June 20, 2019

A ‘World-Class’ Military: Assessing China’s Global Military Ambitions

U.S.-China Economic and Security Review Commission, United States Senate, One Hundred Sixteenth Congress, First Session

HEARING CONTENTS:

Member Statements

Michael A. McDevitt
View Statement

Kenneth Lewis
View Statement

Witnesses

Christopher A. Ford
Assistant Secretary for International Security and Nonproliferation
U.S. Department of State
View Testimony

Mary Beth Morgan
Acting Deputy Assistant Secretary of Defense for East Asia
U.S. Department of Defense
View Testimony

Daniel K. Taylor
Acting Defense Intelligence Officer for East Asia
Defense Intelligence Agency
Testimony Unavailable

* Please Note: External links included in this compilation were functional at the time of its creation but are not maintained thereafter.

This hearing compilation was prepared by the Homeland Security Digital Library, Naval Postgraduate School, Center for Homeland Defense and Security.
Dean Cheng
Senior Research Fellow Asian
Studies Center
Heritage Foundation
View Testimony

M. Taylor Fravel
Arthur and Ruth Sloan Professor of Political Science
Massachusetts Institute of Technology
View Testimony

Phillip C. Saunders
Director of the Center for the Study of Chinese Military Affairs
National Defense University
View Testimony

Isaac B. Kardon
Assistant Professor
Strategic and Operational Research Department
U.S. Naval War College
View Testimony

Christopher D. Yung
Donald Bren Chair of Non-Western Strategic Thought and Director of East Asian Studies
Marine Corps University
View Testimony

David Santoro
Director and Senior Fellow for Nuclear Policy
Pacific Forum
View Testimony

Thomas G. Mahnken
President and Chief Executive Officer
Center for Strategic and Budgetary Assessments
View Testimony

Abraham M. Denmark
Director, Asia Program
Woodrow Wilson International Center for Scholars
View Testimony

* Please Note: External links included in this compilation were functional at the time of its creation but are not maintained thereafter.

This hearing compilation was prepared by the Homeland Security Digital Library,
Naval Postgraduate School, Center for Homeland Defense and Security.
Available Webcast(s)*:

Full Hearing: https://youtu.be/v0Gu-AK3Slk

Compiled From*:

https://www.uscc.gov/Hearings/%E2%80%98world-class%E2%80%99-military-assessing-china%E2%80%99s-global-military-ambitions
Good morning, Commissioners, and thank you for inviting me. I am pleased to offer some thoughts for you today on the subject of China’s geopolitical technology strategy, and although I will only deliver an abbreviated version to you here in person, I request that the full text of my prepared remarks be entered into the record.

As someone who in my own scholarship has spent some time studying China – and especially as someone who has been writing for more than a decade about the challenges that the United States and the international community would likely face as the growth of China’s wealth and power enabled the Chinese Communist Party to pursue Indo-Pacific regional hegemony in the near-term and displacement of the United States to achieve global preeminence in the future – it has been gratifying to see the U.S. policy community and our national security bureaucracy focus with increasing emphasis upon the challenges of competitive strategy vis-à-vis Beijing. I would argue that this emphasis is notably overdue. Nevertheless, as we develop an ever-better “whole of government” approach to meeting the challenges presented by China’s power and its increasingly assertive self-aggrandizement in the international arena, we are developing improved answers to these national security challenges along the compass bearing provided in the 2017 National Security Strategy and the 2018 National Defense Strategy – which focus unmistakably upon the imperative of addressing threats from great-power “near-peer” competitors such as China.

In my current capacity at the State Department, I have spoken about these issues publicly on multiple occasions, including about the challenges of developing a competitive strategy in the new geopolitical context, how nonproliferation tools can be used in the service of competitive strategy, the challenges that China presents to traditional models of export control, the importance of building “coalitions of caution” in slowing the transfer of sensitive technology to China, and how China intends to use technologies bought or stolen from the West to position itself to best the United States in the next anticipated “revolution in military affairs” that Chinese strategists assess now to be getting underway. What I would like to do today is to try to shed a little additional light upon why this all matters so much – and specifically, upon how China itself appears to see technology acquisition fitting into its geopolitical strategy.
The Geopolitics of Grievance and Ambition

Understanding this strategy and context is vital, and not merely, because it is only upon the basis of such a clear understanding that we can take effective countermeasures. Honesty and clarity on these points are also vital. This is a time in which some are trying to persuade the world that the United States is merely making up spurious national security excuses to take umbrage at China in the service of specifically tariff-related economic interests. Ladies and gentlemen, I only wish it were true that our anger and distress over China’s behavior related solely to matters of dollars and cents. Unfortunately, however, the security threats China presents in these and multiple other respects – not just to the United States but to China’s neighbors, to states ever farther from its own shores, and indeed to the structure and function of the current international system – are very real indeed.

One key to understanding this context is to appreciate that despite decades of “win-win” and “peaceful rise” Chinese propaganda tropes, military muscularity – and, more to the point, a steadily increasing military muscularity – is central to Beijing’s geopolitical vision. China has adopted a whole-of-system strategy to develop what it calls a “world class military” in order to achieve the so-called “Strong Military Dream” by 2049. By that date – the symbolically potent centennial of the conquest of China by the Chinese Communist Party (CCP) – the Party hopes to have legitimized its authoritarian rule by having achieved “the great rejuvenation of the Chinese nation” (Zhonghua minzu weida fuxing) as China reclaims for itself the geopolitical centrality it sees as its birthright, and of which Chinese nationalists feel their country was robbed in the 19th Century by predatory European imperialists.

This is a central priority for Xi Jinping, who explained at the 19th Party Congress that the “Strong Military Dream” is critical to China’s national rejuvenation. But even though he is unprecedentedly unabashed in the pursuit of such global military power, this emphasis is hardly unique to Xi. China’s military ambitions apparently have roots that go back to China’s defeat by British ironclads in the Opium War of the 1840s – a defeat which impressed upon Chinese nationalists the ways in which military technological advancement can permit one empire to humiliate and displace another, and which set off a long countervailing Chinese scramble for technologically-facilitated global military power, over the most recent and most successful manifestation of which Xi now presides.

Our National Security Strategy describes China as one of “the revisionist powers” threatening U.S. security interests. As I have pointed out for years, China’s conception of national identity and its national security strategy seem to be premised upon a strong sense of “mission,” in the form of acquiring greater power and status in the world. This power and status are, in turn, the currencies with which it is felt that China will rectify the historical grievances associated with the so-called “Century of Humiliation” that followed the Middle Kingdom’s 19th Century defeats at European hands.

Despite the “win-win” propaganda rhetoric, then, this is no peaceable, benevolent live-and-let-live vision of 21st-Century international engagement. In the scope of its ambitions, the Chinese Communist Party is inescapably revisionist, even revanchist, in its approach to influence the rest of the world. Its self-conceived national mission is to make itself ever more powerful
vis-à-vis everyone else – and particularly vis-à-vis the United States – and it has devoted its national security policy to what Beijing’s 2002 Defense White Paper described as a policy of “unremittingly enhancing the overall national strength.”

Nor, it would appear, is the objective merely relative power and status. Fascinatingly – and worryingly – Chinese officials have made clear that in some sense their target is what I like to describe as the current socio-political “operating system” of the international community. This was a problem called out in our National Defense Strategy, which noted that China aims “to shape a world consistent with [its] authoritarian model – gaining veto authority over other nations’ economic, diplomatic, and security decisions.”

But you need not just take our word for it. Xi Jinping himself noted with alarming confidence that China’s development the past four decades had demonstrated to the international community what he described as a new model of modernization that other countries should look to and adopt. In effect, this model is one of state-controlled economics and authoritarian dictatorship, and thus one in direct competition with the liberal institutions of the current international system. Xi makes few bones about this, describing today’s world environment as a conflict between modernization systems. This makes him the first Chinese leader since Mao Zedong to openly state that China wishes to overturn the norms governing the international system and remake the world more in line with its own image.

This is not a new idea, however, nor one unique to Xi Jinping. Chinese leaders may once have been content – in Deng Xiaoping’s famous formulation – to “bide their time and hide their capabilities,” but such “biding” was inherently tactical, and its cautiousness was clearly understood to serve a broader purpose. (When you bide your time while hiding your capabilities, you are obviously waiting for some opportunity!) And indeed, as China’s power has grown, they have been increasingly disinterested in such coy postures and more inclined to act out.

Under Hu Jintao, officials in Beijing began to talk of creating a “harmonious world” explicitly modeled on China’s own, Party-managed “harmonious society” at home. They even spoke for a while about aiming for China’s “return,” before apparently toning down that rhetoric for fear that it would too clearly signal Beijing’s ambition to reacquire the position of global privilege and centrality vis-à-vis all other nations that gave the “Middle Kingdom” its ancient name. For his part, Xi has now raised the ante with his rhetoric of the “China Dream,” the “Strong Military Dream,” and geopolitical rejuvenation – and he seems uninterested in toning down his rhetoric just because it is beginning to alarm people who see it for what it is.

Today, China is working to export its model of authoritarianism through its “Community of Common Destiny” to reshape global governance, utilizing the power of the Chinese economy to coerce and to corrupt governments around the world that are already suffering from underdeveloped or unstable democracies and taking advantage of countries suffering from financial instability to push them toward the desired end state. Ultimately, China seems to think that it really can reorder the world. As a Chinese ambassador exclaimed some years ago during negotiations over China’s accession to the World Trade Organization, China expects eventually to dictate the rules for the world system: “We know we have to play the game your way now, but in ten years we will set the rules!” His timing may have been a bit off, but it seems very clear what he had in mind.
II. Technology and Chinese Strategy

So this, then, is the context for understanding China’s whole-of-system strategy to modernize the People’s Liberation Army (PLA) into a global military power to underpin the China Dream. To help facilitate this military power, China has adopted an approach it calls “military-civil fusion” (MCF), which seeks to break down all barriers between the civilian sector and China’s defense industrial base in order simultaneously to achieve economic development and military modernization.

As I mentioned, some of the roots of this approach can be seen in China’s painful experience, when encountering Industrial Revolution-era European power, of how military technology can facilitate global power. Beijing may have lost out on prior “revolutions in military affairs” (RMAs), but it is determined to lead the next one. Chinese strategic writers expect that the next RMA will be one of “intelligent warfare” – a whole new arena of state-of-the-art military power driven by the application of artificial intelligence (AI) and AI-enabled technology in to military systems and doctrine.

It is the objective of MCF to help fuel this success, permitting the seamless flow of materials, technology, knowledge, talent, and resources back and forth between the military and civilian industrial complexes. This is the context in which one must understand Chinese interest not merely in AI applications in traditional military sectors – including aviation, aerospace, nuclear, shipbuilding, and land systems – but indeed also in setting international norms for certain enabling technologies that are expected to provide the backbone for AI-enabled future warfare, including 5G and the Internet of Things.

III. Evolving Responses

And, in turn – to fuel MCF itself – China has focused relentlessly not just upon developing technology indigenously but also upon acquiring it abroad, by means both fair and foul, tilting the playing field in its favor at the expense of U.S. and global companies. Not surprisingly, this is one of the reasons we are focusing so much, in the U.S. Government right now, upon reforming national security export control rules and recalibrating export control policy, upon building out recent statutory changes designed to help close loopholes in our traditional methods of screening foreign investments in the United States for national security implications, upon screening visa applicants to try to weed out persons seeking sensitive technologies, and upon shoring up defenses against the cyber-facilitated intellectual property theft that former National Security Agency director Keith Alexander has suggested may constitute “the biggest wealth transfer in history.”

Some of what needs to be done in increasing awareness vis-à-vis high-technology engagements with China lies in such areas of government policy. Meeting these challenges, however – and doing so without throwing the proverbial economic baby out with the security bathwater of China tech-transfer policy – requires much broader involvement and buy-in across the civilian sector, not only in the United States but across the world. Business people,
researchers, academics, technologists, and scientists all need to understand the broader context of China’s global strategy, and the implications of its “fused” military-civilian industrial complex. This is not a call for anything like a complete high-technology “boycott” of China, but there is a need for serious risk mitigation.

This is true in large part simply because there are so many points of contact between China’s MCF industrial complex and the outside world. Authoritative Chinese sources, for instance, have explained that the entire Chinese university system is considered – in the words of the Xinhua state news agency in 2018 – the “front line” of MCF. As befits the priority given to the “front line” in any kind of struggle, the MCF system is working along multiple lines of effort to advance Chinese capabilities through the development of a talent pool of doctoral, masters, and undergraduate-level workers in STEM fields. The Chinese government certifies universities to undertake classified research and development on military contracts, as well as certifying them for weapons production – a policy known in China as the “three certifications.” To date, more than 80 Chinese universities have already been certified to undertake Top Secret or Secret level military research and development under this program.

Significantly, this approach also includes implementing a policy under which state-owned defense enterprises fund the education of students at the undergraduate, masters, and doctoral level – even to the point of providing living stipends. These student subsidies turn their recipients into something akin to employees of China’s defense industry, especially since this support is given in return for a service commitment from the students to the companies that fund their education.

As you might imagine, this well-developed system for leveraging military advantage out of China’s enormous flows of outbound and returning students in STEM fields presents enormous challenges for those of us concerned with screening visa applications for proliferation risks – one of the responsibilities of my bureau at the State Department. It is extremely important to put some national security brakes on the Chinese system’s massive technology-transfer bureaucracy. It is also important, however, to avoid the unjustified conclusion that all Chinese students or technicians seeking to come here are threats – or that the solution to the national security problem with which the CCP’s strategy has confronted us is simply to shut down all ongoing engagements with the world’s second-largest economy.

Striking the right balance is not easy. Even as we police against those who would take advantage of our openness to collect technology for those seek to collect knowledge with which to do us harm, however, we must also remain open and welcoming to Chinese talent that wants to work within our university and lab system to help push the frontiers of the emerging and even disruptive technologies that can help fuel mankind’s flourishing in the years to come.

So that’s one of our challenges. But this difficulty is inherent in the challenge of living out a relationship with China that is both cooperative and competitive in significant ways. This is one of the key challenges of our era, and while no one can guarantee you that we will always get the balance right, I can assure you that we are keenly aware of these imperatives and are committed to answering these challenges effectively.

Thank you.
Commissioner Lewis, Commissioner McDevitt, members of the Commission, and staff, thank you for the opportunity to meet with you today. My remarks will briefly address how the Department of Defense views the military component of China’s rise, and discuss implications for the Department and how we are working to address this challenge.

China’s leaders have set major economic and political milestones for 2021, 2035, and 2049 in the lead up to the 100th anniversary of the founding of the People’s Republic of China. China’s military ambitions are linked to these milestones. By 2035, China’s military leaders seek to complete military modernization and by 2049, they have characterized their goal as becoming a “world-class” military. In this regard, China’s efforts are designed with a clear purpose in mind: to displace the United States in the Indo-Pacific region; to expand the reaches of its state-driven economic model; and to reorder the region in its favor.

This is in direct contrast to the U.S. vision for a free and open Indo-Pacific that promotes security, stability, and prosperity for all based on the following principles: respect for the sovereignty and independence of all nations; peaceful resolution of disputes; free, fair, and reciprocal trade based on open investment, transparent agreements, and connectivity; and adherence to international rules and norms, including those of freedom of navigation and overflight.

The Department views China’s activities as seeking to erode U.S. military advantages. China is working to become the preeminent power in the Indo-Pacific region, while simultaneously undertaking plans to expand its overseas presence and developing capabilities to sustain military operations farther from Chinese shores.

The People’s Liberation Army (PLA) is implementing a long-term, comprehensive military modernization effort to fight and win short-duration, high-intensity conflicts along its periphery, including against “strong military opponents.” Some of its activities, including continued militarization in the South China Sea, erode the international rules-based order.

I want to briefly highlight some developments related to PLA modernization that the Department is monitoring closely.

First, China continues to implement a major restructuring of its armed forces, which has included reorganization; personnel reductions; and creating new institutions like the Strategic Support
Force and Logistics Support Force.

Second, China is developing and fielding new classes of weapon systems. In recent years, these have included precision-guided cruise and ballistic missile systems; its second and third aircraft carriers; modern combat and support aircraft; and a robust space launch program.

Third, China’s nuclear forces are also undergoing significant reform, including expanding and diversifying China’s nuclear arsenal, pursuing a viable nuclear “triad,” and developing nuclear theater-range precision-strike systems capable of reaching U.S. territory and that of our allies and partners, as well as U.S. forces and bases in the region.

Fourth, the PLA is modernizing its training and exercises by increasingly using professional opposition forces during training to improve realism.

Fifth, China is also focused on widening the PLA’s operational reach to match what its leaders consider to be the global nature of China’s economic and national interests. Press reporting in 2018 indicated China sought to expand its military basing and access in the Middle East, Southeast Asia and the Western Pacific. Xi Jinping in January 2019 called for the completion of a “security system” for the “One Belt, One Road” Initiative to “strengthen protection of [its] overseas interests and ensure the security of major overseas projects and personnel.” The PLA Navy has advocated for a long-term strategy to obtain bases in other countries, using methods such as the construction and purchase of ports, as well as long-term leases, to gain rights to foreign ports.

The Department is responding to China’s activities as part of a whole-of-government response in line with the objectives of the 2017 U.S. National Security Strategy and the 2018 National Defense Strategy. The NDS is clear on the Department’s priorities and lays out the central challenge we face, which is the return of great power competition. As such, the Department’s military advantage vis-à-vis China is eroding. If inadequately addressed, this will undermine our ability to deter aggression and coercion.

A negative shift in the regional balance of power could encourage competitors to challenge and subvert the free and open order, which supports prosperity and security for the United States and its allies and partners.

The NDS explains how the Department will engage in long-term competition with China and calls for the Department to execute the strategy along three lines of effort.

The first line of effort is preparing a more lethal and resilient joint force. Our efforts span both near-term force employment activities and longer-term investments in the Joint Force, including new, asymmetric ways to upgrade and employ legacy systems, experimentation, and exercises to test evolving warfighting concepts and capabilities. With the help of Congress starting in 2017, we began to restore our competitive advantage. Recent budgets have allowed us to build readiness and invest in new capabilities while meeting our current operational requirements. We continue to put greater investment into modernization – including emphasis on space, cyber and new missiles, such as hypersonics.
The second line of effort is strengthening alliances and attracting new partners. America’s alliances and partnerships are a crucial and durable asymmetric advantage that no other country can match. As China continues to leverage the economic, political, and military tools at its disposal to erode the sovereignty of others, we are redoubling our focus on alliances and partnerships.

The Department is strengthening traditional alliances, including with Japan, South Korea, Australia, the Philippines, and Thailand. We have also taken steps to expand partnerships with Singapore, Taiwan, New Zealand, and Mongolia. Within South Asia, we are working to operationalize our Major Defense Partnership with India, while pursuing emerging partnerships with Sri Lanka, the Maldives, Bangladesh, and Nepal. We are also continuing to strengthen security relationships with partners in Southeast Asia, including Vietnam, Indonesia, and Malaysia, and sustaining engagements with Brunei, Laos, and Cambodia. In the Pacific Islands, we are enhancing our engagement to preserve a free and open Indo-Pacific, maintain access, and promote our status as a security partner of choice. We are also working with the United Kingdom, France, and Canada, who have their own Pacific identities, to maintain a free and open Indo-Pacific.

A key focus of our efforts is expanding interoperability with allies and partners to ensure that we can work together effectively during day-to-day competition, crises, and, if necessary, conflict. To this end, the Department is building closer relationships through focused security cooperation, information-sharing agreements, and training for high-end combat missions in alliance, bilateral, and multilateral exercises.

As articulated in the NDS, the Department will work with allies and partners to develop a networked security architecture that is capable of deterring or decisively acting to meet shared challenges. In the Indo-Pacific, we are augmenting our bilateral relationships with trilateral and multilateral arrangements, and encouraging intra-Asian security relationships for partnerships with purpose. The desire is for a network capable of deterring aggression, maintaining stability, and ensuring free access to the global commons.

The third line of effort is reforming the Department for greater performance and affordability. Our efforts include organizing Department structures to promote innovation, protecting key technologies, and harnessing and protecting the national security innovation base to maintain the Department’s technological advantage.

With regard to U.S.-China military-to-military relations, competition does not mean confrontation, nor must it lead to conflict. The United States seeks a constructive, results-oriented military-to-military relationship with China. The Department of Defense is focused on: reducing the risk of misunderstanding or miscalculation; ensuring the safety of our forces operating in close proximity; and enhancing the ability for our countries to communicate in the event of a crisis. We are prioritizing defense engagements that promote safety and reduce risk, such as the Military Maritime Consultative Agreement. In addition, we are working to implement existing confidence building measures, such as the Defense Telephone Link mechanism to promote communication.
The United States and China are not destined to be adversaries, and the United States is pursuing cooperation with China where our interests align. At the Shangri-La Dialogue earlier this month, Acting Secretary Shanahan met with Chinese Minister of Defense Wei Fenghe to exchange views and discuss areas of potential cooperation and collaboration. During their meeting, Acting Secretary Shanahan raised how China can do more to enforce U.N. sanctions against North Korea, which North Korea is evading by conducting ship-to-ship transfers of refined petroleum, including near or in Chinese territorial waters.

