2013 the PLAN has conducted regular deployments of nuclear submarines into the Indian Ocean, and while submarines, especially nuclear-powered types, are suboptimal against pirates, they are a highly useful threat against India. The threatening of an emerging U.S. friend and Quad member, India, reveals the actual strategic purpose of China's submarine and naval operations in the Indian Ocean.⁷⁷ In August 2017, China deployed at least fourteen naval ships in the Indian Ocean.⁷⁸

The PLAN also has conducted oceanographic research operations in the Indian Ocean, East and South China Seas, and Atlantic Ocean, as well as commercial oceanographic expeditions in the Mariana Trench (within Guam's EEZ), other parts of Micronesia, Benham Rise (within the Philippine EEZ), and the western Pacific. China's naval oceanography often is conducted in tandem with, or under the guise of, scientific or commercial oceanography, but its real intent is to gain important data about the undersea domain, principally anything of benefit to the PLAN elite submarine force.

In 2017, Chinese hydrographic survey vessels were caught mapping the ocean floor in the Philippines' territorial waters of the Luzon and Surigao Straits and in the Caroline Islands of Micronesia. This ocean floor mapping assists the PLAN subsurface fleet in preparing to break out of the first and second island chains and into the western Pacific and Atlantic; doing so would leave global shipping, the continental United States, and all other territories vulnerable to submarine-launched cruise missile and submarine-launched ballistic missile (SLBM) attacks during wartime.⁷⁹

In furtherance of these goals, the PLAN has developed a network of sensors that incorporates ships, submarines, buoys, satellites, and unmanned underwater gliders. The service's hunger to acquire this information knows no bounds, as was demonstrated when a PLAN warship captured a U.S. underwater glider in 2016, in a brazenly open theft of U.S. military technology.⁸⁰ The PLAN's development of underwater listening arrays and passive sonar will erode, if not outrun, the current U.S. advantage over the next five to ten years if more U.S. funding is not made available in this high-priority, strategic area of naval warfare.

Russia-PRC JOINT SEA Exercises

The PLAN also has been conducting joint naval-warfare exercises, named JOINT SEA by the PRC, with the Russian navy since 2012, when the first exercise occurred in the waters of the Yellow Sea. Since then the scope, scale, and complexity of the exercises in this series have expanded. Each year the PLAN has dispatched its warships to the Sea of Japan and the Mediterranean and Baltic Seas.

In the latest iteration, JOINT SEA 2017, three Chinese and ten Russian warships conducted naval-warfare training for several weeks in the Baltic. This was the first time the PLAN had operated in the Baltic Sea, and by all accounts its performance in this joint operation was flawless. This sent a chilling hard-power diplomatic message to Eastern Europe, as China has never denounced Russia's 2014 annexation of Crimea from Ukraine, and Estonia frequently complains of Russian naval and air forces operating too closely to its shores. However, in a disturbing turn of events, European capitals apparently accepted the Chinese naval presence as the price to be paid for benefiting from Beijing's BRI.⁸¹

Tectonic Shifts in Southeast Asia

China's naval advance in Southeast Asia has been swift in historical terms, but incremental when viewed in the context of America's blinkered four-year political cycle. It unfortunately has been met with almost no resistance and, most notably, by a failure of U.S. resolve to recognize and confront the dangers while the U.S. Navy still held the preponderance of power. China's increasingly well-publicized naval presence and operations throughout Southeast Asia have contributed to a tectonic shift in this sensitive region, a shift toward Beijing and authoritarianism and away from the United States and its values of democracy and the rule of law. Key milestones in the PRC's maritime and political expansion into Southeast Asia are outlined below.

In 1974, the PLA attacked and captured Duncan Island in the Paracels, killing dozens of South Vietnamese soldiers. The United States did nothing to assist its ally against China, despite having a carrier nearby.⁸² China subsequently occupied all the Paracels, where it now has twenty naval outposts.⁸³

In 1988, China captured Johnson Reef in the Spratly Islands from lightly armed Vietnamese troops who were standing knee-deep on the shoal in an attempt to establish a presence. The PLAN murdered all sixty-four soldiers by opening fire from naval ships with large-caliber deck guns. The Philippines made a diplomatic protest of this occupation in its claimed EEZ, but the United States took no military action, sending a message of U.S. ambiguity to China and our allies.⁸⁴

In 1995, China occupied Mischief Reef, an unoccupied low-tide elevation within the EEZ of the Philippines. Again, the United States did nothing. China now has dredged and added naval outposts to all the Spratly islands that it controls.⁸⁵

In 2012, the presence of PRC commercial ships at Scarborough Shoal, also within the Philippines' EEZ, instigated a standoff that ultimately intimidated the Philippine coast guard and fishermen away from their ancestral fishing grounds. The U.S. State Department arguably abetted the PRC's occupation when Kurt Campbell, then the Assistant Secretary of State for East Asian and Pacific Affairs, negotiated a mutual withdrawal of PLAN and Philippine naval assets from Scarborough. The plan was flawed; the PRC immediately reneged, refusing to remove its vessels from the shoal and thereby establishing itself as the sole naval power at the shoal. This single event has had the negative consequence of providing President Duterte of the Philippines with a justification for siding with the PRC after he came to office. More importantly, this failure to support a treaty ally has damaged U.S. credibility severely, not only with the Philippines, but across the entire Indo-Pacific region.

China's claim of the so-called nine-dash line as its sovereign boundary and its occupations of the Philippines' EEZ were ruled illegal in 2016 by the PCA in The Hague.⁸⁶ But the United States took no action to recover lost Philippine rights, and its ally the Philippines already had given up on the possibility of U.S. protection.⁸⁷

The PCA ruling was too little, too late. China now has announced plans to dredge Scarborough Shoal, just 120 nm from the U.S. Navy's former deepwater base at Subic Bay. China's YJ-12 and YJ-18 ASCMs both have an approximately 290 nm range, suggesting that it would be foolhardy to conduct naval operations from Subic in the future without first establishing control of Scarborough.

Most significantly, China now has deployed YJ-12B ASCMs to Mischief, Subi,

While official Chinese documents describe the BRI as purely commercial and a win-win for participants, . . . internal PRC discussion of the BRI characterizes it as a stealthy conduit of political influence and not only maritime but also naval expansion.

and Fiery Cross Reefs, despite the PRC's prior assurances that it would not militarize these facilities. And to complicate the situation further, President Duterte stated in a speech that he believed China had installed the missiles to

protect rather than imperil the Philippines.⁸⁸

There is significant concern that President Duterte's pro-China policies could provide a basis for turning Scarborough Shoal into another PRC air and naval base. Standing up to Beijing would require adept and forceful diplomacy from Manila, as well as the placement of U.S. Navy and Coast Guard assets at the shoal to counterbalance similar Chinese assets.

Farther south, China's accelerated dredging and militarization of its artificial islands since 2013 violates its promises in the Declaration on the Conduct of Parties in the South China Sea, which it signed with ASEAN nations in 2002.⁸⁹ China's naval outposts in the South China Sea include berthing for aircraft carriers and submarines, runways sufficient for its military planes, antiaircraft guns, and—starting in 2018—ASCMs.⁹⁰

The militarization of these islands, contradicting promises President Xi made to President Obama, is an increasingly powerful inhibitor of USN operations in the South China Sea. Counterintuitively, over time China's militarization of the South China Sea increasingly has had the impact of forcing U.S. military commanders to get higher and higher levels of approval before being allowed to conduct routine operations in the South China Sea. This timidity has escalated to the point that presidential approval has been required for even simple freedom of navigation (FON) transits—an approval authority protocol that never had been required since the inception of the program in 1979.

Also in Southeast Asia, it is important to understand the dramatic tilt that the Kingdom of Thailand has taken toward the PRC. This tilt, particularly prominent

since the May 22, 2014, military coup in Thailand, is reflected in unprecedented Sino-Thai military-to-military training and cooperation. The first Sino-Thai naval exercises were held in the Andaman Sea in 2004 and in the Gulf of Thailand in 2005. Exercise STRIKE 2007 was the first joint exercise with any nation involving China's special forces. Exercise BLUE STRIKE maritime drills commenced in 2010, while the first Sino-Thai air force exercises, FALCON STRIKE, took place in 2015. Thai officials have announced that the PRC will build a regional weapons and maintenance center in Thailand, and in 2017 Thailand purchased the first of three Chinese submarines.⁹¹

The submarine sale has serious, far-reaching implications. Not the least of these is that the PLAN likely will control a submarine maintenance and training facility at Sattahip naval base, which could preclude USN use of that important Southeast Asia naval facility.

Regarding China's role in Malaysia, former prime minister Najib Razak visited China in 2014, and by the next year military personnel exchanges and joint exercises occurred between the Malaysian armed forces and the PLAN in the Strait of Malacca. In 2016, the two countries concluded a major military agreement, including Malaysia's purchase of four littoral mission ships (LMSs), accompanied by a statement by the prime minister against the United States. The LMS purchase was Malaysia's first major defense deal with China, and it may include a new Malaysian office of China Shipbuilding and Offshore International Co. Ltd., the LMS maker.⁹²

In 2017, Malaysia's defense minister spelled out the goals of the two countries as being an institutionalization of their "unique relationship" through a "highlevel defense committee" on military cooperation, intelligence exchange, education, training, and strategic affairs. A "current issues" working group discussed the Malacca Strait, South China Sea, and terrorism. On his visit to Beijing that year, the minister oversaw an agreement between Malaysia's National Defense University and Peking University.⁹³

Also in 2017, a PLAN submarine docked at Malaysia's naval base at Kota Kinabalu; this occurred simultaneously with a Russian antisubmarine warfare ship docking in the Philippines. Whether intentional or not, these actions sent a message about the strength of the alliance between China and Russia, along with a lack of any significant resistance to their influence in the region.⁹⁴

After the Chinese and Russian visits in 2017, a fellow at the Chinese Academy of Social Sciences opined, "It is normal for Russia to increase the presence of its force in Southeast Asia as this region cannot be dominated by the U.S. Besides, Southeast Asia has seen a change in the balance of power. The influences of China and Russia in the region have heightened while the influence of the U.S. has declined. What's more, with the U.S. failing to meet the security demands of Southeast Asian countries, more countries in the region will turn to China and Russia for security."⁹⁵ Later in 2017, a PLAN Song-class submarine and a replenishment ship conducted a port call in Sabah, Malaysia, after conducting counterpiracy operations in Somalia—which sent another signal of the shifting sands in the South China Sea.⁹⁶

Ceding Oceania in the Race for the Equator

As we focus on the PRC's ability to break the first island chain, we also must be watching its inroads into the second and third island chains.⁹⁷ Across the vast expanse of Oceania, China's deepening economic and political relationships have paved the way for port leases and maritime construction efforts that serve the PRC's global power-projection vision and threaten U.S. security interests.

China is making a large play for this resource-rich, strategically crucial region, from the continent of Australia to obscure island nations that most Americans might not recognize on a map. These are islands and waters that Americans defended, or liberated island by bloody island, from brutal oppression more than seventy years ago. However, this time the outcome will be determined not only by U.S. naval and air power but also by who wins over the hearts and minds of local island populations. The reality at this moment is that massive Chinese investment to boost island economies is winning the hearts and minds of island leaders and well-off elites, if not necessarily populaces. Simultaneously, U.S. diplomatic and economic investment in the islands is often invisible, and sometimes even in retreat.

As a prime example, Australia, one of America's closest allies, sold a ninetynine-year lease of its strategic port in Darwin to a financially distressed Chinese company for \$506 million in Australian dollars (AUD) in 2015. This sale occurred despite Darwin's long and continuing usage by Australian and U.S. military forces, creating an enhanced security threat for operations and unpredictability of access during a crisis. China's Foreign Ministry spokesperson stated at the time, "This investment by a Chinese enterprise is a normal business operation that complies with market principles, international rules, and Australian laws."⁹⁸ But the Chinese company, Landbridge Group, was financially distressed and seeking cheap loans from the Chinese government. To obtain those loans, the chief executive officer described the port in terms consistent with China's state goals, saying that the lease was part of China's state-coordinated BRI. He also hired Australia's former trade commissioner as a consultant for AUD 73,000 per month, raising questions of corruption among Australia's decision makers on the deal.⁹⁹

China's port in Darwin, Australia, is financially distressed. This is normal for China's ports abroad, which are highly unprofitable—unless viewed from the optic of China's national security. Out of fifteen of China's global port projects sampled by Devin Thorne and Ben Spevack, the authors concluded that "only six are arguably or potentially profitable."¹⁰⁰ Unsurprisingly, the authors included Darwin as one of these six ports, as the port could obtain subsidized funding from the Chinese government only after being linked with the PRC's BRI. The BRI is unambiguously a project to promote Chinese global hegemony, both through political influence and, more concretely, through naval power projection.¹⁰¹