That said, the United States will call out China’s behaviors that are counter to the rules-based international order and the norms of behavior that are expected of all countries. For example, the United States has called for all of China’s maritime forces, including the China Coast Guard and the People’s Armed Forces Maritime Militia, to abide by international rules and norms for safe encounters at sea.

Regarding nuclear issues, as the Commission is aware, China is expanding and diversifying its nuclear arsenal and may double the size of its stockpile over the next decade. The 2018 Nuclear Posture Review emphasizes the continued importance of the U.S. nuclear triad. That is why the United States has undertaken a nuclear modernization program intended to ensure an effective and credible nuclear triad for decades to come. The triad provides diversity and flexibility that allows us to tailor strategies to deter nuclear-armed competitors, like China. This approach is necessary given the scope and scale of China’s nuclear modernization program and its continued lack of transparency on nuclear issues.

This issue speaks to the impetus for including China in multilateral arms control. President Trump has directed the Administration to think more broadly about arms control, seeking to bring both China and Russia to the negotiating table. As a major power, it is appropriate for China to act responsibly and join in multilateral arms control. The United States will continue to seek a meaningful dialogue with China on our respective nuclear policies, doctrine, and capabilities to reduce the risk of miscalculation and misunderstanding.

Ultimately, how constructive our relationship can be with China is contingent on the extent to which China is willing to engage in behaviors that support – rather than undermine – the rules-based international order. Our vision for a free and open Indo-Pacific is inclusive and affirmative for any country – China included – that chooses to support the enduring principles embedded in this vision.
My name is Dean Cheng. I am the Senior Research Fellow in the Asian Studies Center Davis Institute for National Security and Foreign Policy at The Heritage Foundation. The views I express in this testimony are my own and should not be construed as representing any official position of The Heritage Foundation.

**Introduction**

Since the early 1990s, the People’s Liberation Army (PLA) of the People’s Republic of China (PRC) has been steadily evolving its approach to warfare. Not having fought a war since 1979, the Chinese military is forced to rely on other peoples’ experiences, in other peoples’ wars, to derive lessons about what future wars will be like. This includes drawing upon not only American military actions, but also Russian, as well as broader changes in the global social-economic-technological environment. The result has been an increasing emphasis on the role of information, and the belief that achieving “information dominance” will be essential in fighting and winning future wars.

**Evolving View of Future Wars**

In the wake of the first Gulf War (Operation Desert Shield/Desert Storm), the Chinese concluded that there was a need to prepare for what they termed “local wars under modern, high-technology conditions (gao jishu tiaojian xia jubu zhanzheng; 高技术条件下局部战争).” The characteristics of such wars included:

- The quality, as well as the quantity, of weapons matters. The side with more technologically sophisticated weapons would be able to determine the parameters of the conflict, and effectively control its scale and extent.
The battlefields associated with such conflicts are three-dimensional, and extend farther and deeper into the strategic rear areas of the conflicting sides.

- The conflict is marked by high operational tempos conducted around the clock, under all-weather conditions.
- The fundamental approach to warfare is different. Such wars would place much greater emphasis on joint operations, while also incorporating more aerial combat, long-distance strike, and mobile operations.
- Finally, the role of command, control, communications, and intelligence (C3I) is paramount. C3I functions are seen as essential to successful implementation of such wars; consequently, the ability to interfere with an opponent’s C3I functions also became much more important.\(^1\)

The conduct of such wars would entail coordinated joint operations among forces drawn from multiple different services, operating in the same general physical area. For the PLA, “joint campaigns” within the 1990s context were defined by four criteria:

- The campaign involved two or more services;
- Each service contributed a junctuan-level of force, i.e., a group army, a military region air force, a fleet, a Second Artillery base;
- The campaign had a single, unified command structure; and
- The command structure developed a single, unified campaign plan, which all the participating forces were obliged to follow.\(^2\)

By the early 2000s, having witnessed Western military operations in the Balkans and Afghanistan, the PLA shifted to preparing for “local wars under informationized conditions (xinxihua tiaojian xia jubu zhanzheng; 信息化条件下局部战争).” This change was incorporated in the 2004 Chinese white paper on national defense, but was apparently already being discussed in 1999 PLA professional military literature, and was “officially incorporated into the lexicon of the ‘Military Strategic Guidelines for the New Period’” in 2002.\(^3\)

Informationization (xinxihua; 信息化) is the consequence of the Information Age, and the widespread introduction of information technology. Beginning in the 1970s, the proliferation of microelectronics, computers, and telecommunications technology accelerated the ability to gather, store, manage, and transmit information. Information technology, including computers and telecommunications systems,


have also permeated all aspects of society and national economies and become an integral part of a nation’s infrastructure.⁴

From the Chinese perspective,

Informationization is a comprehensive system of systems, where the broad use of information technology is the guide, where information resources are the core, where information networks are the foundation, where information industry is the support, where information talent is a key factor, where laws, policies, and standards are the safeguard.⁵

In the face of this broad trend of economic, political, and social informationization, threats to national interests and security have also become informationized. The continuing spread of information technology means that potential adversaries have unprecedented access to each others’ national economies, as well as the broader population and the top decision makers. Just as the bomber and long-range missile allows an opponent to directly strike a nation without having to first break through ground or naval defenses, information technology similarly outflanks traditional military forces. Indeed, the proliferation of information technology into all aspects of society and economics makes those same aspects now more vulnerable to a range of new pressures and threats.

These threats extend beyond the information networks (e.g., vulnerability to denial-of-service attacks) and the component computers (e.g., computer viruses, malware). Instead, the very information itself can constitute a threat, if, for example, it erodes the morale of key decision makers, popular support for a conflict, or the will of the military to fight. Consequently, China’s interpretation of its national interests has expanded, in step with the expanding impact of information writ large on China.

In the more traditional military sense, warfare has also become informationized. As information technology has also been incorporated into various weapons, they have become ever more precise and lethal. The networking of weapons with each other, and with sensors, allows for higher operational tempos, as night and weather conditions no longer constrain military forces as much as in the past. But informationized warfare goes beyond the incorporation of information technology into individual weapons, or even into broader systems. Rather, it is the creation of systems-of-systems, including the incorporation of information technology into every facet of military activities, e.g., logistics, intelligence collection and exploitation, and transportation, etc., that sets it apart from simply more sophisticated weapons. Indeed, one of the hallmarks of “informationized warfare” is that conflicts are not platform-vs-platform, or even system- (xitong; 系统) versus-system, but battles between rival arrays of systems-of-systems (tixi; 体系).⁶


This, in turn, has led to a modification of the concept of joint operations. Joint operations, under informationized conditions, involve integrated or unified joint operations, among forces operating across multiple domains, including the land, sea, air, outer space, and informational space domains, under a single, unified command. In this informationized environment, the distinction between forward and rear areas is blurring, as are lines separating offensive and defensive operations, or positional, mobile, and guerrilla warfare. In short, informationized warfare appears to have accelerated an evolution of joint operations, from coordinated joint operations to unified (or integrated) joint operations (yitihua lianhe zuozhan; 一体化联合作战) and unified strength (yitihua liliang; 一体化力量). To use a PLA analogy, coordinated joint operations is the equivalent of “three eggs in a bowl,” each egg distinct. Unified joint operations is “three eggs broken in a bowl,” where the eggs intermix somewhat.

Tasks and Missions for the PLA

In December 2004, Hu Jintao, in his role as chairman of the Central Military Commission, gave a major speech where he provided guidance for what the PLA should be preparing for, by charging it with a set of “historic missions for the new phase of the new century,” commonly referred to as the “new historic missions.”

These missions include:

- Safeguarding the role of the Chinese Communist Party (CCP). As the PLA remains a “Party army,” its first responsibility is to preserve the CCP’s grip on power.
- Safeguarding China’s national development. As the PRC remains a developing country, it is essential that the PLA help preserve the conditions for sustaining economic development. This is especially important as the CCP considers that this is a “period of important strategic opportunity for national development”; it is therefore important the PRC capitalize on this period to develop the PRC’s comprehensive national power. The PLA serves this goal by helping maintain national unity, e.g., preventing secession or other breakaway tendencies.
- Safeguarding China’s expanding national interests. While the PRC may be a developing country, its expanding economic strength, as well as developments in technological trends, mean that the PLA must expand its focus beyond its traditional land frontiers.
- Safeguarding world peace.

The “new historic missions” remain in place for the PLA. Under Xi Jinping, however, the PLA itself has been massively reformed in order to better fulfill these missions as well as in order to better accommodate the evolving circumstances under which those missions must be fulfilled. Under Xi, the PLA is now preparing to undertake “informationized local wars (xinxihua jubu zhanzheng; 信息化局部战争).”

---


部战争),” reflecting the “new circumstances” or “new conditions (xin xingshi; 新形势)” now confronting it.

These “new circumstances” have arisen because of a series of transformations in the broader socio-techno-economic context. These include:

- Technological transformation, rooted in big data, cloud computing, and other changes in electronic information technology;
- Industrial transformation, resulting from networking, the growth in artificial intelligence, and other elements that have elevated traditional industries to new levels;
- Military transformation, as a consequence of weapons incorporating more and more intelligence and units becoming more digitized.\(^9\)

The result of this last transformation is a further deepening of trends that had already begun in the earlier part of this decade, including the rise of “unified joint operations (yitihua lianhe zuozhan; 一体化联合作战)” as the fundamental expression of future warfare.\(^10\)

Of particular note is the new historic mission of “safeguarding China’s expanding national interests.” Chinese writings note the growing importance of the maritime, space, and electromagnetic domains for national security.\(^11\) The “new historic missions” require that the PLA be able to establish dominance of each of these domains as a prerequisite for defending the PRC’s interests. Underlying this task, in turn, is the ability to dominate the information domain, to establish “information dominance (zhi xinxi quan; 制信息权).”\(^12\) This will have even greater urgency in light of the “new circumstances.”

**Establishing Information Dominance.** Because all operations require information, whether about one’s own forces or the adversary or the broader operational environment, only with information dominance can air, land, sea, or outer space capabilities operate to their full potential. Conversely, without information dominance, there can be no air, land, sea, or outer space dominance—and victory becomes difficult if not outright impossible. Information dominance is what supports and safeguards the other dominances.\(^13\) PLA analysts assume that both sides will be constantly striving to achieve

---


\(^10\) Ma, Li, and Wei, “Overall Planning of the Military Electronics Industry Under the New Situation,” *Journal of the China Academy of Electronic and Information Technology* (XII, #6, December 2017), p. 582.


\(^13\) Li Yousheng, *Science of Joint Campaign Teaching Materials* (Beijing, PRC: Military Science Publishing House, 2012), p. 69. See also pp. 69–72 for a fuller discussion of the interplay between information dominance and domination of each of these other physical domains.
information dominance, and therefore, both sides will be trying to weaken and undermine the adversary’s information networks, while also trying to preserve their own.

At the same time, the proliferation of various sources of information, as well as the increasing ability to move massive amounts of data, mean that there will be more opportunities to create a common situational picture among all the participating forces. By generating such shared situational awareness, exploiting all the available information sources, Chinese analysts expect a more rapid cycling of information, allowing commanders’ decisions to be more rapidly disseminated to the units, leading to a more flexible, rapid, tailored response. Command will be in real time, and operations will be promptly adaptive.

At the same time, this common situational picture would allow commanders to better track not only adversary forces, but also friendly units. This latter aspect is especially important, given the involvement of forces drawn from all the different services, who would be operating across multiple domains. As one Chinese analysis observed, even Sun-Tzu had written that only by knowing oneself as well as the adversary can one hope to be ever victorious.\(^\text{14}\) This would be even more true in the Information Age.

This common situational picture is built upon several key pillars.

- **Real-time information.** Perhaps most important is the ability to obtain and transmit information on a real-time or near-real-time basis. Unlike in the industrial era, information systems are now sufficiently prolific that they permeate the battlefield, allowing for near-instantaneous capture of information and its transmission. Moreover, because of the advances in electronics and associated information technology, smaller, cheaper sensors can nonetheless collect and transmit enormous amounts of data. At the same time, modern warfare requires prompt access to information, because warfare under informationized conditions is both more rapid and more intense. Given the importance of establishing information dominance, it is vital that information be readily available.

- **Accurate data.** Complementing real-time availability is accuracy. In order to counter an adversary, Chinese analyses argue that it is necessary to calculate their overall combat capabilities and determine their likely courses of action, down to the individual unit level. This must include not only their equipment and manpower strength, but also their physical reach, the radius of action within a given time period, and the quality of the forces.\(^\text{15}\) If the information necessary for such determinations is inaccurate, then the decisions that will be generated will be flawed. Similarly, the information regarding one’s own forces’ disposition and capabilities must not only be timely but accurate as well. Chinese assessments seem to view the greater quantity of data as leading to greater accuracy, in part because it will be collected from many


different sources, including a wide array of sensors, open-source information, and cyber intelligence. Such a diverse set of sources provides a more comprehensive picture of one’s own forces. It may also complicate an adversary’s attempt to undertake camouflage, concealment, and deception measures (CCD), since these efforts would have to be mutually consistent to successfully fool intelligence analysts.

- **Collection of many different kinds of information for many different users.** The variety of sensors and other information sources means that information can be collected from many different domains, including the land, sea, air, outer space, and electromagnetic spectrum, to support users in not only the ground, naval, and air forces, but the political realm (for political warfare) as well. Similarly, all this information can support operations from outer space to the ocean depth, and across both an adversary’s depth and one’s own rear areas. Such levels of information collection are necessary, in order to maximize the effectiveness of one’s own arsenal; at the same time, though, it allows commanders an unprecedented degree of situational awareness, extending for far greater distances and across a wider variety of types of information. Indeed, the collection and dissemination of information in a wide variety of forms also means that different types of information (electro-optical images, radar-generated images, electromagnetic characteristics) are all available and can be blended together to provide a more in-depth look at a target or an environment. All of this helps create a single, integrated situational picture that can then be accessed by all the participating forces, allowing everyone to have a better understanding of friendly and adversary dispositions, the overall environment, and intended operational goals and methods.

- **Intelligent information processing.** The information that is gathered, moreover, will also allow planners a very high level of efficiency, as all this information will allow for much better matching types and numbers of weapons precisely against any given target set. This will be based, in part, on the incorporation of information-processing capabilities on sensors and even weapons, so that analysts will be able to focus better on the elements that matter the most. As platforms themselves become more intelligent, it is expected that the information provided will be better tailored to the individual user, avoiding information overload despite the growth in information collected.\(^{16}\)

- **Reliable communications.** One of the most essential advances allowing for the creation of a common situational picture is the advent of more secure communications. Indeed, the advances in information technology, in the Chinese view, allow not only more information to be securely transmitted, but also the greater variety, as noted previously. This increase in reliability will benefit not only command and intelligence functions, but every aspect of the joint force, including navigation, force coordination within the same echelons, and between front lines and

\(^{16}\)Zou and Cha, *Command Information Capabilities Research, Based on Systems Combat Between Information Systems*, p. 61.
rear areas. As important, Chinese analysts seem to think that future communications architectures, given their networked nature and the incorporation of various security measures, will ensure that communications are safe as well.

These characteristics, in combination, will allow commanders and their subordinate forces to share information on a near-real-time basis, thereby allowing all the forces to integrate their actions. Enemy vulnerabilities can be rapidly identified, all available friendly forces can be deployed to exploit them, and strikes from a variety of locations can be coordinated to maximum effect. At the same time, better information will allow more sustained operations, preventing the adversary from regrouping while exploiting newly arising opportunities. Rather than a linear progression, operations will be able to proceed in parallel, across the depth and breadth of a theater, with precise attacks paralyzing an adversary, rather than relying upon brute force to bludgeon them into submission.\(^{17}\)

From the Chinese perspective, a clear demonstration of what such information sharing can achieve was provided by the American-led coalition’s operations against Iraq in the 2003 Iraq war. Because the coalition forces had superior Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance capabilities, they could forge a truly joint operational approach to the conflict, with smooth communications among the various forces. This was a significant improvement upon what had been undertaken in the Gulf War, a decade previously, where coalition ground forces had some difficulties coordinating with naval and air forces.\(^{18}\)

This, in turn, requires actively undertaking offensive actions—information dominance cannot be achieved through solely defensive, reactive measures. Indeed, because of the importance of information systems to local wars under informationized conditions, as well as the nature of the information environment, “it is more important to emphasize the offensive with regards to the information domain than it is in the traditional land, sea, and air domains.”\(^{19}\) In particular, one needs to take sustained offensive action against the adversary’s information networks, command and control infrastructure, as well as key combat forces.\(^{20}\) These activities constitute the core of “information warfare (xinxi zhan; 信息战).”

Offensive actions are essential, as only by neutralizing the adversary can one ultimately secure one’s own networks and systems-of-systems. If one’s information warfare efforts are successful, the adversary’s traditional combat forces will be reduced to an Industrial Age capacity. They may remain locally potent, but with only a disrupted, paralyzed, and destroyed information network, they will have only limited effectiveness.\(^{21}\) In both the Gulf War and the Balkan conflict in Kosovo, the Iraqi and Serbian forces, respectively, suffered relatively few casualties, but the destruction of their “three major systems” meant that the remaining forces could not have a decisive impact. In those conflicts,


however, the America-led coalition forces had an overwhelming set of advantages, including far more extensive information resources than the Iraqis or Serbs could field. Under more even circumstances, Chinese analyses suggest that information dominance is likely to be a more localized, temporary condition. The pervasiveness and resiliency of information networks means that it would be difficult to establish permanent information dominance. Consequently, the weaker side, by constantly and actively seeking out opportunities to concentrate their information warfare resources, can often nonetheless achieve at least local conditions of information superiority and advantage. Exploited to maximum advantage in the offensive, such local conditions can nonetheless create opportunities to paralyze the adversary and defeat them.

At the same time, whether one has achieved information dominance or not, one must also constantly undertake defensive efforts to try and preserve the integrity of one’s own systems. For the side that is technologically inferior, this will be even more difficult, as the adversary may well exploit paths and approaches that one either had not conceived of or had insufficiently prepared defenses for. Attacking the adversary’s information networks must therefore be part of one’s defensive efforts, even if one is weaker, both to deny the adversary the initiative and to alleviate pressure on one’s own systems. It is the best means by which the weaker side can sustain an asymmetric stance that can compensate for those weaknesses and unbalance a stronger adversary.\(^\text{22}\)

For both sides, then, whether in defense or offense, the priority targets in conducting information warfare and pursuing information dominance will include the adversary’s intelligence and surveillance systems; their high technology weapons platforms and bases where they are located; their safeguarding infrastructure, systems, and forces; and their command, control, and communications networks.\(^\text{23}\) The winner of information warfare is the side that retains a relatively more intact set of system-of-systems; in particular, the side that retains better connectivity among the various constituent systems.

Achieving “information dominance” in the face of this maelstrom of hard-kill and soft-kill weapons and tactics is not solely or even predominantly a matter of computer network attack (or defense). Instead, the Chinese conceive of information warfare at the campaign level as comprising several key lines of operations, including electronic warfare, network warfare, and space warfare.

**Electronic Warfare (dianzi zhan; 电子战)**

Electronic warfare is one of the earliest and most fundamental forms of information warfare. There was widespread employment of electronic warfare in the Second World War (e.g., the use of “Window” or chaff by Allied bombers to blind German air defense radars and the exploitation of cryptanalysis by all sides to outmaneuver their adversaries), and it has become increasingly sophisticated and important in the intervening decades.

Electronic warfare is the effort by each side to degrade and disrupt the adversary’s electronic systems, while preserving one’s own.\(^\text{24}\) It occurs in the “electromagnetic space (dianci kongjian; 电磁空间),”

---


or the electromagnetic spectrum, ranging from super low frequency to ultraviolet, including the visible light spectrum. The electromagnetic space is seen by Chinese analysts as the fifth domain of warfare, alongside land, sea, air, and outer space. Indeed, electronic warfare is actually a struggle to dominate the electromagnetic spectrum, establishing electromagnetic dominance as part of the larger effort to establish information dominance.

The successful domination of the electromagnetic spectrum provides an enormous advantage in the effort to dominate the broader information space, and thereby secure the initiative, because it affects the vast majority of systems that collect, transmit, or exploit information. Electronic warfare conceptually affects radars, communications systems such as radios, as well as electronic countermeasures and electronic counter-countermeasures (ECM and ECCM) systems, as well as weapons control and guidance systems. The ability to operate successfully in the land, sea, air, or outer space will therefore be heavily influenced by the ability to operate electronics successfully. Indeed, as one Chinese assessment notes, the effort to establish the “three dominates” will be heavily influenced by the side best able to succeed at electronic warfare.

Chinese analysts also argue that electronic warfare occupies a central role in modern warfare because electronics are now integrated into the very function of most weapons. Indeed, electronics have assumed a growing proportion of the cost and sophistication of modern weapons; some of the most expensive elements of modern warships or fighter planes are often embodied in the onboard electronics, rather than the metal. As one PLA analysis noted, electronics represent 20 percent of the cost of a modern warship, 24 percent of the cost of a modern armored fighting vehicle, 33 percent of a military aircraft, 45 percent of a missile, and 66 percent of a satellite.