Recent media reports suggest that Australian defense officials are concerned that China aims to establish a permanent naval base on the Pacific island republic of Vanuatu, a country known for its robustly independent foreign policy. Vanuatu was the first Pacific nation to join the Non-Aligned Movement in the 1980s, and it has a long-standing commitment to decolonization in places such as East Timor, West Papua, New Caledonia, and French Polynesia. Some see Vanuatu as the political capital of Melanesia, since it hosts the secretariat for the Melanesian Spearhead Group (MSG) of nations. Vanuatu may be forging closer ties with China because it is being threatened directly by Indonesia as a result of Vanuatu's support for West Papuan independence, and at the same time is in negotiations with France over the disputed territories of Matthew and Hunter Islands. Although Australia usually is seen as the primary regional security provider, Melanesian nations such as Vanuatu increasingly see their security situation as compromised when it comes to Canberra's policies on Indonesia and climate change.¹⁰²

While the Vanuatu government and the PRC currently deny that any plans to establish such a base are afoot, the PRC initially also denied its plans for the base in Djibouti.¹⁰³ China already has built a new wharf on the Vanuatu island of Espiritu Santo, making it one of the largest ports in the South Pacific, and is upgrading the airport and building sports stadia, convention centers, and roads—along with office buildings for Vanuatu's foreign affairs staff and the prime minister's new office. Vanuatu would be a logical location for China to establish a new satellite-tracking station and ground-support facility for its Yuanwang space event support ships.¹⁰⁴ Chinese officials stated that they have more aid projects active in Vanuatu than in any other Pacific country; in return, Vanuatu announced in late 2016 that it would be the first Pacific country to recognize China's claims in the South and East China Seas. Since then, other Pacific nations, including Nauru and Papua New Guinea, have followed suit.

At the same time that Chinese investment and diplomacy are spiking in Vanuatu, so too is investment in New Caledonia, where some French officials are nervous about potential violence and the referenda on independence. Across Oceania, the PRC also is showing deep interest in the Federated States of Micronesia, Tonga, Samoa, and French Polynesia. The interest in French Polynesia stems from these islands' utility not only for support and monitoring (the Yuanwang ships have made several visits) but also as a refueling and transshipment point between China and the Americas. Additionally, China sees French Polynesia as a significant future stepping-stone to growing operations in Antarctica.¹⁰⁵

A Chinese company has agreed to invest almost a third of a billion U.S. dollars to set up an aquaculture project at French Polynesia's large and remote Hao atoll. That amount is more than all the foreign direct investment that French Polynesia received between 2013 and 2016 combined. The atoll used to support a French military base for France's nuclear-testing program. While the base has closed, much of its infrastructure is still intact. This includes the airport, which has a runway long enough to have been designated an emergency landing strip for the space shuttle.¹⁰⁶ Fiji and other politically complex countries that are diplomatically close to China also might be in Beijing's sights as possible locations for naval logistics facilities.¹⁰⁷

Chinese influence operations in Oceania also are reflected closer to U.S. territory in the Commonwealth of the Northern Mariana Islands (CNMI). In CNMI, just north of Guam, Chinese resort developers, serving PRC economic- and political-warfare interests, are stymieing U.S. military efforts to develop further a much-needed training area for amphibious operations, on Pagan Island. This thus-far-successful "blocking operation" is designed to degrade the readiness of frontline U.S. Navy and Marine Corps forces assigned or transiting there.

This now-well-established pattern to support Beijing's global ambitions for the PLAN deserves Washington's close attention. It starts with Chinese financial aid, political donations, and investment, along with commercial inroads, and then an increase in Chinese immigrants, all contributing to influence over local governments. Next, invariably, a PLAN-related military objective emerges. This angle can range from Chinese military access to ports and airfields to blocking efforts, as seen in CNMI and throughout Micronesia.¹⁰⁸

New Threats in South Asia and the Indian Ocean

In recent years, the PRC has increased its influence and presence in South Asia significantly. Beijing is acquiring a naval facility near Gwadar, Pakistan, and a major maritime port facility in the same location on a forty-year lease. The first containership visited in March 2018, but Gwadar was not built exclusively for profit; rather, it also was envisioned to be China's territorial foothold in Pakistan and to service naval power projection into the Arabian Sea.¹⁰⁹

In Sri Lanka, Chinese companies gradually built their influence with arms sales amid a civil war and allegations of corruption and bribery at the highest levels. Vanity projects and growing debt predictably followed. From 2005 to 2014, China provided almost seven billion dollars in loans to Sri Lanka. By 2014, Sri Lanka was having difficulty paying them back, and in September of that year it not only opened four of seven berths at the unprofitable Hambantota port to a Chinese company on a thirty-five-year lease but also hosted the PLAN warship *Changxingdao* and nuclear submarine *Changzheng-2*. After an additional insolvency crisis in 2016, Sri Lanka sold a 70 percent equity stake in Hambantota to Chinese companies in exchange for forgiveness of a fraction of its debt to China. Chinese companies took control of the port, with a ninety-nine-year lease, in January 2018. This port likely will see routine use by PLAN combatants early in the next decade, providing another indicator of the PRC's success in achieving in the Indian Ocean region its goals for acquiring global power-projection capabilities.¹¹⁰

The Maldives provides another stark example. The country lurched toward Beijing (and away from New Delhi) with the election of a pro-PRC president in 2013. The fractious aftermath of the hotly contested election led China to deploy warships in parts of the Indian Ocean to preserve its growing interests.¹¹¹ Consequently, the PRC has been granted exclusive trade and other access. In light of the Maldives' strategic location south of India, this likely will lead to greatly enhanced PRC maritime surveillance and naval operational support.

The Maldives and Sri Lanka are two of the several Indian Ocean nations where China is obtaining footholds that could prove decisive in its future maritime strategy in the region. Mauritius, the Seychelles, and Myanmar also are being lured into China's BRI. The PRC has a substantial stake in the deepwater Kyaukpyu port in Myanmar, identified by Chinese officials as one of several port locations for military supply and industry. In 2015, China's state media described Kyaukpyu (Myanmar), Chittagong (Bangladesh), Colombo (Sri Lanka), Aden (Yemen), and ports in the Maldives as potential industrial hubs to support PLA military operations.¹¹²

While the facilities at Hambantota, Gwadar, and Kyaukpyu are not being used yet by the PLA, Beijing's militarization of its man-made South China Sea facilities and the sudden prospect of a base in Vanuatu demonstrate how quickly dual-use infrastructure could be turned to military logistic support. The vulnerability of countries such as Sri Lanka, Myanmar, and Vanuatu to Chinese debt traps associated with these infrastructure projects was highlighted recently by the International Monetary Fund director, who suggested how easily Beijing might tighten the financial screws to obtain strategic access.¹¹³

Also of great concern, the Maldivian political crisis of 2013 exposed the PRC's willingness to deploy the PLAN to the Indian Ocean in support of China's interests, as described by Vivek Mishra:

Even as the crisis was unfolding, Chinese ships sailed to the East Indian Ocean comprising a fleet of destroyers and at least one frigate, a 30,000-ton amphibious transport dock and three support tankers. The Chinese ships later returned to the South China Sea on the back of heavy Indian naval scrambling. The incident, however, underscored the future importance of the Sunda Strait and the Lombok Strait, used for entry to and departure from the Indian Ocean, for the Chinese Navy (PLAN) in the event of a future maritime crisis in the Indian Ocean.¹¹⁴

Expanding Naval Interests in Africa

China has made naval and commercial shipping advances throughout Africa. These advances accelerated after Xi Jinping's high-profile 2015 announcement of plans to invest sixty billion dollars in the continent. China has built or obtained leases for ports in the Horn of Africa (Djibouti), East Africa (Tanzania), and southern Africa on the Atlantic Ocean (Namibia).

Most widely reported was China's July 2017 establishment of a military logistics base in Djibouti. Here, China began its compromise of U.S. national security by softening up the government of Djibouti by providing a six-hundred-million-dollar port terminal for multipurpose use, a four-billion-dollar terminal for liquefied natural gas exports, a six-hundred-million-dollar deal for two new airports, and a four-billion-dollar railroad. Chinese officials claimed not to be planning a military base for Djibouti—similar to the claims they have made in Vanuatu. But then, in July 2017, China used the influence its commerce had bought to open the Djibouti Logistics Support Base of the People's Liberation Army near Doraleh, Djibouti. Officials then claimed that "the Djibouti base has nothing to do with an arms race or military expansion."¹¹⁵

But the same month they opened the base, they were conducting live-fire exercises using armor, including wheeled tank destroyers and fighting vehicles, accompanied by infantry assault teams. These exercises had nothing to do with logistics, antipiracy, or the United Nations; rather, they established a land fighting force in the Horn of Africa. The day after the exercises' conclusion, Premier Li Keqiang met the Djiboutian president "to foster economic cooperation and to build a regional hub of trade and logistics," according to China's state media.¹¹⁶

Less than a year after the base opening in Djibouti, by early May 2018, there had been several incidents involving high-power military laser attacks against U.S. Air Force (USAF) pilots, a violation of U.S. federal law.¹¹⁷ Two pilots suffered minor eye injuries from the lasers that emanated from either the Chinese base at Djibouti or a Chinese naval vessel nearby. This is a tactic resurrected from the Cold War, when the Soviet Union conducted similar attacks against USAF pilots.¹¹⁸

In February 2018, the government of Djibouti also alienated the United States and its allies by terminating the port leases of Dubai's DP World for the Doraleh Container Terminal (DCT). China already controlled two of five terminals at Djibouti's seaport. The U.S. Africa Command (AFRICOM) chief since has expressed concern that the DCT, which supplies U.S., Japanese, Saudi, and French troops in Djibouti, could be turned over to China, putting at risk naval supply chains for the United States and its allies in the region, and possibly threatening USN access and commercial FON in the Red Sea and Suez Canal. Camp Lemonnier in Djibouti is the only USN base in Africa. Half the world's containerized cargo and four million barrels of oil a day pass by Djibouti.¹¹⁹

The same year—and in stark contrast to the lasing events—the PLAN's hospital ship, *Anwei (Peace Ark)*, made port calls throughout the entire rim of Africa,

Beijing has demonstrated that it has the shipbuilding capacity, capabilities, untapped productivity gains, and global requirements to sustain the transformational growth in Chinese naval construction and combat capability through 2030. which established important local contacts and provided logistic experience and public relations benefits to China. The PLAN mission lasted approximately a hundred days and covered 13,000 nm. The ship made port stops in Dji-

bouti, Sierra Leone, Gabon, the Republic of the Congo, Angola, Mozambique, and Tanzania.¹²⁰

China's naval presence already is progressing southward in East Africa. Tanzania is another illustration of China's incremental insertion of its navy abroad. In 2011, the PLAN and Tanzania showed an increasingly close relationship by conducting joint naval training.¹²¹ China used World Bank funding to deepen and strengthen the port of Dar es Salaam in June 2017, which was a double win for China, as the PLAN's largest warships then would be able to berth there and a Chinese company won a \$154 million contract for the rebuild.¹²²

A three-ship PLAN surface action group (a destroyer, a guided-missile frigate, and a supply ship) visited Tanzania in August 2017.¹²³ In November 2017, China used its growing influence in Tanzania to agree to a new \$10 billion port contract for megaships (those carrying eight thousand twenty-foot equivalent units [TEUs]) in Bagamoyo, about seventy-five miles from Dar es Salaam.¹²⁴ The high cost of the port relative to Tanzania's small economy threatens to overwhelm its ability to repay debt to China incurred from port-construction costs. The port alone could add approximately 20 percent to Tanzania's debt-to-GDP ratio, putting it at risk of debilitating concessions in an insolvency crisis, as Sri Lanka experienced.