At the same time, as more and more aspects of modern warfare involve portions of the electromagnetic spectrum, the electronic environment has become much more complex. Already, current battlefields are exhibiting an increasing density of electronic systems, with both sides fielding a wide array of sensors, communications systems, and other electronic systems. Even without the two sides striving to erode the others’ electronic systems, there is already an enormous amount of electromagnetic energy being emitted by the combatant forces, with the potential for mutual interference. Understanding the electromagnetic battlefield (which will likely span much greater volumes where troops are operating) is further complicated by the efforts of each side to deny the other easy access and smooth operation of their electronic systems. Not only will an enemy seek to deny easy access and smooth operation within the electromagnetic spectrum, but one’s own forces and efforts may generate interference. Thus, an essential part of electronic warfare is frequency and spectrum management by the joint campaign command and reconciliation of electronic activities among the various forces, to minimize the effects of friendly emissions and those from natural sources.

As the Chinese observe, some nations define electronic warfare narrowly. In the Chinese assessment, the Russians, for example, see electronic warfare as mainly involving the use of software to attack the

---

27 Wang, Foundational Knowledge, Considerations, and Explanations of Informationized Warfare, p. 179.
28 Yuan, The Science of Military Information, pp. 84 and 85.
adversary’s electronic systems. Similarly, a different Chinese volume concludes that the U.S. military is focused on the exploitation of the electromagnetic spectrum, both in attack and defense. In this assessment, the American approach neglects several important additional means of neutralizing an adversary’s electronic systems, including:

- Using either human agents or physical weapons to physically attack electronic systems;
- Using propaganda and psychological warfare techniques to degrade the effectiveness of electronic systems; or
- Using non-electromagnetic systems to counter electronic equipment.

By contrast, the PLA adopts a much more expansive definition of electronic warfare. According to Chinese analyses, electronic warfare embodies the range of activities whereby one seeks to maximize the ability of one’s own side to exploit the electromagnetic spectrum, while also striving to erode the adversary’s ability to do the same. Electronic warfare, from the Chinese perspective, therefore includes not only electronic-based weapons, but the conduct of electronic reconnaissance and counter-reconnaissance; interference and preservation measures for electronic information; and all efforts at disrupting and countering the disruption of electronic systems. Electronic warfare measures would include attacks on an adversary’s communications land lines, radio networks, microwave transmission networks, and position, navigation, and timing (PNT) systems. It incorporates not only soft-kill techniques, such as jamming or other forms of electronic interference and suppression, but also hard-kill approaches. The latter includes the use of artillery, aerial bombardment, and other firepower strikes to kill key electronic systems.

It is also important to note that, whereas electronic warfare has historically often been a tactical issue (e.g., the provision of jamming assets in support of a specific bombing raid), in the Chinese estimation electronic warfare will constitute a campaign-level activity in future local wars under informationized conditions. The proliferation of electronic warfare tools and weapons across land, sea, air, and space platforms, and the development of electronic weapons whose effects will span dozens or even hundreds of kilometers, will expand the area affected by orders of magnitude. In particular, the ability to undertake electronic warfare against space-based communications, reconnaissance, surveillance, PNT, and meteorological assets will be a vital means of establishing dominance over the electromagnetic domain.

**Network Warfare (wangluo zhan; 网络战)**

Network warfare is the partner of electronic warfare. Also termed “network conflict (wangluo duikang; 网络对抗),” it is an aspect of information warfare involving the range of activities that occur

---


33 Ibid., p. 314.
within networked information space, as the two sides seek to reduce the effectiveness of the adversary’s networks, while preserving one’s own. Like electronic warfare, it includes not only offensive and defensive components, but also reconnaissance of adversary and others’ networks.

Network warfare occurs in the realm of “network space (wangluo kongjian; 网络空间),” a term that roughly parallels that of “cyberspace.” However, network warfare is seen as moving beyond just computer networks, although computer network warfare remains an integral element of network warfare. In relation to information warfare at the campaign level, it occurs within networks that are part of the overall battlefield (which can extend to outer space and deep into the two sides’ homelands as part of the command and control, and logistical and support infrastructures).

The purpose of network warfare is to establish “network dominance (zhi wangluo quan; 制网络权).” When one has “network dominance,” the full range of one’s networks (not just computer networks) can operate smoothly and the information on those networks is safeguarded while being rapidly moved and applied, while an adversary’s networks are prevented from doing the same. Some of the networks that are integral to network warfare include the command and control network, intelligence information network, and air defense network. Network space is sometimes characterized as the sixth domain (alongside land, sea, air, outer space, and the electromagnetic spectrum). In some cases, however, it is seen as the fifth domain, encompassing the electromagnetic spectrum.

Because of the importance of these various networks in the conduct of unified joint operations, network warfare is considered by the Chinese as inevitably a central part of future local wars under informationized conditions. It is seen as an especially effective means for the weaker player to balance the capabilities of the stronger one. One Chinese analysis observes that in the Balkan conflicts of the 1990s, although the Serbian forces were generally outmatched by NATO, they were nonetheless able to repeatedly penetrate various NATO networks and degrade their operations. The Chinese write that the Serbs were able to penetrate the networks of the aircraft carrier USS Theodore Roosevelt and British Meteorological Office, affecting air operations. Another Chinese analysis similarly observes that the disparities in conventional strength between NATO and Serbia were not paralleled on the Internet, where Serbian forces successfully attacked various NATO and individual member states’ websites.

**Integrated Network and Electronic Warfare (wangdian yiti zhan; 网电一体战)**

Of particular importance in future local wars under informationized conditions will be the steady merging of network and electronic warfare. This is the embodiment of the Chinese concept of unified joint operations. As network warfare expands and electronic warfare systems are networked, the

---

36 Ibid., pp. 24 and 25.
38 Yuan, *The Science of Military Information*, p. 73.
Chinese see network warfare and electronic warfare as inextricably linked. Indeed, Chinese military theorists were among the earliest adopters of the concept of integrated network-electronic warfare (INEW), and see INEW as a fundamental characteristic of information warfare and the informationized battlefield.\(^{39}\)

The PLA defines the INEW concept (which it at times translates as “network-electronic integration warfare”) as a form of information warfare where one implements information attacks against the enemy’s networked information systems through highly melded electronic warfare and network warfare.”\(^{40}\) It is those information warfare methods that use a combination of electronic warfare and network warfare techniques to attrit and disrupt the adversary’s networked information systems, while defending one’s own, in order to secure information dominance over the battlefield. It is the main expression of information warfare.\(^{41}\)

As one Chinese analysis notes, in future conflicts, the electromagnetic spectrum will be the key influence upon the operation of network-space, with network and electronic warfare organically linked, operating under a single unified direction.\(^{42}\) Therefore, network warfare will be affected by efforts aimed at dominating the electromagnetic spectrum, while the ability to operate electronic systems will be directly affected by efforts to penetrate and damage networks. The two elements are seen as mutually complementary in a unified effort to degrade the enemy’s system-of-systems. Neither electronic warfare nor network warfare alone can comprehensively disrupt that system-of-systems, but given the mutually supporting nature of the two different types of warfare in terms of attack concepts, attack methods, and operating environments, they constitute a highly effective integrated attack methodology.

One Chinese volume observes:

> From a technical angle, electronic warfare and network warfare can be greatly complementary. Electronic warfare emphasizes attacking the signal layer, with the use of strong electromagnetic energy to drown out target signals. Network warfare emphasizes attacking the information layer, using disruptive information flow, transported into the enemy’s network systems, as the means of attack.\(^{43}\)

In the Chinese view, as individual facilities and their attendant information systems are networked together, the physical infrastructure upon which information passes and the information itself became an integrated whole. INEW is an effort to unify the concrete physical aspects and virtual aspects of


\(^{40}\) All Army Military Terminology Management Commission, *Chinese People’s Liberation Army Terminology* (Unabridged Volume), pp. 262–263.


information warfare, merging them into a single concept of operations. By undertaking attacks on both of these elements, it is more likely that one can establish information dominance. INEW therefore envisions using electromagnetic attack and defense and information attack as the main techniques for degrading adversary ability to gather and exploit information, treating networked information systems as the domain of operations. Successful conduct of integrated network and electronic warfare should lead to dominance of the entire “battlefield information space (zhanchang xinxi kongjian; 战场信息空间).”

The central point of the Chinese conception of INEW is the incorporation of targeting (and defense) of the physical element of the information networks into network warfare. This is what makes INEW more than simply adding electronic warfare techniques to network warfare; it expands information warfare beyond the predominantly virtual world of data to include the physical, tangible world. In the context of the greater emphasis on unified joint operations, INEW is envisioned as a key example of the new kind of unified jointness necessary to successfully fight local wars under informationized conditions.

Space Warfare (taikong zhan; 太空战)

As PLA writings have noted, “informationized warfare” does not simply refer to the use of computers and cyberwarfare. It involves the acquisition, transmission, and exploitation of all forms of information. Chinese writings indicate a growing recognition that space plays a central role in all these tasks. In the 2006 edition of The Science of Campaigns, it is specifically stated that “the space domain daily is becoming a vital battle-space…. Space has already become the new strategic high ground.”

In the subsequent 2013 edition of The Science of Military Strategy from the PLA’s Academy of Military Science, space is deemed the “high ground in wars under informationized conditions,” tied to the struggles in network space and the electromagnetic spectrum as key future battlegrounds.

In the 2015 PLA National Defense University volume also entitled The Science of Military Strategy, space is discussed at length, both as a new area of military conflict (alongside network space and deep ocean regions), and as an area of acquisition and development. In the first case, it is described as a key factor in the ongoing military transformation, with a major impact on future warfare’s stance, form, and principles. In the latter section, this is reinforced by the observation that space is the strategic “high ground” in any international military competition. “A nation’s military aerospace strength will determine a nation’s international standing and security.”

---

49 Ibid., p. 373.
In the Chinese conception, space is important for the advantage it confers with regards to the ability to collect, transmit, and exploit information, rather than for its own sake. As other Chinese analysts conclude, “space operations will be a core means of establishing information advantage.” To this end, Chinese analysts have long recognized, since at least the first Gulf War, that space is a key means of providing information support to terrestrial forces. Consequently, the emphasis upon establishing “space dominance (zhitian quan; 制天权),” as part of the struggle for information dominance, has become more explicit.

Several PLA analyses, for example, have observed that space is the “strategic high ground (zhanlue zhigao dian; 战略制高点)” in informationized warfare. They conclude that the ability to dominate space will have greater impact on informationized warfare than any other domain because it will provide:

- Real-time, global monitoring and early warning, such that no major military activity can occur without being spotted;
- Secure, long-range, intercontinental communications; and
- Positional and navigational information that will support long-range precision strike, including against targets that are over the horizon.

All of these will occur without restriction from political borders, physical geography, or weather conditions and time of day.

Space dominance entails not only the ability to provide information support to the PLA, but also to deny an adversary the ability to exploit space to gain information. The American reliance on space systems, in particular, has been remarked upon. One Chinese assessment notes high levels of American investment in military communications satellites, navigation satellites, reconnaissance and surveillance satellites, ballistic missile early warning satellites, and environment monitoring satellites. These satellite constellations, moreover, will be complemented by an array of terrestrial and aerial systems to provide a complete, overlapping array of surveillance capabilities. The expectation is that the United States is preparing to disrupt, degrade, deny, and destroy adversary space systems in the effort to establish information dominance; conversely, that the Americans are also preparing to face such attacks against their own systems.

Nor is American dependence upon space unique, in the Chinese view. PLA writings indicate that they are also closely observing other nations’ space developments. Russian space developments, in particular, seem to garner heavy Chinese attention. The Chinese military textbook Military Astronautics discusses Russian as well as American aerospace forces. The 2013 edition of The Science of Military Strategy observes that Russia has made space a major focus of its military refurbishment effort, and that Moscow has increased its investments in the space sector as the Russian

---

50Yuan, Science of Military Information, p. 324.
economy has improved. In particular, Russian dependence on space systems has been noted. One Chinese volume related the Russian observation that “[i]f Russia did not have an advantage in space, then it would not have reliable communications and reconnaissance, in which case, it would lack modernized information systems,” leaving Russia blind and deaf.

This will make the struggle for space dominance that much more pointed. If, as Chinese authors believe, without space dominance, one cannot obtain information dominance and aerial dominance, and therefore one cannot achieve land or maritime dominance, then space will inevitably be a battleground, if only in order to deny an adversary the ability to use space freely. Therefore, the space arena will be one of the very first scenes of conflict, as the two sides struggle for control of space. Neither side can afford to neglect this theater, as it will be a central determinant of who will secure information dominance.

Prospects for the Future

The PLA, despite being a Party army, is nonetheless a professional organization devoting substantial effort to analyzing the nature of modern conflict, in the Information Age, in order to better fulfill its “new historic missions.” As important, it is modernizing its forces, based on its findings.

In light of the “new historic missions,” for example, it should not be surprising that there has been a substantial effort to improve the PLA’s maritime capabilities. As the 2019 Department of Defense report to Congress on China’s military capabilities notes, the PLA Navy is replacing “obsolescent, generally single-purpose platforms in favor of larger, multi-role combatants featuring advanced, anti-ship, anti-air, and anti-submarine weapons and sensors.” At the same time, the Chinese navy is increasingly emphasizing the maritime domain, as it now regularly conducts various missions and operations farther and farther from Chinese shores. This has included indigenous construction of aircraft carriers, serial production of multiple different surface combatants and submarine classes, and the expansion of the PLA naval infantry force. This last effort, which is expected to see a tripling in size from 10,000 men organized in two brigades to 30,000 men in seven brigades, is consistent with the ongoing focus on Taiwan.

Similarly, the Chinese emphasis on space dominance would suggest that the PLA would not be focused solely on information collection systems, but would also push the development of space weapons. This is also consistent with what has been observed in China’s military space forces.

Under Hu Jintao, the PLA began to demonstrate overt space combat capabilities. The PLA tested its direct ascent, kinetic kill anti-satellite (ASAT) system in January 2007. Launched from Xichang

---

Satellite Launch Center, the Chinese ASAT destroyed a defunct Fengyun-1C weather satellite in low orbit. In the process, China also generated a massive amount of space debris. Almost precisely three years later, in January 2010, China engaged in what was termed an anti-missile test, involving “two geographically separated missile launch events with an exo-atmospheric collision also being observed by space-based sensors,” according to the United States Department of Defense. This test also helped Chinese scientists improve their ASAT system. And in August 2010, two Chinese microsatellites were deliberately maneuvered into close proximity, and apparently “bumped” each other.

These efforts at developing anti-satellite systems have been sustained under Xi Jinping. In May 2013, the Chinese conducted another anti-satellite test. This weapon, however, is assessed as demonstrating an ability to threaten targets as far as the geosynchronous belt, over 26,000 miles away. This is the first time that any nation has tested a weapon explicitly intended to hold satellites in that orbit at risk. Described by one senior U.S. military officer as the “most valuable orbit,” the geosynchronous region is populated by not only large numbers of communications satellites, but also strategic early warning satellites as well as weather satellites. The ability to destroy such satellites would be a major step towards establishing information dominance. China conducted what it termed a missile interceptor in July 2014, but which the United States has assessed as an anti-satellite weapon.

As important as the individual weapons, from the Chinese perspective, is the ability to field weapons in units, as part of a system-of-systems. In this regard, American intelligence assessments have concluded that the PLA is already employing these weapons at the unit level. These units, moreover, are part of the PLA Strategic Support Force (PLASSF), a new organization created at the end of 2015 that combines China’s electronic warfare, network warfare, and space warfare forces. Given the importance of these capabilities in the Chinese view for achieving “information dominance,” the consolidation of the units that conduct these operations into a single service would be consistent with efforts to secure such dominance.

**************


The Heritage Foundation is a public policy, research, and educational organization recognized as exempt under section 501(c)(3) of the Internal Revenue Code. It is privately supported and receives no funds from any government at any level, nor does it perform any government or other contract work.

The Heritage Foundation is the most broadly supported think tank in the United States. During 2016, it had hundreds of thousands of individual, foundation, and corporate supporters representing every state in the U.S. Its 2016 income came from the following sources:

Individuals 75.3%
Foundations 20.3%
Corporations 1.8%
Program revenue and other income 2.6%

The top five corporate givers provided The Heritage Foundation with 1.0% of its 2016 income. The Heritage Foundation’s books are audited annually by the national accounting firm of RSM US, LLP.
Testimony before the U.S.-China Economic and Security Review Commission


M. Taylor Fravel
Arthur and Ruth Sloan Professor of Political Science
Member, Security Studies Program
Massachusetts Institute of Technology

June 20, 2019
Commissioner Lewis, Commissioner McDevitt, members of the commission, thank you for inviting me to appear before you today to discuss China as a world-class military and its global military ambitions. I have been asked to comment on the strategy and employment of a world-class military force. My testimony will examine how authoritative and other Chinese sources define the concept of a world-class military, discuss how China’s military strategic guidelines can illuminate its military strategy and how the People’s Liberation Army (PLA) thinks about the use of armed force, and provide several recommendations for Congress to consider.

“World-Class Military” as a Force Development Concept

China’s goal of building a “world-class” military is commonly associated with the work report delivered by general secretary Xi Jinping at the Nineteenth Party Congress of the Chinese Communist Party (CCP) in October 2017. In the report, Xi said the party will “strive to basically complete national defense and military modernization by 2035 and fully build the people’s army into a world-class military by the middle of the century.”¹

Although Xi Jinping has used the term “world-class military” (世界一流军队) on multiple occasions, authoritative Chinese government and PLA documents do not provide a clear and accepted definition of the term.² Below, based on commentaries by PLA scholars and senior military officers, I will argue that, in a Chinese context, the idea of a “world-class military” should be viewed as a general, high-level, and overarching concept for force development, which outlines the intended outcome of PLA modernization and thus a set of benchmarks for assessing the PLA’s progress toward achieving this objective. In this way, the goal of building a world-class military defines what it means to “achieve the goal of a strong army,” a goal that Xi introduced in early 2013 as part of his “China dream.”³

At the same time, the notion of building a world-class military does not reflect a comprehensive military strategy. That is, it does not identify for what ends a world-class or even modernizing PLA will be used nor does it outline the manner in which such forces will be used. It is also not a geographic concept, in so far as it does not describe a global posture or role for the PLA except in the most general sense.

Origins of “Building a World-Class Military”

The concept of a world-class military was first used in early 2016 in a series of speeches that Xi Jinping gave before military audiences. At this time, the PLA had just launched far-reaching and

---

² In a Chinese context, the term could also be translated as “world-class army,” as the character 军 can refer both the PLA (解放军) and a military in a general sense (军队). In other contexts, “一流 (yīliú)” means “first-class” or “top-tier.” So, the idea of a world-class military is one that belongs in the top tier of militaries around the world.
unprecedented organizational reforms and was finalizing the five-year development outline for China's armed forces, as part the government’s Thirteenth Five-Plan. These development outlines provide a template for military modernization—what PLA sources often describe as “national defense and army building” (国防与军队建设). This outline would govern national defense and army building from 2016-2020. The year 2020 itself is important because it marked end of the second stage in Jiang Zemin’s 1997 “three-step” modernization plan for the PLA (see below).

In this context, Xi Jinping first raised the idea of building a world-class military. Specifically, it as part of a phrase describes the high-level goals for PLA modernization: “achieving the goal of a strong army, building a world-class military” (实现强军目标，建设世界一流军队). Although no official Chinese definition of the term world-class military exists, Xi’s first use of the term clearly indicates that it is a force development concept, part of Xi’s goal of transforming the PLA into a strong army. The simplest interpretation is that China would achieve this goal by building a force that was world class. In addition, the goal of a strong army provided the rationale and motivation for the far-reaching reforms announced at the end of 2015 and whose implementation began in 2016. Thus, the idea of building a world-class military explained how the goal of having a strong army would be realized—when the PLA had become a world-class force.

This link between the goal of a strong army and building a world-class military appears in other speeches Xi delivered before the Nineteenth Party Congress. In a 2017 speech on the occasion of the 90th anniversary of the founding of the PLA, for example, Xi repeated similar language from 2016. As he told the assembled troops, “We must thoroughly implement the party’s thought on strengthening the army, unswervingly follow the road of strengthening the army with Chinese characteristics, strive to achieve the Party's goal of a strong army under the new situation, and build our heroic people's army into a world-class military.”

By describing what a strong army should be, the idea of building a world-class army is clearly a force development concept, not a strategic concept that can illuminate the future employment of the PLA.

After the initial use of the term world-class military in 2016, it peaked in 2017 and has then declined. To put use of the term in context, Figure 1 shows the number of times “strong military goal” and “world-class military” have appeared in articles published in the Liberation Army Daily (解放军报), the PLA’s official newspaper. As the figure shows, the frequency of “strong

---


5 The PLA defines army building as “a general designation of all activities to build armed forces, maintain and improve the system of military power, and increase combat power.” See Junshi kexue yuan, ed., 中国人民解放军军语 [Military Terminology of the Chinese People’s Liberation Army] (Beijing: Junshi kexue chubanshe, 2011) p. 8.


army goal” peaked in 2013 and 2014, after Xi began to use the term. The frequency of the term “world-class military” has never exceed that of “strong army goal,” again suggesting the idea of building a world-class military explains how the goal of a strong army will be realized. Interestingly, the frequency of both terms has declined significantly. The data for 2019 is incomplete and includes articles published through June 15, 2019.