In the 1960s, nationalist forces from Namibia visited Beijing to ask for guns and money in their fight against apartheid. In 1990, when Namibia claimed independence, China was one of the first to recognize the country diplomatically. With that military, economic, and diplomatic investment flowed a hundred thousand Chinese immigrants into Namibia by 2016. Chinese corruption of local Namibian politicians has led to international suspicion about plans for a potential PLA base on the Atlantic Ocean.¹²⁵

In 2014, China Harbor Engineering Company began developing a \$344 million shipping terminal in Walvis Bay, Namibia, on the South Atlantic Ocean. Slated for completion in mid-2019, the terminal will have an artificial peninsula the size of forty baseball fields and two six-hundred-meter berths that each can accommodate containerized cargo vessels of eight thousand TEUs, for a total of 750,000 TEUs per year. The plan also includes a \$400 million fuel depot—and rumors of a naval base. At a ceremony for delivery of four ship-toshore cranes in February 2018, China's ambassador to Namibia stated that with their delivery, "Namibia's port in the coastal town of Walvis Bay will become the most brilliant pearl on the Atlantic Coast of southwest Africa." He added, "It can be said that this is the benchmark project for China-Namibia friendly and pragmatic cooperation, which symbolizes the great attention of our leaders to our relations and the brotherhood between our people."¹²⁶

This port is part of a larger Chinese presence in Namibia. Just forty-three kilometers (km) north of Walvis Bay is Swakopmund, Namibia, which hosts a Chinese telemetry station for tracking satellites and space missions. Chinese construction companies are building a new military academy 324 km northeast of Walvis Bay. China supplies weapons and training to the Namibian military, including from Poly Technologies, which also supplies Iran, Syria, and North Korea.¹²⁷

About a hundred kilometers northeast of Walvis Bay is the Husab Uranium Mine, the world's second largest. China General Nuclear (CGN) owns 90 percent of the mine, into which it has invested \$4.6 billion since construction started in 2013; the Namibian government owns only 10 percent. The mine and a processing plant produce triuranium octoxide (U_3O_8), a yellowcake for both production of nuclear energy and weapons manufacture. The mine alone is economically, and therefore politically, important to the country, as it will increase Namibia's GDP by 5 percent, according to its own estimates. Almost all Husab's yellowcake production is planned for export to China out of the Walvis Bay port. CGN also builds nuclear reactors in China for export, and has proposed one for Namibia. CGN is trying to accelerate the manufacture and design of its nuclear reactor components. Notably, one of its American consultants was convicted in 2017 for conspiring to recruit U.S. nuclear engineers.¹²⁸

By all accounts and indications, the PRC has selected Namibia as a strategic location, so U.S. national security policy makers should expect the PLAN to establish a naval base there in support of China's global aspirations in the South Atlantic. The next logical area for expansion after Africa and the South Atlantic is in Europe and the North Atlantic. In 2017, China and Mauritius announced "a new strategic partnership" that included port access and much more. Mauritius is a small island nation to the east of Madagascar in the Indian Ocean. Judging by its own description, the Mauritian government offered itself as a virtual shell country to China.

Minister Lutchmeenaraidoo emphasized that Chinese companies will be able to use the free port facilities in Mauritius as a basis for adding value to their products and re-export them under favorable conditions to [African] countries and can rely on Mauritius' membership of organisations such as COMESA [Common Market for Eastern and Southern Africa], SADC [Southern African Development Community], IOC [Indian Ocean Commission], and possibly the Tripartite Trade Zone (COMESA, SADC, East African Community) to reach markets [in the] countries of Southern Africa and East Africa, a huge market of some 650 million consumers.¹²⁹

Mauritius is targeting countries such as Ghana, Senegal, and Madagascar for special economic zones, which they are offering as a sweetener to Chinese investors for government-to-government agreements "as a very attractive possibility to mobilise investments in these new economic poles." In exchange, China apparently dangled the opportunity to use Mauritius as an all-Africa hub of investment and for clearing Chinese currency.¹³⁰ This dangling of "hub status" to countries throughout the world is a common tactic of China's negotiators.

China Approaching American Coasts

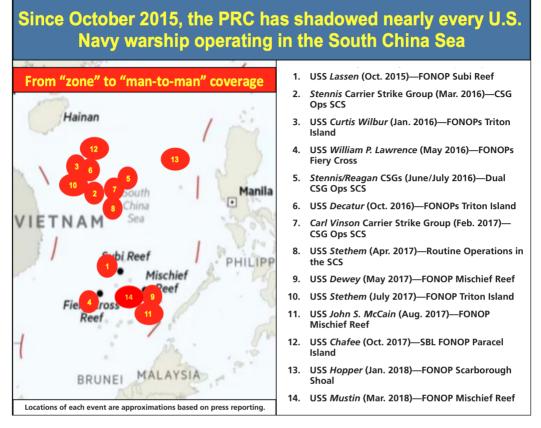
This article has noted China's naval and maritime expansion in terms of both ports and military basing in Southeast Asia, the Horn of Africa, and the Indian Ocean.¹³¹ The examples illustrate that China's ports are not really *commercial ports*, as Americans understand the term, because they are unprofitable; their real purpose is geopolitical and naval expansion.

Similarly, China's merchant marine is not only a merchant marine but also an arm of state power on the seas. China used its merchant marine in coordinated fashion to evacuate Chinese citizens fleeing violence in Libya in 2011 and to threaten Vietnamese boats in their own EEZ in the 2014 China National Offshore Oil Corporation oil rig incident. This state coordination of commercial and military assets is a hallmark of China's BRI—which is creeping ever closer to American shores.

With the Terminal Link purchase of 2013, Chinese companies purchased 49 percent stakes in Houston Terminal Link, Texas, and South Florida Container Terminal in Miami, Florida. But China's maritime tendrils are not limited to commercial ports.

China already has dispatched warships as far as Alaska. In 2015, the PLAN made its first trip there, with five ships, apparently seeking to intimidate President Obama when he made the first visit of a sitting president to Arctic Alaska.

FIGURE 3 PLAN SHIFT FROM "ZONE" TO "MAN-TO-MAN" COVERAGE IN SOUTH CHINA SEA



Notes: CSG = Carrier Strike Group, FONOP = freedom of navigation operation; SBL = straight baselines; SCS = South China Sea. *Source*: Independent research by author, compiled from press reporting.

The PLAN's unexpected rendezvous with him should be seen as strategic messaging, as well as a probable (if spurious) basis for a potential claim on Arctic resources in the future.¹³² In 2017, the PLAN again sailed to Alaska, on an apparently uninvited intelligence-gathering mission to monitor U.S. testing of the Terminal High Altitude Area Defense (THAAD) missile-defense system.