At the Nineteenth Party Congress, Xi linked the idea of building a world-class military with a general timetable for PLA modernization. Almost twenty years earlier, back in 1997, general secretary Jiang Zemin identified three goals for PLA modernization known as the “three steps” (三步走). By 2010, the PLA would create a foundation for modernization. By 2020, it would complete mechanization and “make great progress toward informatization.” Finally, the third step was “to achieve national defense and military modernization by the middle of the 21st century.”

Xi modified Jiang’s own timetable in two ways. First, by 2049, the goal was not just to realize defense and military modernization, but to complete building a world-class military. Thus, Jiang’s goal was now described as to “fully build the people’s army into a world-class military by the middle of the century.” Second, Xi added an interim stage by which to assess the PLA’s progress, to “strive to basically complete national defense and military modernization by 2035.”

Xi’s change raises the question of whether he altered Jiang’s original timetable for PLA modernization. However, little has been published in authoritative sources on the meaning of 2035 benchmark. One interpretation is that Xi accelerated Jiang’s original timetable for PLA modernization by fifteen years. Another is that Xi clarified how the modernization goal for mid-century that Jiang identified would be realized, as the inclusion of “basically” in the context of 2035 suggests additional work would be required before modernization would be “fully” complete in 2049. In other words, Xi defined the completion of PLA modernization as becoming “world class,” while also adding an interim step. A manual published by the CMC Political Department described Xi’s timetable as “a grand blueprint for comprehensively advancing national defense and military modernization.”

A final and perhaps simpler explanation is that the 2035 and mid-century benchmarks for PLA modernization complement development goals for the PRC. At the Nineteenth Party Congress, Xi introduced a two-stage plan for China’s national development. By 2035, the work report noted, “socialist modernization” would be “basically realized.” By mid-century, China would become “a great modern socialist country that is prosperous, strong, democratic, culturally advanced, harmonious, and beautiful.” Identification of 2035 as a milestone in China’s

---

10 Xi Jinping, “Work Report.”
11 One Chinese sources that makes this point is Guofang daxue dangwei lilun xuexi zhongxin nzu, “把人民军队全面建成世界一流军队 [Fully Build the People’s Army into a World-Class Military],” Qiushi, No. 13 (2018).
national development by definition carried implications for the level of military modernization that would need to be achieved at that time. As one commentary notes, PLA modernization should be “closely aligned with the strategic arrangement for national modernization.”

In addition, the party congress work report did not limit the use of “world class” to describe only the desired outcome of PLA modernization. The report uses world class to describe the goals for transforming other parts of the state and Chinese society. These include fostering “world-class advanced manufacturing clusters,” cultivating “world-class scientists and technologists,” turning “Chinese enterprises into world-class, globally competitive firms,” and working “to build Chinese universities into world-class universities and develop world-class disciplines.”

**Commentaries on “Building a World-Class Military”**

Authoritative Chinese government and PLA sources do not contain any definition of the term “world-class military.” To better understand the meaning of the term, this section reviews commentaries on the term authored by PLA officer and scholars. Most of them have appeared in party or military publications, such as *China Military Science* (中国军事科学) (the journal of the PLA’s Academy of Military Science), in the “military forum” (军事论坛) section of the *Liberation Army Daily*, and *Seeking Truth* (求是) (a party journal). These commentaries are less authoritative than leadership speeches or government statements and documents, as the authors are usually writing in their personal capacity (based on their qualifications) and not representing their organizations. These commentaries provide support for the argument that “building a world-class military” is a force development or army building concept. The commentaries revolve around how to identify what constitutes “world class” in an effort to develop benchmarks for assessing progress for the PLA’s modernization.

These commentaries describe world-class militaries in several ways. The first concerns the overall capabilities of world class militaries. Simply put, they are as capable as the best militaries in the world. One professor from the PLA’s National Defense University (NDU) describes being world class as “having the ability and strength to compete on a par with the world-class militaries” and “having the powerful strength and deterrent force to match [抗衡] the militaries of world powers [世界强国].” A professor from the Academy of Military Science (AMS) describes world class militaries as being able to “compete with world-class rivals [对手].” Elsewhere world-class militaries are viewed as “those who have the military ability to compete with the world’s strongest players.”

The second description of world-class militaries in these commentaries concerns the characteristics of world-class militaries that makes them world class. Most of the commentators

---

14 “Leap toward a World-Class Military.”
agree with Cao Yimin, chief of staff of the ground forces in the Western Theater Command, who describes world-class militaries as possessing world-class operational theories, personnel, weapons and equipment, law-based management, combat power, and innovation abilities. Likewise, as a scholar from AMS writes, “a so-called world-class military means having world class military theories, military systems, weapons and equipment, personnel, and training levels.”

A number of the commentaries highlight the need for clear benchmarks or standards to measure the PLA’s progress toward becoming world class. These benchmarks also offer insight into how the PLA views what constitutes world class. AMS scholar Xiao Teifeng offers a lengthy description, which distinguishes between benchmarks for operations and for army building. Regarding operations, he writes:

> World class militaries should have advanced military thinking and strategy and tactics, efficient and sensitive command and control, real-time or near-real-time intelligence surveillance capability, combined and integrated firepower strike capability, actual combat training, trans-regional and trans-continental force delivery capability, and comprehensive, efficient and seamless link support level.

Turning to army building, Xiao offers an even longer list of benchmarks:

> World-class militaries should … possess advanced leadership and management concepts, and intensive and efficient military institutions and organizations; have world-class modern equipment, especially realizing the composite development of mechanization, informatization and intelligentization; have a perfected system of military regulations and rules; possess abundant and high-quality military human resources and high comprehensive quality of military and civilian personnel; realize the deep military-civil fusion and the people and form a "whole country" and “great national defense” system; have a good international image and a high degree of internationalization.

Implicit and often explicit in these discussion of benchmarks is the assessment that the PLA currently falls short of what might constitute a world-class military. Many commentaries note that China’s level of military modernization lags behind the country’s economic accomplishments and significant reforms are still needed for the PLA to become world class. They also note that the goal of becoming world class underscores the imperative of

---


implementing the 2016 reforms.\textsuperscript{24} As one group of AMS scholars write, “Compared with the world's first-class militaries, our army is still in the historical stage of the composite development of mechanization and informatization and many 'shortcomings' [短板] for development exist.”\textsuperscript{25}

As a world-class military, the United States looms large in Chinese discussions of what it means to be world class. Nevertheless, these commentaries do not dwell excessively on the United States. Some of them mention the US pivot or the rebalance to Asia as part of the security challenges China faces and that a world-class or at least more modernized PLA would be better able to address.\textsuperscript{26} Others describe the United States as a world-class military, often along with Russia and sometimes France and the United Kingdom. Nevertheless, the implication of becoming world class is clear: China would be in a position to match and deter the United States.

These commentaries do not discuss the geographic characteristics or requirements of a world-class military. That is, the commentaries do not describe a world-class military as a global military that can project power around the world in the way that the United States military can today. Certainly, some degree of power projection is implied by using the United States, Russia, France and others as current examples of world-class militaries. Nevertheless, there is little discussion in these commentaries of where the Chinese military would be used beyond East Asia or what kind of global posture would be required in order to be world class. However, two exceptions exist. The first is references to China’s overseas interests, though these commentaries do not define them in detail or link them to specific military forces.\textsuperscript{27} The second is international security cooperation, as these commentaries note how world-class militaries are able to participate in international security cooperation and make contributions to the international community.\textsuperscript{28}

**The Military Strategic Guidelines**

As argued above, as used by Xi Jinping and in other Chinese sources, the idea of building a world-class military is a force development concept. As such, it does not illuminate broader questions relating to China’s military strategy or force employment. Instead, a review of China’s national military strategy, contained in what the PLA calls the “strategic guidelines” (战略方针) or “military strategic guidelines” can help to answer these questions. Below, I argue that, from


\textsuperscript{25} Zhang Dongjiang, Wu Jun, Xiao Tiefeng, “The Scientific Connotation and Construction Path of President Xi’s Important Thought of "Building a World-class Military,” p. 3.


\textsuperscript{27} Liu Jianggui and Han Weifeng, “Some Thoughts on Building a World-Class Military],” p. 27.

the standpoint of strategy and warfighting, the PLA remains focused on East Asia more than any other region.\textsuperscript{29}

\textit{Overview of the Strategic Guidelines}

In PLA’s approach to doctrine, the military strategic guidelines (sometimes called just the strategic guidelines), contain the essence of China’s national military strategy at different points in time. The PLA itself describes the strategic guideline as containing the “principles and plans for preparing for and guiding the overall situation of war.”\textsuperscript{30} The concept of the strategic guideline has a long history in the PLA and the CCP. It was first used in the early 1930s to provide operational guidance when faced with repeated Nationalist efforts to invade the Jiangxi base area and destroy the Red Army. It was then used during the Long March, in the war against Japan, and during all phases of the civil war with the Nationalists that began in 1946.

After PRC’s establishment in 1949, the concept of the strategic guideline has been used to delineate China’s national military strategy. The purpose of the guidelines is to answer core questions that, in turn, shape the development of the PLA’s operational doctrine, force structure, and training. As the Chief of the General Staff Zhang Wannian said when developing the 1993 strategy, the strategic guideline should answer following questions: “With whom will China fight? Where will China fight? What is the character of the war China will fight? How will China fight?”\textsuperscript{31}

In the jargon of Chinese strategy, the guidelines identify the following:

\begin{itemize}
  \item “With whom China will fight” identifies the primary strategic opponent (主要战略对手) and operational target or China’s main adversaries
  \item “Where will China fight” identifies the primary strategic direction (主要战略方向), where China expects armed conflict to occur
  \item “What is the character of the war China will fight” identifies the basis of preparations for military struggle (军事斗争军备基点), which describes how the PLA envisions warfare will be conducted at any point in time
  \item “How China will fight” identifies the main form of operations (作战形态) that the PLA should be able to conduct and basic guiding thought for operations for executing such operations.
\end{itemize}

The formulation of the strategic guidelines should be viewed through the lens of the CCP’s approach to policymaking in other domains. With one exception, each guideline has been formulated by the Central Military Commission (CMC) of the Central Committee of the CCP, the party’s top body for military affairs, with the final consent of the top party leader. In other


\textsuperscript{30} Junshi kexue yuan, ed., \textit{Military Terminology of the Chinese People’s Liberation Army}, p. 50.

\textsuperscript{31} Guo Xiangjie, ed. 张万年传（下）[Zhang Wannian's Biography (part 2)] (Beijing: Jiefangjun chubanshe, 2011), p. 60.
words, the strategic guideline for any period represents the consensus of the PLA high command, approved by the paramount leader. New strategic guidelines are introduced in a speech delivered at an enlarged meeting of the CMC, which gathers the most important officers in the PLA (including the heads of the services, theater commands, academies and other top-level military bodies). Such speeches are similar to the work report that the party general secretary delivers at a national party congress. The content of the strategy is then distributed through a process of “communicating documents” or “chuanda wenjian,” in which the contents are disseminated through lower levels of the PLA (often through meetings of party committees in different units.) Importantly—and unlike in the United States—the content of the strategic guidelines is not contained in a document that is widely accessible inside the PLA or even the civilian parts of the CCP, much less Chinese society at large.

Like high-level CCP policymaking, the adoption of a new strategic guideline represents only the beginning of the process of implementing a new military strategy. They contain the major goals to be achieved and the principles that should guide the achievement of these goals, but not a detailed plan of implementation. The expectation is that the details will be fleshed out afterward in a way consistent with the objectives and principles in the guidelines, often in the context of the development of national five-year plans and corresponding military development outlines drafted on the same schedule. Thus, the PLA can adopt a new military strategy quickly, as circumstances require, because the details will added later.

Since 1949, the PLA has adopted nine military strategic guidelines, or roughly one every eight years. The first five strategies, adopted between 1956 and 1980, focused on how to defeat either an American or Soviet invasion of China. The last four strategies, adopted between 1988 and 2014, have addressed how to prevail in local wars over limited aims on China’s periphery, primarily in conflicts involving Chinese sovereignty such as the status of Taiwan, the border dispute with India, and maritime disputes.

Some of these nine strategic guidelines were more important than others. The strategies adopted in 1956, 1980, and 1993 constituted major changes in the PLA’s approach to strategy. By major change, these guidelines outlined a new vision of warfare that required transforming the PLA’s approach to operational doctrine, force structure, and training. The other six strategies reflected minor changes or adjustments and refinements existing strategic guidelines. Either they did not contain a new vision of warfare or did not require major organizational changes.

All of the guidelines have been based on the Chinese idea of “active defense” (积极防御). Mao Zedong defined active defense in 1936 as “offensive defense or defense through decisive engagements.” In general, active defense refers to the idea that China’s strategy is strategically defensive, but, once China is attacked, China will engage in offensive actions at the operational and tactical levels to achieve defensive goals.

“Winning Informatized Local Wars”

The PLA’s current military strategy was adopted in July 2014, with the formulation of “winning informatized local wars” (打赢信息化局部战争). It is also often described as the “military strategic guideline of the new situation” (新形势下军事战略方针) in order to link the strategy
with Xi Jinping’s leadership of the party and the PLA. The 2014 strategy is the second adjustment to the 1993 strategic guideline adopted after the Gulf War, in which the PLA highlighted the role of high technology in warfighting and the shift to joint operations among the services.

The 2015 white paper lists the “strategic tasks” (战略任务) or goals for China’s military:32

- Deal with (应对) a wide range of emergencies and military threats, and effectively safeguard (有效维护) the sovereignty and security of China's territorial land, air and sea
- Resolutely defend (坚决捍卫) the unification of the motherland
- Safeguard (维护) China's security and interests in new domains
- Safeguard the security of China’s overseas interests
- Maintain strategic deterrence and carry out nuclear counterattack
- Participate in regional and international security cooperation and maintain regional and world peace
- Strengthen efforts in operations against infiltration, separatism and terrorism so as to maintain China’s political security and social stability
- Perform such tasks as emergency rescue and disaster relief, rights and interests protection, guard duties, and support for national economic and social development

The 2014 strategy contains important elements of continuity with China’s previous military strategic guidelines, especially the 1993 and 2004 strategies. First, the 2014 strategic guideline remains premised on how to prevail in local wars on China’s periphery involving Chinese sovereignty claims. China has not yet adopted a strategy that has emphasized substantially broader goals than contained in 1993 and 2004 strategic guidelines. Second, within the context of local wars, the primary strategic direction or the most important area where the PLA believes conflict will occur remains the southeast. The primary operational target remains Taiwan along with the United States to the degree it becomes involved in Taiwan’s defense. Likewise, the southwest (the border with India) and the south (the South China Sea) are still secondary strategic directions or not the top priority in China’s military strategy. Third, the main form of operations for the PLA to be able to conduct remains joint operations, which the PLA now conceptualizes as “integrated joint operations” (一体化联合作战). Fourth, the strategic guiding thought or strategic guidance continues to stress crisis prevention, crisis management, and escalation control if war occurs. Finally, the 2014 strategic guideline remains premised on concept of active defense. Today, the PLA defines active defense as “using proactive offensive actions to defend against the attacking enemy.”

Nevertheless, the 2014 strategic guideline contains several important differences with previous strategies. First, the basis of preparations of military struggle—what kind of wars the PLA should be prepared to fight—was adjusted to highlight the role of informatization in warfare. In contrast to the 2004 strategic guideline, the 2014 strategic guideline indicates that informatization is no longer just a condition of warfare, but the dominant feature or characterization. In the simplest terms, informatization refers the collection, processing, and

---

33 Junshi kexue yuan, Military Terminology of the Chinese People’s Liberation Army, p. 52.
utilization of information in all aspects of warfighting in order to seamlessly link individual platforms in real-time from across the services to gain leverage and advantage on the battlefield.

Second, perhaps the most important change in the 2014 strategic guideline is the emphasis on the maritime domain. Specifically, the new strategy called for “highlighting maritime military struggle and preparations for maritime military struggle.” Thus, this marked the first time that any domain of warfare has been singled out in a strategic guideline and at the strategic level. Maritime military struggle does not refer only to naval conflict but instead it refers to the maritime domain in many of the local wars the PLA may need to fight, especially Taiwan but also of course in maritime disputes in the East and South China Seas. This component of the 2014 strategy, however, appears to remain under development, as the phrase has only appeared thirty-four times in the Liberation Army Daily since 2014. In this way, the lack of development of this aspect of the 2014 strategy may be a victim of the organizational upheaval created by the PLA’s reorganization that began in 2016.

Third, and relatedly, the main strategic direction was expanded to include parts of the Western Pacific, as it would relate to a conflict over Taiwan. This perhaps reflects what other Chinese military sources have described as “forward defense” (前沿防卫), which seeks to push the frontline of combat away from China’s national borders.

Based on the limited sources that are available, my analysis suggests that the strategic guideline was adjusted in 2014 for two reasons. The first and most important reason was to provide an overarching rationale or justification for the reforms that were launched in 2016. The previous strategic guidelines adopted in 1993 and 2004 had called for the PLA to be able to conduct joint operations, but organizational and other reforms were never implemented to enable the PLA to be able to do so. The link between changing the strategic guideline and pursuing reform appeared in the “decision” of the third plenum in November 2013. In the preamble to the section on defense issues, the plenum’s decision called for both “improving the military strategic guideline of the new period” and “reform of the military leadership system.” This was the first time that the decision to pursue organizational reforms was announced simultaneously with the decision to change the strategic guidelines. In December 2013, during a speech at an enlarged meeting of the CMC, Xi made this link clear: “we have extensively explored the command system for joint operations, but the problem has not been fundamentally resolved,” citing numerous “deep contradictions.” The reforms have been unprecedented and constitute the most important organizational transformation of the PLA in over sixty years. The new strategic guideline provided a high-level rationale and justification to guide these reforms. Even though the 2014 guideline did not envision waging war in a new way, the reforms it justified are poised to have a significant effect on the PLA’s military effectiveness if implemented successfully.

34 China’s Military Strategy.
37 Fravel, Active Defense, p. 34.
The second reason for changing strategy in 2014 was to note the growing importance of the maritime domain for Chinese interests. As noted in the 2015 white paper on Chinese military strategy, “It is thus a long-standing task for China to safeguard its maritime rights and interests.” Chinese sources identify growing threats in the maritime domain, including in the South China Sea as well as in a Taiwan conflict, along with potential threats to China’s growing interests overseas. The emphasis on the maritime domain also provides the naval pillar of China’s aspirations to become a maritime power, as first codified at the Eighteenth Party Congress in 2012. Toward this end, the service strategy for the PLAN was altered from focusing only on the “near seas,” or defense of Chinese sovereignty interests in East Asia, to gradually combining near seas defense (近海防御) with far seas protection (远海护卫), or a focus on China’s interests beyond the region.38

Implications of the Strategic Guidelines for the PLA’s Global Role

This review of China’s strategic guidelines and its current military strategy contains several implications for considering the global role of the PLA today. First, geographically, in terms of force employment and warfighting, the PLA remains focused primarily on East Asia (defined broadly to include the eastern parts of the Western Pacific). The reason is that China remains involved in disputes over its sovereignty, which are the kind of issues that could most easily escalate into armed conflict. Toward this end, the first two strategic tasks for the PLA listed in the 2015 white paper on China’s military strategy are to “effectively safeguard the sovereignty and security of China's territorial land, air and sea” and “resolutely defend the unification of the motherland.”39 Actions and operations outside the region, to include “protecting the security of overseas interests” and participation in international security cooperation rank fourth and sixth on this list, respectively. They are not unimportant, but they are also not the primary focus in the PLA’s current military strategy.

Second, so long as China’s major sovereignty disputes remain unresolved, especially Taiwan, its military strategy will continue to emphasize East Asia over other regions. This does not mean the PLA will not continue to explore how to operate in other regions or even increase its ability to do so—it certainly has, as the establishment of a PLA base in Djibouti in 2017 indicates. However, the PLA will likely not expand significantly beyond East Asia until its major sovereignty disputes are resolved or until it has achieved a level of military dominance in these disputes such that the final outcome of these disputes is not in doubt from China’s perspective. After all, Taiwan’s unification remains part of the preamble of the constitution of the PRC. Military dominance in these sovereignty disputes will be hard to achieve, however, especially over Taiwan, so long as the United States maintains its commitments and pledges to Taiwan’s security under the Taiwan Relations Act.