In both instances, PLAN warships operated well within the U.S. EEZ and reportedly near or within U.S. territorial waters. Ironically, as Chinese ships have begun to operate routinely inside the U.S. and other nations' EEZs, the PRC vociferously complains whenever U.S. military ships operate within the South China Sea. As outlined in figure 3, since October 2015 the PLAN has shadowed nearly every USN warship that has entered and operated within the South China Sea, shifting from a "zone" coverage to a "man-to-man" strategy. This shift provides more empirical proof of the PRC's intent to use its military forces to achieve its strategic goals through bullying and intimidation, despite assertions of peaceful development. Regarding the PRC's Arctic interests that portend impacts on U.S. territory and interests, in July 2017 the PRC and Russia agreed to "develop their cooperation on arctic shipping routes, jointly building a silk road on ice." And less than a year later China's State Council issued the country's first Arctic white paper and continues to negotiate the outlines of potential cooperation and collaboration with Russia.¹³³

China is pushing its military well into the Pacific, including to Guam and Hawaii, and into the Atlantic islands of the Azores. In 2017, the PLAN used intelligence-gathering ships to shadow joint U.S.-Australia naval exercises off the coast of Guam.¹³⁴ China also has employed uninvited intelligence-gathering ships to spy on the U.S.-hosted Rim of the Pacific (RIMPAC) exercises off Hawaii in 2012 and 2014.

In Brazil, China Merchant Port Holdings purchased a 90 percent stake in Brazil's most profitable port, TCP Participações SA, for \$924 million in 2017.¹³⁵ In Brazil's state of Maranhão, Chinese companies laid foundation stones at the Port of São Luís in March 2018. A Chinese company holds a 51 percent stake in the \$244 million port. The port will handle ten million tons of cargo, plus 1.8 million cubic meters of oil products. China's ambassador to Brazil and the governor of Maranhão attended the ceremony for the BRI project.¹³⁶

The PLAN is operating hydrographic research ships in the South Atlantic—a harbinger of future PLAN submarine operations in the North Atlantic, which could begin by 2025. While the U.S. air base in the Azores was home to the USAF 65th Air Base Wing and was critical to fighting World War II, the Cold War, and the Iraq war, by 2015 U.S. personnel there had been reduced to only two hundred, causing a cash crunch for locals—and providing a major strategic opportunity for China's military.¹³⁷ China made moves to scout berthing in the Azores that year. A Chinese naval and air base in the Azores would be a third of the way to the U.S. East Coast from Portugal, providing PLAN ships and submarines and PLAAF planes a strategic basing location to cover the East Coast of the continental United States.

FUTURE PRC NAVAL FORCE ESTIMATE

What, then, does this vast PLAN maritime mission mean for Chinese naval construction over the next fifteen years? It means that in twelve years the PLAN most likely will have twice as many warships and submarines as the U.S. Navy. It means the PRC will be able to conduct successful naval missions on a scale that, until recently, was deemed implausible by the most senior leaders of the Intelligence Community. Beijing has demonstrated that it has the shipbuilding capacity, capabilities, untapped productivity gains, and global requirements to sustain the transformational growth in Chinese naval construction and combat capability through 2030.

EXHIBIT 1 PLAN 2015—CURRENT PLATFORM INVENTORY

Platform	Inventory
Destroyers	26 (21 modern)
Frigates	52 (35 modern)
Corvettes	20 (all modern)
Missile patrol craft	85 (60 modern)
Amphibious ships	56
Mine-warfare ships	42 (30 modern)
Major auxiliaries	50+
Total surface combatants	331+
SSNs	5
SSBNs	4
SSs	57
Total submarines	66

EXHIBIT 2 PLAN 2030—FORECAST PLATFORM INVENTORY

Platform	Inventory
Destroyers	34
Frigates	68
Corvettes	26
Missile patrol craft	111
Amphibious ships	73
Mine-warfare ships	55
Major auxiliaries	65+
Total surface combatants	432+
SSNs	12
SSBNs	12
SSs	75
Total submarines	99

Notes: SS = attack submarine, conventionally powered; SSBN = ballisticmissile submarine, nuclear-powered; SSN = attack submarine, nuclearpowered.

> ' Source: Author's calculations based on multiple sources.

Notes: SS = attack submarine, conventionally powered; SSBN = ballistic-

missile submarine, nuclear-powered; SSN = attack submarine, nuclear-

Source: Office of Naval Intelligence, The PLA Navy.

The ONI's most recent study (exhibit 1) reports that the PLAN consists of over 330 surface vessels and sixty-six submarines.¹³⁸ Given the increasing PRC shipbuilding capacity and capabilities outlined above, it is likely that by 2030 the PLAN surface force could approach 450 hulls and ninety-nine total submarines (exhibit 2), a growth rate of 30 percent and 50 percent, respectively, compared with approximately 15 percent for overall 2000–15 PLAN growth.¹³⁹ This expected force would satisfy the requirements for fleet expansion to meet Beijing's "goal of rejuvenation of the Chinese Nation."¹⁴⁰

powered.

To achieve the China Dream, the PLAN of 2030 will not resemble the PLAN of 2015. Rather, it will enjoy a global presence characterized by multiple strike groups, a credible SLBM capability, and an ever-present network of ships at sea. Thanks to the strength of its naval shipbuilding capacity and its commitment to national rejuvenation, the PLAN will present an expansive and formidable challenge—one the United States can ill afford to underestimate or ignore.

THE COMING DECADE OF CONCERN

In his March 2018 speech to the National People's Congress, President Xi Jinping stated as follows:

Since modern times began, to realize the Chinese Dream of national rejuvenation has become the greatest dream of the Chinese nation. . . . With the spirit of fighting the enemy to the last minute, the resolve of recovering the lost on the basis of self-reliance . . . the Chinese people have made continuous efforts for more than 170 years to fulfill the great dreams. Today, we are closer, more confident, and more capable than ever before in making the goal of national rejuvenation a reality.¹⁴¹

As it relates to the restoration of China's perceived territory President Xi made this statement:

It is the shared aspiration of all Chinese people and in the fundamental interests of the Chinese nation to safeguard China's sovereignty and territorial integrity and realize China's complete reunification. In front of the great national interests and the tide of history, any actions and tricks to split China are doomed to fail. They are certain to meet with the people's condemnation and the punishment by the history [*sic*]. The Chinese people have the resolve, the confidence, and the ability to defeat secessionist attempts in any form! The Chinese people and the Chinese nation share a common belief that it is never allowed and it is absolutely impossible to separate any inch of territory of our great country from China!¹⁴²