Third, the focal point of military competition between the United States and China will also be centered in East Asia. The PLA’s ongoing modernization since the late 1990s has enabled it to

38 In Chinese sources, the near seas are generally defined as the Yellow Sea, East China Sea, waters to the east of Taiwan, and the South China Sea. The far seas are the waters that lie beyond the near seas.
39 China’s Military Strategy.
project power farther from its shores than ever before, challenging the sanctuary that US forces previously enjoyed in maritime East Asia. Although distance creates challenges for US force projection into East Asia, China also faces challenges to projecting its forces farther and farther from its shores, especially beyond the range of air defenses and fighter aircraft based on mainland China that can protect naval forces at sea. Thus, competition between the United States and China will focus on a contested zone in maritime East Asia into which both sides can project power but neither may be able to dominate. Nevertheless, China’s current strategy is not premised on expelling or extruding the US military from the region. Nor is it, as the US National Defense Strategy suggests, a strategy “that that seeks Indo-Pacific regional hegemony in the near-term.” Of course, China would likely prefer that the United States was not a military power in the region, but the question remains at what price China is willing to achieve that goal. So far, China is focused on diminishing the ability of the United States to play a decisive role in China’s sovereignty disputes, especially Taiwan. China’s strategy remains focused on how to prevail in its sovereignty disputes and how to do so if the United States if it becomes involved in these disputes.

Fourth, China’s global military presence outside of East Asia will grow in the coming decade, but it is likely to be relatively modest when compared with other major military powers. The United States currently has military bases, operating locations and access points in roughly forty countries, often with multiple facilities in the same country. France and Great Britain have roughly overseas military bases in eleven countries and Russia nine. Although much speculation surrounds where China might establish additional military bases in addition to the facility in Djibouti, they will most likely be astride the Indian Ocean. In peacetime, even if China does not establish more overseas bases, an increasingly global presence of the PLA could enable further cooperation between the United States and China. In 2017 and 2018, for example, the two governments worked together to facilitate the removal of fissile nuclear material from Ghana and Nigeria, respectively. In wartime, however, in a conflict between the United States, China’s bases beyond East Asia would likely be quite vulnerable if the United States chose to attack them.

Policy Recommendations

The analysis above yields several recommendations for Congress:

First, Congress should increase funding for open-source analysis of issues relating to China’s foreign and security policies. A tremendous amount of information is available, in Chinese, from a range of open sources. These sources include some of those cited in this testimony, such as newspapers, military journals, military textbooks, military books, among others. Much can be gleaned from these sources about how China approaches questions of strategy if they are systematically collected, analyzed, and translated into English to make them accessible to a wide audience. Since the end of the Cold War, however, support for open source analysis, and making it available as widely as possible inside and outside the government, has waned even though such sources have perhaps never been more important than they are today. Thus, Congress should consider significantly increasing funding for Open Source Enterprise and for making it as widely available as possible.

Second, Congress should examine the possibility and feasibility of a strategy of “active denial” for the US to adopt to meet the challenges posed by China’s military modernization in East Asia. This strategy would seek to deny China a quick victory and force it to face the prospect a protracted contest to be able to achieve its national objectives through the use of armed force. Such an approach can increase crisis stability and deterrence. The key components are to increase the resiliency and survivability of US forward-deployed forces, emphasize capabilities to counter Chinese power projection in the region, and work more closely with the allies.

---

"Strong Army Goal" and "World-Class Military" in the Liberation Army Daily, 2012-2019
Testimony before the U.S.-China Economic and Security Review Commission

Hearing on A ‘World-Class’ Military: Assessing China’s Global Military Ambitions

Dr. Phillip C. Saunders
Director, Center for the Study of Chinese Military Affairs,
National Defense University
June 20, 2019

Introduction

Economics is the ultimate foundation of military power. The size and technological sophistication of a country’s economy serves as a hard constraint on the potential size and capability of its military forces. In the case of China, rapid economic growth and increasing technological capability in the reform era (1979-present) have provided the foundation for significant improvements in the capability of the People’s Liberation Army (PLA). Chinese leaders have placed increasing emphasis on building a military that can “fight and win wars” and have backed up this commitment with sustained increases in military spending. The professed goal of military modernization is to basically achieve modernization by 2035 and to build a world class military by mid-century.

This testimony examines trends in Chinese defense spending and their implications for future military modernization. It begins by examining the Chinese official defense budget, which excludes a number of items usually considered to be part of defense spending. These “off budget” revenues and expenditures mean that the official defense budget understates actual
defense spending, but the size of these “off budget” expenditures appears to have declined over time. A survey of estimates of Chinese defense spending suggests that actual spending is about $30-50 billion more than the official budget.

The testimony then examines trends in defense spending. As Chinese economic growth has slowed, defense spending has grown at a rate that has sometimes outpaced GDP growth, but which remains roughly consistent with growth in national government spending. The data do not indicate that defense spending is becoming a higher relative priority for Chinese leaders. Defense spending has declined over time as a percentage of government expenditure (to about 5 percent in 2017 and 2018) and has fluctuated between 1.2 and 1.4 percent of GDP (with a modest increase in 2014-2016 that was not sustained).

Projections that Chinese economic growth will continue to slow in the future and the potential for significant fiscal and financial system crises suggest that future defense budgets will experience slower growth than in the past. China may eventually reach an equilibrium point where defense budgets grow at slower, steady-state level that produces slower improvements in defense capabilities. This might change if Chinese leaders conclude that external military challenges—especially those posed by the United States—constitute the most important threat to the Chinese state and continued Chinese Communist Party (CCP) rule.

**Chinese Defense Spending Data**

China releases a figure for its total annual defense budget, but the available public information is extremely limited. The Chinese annual government budget lists figures for central government and local government spending on national defense, with no breakouts by service or type of expenditure. In some years, China has published white papers with defense budget information or submitted reports on defense spending to the United Nations. These provide a breakout of
defense spending in three broad categories: 1) Personnel, 2) Training & Maintenance, and 3) Equipment (including research and experimentation, procurement, and maintenance costs).

China does not release budget figures for the individual services or figures for the 13-15 categories it uses internally to manage the PLA budget.²

The official Chinese defense spending figure excludes a number of categories related to national defense, but which are contained in other parts of the government budget (and not broken out separately). These include the budget of the paramilitary People’s Armed Police (PAP); some domestic procurement and research and development (R&D) expenses; procurement of foreign weapons; some demobilization, retirement, and education expenses; some military-related construction expenses; some military aspects of the space program; spending on nuclear weapons and strategic rockets; and reimbursement for military expense in disaster relief.³ The official budget also does not include various “off budget” revenues, such as revenue and goods produced by military enterprises.

China’s official defense budget figure for 2017 was 1,026,635 million RMB, or about $159.9 billion. The Office of the Secretary of Defense estimates that actual military related spending in 2017 was more than $190 billion, or about $30 billion more than the official budget.⁴ A Defense Intelligence Agency report looking at the 2018 budget gives a similar estimate that actual

defense spending in 2018 was about $30 billion higher than the official budget.\(^5\) IISS estimates that actual Chinese defense expenditure in 2016 was about $53 billion larger than the official budget.\(^6\) SIPRI, which uses a broader definition of defense expenditure that includes pensions and other expenses, estimates China’s 2017 defense expenditure at $227.8 billion, about $69 billion higher than the official budget.\(^7\)

This data collectively suggest that China spends significantly more on defense than the official defense spending estimate, perhaps $30-50 billion more. These estimates contrast with figures from the 1990s, when analysts believed that actual Chinese defense spending might be 2-3 times the official figure. The changes reflect the fact that central government spending on defense has increased steadily over the last twenty years, often at a double-digit rate, and that many off-budget revenues and expenditures have moved “on budget” or declined in size relative to the official budget.

For example, Chinese President Jiang Zemin ordered the PLA to divest most military-owned enterprises in 1998, and a second round of divestiture took place over the last several years as part of ongoing anti-corruption efforts. The divestiture greatly reduced off budget revenue and expenditure. The omission of procurement of foreign weapons from the official budget used to amount to about $3 billion annually, but SIPRI data from 2017 indicate China only imported about $1.190 billion in arms in 2017.\(^8\) This is both an absolute decline in value from earlier years, and an indication that the omitted category is becoming relatively smaller as a percentage of overall PLA spending on weapons and equipment.


\(^7\) SIPRI Military Expenditure Database (Stockholm: SIPRI, 2019), https://www.sipri.org/databases/milex

\(^8\) SIPRI Arms Transfers Database (Stockholm: SIPRI, 2019), https://www.sipri.org/databases/armstransfers
The appendix has data on trends in Chinese defense spending based on official budget figures. A recent DIA report notes that “China’s military spending increased by an average of 10 percent (inflation adjusted) per year from 2000 to 2016 and has gradually slowed to 5 to 7 percent growth during the past two years [2017-2018].” As Chinese economic growth has slowed over the last decade, defense spending has grown at a rate that has sometimes outpaced GDP growth (as in 2014-2016), but which has remained roughly consistent with overall GDP growth and with growth in central government spending. In other words, the official data do not indicate that defense spending is becoming a higher relative priority for Chinese leaders. Figures 1 and 2 indicate that defense has declined over time as a percentage of government expenditure (about 5 percent in 2017 and 2018) and has fluctuated between 1.2 and 1.4 percent of GDP.

Figure 1: PRC Defense Budget at % of Public Budget Expenditures (PBE)

![Graph showing PRC defense budget as a percentage of PBE from 1998 to 2018](source:China Statistical Yearbook)

---

9 *China Military Power*, 20.
If it were possible to develop consistent estimates for the defense spending that is missing from the official budget, these percentages would both be somewhat higher. However, since “off budget” expenditures have either migrated into the official budget or declined in significance relative to official budget spending, the trend lines in defense spending as a percentage of government expenditure and defense as a percentage of GDP would not change radically. In fact, addition of data on off budget spending would likely show a steeper fall in the percentage of central government spending devoted to defense over time, since off budget spending was more significant in earlier years.

The public data, while limited, are sufficient to indicate several significant trends in defense spending over time. Although China does not release budgets for the individual services, the Chinese 2004 defense white paper indicated that the PLA was increasing spending on the navy, air force, and Second Artillery Force (now Rocket Force), increasing their relative share of the overall PLA budget at the expense of the ground forces.  

Table 1, which examines the data that

---

China submitted to the United Nations with breakouts of PLA spending, shows that the share of the PLA budget devoted to equipment increased from 32.2 percent in 2007 to 41.1 percent in 2017.

| Table 1: Chinese Military Expenditure Breakouts, 2007 and 2017 |
|----------------|--------------|--------------|
|                | 2007         | 2017         |
| Personnel      | 120,015      | 321,052      |
|                | 33.8%        | 30.8%        |
| Training and   | 121,042      | 293,350      |
| Maintenance    | 34.0%        | 28.1%        |
| Equipment      | 114,434      | 428,835      |
|                | 32.2%        | 41.1%        |
| Total          | 355,491      | 1,043,237    |


This indicates that the PLA’s equipment buildup and modernization efforts are consuming an increasing share of the growing defense budget, not surprising in a military that is expanding the size of its air, naval, and missile forces and investing in replacing older systems with upgraded modern weapons. It is notable that the share of the budget devoted to personnel expenses decreased from 33.8 percent of the budget to 30.8 percent. Increases in the overall defense budget permitted major increases in PLA salaries and benefits during this period, even as the budget shared devoted to personnel declined. However, as the PLA competes with the civilian economy for soldiers, officers, and non-commissioned officers with greater technical knowledge, personnel costs are likely to rise in the future.

The major Chinese military reforms that began in late 2015 have changed the relative size of the services in the PLA (for example, the PLA Army now makes up only half of the total force) and surely have caused shifts in the budgets allocated to Central Military Commission offices, the services, the five theater commands, and the new Strategic Support Force and Joint Logistics
Support Force. They also stripped many of the economic functions away from the PAP, ended its dual subordination to the State Council, and refocused it on support to military operations, internal security, and maritime security functions. The Chinese Coast Guard was also resubordinated to report directly to the PAP. This strengthens the case for considering PAP (and Coast Guard) spending as part of China’s overall defense spending. However, in 2018 the PAP (and Coast Guard) spending continued to be listed within the public security budget. The PAP budget in 2017 was 192,369 RMB, or $29.9 billion, which does not include the Coast Guard budget.

The lack of detailed, publicly available data on Chinese defense spending imposes limits on open source analysis of trends within the PLA. For example, it is difficult to track expenditures on specific weapons programs, the relative share of the service budgets over time, or details of personnel expenses. However, financial data on the Chinese defense industry are more available and may yield interesting insights.

The commission may wish to request classified briefings on specific aspects of Chinese defense spending or commission research on the financial details of the Chinese defense industry.

---

12 See Joel Wuthnow, China’s Other Army: The People’s Armed Police in an Era of Reform, China Strategic Perspectives 14 (Washington, DC; NDU Press, April 2019).
Potential Impact of a Chinese Economic Slowdown

Projections that Chinese economic growth will continue to slow in the future, the drag of government budget deficits on the financial system, and the potential for significant fiscal and financial system crises all suggest that future Chinese defense budgets will also experience slower growth than the 5-7 percent increases in recent years. If the CCP leadership maintains the relative priority of defense spending, the future growth rate of PLA budgets will continue to decline in line with slower GDP growth and slower growth in central government spending. There are some indicators that smaller increases in defense spending are already starting to impose some constraints on the PLA, and that these are likely to increase over time.

The surge in procurement of existing and planned PLA advanced weapons systems implies significant long-term financial commitments to operate, maintain, and upgrade these systems over their life-cycles. The recent expansion of the navy, air force, Rocket Force and the cost of the advanced weapons systems they operate will incur continuing expenses for the next 20-30 years, regardless of future PLA decisions about procurement. These financial commitments to traditional air, naval, and sub-surface platforms—which will eventually turn into what the U.S. military calls legacy systems—may eventually limit PLA financial flexibility to invest in new areas of warfare.

Slower growth in defense spending is already producing increasing competition among the PLA services for roles and missions (and the budgets that accompany them). For example, the higher priority accorded to the maritime domain by Xi Jinping has prompted efforts by the air force, Rocket Force, and even the army to develop and showcase capabilities relevant to maritime
operations. Similar trends are evident in long-range precision strike platforms, where the navy, air force, and Rocket Force all have systems that perform similar missions. In an environment where military budgets are growing more slowly, inter-service competition over missions and resources may impede operational cooperation. This may also be the case in the nuclear domain as the PLA Navy’s submarine-launched ballistic missile–equipped nuclear submarines become operational and if the PLA Air Force develops nuclear capabilities.

One question going forward is whether the removal of the service commanders from membership on the CMC will allow that organization to override parochial service considerations and make procurement decisions that maximize PLA joint capabilities. Recent interactions with PLA officers suggest that the PLA is grappling with how to reconcile competing service and theater command requests for advanced systems and additional spending. According to one PLA officer, the service commanders regularly petition the CMC for additional money to fund their priorities.

One interesting new development involves efforts by the services and the Chinese defense industry to lobby for increased defense expenditures and for procurement of specific weapons systems. Military services are beginning to use more sophisticated public relations efforts—including movies such as *Shy Hunter* and *Operation Red Sea*—to boost recruiting and advocate for increased funding for individual services and branches. The Chinese defense industry is also making increasing use of advertising, lobbying, and defense exhibitions to influence PLA decisions about arms procurement. A good example is the FC-31 stealth fighter designed by

---

15 See Ian Burns McCaslin and Andrew Erickson, “The Impact of Xi Era Reforms on the Chinese Navy,” in *Chairman Xi Remakes the PLA*, 125-170.

16 For a look at the efforts of the air force, see Ian Burns McCaslin and Andrew S. Erickson, *Selling a Maritime Air Force: The PLAAF’s Campaign for a Bigger Maritime Role*, (Montgomery, AL: China Aerospace Studies Institute, April 1, 2019).
Shenyang Aircraft Corporation. Although the FC-31 lost out to Chengdu Aircraft Corporation’s J-20 in the PLA Air Force stealth fighter competition, Shenyang has mounted ambitious efforts to market the fighter to foreign customers and to try to lobby the PLA Air Force and PLA Navy naval aviation to procure the aircraft. The company is reportedly trying to modify the aircraft for possible use on Chinese aircraft carriers.\(^\text{17}\)

Moreover, as the PLA competes with the civilian economy for the high-tech talent needed to operate a modern military, personnel costs are likely to rise significantly as the PLA pays more for salaries, benefits, personnel expenses (such as training, education, and relocation costs), and retirement costs. China’s booming technology sector offers higher salaries and a less restrictive working environment than military careers.

An economic downturn or crisis could delay the production and fielding of high-end assets, which would constrain military modernization. An economic slowdown would probably result in even slower or no growth in defense budgets, which would further heighten inter-service competition for resources and missions. However, it is also possible that Xi or another future Chinese leader could decide to devote a higher proportion of Chinese spending to defense, in which case an economic slowdown would not necessarily result in scaled-back military ambitions.

These factors collectively suggest that China will eventually reach an equilibrium point where defense budgets grow at slower, steady-state level that produces more gradual improvements in defense capabilities. Given China’s significant recent progress in military modernization, and the

likelihood that other advanced militaries will also face budget constraints, such an equilibrium point might still be sufficient to achieve China’s goal of building a world class military.

While resources devoted to defense matter, the biggest constraint in improving Chinese military capabilities and taking full advantage of advanced weapons and the reformed military structure is likely to rest with the quality of the personnel in the PLA, especially the senior military leadership. Reforms to the PLA educational, training, personnel assignment, and promotion systems are critical to building officers who can function as effective joint commanders and staff officers in a modern military.  

**Conclusion**

The trends discussed above might change if Chinese leaders conclude that external military challenges constitute the most important threat to the Chinese state and continued Chinese Communist Party (CCP) rule. China has tried to avoid direct confrontation with the United States, but recent shifts in U.S. policy and strategy have focused the U.S. government and the Department of Defense on posturing for long-term strategic competition with China and Russia. From China’s point of view, this represents a significant adverse shift in the strategic environment that may require adjustments in its grand strategy and military modernization efforts, including adjustments in the resources devoted to defense. To date, however, Chinese leaders have sought to stabilize relations with the United States and called for maintaining the period of strategic opportunity for China’s modernization.

If Chinese leaders conclude that confrontation with the United States is inevitable, they may increase the resources devoted to defense and military modernization. However, CCP leaders

---

18 See Joel Wuthnow and Phillip C. Saunders, “A Modern Major General: Building Joint Commanders in the PLA,” in Chairman Xi Remakes the PLA, 293-326.
have carefully studied the collapse of the Soviet Union and concluded that over-spending on military capabilities at the expense of economic development was a major factor. This suggests that CCP leaders will probably continue to regard internal challenges as the greatest threat to continued CCP rule, and view efforts to raise living standards of the Chinese people and spending on internal security (which exceeds spending on national defense) as more important priorities. However, this judgement might change if Chinese leaders perceive U.S.-China strategic competition as headed toward an inevitable military showdown.
### Appendix

#### Chinese GDP, Central Government Expenditure, and Defense Spending, 2007-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>PRC Nominal GDP (in 100 million RMB)</th>
<th>Central Government Expenditures (in 100 million RMB)</th>
<th>Defense Spending (in 100 million RMB)</th>
<th>Nominal growth rate in %</th>
<th>as % of CGE</th>
<th>as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>270232.3</td>
<td>49781.35</td>
<td>3482.32</td>
<td>16.9%</td>
<td>7.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2008</td>
<td>319515.5</td>
<td>62592.66</td>
<td>4098.95</td>
<td>17.7%</td>
<td>6.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2009</td>
<td>349081.4</td>
<td>76299.93</td>
<td>4825.01</td>
<td>17.7%</td>
<td>6.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>2010</td>
<td>413030.3</td>
<td>89874.16</td>
<td>5176.35</td>
<td>7.3%</td>
<td>5.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2011</td>
<td>489300.6</td>
<td>109247.8</td>
<td>5829.62</td>
<td>12.6%</td>
<td>5.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2012</td>
<td>540367.4</td>
<td>125953</td>
<td>6481.38</td>
<td>11.2%</td>
<td>5.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2013</td>
<td>595244.4</td>
<td>140212.1</td>
<td>7177.37</td>
<td>10.7%</td>
<td>5.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2014</td>
<td>643974</td>
<td>151785.6</td>
<td>8055.14</td>
<td>12.2%</td>
<td>5.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2015</td>
<td>689052.1</td>
<td>175877.8</td>
<td>8868.51</td>
<td>10.1%</td>
<td>5.0%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Source: China Statistical Yearbook in 100 million RMB; figures are nominal.
June 20, 2019
Isaac B. Kardon, Ph.D. – Assistant Professor, U.S. Naval War College, China Maritime Studies Institute*
Testimony before the U.S.-China Economic and Security Review Commission

Panel III: Building a World-Class Military: Missions, Modernization, and Bases

Introduction:

The People’s Republic of China’s (PRC) program to develop a world-class military (世界一流军) is well underway. Among the critical challenges facing the People’s Liberation Army (PLA) in achieving this lofty but ill-defined goal is an obvious deficit in its capacity to “safeguard overseas interests.”¹ The demand generated by China’s rapidly growing portfolio of personnel, capital, and resources abroad outstrips the supply of Chinese security.² Certain security tasks may be outsourced to private or local forces,³ but it is the PLA – and principally the PLA Navy (PLAN) – that must deliver military capability to distant theaters and secure the sea lines of communication (SLOCs) between those far-flung locales and the Chinese mainland.

Becoming a “world-class military” does not mean becoming the U.S. military. Certainly, China’s objective entails fielding a force with joint capabilities that are at least competitive, if asymmetrically, with those of the U.S. and its allies. It does not, however, follow that the U.S. model of forward-deployed forces capable of global power projection for major combat operations is a requirement or even a long-term objective for the PLA. Among other contrasts, there is no evidence – nor sound logic – to support the expectation that the PLA needs to establish a large number of permanent military bases that support major combat operations abroad. This is hardly the same as saying China’s growing overseas military capabilities are unworthy of concern, but it is a distinction with a difference.

Even as Chinese analysts and planners draw inspiration from the “bases and places” concept employed by the U.S., the pattern and functions of China’s overseas facilities will remain


² One Beijing Academy of Social Sciences researcher describes a “serious structural imbalance between low supply and high demand in China’s international security market,” (Liu Bo [刘波], “Research on Private Security Companies in the Construction of the ‘Belt and Road’ Security System [‘一带一路’安全保障体系与海外承包公司研究],” Journal of International Security Studies [国际安全研究], no. 5, 2018, p. 120). This is a clear way to express a common consideration that China does not provide military security for its overseas projects or citizens, and instead relies on local support or free-rides on U.S. security, in Afghanistan or Iraq for example.


*All views expressed in written and delivered testimony are those of the author alone and not of the U.S. Naval War College, the U.S. Navy, or the U.S. Government.
distinctive. The American mode of overseas basing is indeed cited in Chinese writing on the PLA’s need for overseas facilities. That need is now openly stated, in contrast to prior reticence or outright denials from all but the most forward-leaning voices in China.⁴ However, we should carefully distinguish when U.S. practice serves as a model for China vice a justification for PLA practice that differs along critical dimensions.⁵

Three such dimensions bear noting up front. First, China does not have any military alliances, nor will it in the foreseeable future (the treaty with North Korea is suspect and, at any rate, involves territory contiguous to China not suitable for overseas power projection). This fact surfaces an immediate and obvious contrast that imposes definite constraints on the PLA’s overseas basing potential. America’s treaty allies (66, on paper)⁶ have concluded binding agreements for mutual defense in wartime. Many allies and non-treaty partners host permanent facilities⁷ that support long-term deployments of significant numbers of military and support personnel, often with their families.⁸ There is no prospect that the largely commercial sites of most interest to the PLA at present could support such presence, nor that they would be reliable, defensible sites in the event of major conflict.

---


⁸ Other sites, like Singapore, are not formal bases but provide logistical support for the U.S. Navy, including a dedicated berth for Nimitz-class carriers.
This predominantly commercial character of China’s overseas facilities is a second limiting factor. For reasons explored below, this hardly precludes dual-use functions that challenge the U.S. and its allies. Nonetheless, it is not illuminating to ask whether the facilities are “commercial” or “strategic” because the answer is “yes” – commerce is the strategy. This is of course oversimplified, but it will not strain imagination to recognize that strategic effects may flow from the commanding commercial position in global trade and logistics that a few Chinese state-owned enterprises (SOEs) have staked out. If these facilities were to be overtly militarized, the commercial viability of many of these highly capital-intensive projects could be severely jeopardized, as would China’s overall diplomatic position. There are thus clear and possibly overwhelming opportunity costs facing China as its leaders consider the choice of an overseas basing scheme to project power compared to a program of overseas commercial expansion – albeit one that unavoidably generates demands for military security.

Finally, China’s continental geography changes the geopolitical logic of overseas bases. If the U.S. is blessed by “splendid isolation,” the PRC is cursed by difficult neighbors. Some 14 countries (several of them large and nuclear-armed) crowd China’s continental periphery, whereas the U.S. enjoys the geopolitical luxury of meeting security challenges far from America’s shores. Interior, not exterior, lines of communication are intrinsic to China’s geographic position. This means, inter alia, that overland routes from overseas ports to China are strategically meaningful; that Chinese military power will continue to be projected largely from the land outward to sea and air, and that the vital SLOCs connecting China’s coastal economic centers to resources and markets traverse a series of vulnerable maritime chokepoints. From the U.S. perspective, these look like grave liabilities; from the Chinese perspective, they are immutable realities that require development of “hybrid continental-maritime state” approach to national security.

With this context intact, we can examine some of the details of China’s efforts to secure its overseas interests. This testimony follows the Commission’s prompts to address (I) the emerging Chinese network of overseas bases and places, (II) the PLA’s actual and possible roles and functions at these sites, (III) their viability for expeditionary operations, and (IV) their probable connection to artificial island bases constructed in the South China Sea.

9. 14 countries are contiguous to China, including four nuclear armed states (Russia, India, Pakistan, and North Korea). China also has eight or nine maritime neighbors (depending on how you count Taiwan), all of whom are in relatively close proximity due to the “first island chain” surrounding China’s eastern flank and the Korean peninsula.


11. This hybridity has been an ongoing conversation in Chinese strategic circles since the turn of the century, e.g., 邵永灵 [Shao Yongling] and 时殷弘 [Shi Yinhong], “近代欧洲陆海复合国家的命运与当代中国的选择 [The Fate of Modern European Land-Sea Hybrid States and China’s Choices],” 实际经济与政治 [World Economics and Politics], October 2000, pp. 47-52. For a good round-up of this debate, see Daniel Hartnett and Frederic Vellucci Jr., “Continental or Maritime Power: A Summary of Chinese Views on Maritime Strategy Since 1999,” Center for Naval Analyses, October 2007.
I. What steps is Beijing taking to build a network of military bases and other support facilities overseas and how might this evolve, including the potential for agreements on supply and support to maritime and air operations? What do China’s national leadership and the PLA envision for the PLA’s role in supporting the Belt and Road Initiative?

The establishment of a PLA “logistical support facility” (后勤补给设施) at Djibouti in 2017 marks a significant step towards the PLA achieving capacity to conduct out of area ground, maritime, and air operations. However, because this single outpost is not mutually supported or supplied by other sites,12 the PLA’s ability to sustain large-scale operations beyond China’s immediate periphery will remain limited for the foreseeable future. The main developments to date have concerned a narrower PLA tasking to “safeguard overseas interests.”13 This mission-set is more modest than the development of major combat capability overseas. Instead, it demands various bespoke operations to secure, defend, evacuate, and/or convoy Chinese personnel, assets, and resources, now widely distributed around the globe. Achieving this goal is the principle driver for China’s current push to establish overseas facilities and access points – that is, strategic strongpoints (战略支点).14

How will the PLA achieve the necessary logistical support for this mission to protect overseas interests? Djibouti is almost certainly not predictive of future arrangements. The agreement reached with the Djiboutian government for leasing and operation of the PLA base nearby Doraleh Multi-Purpose Port reportedly resembles the one concluded with the US.15 There are models for at least temporary status of forces embedded in China’s Shanghai Cooperation Organization agreements as well as its agreements for military exercises with Russia.16 It is unlikely, however, that such an agreement would be possible or desirable at many of the other locations at which Chinese state-owned enterprises (SOEs) have established commercial presence.17 Djibouti is unlikely to serve as the model for other bases. The conditions that led to its establishment are unique and quite unlikely to be replicated. Djibouti’s geographic position allows it to directly support the PLA’s first regular overseas military mission (the anti-piracy escort task forces operating in and around the Gulf of Aden). Furthermore, Djibouti is the site of Japan’s only overseas military installation, a crucial fact that Chinese interlocutors never fail

---

12 One Chinese maritime strategist likened the PLA’s Djibouti base to Imperial Germany’s base at Qingdao, which was immediately seized by Japanese forces at the outbreak of World War I.

13 This is one of eight “strategic tasks” laid out in the 2015 Defense White Paper on China’s Military Strategy.

14 See below for further explication of this concept.


16 Some scholars advocate expressly for these to serve as a model for other bases and claim that the Agreement of the Shanghai Cooperation Organization Member States on Joint Military Exercises (Article 7) and The Agreement Between People’s Republic of China and the Russian Federation on the Temporary Status of Forces in the Other’s Territory during Joint Military Exercises (Article 5) provide useful templates for multilateral and bilateral military basing arrangements, respectively ([Xue and Zheng 2017: 105-107].

17 Chinese legal scholars note that international law is no constraint on bilateral arrangements at the invitation of the host country. For some, it would be irresponsible for China not to make formal military arrangements due to its international responsibilities and obligation to protect its own interests (Xue and Zheng 2017: 116); nonetheless, even these most gung ho of advocates for overseas basing recognize that the international political environment is not ready for such a development.
emphasize. The confluence of these two factors made the decision to establish a base much easier from a diplomatic and operational standpoint.

More probably, the PLA will avail itself of a network of commercial facilities without any formal or overt agreements for military use. Instead, Chinese forces operating abroad will likely secure supplies and other services at SOE-owned or -operated ports and facilities – or simply call at friendly foreign ports where husbanding arrangements can be made commercially on an ad hoc or contractual basis. Such arrangements can likely be secured with increasing scale and efficiency because several Chinese state-owned enterprises (SOEs) are now among the world’s leading commercial port operators. No less than 13 of the 20 largest ports in the world are in mainland China, and Chinese SOEs have equity and/or operating leases on upwards of 70 other key ports across the globe. To date, only one such SOE-invested or -operated port has resulted in a Chinese military base: the PLAN base adjacent to the China Merchants Port multi-purpose port in Djibouti. There is some potential for a variety of dual-use functions at many other facilities, but only limited scope for the development of more outright military bases.

Analytically, the Belt and Road Initiative is probably not the right category for determining where and how the China will establish such support facilities overseas. For one, as a simple matter of accounting, it remains unclear how many countries are “members” and what that status entails. A Peking University research institute lists 64 countries as “沿线国家,” or “countries along” the BRI, while the PRC State Council’s National Development and Reform Commission’s official BRI website touts some 173 agreements with 125 countries and 29 international organizations that have some (undefined) connection to the BRI. Many news outlets report that there are about 70. Meanwhile, not all countries where China has major “overseas interests” are classified as BRI countries, nor is there yet any evidence that being so designated entails any systematic differences in military to military or other bilateral relations.

It is therefore analytically preferable to look at the locations where Chinese SOEs have established commercial outposts and the sites where the PLAN has made port-calls in order to begin making inferences about the likely demands for PLA logistical support. Pending complete collection and analysis of those data, most of which are available in open sources, a conceptual

---

18 Author discussions with PLA and with US military commanders who discussed the establishment of a base with PRC personnel.
19 Author’s database, collected from open sources, e.g., Lloyd’s List Maritime Intelligence and IHS Markit Sea-web.
20 A country’s decision to join BRI is already a function of its existing diplomatic relationship, rendering endogenous any subsequent decision to deepen bilateral relations with China by, say, developing a commercial port.
21 Peking University “One Belt One Road” Data Analysis Platform [北京大学《一带一路》数据分析平台], [http://ydyl.pku.edu.cn/yxgj/index.htm](http://ydyl.pku.edu.cn/yxgj/index.htm)
container better-suited to understanding where and how such logistical arrangements are likely is the “strategic strongpoint” (战略支点) overseas port.\(^{25}\)

The strategic strongpoint concept is increasingly deployed among Chinese strategists and officials to highlight the geo-economic value of the location – its proximity to markets, resources, or SLOCs. This economic priority generates a necessity for security, largely the remit of the PLA. Importantly, this is a networked concept: a single site will not do. Mutually supporting, functionally differentiated points will afford the best possible security guarantee for China’s overseas interests.\(^{26}\) Not all strategic strongpoints must be sites for PLAN port calls or military facilities of any kind, but rather can fall along a spectrum from friendly commercial ports of call to a full-up naval base like Djibouti.\(^{27}\) Additionally, the strategic strongpoint is virtually never described as a platform for offensive military operations; rather, researchers portray such overseas ports as the logical sites for staging some military operations designed to “safeguard overseas interests” – especially the SLOC-protection mission.\(^{28}\)

This strategic strongpoint terminology has growing currency in authoritative official economic planning documents like the 13th Five Year Plan (2016-2020),\(^{29}\) and the BRI’s guiding “vision” as released by several of China’s leading state agencies in 2015.\(^{30}\) But the concept and its logic predates those BRI documents, appearing prior to the unveiling of the Initiative itself in the authoritative 2013 Science of Military Strategy, which states that the PLA:

“…must build overseas strategic strong points that depend on the homeland, radiate into the periphery, and move us in the direction of the two oceans [i.e. the Pacific and Indian Oceans]. These sites are to provide support for overseas military operations or act as a


\(^{26}\) For a particularly clear analysis of the varied types of mutually supporting strategic strongpoints from a scholar from the Academy of Military Sciences, see Hu Xin (胡欣), “The Expansion of National Interests and the Construction of Overseas Strategic Strong Points [国家利益拓展与海外战略支撑点建设],” *世界经济与政治论坛 [Forum of World Economics & Politics]*, No. 1, Jan. 2019, pp. 21-35.

\(^{27}\) Indeed, another Chinese scholar from the PLA Academy of Military Science categorized Djibouti as China’s first strategic strong point. Liu Lin [刘琳], “Strategic Strongpoints and Military Diplomacy Construction Along the Belt and Road [“一带一路”沿线战略支点与军事外交建设],” *World Knowledge [世界知识]*, 26 July 2017, http://www.jiaodu.com/waijiaodu/1562.html

\(^{28}\) Zhang Jie [张洁], “Maritime Channel in Southeast Asia and China’s Strategic Pivot [海上通道安全与中国战略支点的构建],” *Journal of International Security Studies [国际安全研究]*, No. 2, 2015, pp. 100-118.

\(^{29}\) This most authoritative economic planning document charges the party-state to “actively advance the construction of strategic strongpoints along the 21st Century Maritime Silk Road, participate in the building and operation of major ports along the road, and promote the joint development of industrial clusters around these ports to ensure that maritime trade routes are clear and free-flowing,” PRC National Development and Reform Commission. 2016. “The Thirteenth Five Year Plan for Economic and Social Development of the PRC [2016-2020].” Beijing: Central Compilation & Translation Press, Part XI, Chapter 51, Section 2.

forward base for deploying military forces overseas, exerting political and military influence in relevant regions. We should form a posture with the homeland strategic layout that takes account of both the interior and the exterior, connects the near with the far, and provides mutually supporting facilities.”

The recent advent of BRI only compounds a shortcoming in overseas capability that the PLA has faced for at least 20 years. China’s firms have sought foreign markets and resources – and to develop the seaports that facilitate export and import – with increasing scale and tempo since becoming a net oil importer in 1993. Jiang Zemin’s “Go Out” (走出去) strategy, launched in 1999, is the forbear to steadily more grandiose programs pushed by Hu Jintao’s “New Historic Missions” and now Xi Jinping’s “Belt and Road Initiative” to promote China’s continued economic development. The PLA has consistently lagged behind this trend.

The flag evidently follows trade in the open, globalized economy of the early 21st century. Arguably, this is because security for commerce is already fairly stable due to the overwhelming presence of the U.S. Navy and its allies and partners, and prevailing norms of “free and open” trade. Yet China is vulnerable to changes in U.S. strategy. Thus, Chinese leadership increasingly views it as a vital imperative to establish its own security backstop for its globalized commercial interests.

This mission falls primarily to the PLAN. South Sea Fleet Commander Wang Hai told the People’s Navy that “[w]e must closely coordinate with the Belt and Road Initiative, use multiple means to safeguard the security of strategic sea lanes in the region, and ensure that strategic capabilities can extend and radiate wherever China’s interests develop.” He evokes the BRI not because it defines the geographic or economic scope of his mission, but because it is the surest way for PRC central leaders to market the military’s mission in a positive light.

Indeed, Xi Jinping told the first Belt and Road Forum (BARF) in May 2017 that “the Belt and Road initiative requires a peaceful and stable environment,” observing that the countries and regions it traverses “are often associated with conflict, turbulence, crisis, and challenge.” At a 2019 address to the Central Party School, Xi proposed “improving the BRI security system [一
and “strengthening the protection of overseas interests and ensuring the safety of major overseas projects and personnel.” BRI is the vehicle and an ex post justification of sorts for energizing a process to secure Chinese interests abroad that has been underway for some time.

The BRI also provides an administrative home for domestic reforms that will enable the PLA and private security to coordinate with the state and enterprises in providing security. The Office of the Leading Group for Promoting the Belt and Road Initiative, an “interagency” group under the State Council’s National Development and Reform Commission headed up by Chinese Communist Party (CCP) Politburo Standing Committee (PBSC) member Han Zheng proposed two security mechanisms toward this end. The first is a “security risk early-warning and monitoring mechanism,” and the second is an “emergency response mechanism.”

Neither mechanism has yet been fully articulated in a major speech nor implemented by the relevant agencies, though Central Party School researchers quickly began to elaborate the need to coordinate “front-end construction with back-end security.” They recommend establishing a “Belt and Road Safety Emergency Subcommittee” under the PRC’s relatively new Central National Security Commission (中央国家安全委员会), which could help integrate the party, state, and military functions necessary to manage emergent security threats abroad. Relatedly, the Secretary General of the China Port Association, Ding Li, suggests a similar integration – in his case, a “Belt and Road national port liaison mechanism” (建立“一带一路”国家港口联络机制) that would join party, state, and military leaders in a unified (but perhaps ad hoc) committee to facilitate security and coordinate policy at strategic strongpoint ports.

Chinese leadership plainly wants to include the PLA in addressing overseas security concerns without giving the impression that it is “militarizing” all of its commercial facilities. This is a current and unresolved problem, and the commercial logistics facilities already established by SOEs are an overwhelmingly likely site for experimenting with ways to deter and control

---

37 Although this prompt appears prominently in the Commission’s questions, I do not yet see evidence in open sources that this “system” has become a major theme in Chinese writing or thinking. There is evidently a centrally-funded grant for research on “Belt and Road Risks and Systematic Response” (国家社科基金项目“‘一带一路’战略风险及系统应对研究” [16XGJ010]). Beyond that, only two detailed examinations are readily available. One is by two researchers at Guizhou University, and focuses at a very generic, slogans level on security along the BRI (Yang Da [杨达] and Deng Yu [邓羽], “Perfecting the Collective Construction of the ‘One Belt One Road’ Security Guarantee System [完善共建‘一带一路’安全保障体系],” Guangming Daily [光明日报], 1 April 2019, p. 16, http://mini.eastday.com/a/190401050446529.html); a second is Liu Bo (2018) on the role of private security firms in this system (see fn 2). It is possible that this concept is simply new, but equally possible that it is one of many slogans relating to BRI that will not develop into a concerted set of policies backed by substantial resources.


40 Cao and Gong, “Improving the ‘Belt and Road’ Overseas Emergency Response Mechanism,” p. 63.

41 Ding Li [丁莉], “Writing a New Chapter in the Construction of the 21st Century Maritime Silk Road with the Port as a Strategic Strongpoint [以港口为战略支点书写21世纪海上丝绸之路新篇章],” China Ports [中国港口], no. 7, 2018, http://www.sohu.com/a/242651424_784079
emerging risks and threats to China’s overseas interests. The strategic strongpoint concept is a leading contender in the debate about how to go about doing so without developing a large network of overtly military facilities. This remains a work in progress.

II. What, if any, evidence exists that China intends to use the construction, acquisition or management of commercial logistics infrastructure to develop an overseas support network for clandestine military or intelligence operations, including through the stationing of military or intelligence personnel at these facilities?

While we cannot rule out clandestine efforts to establish military or intelligence operations from China’s commercial ports, open sources do not provide anything beyond speculation about such practices. The overt uses, however, of SOE-built, -owned, or -operated port facilities are worthy of attention in their own right. In particular, we should attend to the immense portfolio of overseas ports and related infrastructure designed, built, and sometimes owned and operated by subsidiaries of centrally-owned SOEs42 – especially industry leaders like China Merchants Ports (CMP), China Overseas Shipping Corporation (COSCO) Shipping Ports, and China Communications Construction Corporation (CCCC) and its subsidiary China Harbor Engineering Corporation (CHEC).43

These SOEs are not “state-run” in the sense of being managed directly by state bureaucrats, much less by party cadres. Still, at the “group” or enterprise level, the central SOEs are led by a CEO or other executive appointed directly by the State Assets Supervision Administration Commission (SASAC) under the State Council, China’s cabinet. That executive holds vice-ministerial rank and can therefore be reliably considered an agent of the state in certain respects. Even if that executive comes from industry, it is a political appointment. Therefore, the cloak-and-dagger clandestine infiltration of one of the 70-odd SOE-operated ports44 seems unnecessary when the channels between the SOE and state agencies are direct and explicit.