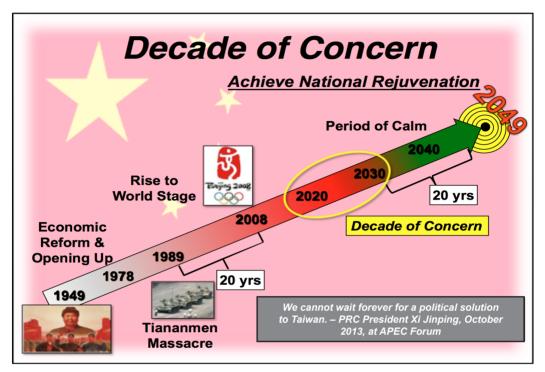
It is clear that President Xi and the CCP firmly believe that the PRC has not yet reached national rejuvenation, and therefore they are on a timeline to achieve this goal. President Xi stated that the CCP "has drawn up a splendid blueprint" to realize "the great rejuvenation of the Chinese nation."¹⁴³ And, as with most blueprints, there is an element of time, which President Xi specifically references in the following statement: "[A]lthough we have a long way to go, we are left with limited time and not allowed to be slack. We must not be satisfied with the status quo, indulge ourselves in ease and comfort, or let delight dispel worries."¹⁴⁴

Given Xi's clearly articulated goal for the PRC's great rejuvenation, which includes the restoration of its perceived territory, the obvious question is: How long will the PRC wait? It is my assertion, on the basis of all available evidence, that China desires to celebrate the complete restoration of the PRC by the hundredth anniversary of its establishment, in 2049.

If so, the next logical question is: What will happen if Beijing is unable to achieve complete restoration via nonviolent means? Or, to put it another way, regarding such regional disputes as those over the Senkakus and the sovereignty of Taiwan, what if Japan or Taiwan resists? How long will it be before the PRC's rulers believe they have to use military force to achieve their ultimate goal of national restoration?

The answers to these questions also will help drive the PRC's timelines for establishing its global hegemony. The CCP will seek to ensure its uncontested ability to dominate political, diplomatic, and military discourse globally, not only

FIGURE 4 THE DECADE OF CONCERN, 2020–30



Source: Captain James E. Fanell, USN (Ret.).

in support of its BRI, but also prior to using military force to settle the Senkakus and Taiwan issues on its terms.

In my estimation, the answer is as early as 2020, but likely no later than 2030— a period that I have labeled "the decade of concern" (see figure 4).

China very likely has calculated a timeline for when it could use military force at the latest possible moment and still be able to conduct a grand ceremony celebrating its national restoration in 2049. A likely template for calculating that date would be the period from Tiananmen Square to the 2008 Olympics. China's leaders remember well that in 1989 the international community largely condemned Beijing's brutal slaughtering of its own citizens at Tiananmen Square, yet just nineteen years later the world's leaders—including the president of the United States—eagerly flocked to Beijing to attend the opening ceremony of the 2008 Olympic Games. That president later described the event as being "spectacular and successful."¹⁴⁵

What was the strategic message from this event? It reinforced a belief among China's leadership that the United States has a short attention span regarding the use of force. In short, Beijing believes the West can be counted on to forget even the most barbarous actions after a roughly twenty-year time span. Given that logic, the latest Beijing could use military force to restore China's perceived territory physically would be around 2030. This would then allow for twenty years of "peace" before Beijing would conduct a grand ceremony to memorialize the "second 100"—the hundredth anniversary of the PRC. This again leads to the question: When is the earliest China could use military power?

Given the current environment and readiness of the PLA, such use could start at any time. However, as referenced earlier, intelligence analysis strongly indicates that during the past decade the PLA has been given the strategic task of taking Taiwan by force by 2020. If it is able to do that, it stands to reason that the lesser task of seizing the Senkaku Islands also would be achievable.

With the decade of concern beginning in 2020, it is my estimation that there will be mounting pressure within China to use military force to achieve the China Dream of national restoration by 2049. There will be a loud chorus for the use of force, which will grow each year and will crescendo in the late 2020s, ending in a violent clash to seize Taiwan, the Senkakus, and any other area Beijing deems to be a core interest.

In this decade of concern, an increasingly capable PLAN, as directed by a CCP greatly emboldened by its power and the lack of resistance to its expansionist global aspirations, will engage in operations in all the oceans of the world. It is entirely foreseeable that these PLAN operations will include activities designed to coerce, intimidate, and ultimately even defeat at sea the United States, our allies, and our friends.

RECOMMENDATIONS

First and foremost, I believe there must be, as James Holmes recently wrote, a fundamental transformation in the "culture" of how we deal with China, to one that recognizes that country as the main threat to U.S. national security, principally because of the strategic trend line that will grant the PLAN the ability to control the oceans of the world.¹⁴⁶

Achieving this cultural change is a national issue, and the effort to do so is being driven from the top. The new National Security Strategy (NSS) and the National Defense Strategy call out the PRC for being a "revisionist power." Standing up to Beijing is not irresponsible or irrational, especially given that China's actions are targeting the United States (and our fleet) despite President Xi's pledge that the PRC is devoted to a "community with a shared future for mankind" and "mutual respect, fairness, justice, and win-win cooperation."¹⁴⁷

Second, the administration should declare unambiguously that U.S.-China relations have entered a new period of competition, as stated in the NSS, and then take the steps needed to compete. We must, of course, walk our talk. To this end,

our strategic communications need to be strengthened greatly and organizations need to be given specific authority and direction to fight and win on the information battlefield.

America must deal with the PRC now from a position of strength, one from which we can assert our core interests and principles just as firmly as, if not more firmly than, the PRC asserts its core interests and principles. This means no more acquiescing to PRC demands; no more being quiet when the Chinese ignore the rule of law, as they have done with regard to the July 12, 2016, PCA ruling; and no more subordinating U.S. national interests to worries about whether we are provoking China.

Beijing is using incremental strategies and political warfare very effectively to gain maritime territory, and in the process to destroy the trust of our allies. Washington must be willing to confront Beijing's bullying even at the risk of military conflict, especially since Beijing purposefully fosters fear among the Western academic China-watching community as a tool to manipulate us in our military, economic, and diplomatic strategies. For instance, as part of our messaging, we regularly—whenever we wish—should conduct carrier operations anywhere within the first island chain. In fact, we should increase our presence, with the adoption of a permanent 2.0 presence in the western Pacific.