Anecdotally, there are some port projects for which there is not a strong commercial rationale.45 In such cases, the reasonable presumption is that political incentives pushed firm executives to pursue a project driven by China’s broader diplomacy.46 It can be “good for business” for an SOE to pursue a project for which there is strong political backing by elite party members or for

---

42 Central SOEs are those owned by the central government, some 96 firms that include the “big three” port developer/operator firms: China Merchants Ports (a subsidiary of China Merchants Group), COSCO Shipping Ports (a subsidiary of COSCO), and China Communications Construction Group (which operates China Harbor Engineering Corporation, the leading port dredger). For clear analysis of the relationships between SOEs and the party-state, see Rosen, Daniel H., Wendy Leutert, and Shan Gao, “Missing Link: Corporate Governance in China’s State Sector,” Asia Society Special Report, Nov. 2018, https://asiasociety.org/sites/default/files/inline-files/ASNC_Rhodium_SOEReport.pdf
43 These firms are involved in over 90% of Chinese firms’ overseas port projects (author database).
44 The data are still being collected to determine how many there are in total as well as the extent to which the Chinese SOE controls port operations. In some cases, as a majority equity holder and owner in whole or in part of a port authority, there will be considerable autonomy for an SOE to operate a port without supervision.
45 This is based on interviews with managers from Chinese SOEs and those with close observations of their operations; it is difficult to make this judgment conclusively without seeing meeting minutes or internal documents in which the enterprise’s leadership determines a project to be non-economic but pursues it anyhow.
46 Sun Degang [孙德纲], “The Theory and Practice of China’s Seaport Diplomacy [中国港口外交的理论与实践],” World Economics and Politics [世界经济与政治], no. 5, 2018, pp. 4-32.
which there is a strong foreign policy rationale – thus the attractiveness of branding projects “BRI.” The cheaper financing available for such projects, at least until recently, is still more reason to do so. At any rate, infrastructure is not typically profitable in the short- or even medium-term, deriving its value by boosting logistics for peripheral industries and thus goosing local and regional commercial activity.\textsuperscript{47}

In short, good politics may outweigh good profits for some SOE corporate decision-making. These political incentives are quite obvious in SOE enthusiasm for certain dubious BRI projects. Still, the further expectation that these facilities might be available for military or intelligence use, clandestine or otherwise, is not as readily deduced. Hints of a mandate for such permissive corporate behavior are found in legislation like the 2017 National Defense Transportation Law. It indicates that “civil-military fusion” and “embedding military in civilian” are obligatory under the “principles of unified leadership…long-term preparation, [and] emphasis on the construction of key projects” (Article 4).\textsuperscript{48} These are seemingly applicable provisions for the use of commercial ports by military personnel. The law further stipulates that the state will “guarantee the national defense mobilization expenses” (Article 6), underlining the seeming hazard for firms in the event that they are called upon to allow covert use of their facilities.

Even in the absence of exquisite intelligence on such clandestine operations, we can see quite overt intent and potential for use of commercial facilities for “civil-military” purposes. For example, the information about flows of goods and personnel through ports has clear military intelligence value. Systematic knowledge concerning the huge volume of merchandise trade, some of it destined for the U.S. military and its partners, is a clear advantage, and one that China can likely already exploit. However, it is a marginal capability and probably not useful in high-end warfighting. It is also entirely conceivable that sensors and other signals intelligence technology may be emplaced, human intelligence may be collected, and various other types of information may be gleaned in the process of conducting the normal commercial operations.

Those very same normal commercial operations, however, provide some strong arguments against utilizing overseas ports for clandestine intelligence and military operations. For one, doing so and being discovered risks the commercial viability not only of that compromised project, but also the diplomatic relationship with the host and its tolerance for other Chinese projects. Additionally, if publicized, such a scandal would damage diplomatic and commercial relationships with other partners hosting comparable Chinese-operated facilities. These foreseeable opportunity costs may not prevent surreptitious use, but it is quite reasonable to expect strong countervailing pressures from China’s own diplomatic and commercial stakeholders. It also bears noting that the SOEs are supposed to make money for their principal shareholder, the Chinese state, and avoid upending its other interests and operations. These are not clinching arguments, but should be factored in as liabilities for clandestine program.


A black eye for the BRI is not the only liability that such a “weaponization” of commercial port facilities could present. Indeed, it may simply be operationally undesirable to rely on commercial facilities for anything but minor military and intelligence concerns. The argument against going too far towards using commercial facilities for military purposes is thus based not just on the opportunity costs of doing that rather than pursuing profitable trade and investment relations, but also on the unfeasibility of using these facilities to achieve desired effects. Even with the large number of overseas facilities operated by Chinese firms, very few are majority-owned. Rarely is more than an individual terminal under SOE control. These considerations thus support the judgement that covert and clandestine efforts at ports owned or operated by Chinese firms are possible, even likely, but not sufficient for supporting most significant military operations.

III. How does the PLA currently use commercial ports overseas? To what degree could China’s commercial investments in ports and airfields abroad support the PLA’s expeditionary operations? What are the current limitations of that infrastructure for support to expeditionary operations?

At present, the PLA uses commercial ports overseas primarily for friendly port calls. “Showing the flag,” refueling, and reprovisioning to the extent possible do not enable warfighting, though they do allow sustained non-war operations out of area. Several scholars have tracked the frequency and type of such port calls, which have seen a marked uptick since the launch of the PLAN anti-piracy escort mission in 2008.49 Again, based on open source information, I can only testify that PLA use of commercial ports has largely been limited to these relatively mundane functions. Even without such pit stops, some underway refueling and limited resupply can be achieved with support vessels and helicopters, both of which are increasingly well-represented in the PLAN force structure. If we define “expeditionary operation” loosely to include escort and peacekeeping,50 the very limited capacity afforded by commercial ports and the one base at Djibouti are sufficient for some modest expeditionary operations.

Further development of strategic strongpoint ports will enable the PLAN to steadily ramp up capacity for conducting such missions at higher frequency and intensity. The former PLAN Commander, Wu Shengli, noted that “overseas strategic strongpoint construction has already provided a new support for escort operations.”51 In respect of escort operations and SLOC protection, these commercial facilities provide ample, convenient services for most PLAN vessels to sustain such operations across the Indian Ocean region and beyond.

The question is whether they could do so in an opposed environment. At present, this seems to depend on who is opposing their operations. If the U.S. or India is attempting to deny China’s


operations in the Indian Ocean region, unhardened commercial facilities in neutral countries are not likely to be sufficient. If no major power is involved, the steady development of strategic strongpoints will enable a range of non-combat military operations throughout the region. The addition of a single, more capable “base” in the central Indian Ocean (say at Hambantota, where much speculation abounds about Chinese intentions), on the west coast of Africa, and in the South Pacific, would shorten supply intervals such that the PLAN could sustain certain expeditionary operations throughout the Indian Ocean region, the South Atlantic, and the Western Pacific, respectively.52

While Chinese officials analysts are quick to disclaim any intention to use such facilities for offensive operations as does the U.S.,53 others are quick to assert that China’s model is switching from one “based on supply ships supplemented by foreign ports to one that is based on overseas bases supplemented by foreign ports and domestic support,” in the words of Li Chunpeng, Political Commissar of the PLAN base in Djibouti.54 Other Chinese leaders send mixed signals, as former State Oceanic Administration Director and current Hainan province governor Liu Cigui puts it: “The security of sea lanes is the key to sustaining the stable development of the Maritime Silk Road, and ports and docks are the highest priority for securing the sea lanes…[they] must not only have the function of cargo handling, but must also provide replenishment and logistics services…[and] ensure the safety of the surrounding waterways.” They may be “built separately from the host country, jointly with China and other countries, or could involve leasing currently existing ports as a base of operations.”55 The advent of a PLA Marine Corps is intended, in part, to create a more flexible force that can swiftly deploy and operate overseas without the need for large-scale forward operating bases.56

Others simply doubt the operational capacity of commercial facilities to support the types of capabilities that China would need to conduct major expeditionary operations:

“construction of ports and related facilities through friendly cooperation with other countries can expand the scope of maritime operations and enhance their flexibility and sustainability. However, the construction of such commercial port facilities is extremely expensive and their practical utility is limited; they cannot meet the needs of munitions storage, maintenance and parts for large surface vessels, and security needed for military operations, especially in the event of conflict. If the intensity of China’s overseas military

52 Author interviews with U.S. navy logistics and supply officers.
53 Several scholars from the Army Military Transportation University in Tianjin lay this out in some detail: Wang Tianze [王大洋], Qi Wenze [齐文哲], “An Exploration into the Support of Transportation and Projection for Military Bases Abroad [海军海外军事基地运输投送保障探讨],” National Defense Transportation Engineering and Technology [国防交通工程与技术], vol. 16, no. 1, 2018, pp. 32-35.
operations increases as China’s economic, political, and security interests continue to expand, commercial port replenishment is unlikely to be used as a long-lasting logistical support option. After all, foreign commercial port facilities also have their own commercial self-interests which requires the regular scheduling of commercial activities that will tie up most of the service capacity of any commercial port… [Therefore] the lack of overseas bases has become an important factor limiting the effectiveness of Chinese military forces, including the Navy. How to build overseas bases is an issue that China cannot avoid.”

The existing stock of commercial “places” may be sufficient to build strategic strongpoints sufficient to support limited expeditionary operations tailored to the protection of China’s overseas interests, even as they expand. Whether China’s force structure can support higher-end, major combat functions without using these ports is beyond the scope of this testimony and my expertise. However, we should be looking at these facilities in terms of what they can – and in some cases already – deliver for lower-end operations. It does not take another navy modeled on the U.S. navy to generate significant strategic problems, to include peacetime coercion and horizontal escalation.

IV. What role might the bases China has built on artificial islands in the South China Sea play in the PLA’s operations beyond its immediate periphery?

Chinese officials and scholars have not explicitly drawn connections between out of area operations and the artificial island bases that China has constructed in the South China Sea (SCS). Still, the augmented military and intelligence facilities in the Paracels (especially Woody Island, or 永兴島) and in the Spratlys at Subi Reef (渚碧礁), Mischief Reef (美济礁), and Fiery Cross Reef (永暑礁) effectively extend China’s territory some 800 miles south from its coast.58 The logic of mutually supporting strategic strongpoints59 dictates that these installations should function to extend the operational range of the PLAN well beyond the first island chain.

PLA doctrine supports this operating concept. The 2013 Science of Military Strategy posits the use of islands and reef installations to create a “large-area maritime defense system” (大区域海上防卫体系) to extend power projection.60 This is characteristic of a continental power, treating proximate maritime areas as extensions of land power rather than hubs for maritime power projection. Further, China’s geography – particularly the vast, foreign land territory that envelops its southern and western flanks – dictates that the South China Sea will be the nearest maritime area to support operations in the Indian Ocean, and likely in the Western Pacific. PLA researchers have recognized this for some time, and explicitly linked it to the Spratlys since artificial island building got underway in earnest in 2014.61

---

58 Zhanjiang, the home port of the South Sea Fleet, is about 820 miles, or 712 nautical miles, from Fiery Cross Reef.
59 Academy of Military Sciences 2013: 254; Hu Xin 2019: 26
60 Academy of Military Sciences 2013: 214
61 Jian Li [剑李], Chen Wenwen [陈文文], and Jing Jin [晶金], “Indian Ocean Seapower Structure and the Expansion of China’s Seapower into the Indian Ocean [印度洋海权格局与中国海权的印度洋拓展],” Pacific Journal [太平洋学报], vol. 22, no. 5, 2014. The authors are researchers at the PLAN’s Naval Research Institute.
The newly formed Western Theater Command has no naval component that might execute such distant operations in the event of a conflict in the Indian Ocean. This task would fall to the Southern Theater Command, which now routinely operates into the far reaches of the SCS. China’s expanding fleet of blue water vessels (especially the Type 055 Renhai-class guided-missile destroyers) can utilize the Spratly bases and thus skip the long voyage back to Hainan or Zhanjiang. So too can long-range strategic aircraft like the Y-20, AN-225, and even the H-20 strategic bombers. These assets are not able to operate out of more distant facilities, and though PLA warfighters would no doubt like to have forward operating bases, they will have to make due with Spratly outposts as the furthest extent of basing for the present.

Such use of SCS facilities modestly increases the out of area power projection of the PLA. The question of whether they can be effectively linked to other bases and places remains outstanding. Certainly, a link between the Djibouti base and the Spratlys is too distant for sustaining high-intensity operations. An intermediate base in, say, Sri Lanka, Burma, or the Maldives would help operations, though it might badly harm China’s diplomacy and commercial ambitions in the region.

The opportunity costs of appearing to abandon China’s “peaceful rise” are high, and not lost even on the PLA. The 2015 *Science of Military Strategy* evinces keen awareness of the perils of operating overseas. “A first consideration must always be to weigh the pros and cons of whether or not to ‘go’ at all. Diplomacy is no small matter, nor is the use of military force overseas…[even innocuous tasks like] peacekeeping, NEOs, maritime escort, and search and rescue must only proceed from careful consideration of the strategic requirements of China’s political interests, economic interests, diplomatic interests and security interests.”62 China will need to utilize overseas ports to protect its overseas interests, and the PLAN will be the main agent of that effort. Given the likely long-term limitations on building a large network of distant bases, they will largely have to flow the needed capabilities from the SCS.

---

“Building a World Class Expeditionary Force” Testimony Before the US-China Economic
And Security Review Commission Hearing on China as a World Class Military Power
June 20, 2019
By Christopher D. Yung
Donald Bren Chair of Non-Western Strategic Thought and Director of East
Asian Studies, U.S. Marine Corps University

Introduction

Chairman Bartholomew and Vice Chairman Cleveland, and to all of the Commissioners, I appreciate the opportunity to testify to the Commission on a subject which will be of increasing importance as China’s global interests and reach start to significantly expand outside of China’s immediate neighborhood—that is, the Asia-Pacific Region. Xi Jinping’s Report for the 19th Party Congress laid out the goal for the People’s Liberation Army to become a World Class Military by the centennial of the founding of the People’s Republic of China. This ambition, combined with the significant military reforms and reorganization of the PLA initiated in 2015 and China’s increased foreign policy activism, manifest in the Belt and Road Initiative has correctly sparked the interest and in some quarters, suspicion, of China’s motives and has stimulated more than a passing interest to evaluate exactly what China’s pursuit of a “World Class Military” truly entails.

In my testimony today, I have been asked to evaluate what a “World Class Military” looks like from the perspective of an expeditionary power. Specifically your staff has asked me to examine what aspects of PLA modernization have provided or are currently providing China with a burgeoning expeditionary military capability? What are the weaknesses in this capability and how is the PLA attempting to address these weaknesses? Additionally the USCC staff have asked me to address how the PLA is currently training and developing its doctrine to address expeditionary operations? And related to this notion, whether its current out of area operations are contributing to the evolution of China’s expeditionary capabilities? Finally, your staff have asked me to examine what core technologies China needs to achieve its force building goals in relation to expeditionary operations.

Before embarking on that analytical crusade, I first deem it necessary to lay out what China’s strategic goals are in relation to its out of area operations; from there I venture to generate a number of missions that the PLA is expected to be able to perform in the near to medium term, some of which involve the need for expeditionary capabilities. Finally, it will be necessary to establish my definition of “expeditionary” which the analysis can use as a yard stick or baseline to compare China’s activities and efforts.

China’s Strategic objectives

As many China experts have stated before, China’s strategic objectives are synonymous with the Chinese Communist Party’s strategic objectives. These objectives laid out in official Party pronouncements, White papers, and General Secretary Work Reports, but most recently specified in the New Historic Missions are: (1) Ensure the Survival of the Chinese Communist Party; (2) protect China’s
national sovereignty and territoriality; (3) ensure continued economic growth; and (4) foster global 
stability and international peace and security.¹ These strategic objectives do ultimately translate into 
mission sets that the PLA is expected to be able to perform. Therefore, if regime survival is objective #1 
for the PLA, then this translates into missions designed to address internal security and order. These in 
turn translate into mission sets designed to address terrorism, insurgency, ethnic disturbances, other 
wide spread mass disturbances, natural disasters, man-made disasters, and cyberspace threats to the 
regime. If national sovereignty and territorial protection is objective #2, then the PLA is expected to 
direct border protection and border incursions, territorial rights protection, but it also encompasses 
the massive mission of keeping Taiwan from breaking away from the Mainland (More on this below). 
Strategic objective #4 also appears at first glance to be a throw away concept, but the idea of the 
Chinese military fostering international peace and stability, comes down to the recognition by the CCP 
that unstable, dangerous parts of the world cannot be ignored and could be addressed through UN 
peacekeeping, counter-piracy task forces, military and civilian nuclear and chemical inspectors, and 
other international security efforts. A fifth, unstated strategic objective is to shape the international 
system so that it is more suitable for and enhances the survival of authoritarian regimes like the Chinese Communist Party. This manifests itself in its wider foreign and defense policies such as its stance on 
cyberspace, and its policies related to the use of UN peacekeepers; however, this objective also reveals 
CCP efforts to erode American credibility in the Asia-Pacific Region and elsewhere, cooperation and 
alignment with nation-states which pose strategic challenges to US governance (e.g., Russia, and Iran), 
and the creation and promotion of alternate global institutions (e.g., the Maritime Silk Fund, the Asia 
Infrastructure Investment Bank, and of course, the Belt and Road Initiative itself).

The rather innocuous sounding objective #3, “Ensure continued economic growth”, interestingly is the 
rationale for China’s extremely vigorous activist foreign and security policy abroad. Since China depends 
on resources and energy imported from abroad, the PLA has been assigned the mission of assuring that 
continued access. Since Chinese citizens have been prompted to “go out” and start businesses and 
conduct commercial activities abroad, if those citizens are in peril, the PLA is expected to evacuate those 
citizens, provide protection for those citizens or at least help the host nation government create a more 
secure environment for those citizens to operate in. The PLA has been authorized to conduct counter-
terrorism, counter-insurgency, and other security related functions if invited in by a Host Nation and/or 
if the UN authorizes the Chinese intervention. With the arrival of the Belt and Road Initiative, China’s 
investment between $1 and 4 trillion in roads, ports, airports and other infrastructure projects, the PLA 
is now also expected to play some role in protecting the vast Chinese investment in this far ranging 
foreign economic policy. This could include the building of partner capacity, PLA intervention and 
response to a large scale terrorist attack on Chinese laborers and BRI funded investments. As other 
experts on the security implications of the BRI have noted, however, the initial Chinese response to this 
demand signal for security services will be to offer and provide private security contractors to the Host 
Nation government. At some point, however, the skeptics of Chinese motives in its out of area 
operations are probably correct that ultimately, gradually there has to be a PLA presence abroad in 
some capacity.

¹ Daniel Hartnett, “the ‘New Historic Missions’: Reflections on Hu Jintao’s Military Legacy” in Kamphausen, Lai & 
Tanner, eds., Assessing the People’s Liberation Army in the Hu Jintao Era, US Army War College, Carlisle, PA, April 
2014, pp. 40-55.
One thing that is important to note about China’s strategic objectives is that they are interlinked and their connectedness inform how the Chinese think about the operations and the missions designed to accomplish these objectives. If regime survival and internal security is a paramount objective, then this informs China’s activities and actions abroad to foster continued economic growth. In order to promote internal stability AND economic growth, the CCP promoted the modernization and growth of China’s inner provinces which had not successfully taken advantage of China’s opening up to the global economy. This objective is directly linked to the creation of the BRI which was initially designed to promote the increased economic potential of China’s poor inner provinces, and which seeks to link China’s inner provinces to Central and South Asia through to Eastern and Western Europe. If promoting continued economic prosperity and growth, as well as fostering internal security are important objectives, as is ensuring the territorial integrity and national sovereignty of Chinese borders, then the Chinese efforts to create a coalition of like-minded governments intent on protecting national sovereignty against terrorists, insurgents, civil war and other governance threats, through the Shanghai Cooperation Organization makes full sense. The objective of shaping an international order that is safe for authoritarian regimes must be balanced off of the objective of ensuring continued economic growth—suggesting a Chinese policy approach that is gradualist and cautious in confronting the United States. The need to balance these strategic objectives off of one another, will be highly informative in explaining Chinese expected missions and by implication China’s force structure goals, as we will discuss below.

What is Expeditionary?

A number of the US military services have offered definitions of expeditionary operations. The United States Army offers the following definition in its publication Army Doctrine Publication 3-0 Unified Land Operations. It defines expeditionary capabilities as “the ability to promptly deploy combined arms forces world-wide into any area of operation and conduct operations on arrival. Expeditionary operations require the ability to deploy quickly with little notice, rapidly shape conditions in the operational area, and operate immediately on arrival, exploiting success and consolidating tactical and operational gains. Expeditionary capabilities are more than physical, they begin with a mindset that pervades the force.”

Interestingly the United States Marine Corps offers a much wider definition of expeditionary operations—one less wedded to the conduct of major military operations. MCDP 3, Expeditionary Operations defines it this way: “An expedition is a military operation conducted by an armed force to ACCOMPLISH A SPECIFIC OBJECTIVE IN A FOREIGN COUNTRY. The missions of military expeditions may vary widely. Examples of missions of military expeditions include providing humanitarian assistance in times of disaster or disruption; establishing and keeping peace in a foreign country; protecting U.S. citizens or commerce abroad; retaliating for an act of aggression by a foreign political group; and destroying an enemy government by defeating its armed forces in combat”. Given China’s strategic and political goals, and its need to accomplish these goals short of war, it seems to be the case that the Marine Corps definition of expeditionary operations is closer to how the PLA might envision its future with expeditionary operations.