Third, this new relationship also means recalibrating our *one-China* policy, and very publicly highlighting the U.S. interpretation of the term—what it means and what it does not mean. To this end, we have to refute, visibly and verbally, the PRC's constraints on our relationship with Taiwan. This means discarding years of constraints our own bureaucrats have imposed. For example, the notion that U.S. warships cannot make the occasional port call in Taiwan needs to be scrapped; nowhere is this self-defeating prohibition enshrined in any treaty, agreement, or law. Therefore—after discussion with our friends in Taiwan—we should make a port call, and we should do it without fanfare or advance notification.

To disrupt Beijing's strategic schedule, the United States must keep China on its back foot, and that requires strategic unpredictability on our part. The message to China is that freedom of navigation and free access to ports is a core interest of the United States of America, and we are not going to be constrained by Beijing's threats.

Also to this end, we must end the practice of "unconstrained engagement" by the Department of Defense. Encouragingly, the fiscal year 2019 National Defense Authorization Act, signed on August 13, 2018, includes a specific policy barring the PLAN from participating in any future RIMPAC exercises unless the Secretary of Defense grants a waiver. This constitutes a direct response to China's decades of aggressive and expansionistic behavior in the South China Sea. The

United States is making a clear statement that China's bad behavior no longer will be rewarded with such privileges; to do otherwise simply makes a mockery of our foreign policy positions in Asia, if not around the globe.

Fourth, and closely aligned with the preceding, the administration must proclaim its commitment to a forward-deployed presence, especially for our naval forces. Not only is this necessary for bolstering the flagging confidence of our allies; it also sends a clear and unambiguous statement to China. Options can range from homeporting a second carrier in the western Pacific (i.e., Guam) to homeporting ships in South Korea.

America must deal with the PRC now from a position of strength, one from which we can assert our core interests and principles just as firmly as, if not more firmly than, the PRC asserts its core interests and principles. This visible commitment to forward presence also means halting any further reduction of U.S. Marine Corps forces in Asia. Every time we vacillate in defense of our forward presence we succumb to

the PRC's PW strategy; in essence, we hand China a victory and perpetuate its myth that China is in ascension and America in decline.

Fifth, the United States must commit to conducting more-robust and morepublic maritime intelligence operations. While much progress has been made in improving our intelligence, surveillance, and reconnaissance capabilities in the Indo-Pacific region, as reflected by the introduction of the P-8 aircraft, we concurrently have displayed a lack of will to expose the PRC's aggressive actions in the maritime domain. This requires the United States to get serious about its strategic communications, in terms of mission, organization, policy, and doctrine.

Why, for instance, during the inaugural deployment of China's aircraft carrier *Liaoning*, did the U.S. Indo-Pacific Command, which conducted intelligence reconnaissance flights, fail to provide unclassified pictures of China's inaugural carrier flight operations in the deep blue sea? This same reluctance characterized our approach to China's building of the seven new artificial islands. Why?

The sharing of facts about Chinese activities at sea is not only good for transparency in a democracy but is also smart military strategy, as it imposes reputational costs on the PRC for its military adventurism. Moreover, making such information widely available would help to counter spurious Chinese narratives of American actions as being the root cause of instability in the western Pacific. Both outcomes are in our national interest.

However, we have no unified national policy to develop and execute strategic communications in this era of competition, and there is no unity of effort. For example, the funding allotted to the State Department for counter-PW operations has been diverted almost exclusively to countering Russian propaganda, with the seemingly conscious exclusion of countering PRC influence operations. Further, as a rule, neither Department of Defense nor Department of State public affairs practitioners study PRC influence operations and political warfare at the Defense Information School or the Foreign Service Institute, as the leadership in those organizations does not seem to understand the urgency of including such training in the curriculum.

Sixth, we must return to naval nuclear-deterrence operations. The harsh reality is that China's nuclear ballistic-missile submarines (SSBNs, also known as boomers) now can range all of the United States, including the capital. Given the presumption that the PRC already has begun SSBN patrols and to mitigate the risk of a sea-launched nuclear ballistic-missile attack against the United States, the U.S. Navy must be able to hold at risk all adversarial nations' patrolling SSBNs, at all times. To *hold at risk* means that every time PLAN SSBNs depart on strategic nuclear patrols, the U.S. Navy must follow them closely enough to be ready to sink them if they ever attempt to launch nuclear-tipped intercontinental ballistic missiles toward our shores. Chinese boomers are not so loud that if a crisis began we would, with high certainty, be able to find them.

This leads to the seventh recommendation—and the proverbial elephant in the room. All the above recommendations make it obvious that the U.S. Navy must increase in size. Roger Wicker and Jerry Hendrix's recent article entitled "How to Make the U.S. Navy Great Again" states as follows:

From a naval perspective, the Chinese People's Liberation Army Navy (PLAN) is pursuing a mix of high-end and low-end ships and submarines. This strategy would allow the PLAN to spread out across the vast Pacific Ocean in sufficient numbers to locate and interdict U.S. ships. At the high end, China is investing in aircraft carriers, nuclear-powered fast-attack submarines and large surface combatants equipped with advanced radars, surface-to-air missiles (SAMs) and surface-to-surface missiles. . . . Backed by a growing arsenal of longer-range and more sophisticated air and missile weapons, the Chinese navy will have a highly capable and numerically larger maritime force by the middle of the next decade. If this situation comes to fruition, it could make the projection of U.S. naval power cost prohibitive in the western Pacific, undermining the credibility of our alliance commitments.¹⁴⁸

Given my estimate that the future size of the PLAN will be about 550 warships and submarines by 2030—twice the size of today's U.S. Navy—it is clear the U.S. Navy is at great risk of not being adequately sized or outfitted to meet American national security commitments in the Indo-Pacific, let alone around the globe. Therefore, to accomplish all the above missions, to provide a credible deterrent against PRC hegemony, and to be able to fight and win wars at sea, the U.S. Navy must get bigger. The evidence that a strategic gap between the U.S. Navy and the PLAN is on the verge of exploding over the next decade and a half is overwhelming. Because of this gap, it seems clear to me that to keep even a modicum of parity with the Chinese the U.S. Navy will require more than 355 ships.

The bottom line is that America needs to get back to being a maritime power supported militarily by strong allies—something that has been sorely neglected since the fall of the Soviet Union. Without that accomplishment, expect China to push us ever farther from Asia. Expect to lose more allies and influence across the Indo-Pacific. And, ultimately, expect to be seen as globally irrelevant, with all the negative consequences for our national security interests and the defense of our values.

We already have slipped. If we fall any further, we may not recover.

NOTES

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