---

Embedded in this latter definition of expeditionary operations is the idea that a military force can quickly embark on military platforms either through military shipping, military aircraft, or some other mode of transport (e.g., civilian air craft, merchant shipping, rail transport) be dispatched to an area of operation either currently involved in intense combat or at lower stages of conflict, and can immediately engage in military operations to shape the environment, exploit a tactical situation, and support national political and security objectives. Implicit in this definition is the idea that the military force has what it needs to protect itself, to supply itself or be supplied by supporting agencies, and to communicate with all relevant authorities for its operations.

What operational missions?

CCP strategic objectives tend to balance off of one another; with internal security and regime survival serving as the paramount objective and other objectives (important as they are) serving as secondary or tertiary objectives. This means that in addition to internal security, counter-terrorism and national stability missions within the PRC high up on the list of operational priorities will be a Taiwan mission, but that Taiwan mission must be balanced with an almost equally important objective of continued economic growth and international stability. The PLA has undoubtedly been tasked with planning for and executing military missions designed to keep Taiwan within the fold—preventing Taiwan from declaring de jure independence, or even asserting greater international autonomy for itself, but its mandate extends only so far. PLA force structure development with regard to its Taiwan mission appears to be to gradually develop the capability to fully assault Taiwan from the sea for the purposes of exerting maximum political pressure on the island. As time elapses however the PLA will eventually develop a “World Class Expeditionary” capability to fully address, militarily, its Taiwan problem. Table One lists the CCP’s “national sovereignty and territorial strategic objectives” and the PLA’s “out of area strategic objectives” and the associated notional operational missions. Table Two lists likely expeditionary missions associated with the larger operational issues the PLA will have to be able to plan for and execute in relation to larger strategic objectives listed in Table One.

The imperative to balance the CCP’s larger strategic objective additionally means that it is unlikely in the near to medium term that the Chinese are first and foremost seeking a full scale conventional war in the Indian Ocean and in South Asia or a policy of direct confrontation with the United States. A large scale conventional conflict in South Asia imperils China’s economic growth, puts at risk China’s borders, and potentially risks border insecurity and unrest within China. This does not mean that the PLA is not thinking hard about the mission of protecting its SLOCs against the possibility of Indian or possibly American interference, the PLA has probably already gamed out what requirements for this kind of contingency would look like and may have thought through potential mitigating operations should the two Asian powers slide into a conflict at sea (see the last category of Table one); it also suggests that while the PLA is cognizant of the power projection capabilities required to address a direct confrontation with the United States, the ultimate guarantor of security for the CCP regime, it will choose to accomplish its strategic objectives gradually and through a policy of erosion of American power. What this also suggests is that the PLA is thinking about the possibility of having to perform an

---

4 Both Bonnie Glaser and Tai Ming Cheung argue that the PLA had a hand in developing this strategy and policy toward Taiwan. Cheung’s analysis is cited in Glaser’s excellent chapter on the PLA role in national security decision-making. See Bonnie Glaser, “The PLA Role in China’s Taiwan Policymaking” in Saunders and Scobell, eds., PLA Influence on China’s National Security Decision Making, Stanford University Press, Stanford, CA, 2015, p. 168.
Indian Ocean wide SLOC protection mission or a maritime superiority mission somewhere in the future, but its current and near term emphasis is probably protecting those immediate interests associated with Chinese citizens living and working abroad, helping to protect and respond to threats to overseas Chinese businesses, the enormous Chinese interests associated with the BRI, and fostering a collective security response through the SCO.

<table>
<thead>
<tr>
<th>Strategic Objective</th>
<th>Associated Operational Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect national territory &amp; national sovereignty</td>
<td>Foster military cooperation with Taiwan; promote political integration; deter &amp; coerce Taiwan; increase coercive pressure; isolate Taiwan; seize offshore islands; full-scale invasion</td>
</tr>
<tr>
<td>Support to HN authorities--</td>
<td>Build Partner Capacity; Private Contractor Security support; Law Enforcement or Local Incident Response/Investigation; Coalition response thru SCO; Joint Patrolling; Advise &amp; assist in implementation of internal security measures; Medical response; HA/DR response; Direct Counter-terrorism/COIN support; PLA deterrence presence; PLA Direct Action vs. Terrorists, insurgents</td>
</tr>
<tr>
<td>Protection of Chinese citizens/businesses</td>
<td>Non-Combatant Evacuation Operations; Private Contractor Security Support; Search &amp; Rescue Operations; Law Enforcement or Local Incident Response/Investigation; Direct CT/COIN support</td>
</tr>
<tr>
<td>Support to Belt &amp; Road Initiative Projects</td>
<td>Build Partner Capacity; Private Contractor Security Support; Law Enforcement or Local Incident Response/Investigation; Coalition Response through SCO; Joint Patrolling; Advise &amp; Assist in implementation of internal security measures; Direct CT/COIN support; PLA deterrence presence; PLA Direct Action vs. Terrorists, insurgents</td>
</tr>
<tr>
<td>Counter-Piracy, Counter-Trafficking, and Local SLOC protection</td>
<td>Ship escort; Maritime Intercept Operations; Visit Board Search &amp; Seizure; Law Enforcement or Local Incident Response/Investigation; PLA Direct Action versus transnational criminals, pirates</td>
</tr>
<tr>
<td>Regional Stability Operations</td>
<td>Show of force; Coalition response thru SCO; joint patrolling; PLA Direct Action vs. terrorists/insurgents; PLA deterrence presence; Support to HN authorities missions; UN Peacekeeping operations; Possibly ARG-MEU operations</td>
</tr>
<tr>
<td>Extra-regional SLOC protection</td>
<td>Carrier maritime superiority missions; area air and missile defense; Anti-Surface Warfare (ASUW); extra-regional ASW; extra-regional littoral operations in a contested environment (LOCE); show of force; VBSS; MIO; area wide</td>
</tr>
</tbody>
</table>
In addition to strategic objectives related to operational missions associated with Taiwan, Table One lists the CCP’s out of area strategic objectives and the associated notional operational missions. A cursory glance at this table reveals that there are definitely potential expeditionary missions associated with these broad operational missions. Table Three maps the potential “Far Seas” expeditionary missions to the identified larger operational missions of the PLA listed in Table One.

<table>
<thead>
<tr>
<th>PLA operational missions related to Taiwan</th>
<th>Associated Notional Expeditionary Missions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote mil-to-mil cooperation; foster Taiwan-Mainland integration; create/enhance joint security perspective</td>
<td>HA/DR; NEO (including Taiwan citizens); escort of Taiwan flagged shipping; joint patrolling in SCS/ECS; logistics supply &amp; cooperative activities with Taiwan forces on Taiping</td>
</tr>
<tr>
<td>Deterrence; coercive actions; Strategic signaling; erode Taiwan sovereignty</td>
<td>Amphibious demonstration (exercises); large scale naval maneuvers &amp; ATF operations at sea (east of Taiwan); Airborne &amp; SOF simulation exercises; Trans-Theater Mobility Exercises</td>
</tr>
<tr>
<td>Increase coercive pressure; isolate Taiwan; impede commerce &amp; free flow of goods to/from Taiwan; warning shots;</td>
<td>Transportation of ground, air, SOF forces to TCs near Taiwan; load amphibious ships &amp; Prepositioned ships; deploy ATF east of Taiwan; naval blockade, MIO, VBSS; coordinated naval amphibious, Air Force exercises with Strategic Rocket ballistic missiles fired around Taiwan</td>
</tr>
<tr>
<td>Seize of offshore islands; seizure of Taiping island (SCS); SOF insertion &amp; espionage on Taiwan; seizure of single port/airfield</td>
<td>JFEO; SOF Insertion; NGFS; C2 Air Support; CATF-CLF turnover of command; Airborne operations; coordinated missile, ground, air, sea operations offshore; Beach operations</td>
</tr>
<tr>
<td>Full-scale invasion; large scale amphibious assault; SOF/airborne insertion; seizure &amp; hold PODS/APODS; cross-channel logistics; maritime &amp; air superiority over Strait &amp; Taiwan airspace; comprehensive “counter-intervention” operations to keep US/Allies at bay</td>
<td>JFEO; Establish &amp; expand beachhead; Cross-Theater transportation of PLA ground &amp; air forces to PODS/APODS; SOF Insertion; NGFS; C2 Air Support; CATF-CLF turnover of command; Airborne operations; coordinated missile, ground, air, sea operations offshore &amp; in wider region; Beach operations; Multi-domain situational awareness, C2;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2. Notional Sovereignty &amp; Territoriality missions and Associated Expeditionary Missions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larger PLA Out of Area operational missions</td>
</tr>
<tr>
<td>Private contractor support; law enforcement incident response/investigation; advise &amp; assist internal security measures; coalition response thru SCO</td>
</tr>
</tbody>
</table>
HA/DR; NEO; COIN; CT; SOF Direct Action; hostage rescue
Amphibious lift; Air lift; transportation of person/equip; C2 platform; mother ship

Build Partner Capacity; joint training
Exercise platforms

MIO; VBSS; Counter-piracy, trafficking
C2 platform; mother ship; air surveillance & airborne early warning

Show of force; coalition response to major terrorist event; ARG-MEU operations
Amphibious task force; personnel and equipment carrier; C2 platform

Limited littoral operations in contested environment
Amphibious lift; C2 platform; regional air and missile defense

Maritime superiority; air superiority; ASW; ASUW; JFEO
Amphibious lift; Amphibious task force; Air superiority; carrier operations; Joint Air and Sea operations; comprehensive multi-domain operations

Table 3. PLA Out of Area Missions and Associated Expeditionary Missions

PLA modernization and the evolution of China’s expeditionary capability

Although the commissioning of the Liaoning, China’s first operational aircraft carrier, which gained most of the international attention in 2011, it was the procurement of L-class ships which truly heralded the arrival of China’s naval expeditionary capability. Its Yuzhao Class ships, close to the U.S. San Antonio Class Landing Platform Dock or LPD, can carry a force of roughly the same size as a battalion with four air cushioned landing craft in its well deck and 4 Z-8 support rotary wing aircraft. There are currently four Yuzhao class ships in the PLAN inventory with more to follow. There is also strong evidence that the Chinese are on the verge of developing an LHD style large deck amphibious ships, akin to the Wasp Class LHD in the US Navy inventory. Such a platform significantly expands the PLA’s expeditionary lift capacity. A ship of this size and capacity can carry 1,900 troops and its associated ground transportation assets and equipment, 30 helicopters, six fixed wing aircraft, an associated air element, and 3 air cushioned landing craft and/or about 30 amphibious assault vehicles.

The Chinese also have over the past decade been procuring and have now developed an indigenous hovercraft style landing craft or Type 726 Class landing craft which has a top speed of over 60 knots, can carry a payload of 150 tons, and a 300 nm operational range. A far cry from the Landing Craft Vehicle and Personnel (LCVP) of the Second World War, the Type 726 class landing craft can carry approximately 60 to 70 troops in addition to one Type 96 Main Battle Tank or four armored vehicles. Although the Department of Defense cancelled the much anticipated Advanced Amphibious Assault Vehicle or AAV, the Chinese have gone ahead and procured a similar vehicle for the PLA Marine Corps.

Although most likely part of a long-term planning assessment the PLA could be contemplating extensive blue water SLOC protection missions in anticipation of a future major power conflict either with India or with the United States. As the last field of Table 1 illustrates, this requires quite an extensive naval capability; one which the PLA clearly lacks at present. There are nascent signs that the PLAN could be heading in this direction although the evidence remains debatable. These signs are: (1)

---

6 Ibid.
7 Ibid.
the procurement of two aircraft carriers (the Liaoning and the Shandong) and evidence that China could have a total of four by the middle of the next decade; (2) ever increasing numbers of surface combatants each class improving in stealth, stability, range of weapons systems, radar capability, and area air defense capability; (3) recent procurement of nuclear attack submarines with increasing willingness to employ these out of area; (4) enhanced naval aviation capability as evidenced by the PLAN’s interest in procuring the follow-on to the J-15—the FC-31; and (5) and the effort to increase the fielding of rotary wing assets (the Z-8 and Z-9) to the Sea Fleets for the purpose of making more robust task force operations region-wide.8

Expeditionary capability is not strictly defined as naval. A nation’s ability to conduct expeditionary operations applies to the other services as well. In China’s case, the PLA Air Force (PLAAF) has also been procuring capabilities which can be characterized as expeditionary. First, its air transport capability has over the past fifteen years expanded significantly with the co-development (with Ukraine) of the AN-225 the world’s largest military air transport aircraft.9 Previous efforts to improve the PLAAF’s air transport capability have focused on the PLAAF’s Yun class aircraft, although much more limited in range to the USAF’s C-17 and C-5 transport aircraft play similar roles.10 The Chinese have used these aircraft to transport PLA airborne forces across military regions during exercises; have transported cargo and personnel to distant and remote areas within China following natural disasters; and have transported equipment, vehicles and personnel to the far reaches of China to bolster border defenses (e.g., against India during tense times) or to areas outside of China to participate in NEOs and out of area exercises. Additionally, PLA Air Force exercises have emphasized rapid deployment, austere air field, and sparse supporting activities in their operations.11

The PLA Ground Forces have been making efforts to make their operations more expeditionary in nature. Since 1993 following the lessons learned from observing the Gulf War, the PLA ground forces have become more amphibious in nature, first, by dedicating infantry divisions to the amphibious mission for Taiwan; secondly, the PLA ground forces have embraced the concept or modularity or multi-functionality by creating combined arms brigades;12 and the PLA ground forces have been identified as the “out of area force” when it comes to Military Operations Other Than War (MOOTW), especially for UN peace keeping.13 The ground forces reducing the size of staffs and moving from Division to Brigade centered organization was in part motivated by the need to make the PLA ground forces more mobile and expeditionary. PLA Army ground forces have clearly been moving toward a greater expeditionary focus, however, the most revealing link between expeditionary operations and Chinese force modernization is the renewed focus on the PLAN Marine Corps.

---

8 Ibid, pp. 8-50.
The PLAN Marine Corps is expanding from a 10,000 size force of three brigades strictly associated with the South Sea Fleet, to a 30,000 size force of about nine brigades, each associated with the three PLAN Sea Fleets (North Sea Fleet, South Sea Fleet, East Sea Fleet).\textsuperscript{14} The expansion of the PLANMC appears to have been entirely at the expense of the PLA Army Ground Forces, primarily from Army amphibious units associated with the Taiwan mission;\textsuperscript{15} this makes sense. The separation of PLANMC exercises, operations, and career paths from those of PLA ground force amphibious units suggests that the PLA has created a hard division between the two expeditionary forces, with the Army amphibious units still strictly reserved for a Taiwan contingency and the PLAN Marine Corps missions centered around the maritime territorial disputes, and out of area missions.

A military is characterized as expeditionary not simply by its platforms. It is also defined by capabilities which permit a military to operate at long distances and for extended periods of time in austere conditions. In addition to the direct expeditionary platforms just listed, the PLA has also been making investments in underway replenishment ships, air to air refueling capability, ship tenders, and increasing the number of PLAN ships with satellite communications.\textsuperscript{16}

Finally, a military may be characterized as expeditionary if its logistical, maintenance, and rotational process supports a consistent ability to deploy forces long distance, sustain them, rotate them out, maintain them on a periodic basis, upgrade them, and then put them through a rigorous training and work-up process before they deploy again. From the ten years of evidence that we have of China’s counter-piracy operations to the Gulf of Aden, China has something close to a well-executed process.\textsuperscript{17}

**PLA Training and lessons learned for an evolving expeditionary force**

There is ample evidence in the Open Source literature that the PLA has been engaged in increased expeditionary operations training. Dennis Blasko and Rodrick Lee have documented the evolution of PLA Marine Corps training from that restricted to South China Sea related missions to an ever expanding training regimen involving diverse climate, terrain, and geography.\textsuperscript{18} A recent RAND report on the PLAAF’s transition to a force capable of engaging in air expeditionary operations also details the PLAAF’s increasing involvement in exercises outside of China, with an increasingly diverse array of foreign exercise partners, and involving an increasing number of air personnel and aircraft.\textsuperscript{19} The PLA’s ability to operate out of area for the purposes of engaging in training is unquestioned. The real question is: has the PLA been training to address some of the missions already discussed in this paper and has it been gathering lessons learned to improve its performance in these mission areas?

There is every bit of evidence to suggest that this is indeed the case. First, the PLA has, since the mid-2000s been engaged in international counter-terrorism exercises along with coalition partners in


\textsuperscript{15} Ibid.

\textsuperscript{16} Bernard Cole, *China’s Quest for Great Power: Ships, Oil and Foreign Policy*, Naval Institute Press, Annapolis, MD, pp. 51-84.

\textsuperscript{17} Andrew Erickson and Austin Strange, “No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden”, China Maritime Studies Institute, # 10, Naval War College, November 2013, pp. 81-108.


\textsuperscript{19} Garofalo and Heath, pp. 12-33.
the close to yearly Shanghai Cooperation Organization exercises. These exercises with Central Asian countries, Russia and China have invariably involved some kind of major terrorist incident or threat to the sovereignty and survival of a partner regime. The PLA has therefore had over a decade and a half to practice expeditionary responses to the kind of major crises possibly associated with its interests in Belt and Road Initiative countries.

Second, the PLA has had a decade of experience conducting counter-piracy operations and has had that long to practice the deployment of both naval and ground forces out of area to address threats to shipping and its SLOCs. A number of assessments have noted that China’s real world operations, particularly its anti-piracy operations have led to a number of lessons learned and improvements in PLA expeditionary operations. In particular, Andrew Erickson and Austin Strange (“Learning by Doing”) have noted the distinct improvement in PLAN training and “work up” preparation; the collection and fusion of intelligence while deployed and the utilization of intelligence to inform current operations; the specific procedures of the PLAN task force to include procedures on underway replenishment, vertical replenishment, force make up, force protection procedures, leave policy, and food preparation and preservation.

Third, there is every reason to believe that the PLA is now beginning to incorporate these new out of area missions into its training and education regimens. When the author visited the PLA Marine Corps training academy in Guangzhou as part of a Marine Corps War College exchange with the PLA in both 2016 and 2018, he was told by the faculty and the leadership that lessons from these out of area operations are starting to be included in the curriculum so that the upcoming generation of operators can have the benefit of these expeditionary lessons.

There is also evidence that the PLA has an even greater desire to learn from and improve upon its most likely real world operation—Non-Combatant Evacuation Operations. During dialogues with the Chinese defense scholars, an oft repeated subject raised was the possibility of table top exercises in which the scenario was a major crises in a third country prompting the need for a NEO. The Chinese suggested that a joint table top exercise in which the two sides had to coordinate and plan a NEO was a possibility. In meetings with Chinese defense and foreign policy analysts in Beijing in 2011 the author was informed that the PLA and various other agencies had gathered in Beijing to engage in a lessons learned discussion on the Libya NEO.

Lastly, that the PLA takes these expeditionary operations seriously and plans on providing rigorous training and education in support of them is illustrated by the resources put toward these

---

22 U.S. Marine Corps War College exchange with the PLAN Marine Corps Training Academy, Guangzhou, PRC, May 2016 and 2018.
efforts. The Chinese have created and put in place a Peacekeeping training center in Beijing to which PLA units and command elements must attend prior to deploying on any UN Peacekeeping mission.23

Gaps in China’s expeditionary capabilities

It would be folly to assert that after decades thinking about, planning, rehearsing and developing the capabilities for an amphibious assault on Taiwan that the PLA lacks the basic fundamentals to conduct this kind of operation. The US amphibious doctrine template for sound, effective amphibious operations is the acronym PERMA (Planning; Embarkation; Rehearsal; Movement; and Assault). There is ample evidence that the Chinese have over the decades embarked on all of these activities with regard to Taiwan. Technologically the PLA has the scientific skill to procure the platforms and weapons systems to be able to undertake a large scale amphibious assault. The PLA has all of the components—landing craft, amphibious assault vehicles, landing ships, surface combatants, amphibian trained ground forces, support aircraft—to conduct an assault. At the same time, as the history of amphibious operations attests, the possession of technical skill and the material resources does not ensure a successful amphibious assault. On the verge of D-Day in 1944, the Allies possessed the technological skill, the amphibious lift, the air support, and detailed planning; nonetheless, Operation Neptune was by no means a fait accompli. Any number of actions that the German defenders undertook in France could have unraveled the success of Neptune and Overlord.

If I were to identify areas where the PLA likely has gaps in its ability to assault Taiwan these areas would center around the seams of expeditionary operations—areas where domains cross-over into each other and which require sophisticated command and control, very practiced cross-service coordination; and very well thought out doctrine designed to minimize confusion when sea operations cross over into land, where surface operations must be coordinated with sub-surface, where the passing of command goes seamlessly from a maritime commander to a ground force commander. Additionally, the PLA also lacks the ability to fully address the likely mine problem which Taiwan’s defenders would most likely utilize. Although I do not possess hard evidence of this, it is also likely that the PLA has not fully developed a number of “behind the scenes” operations which would prove crucial to a full scale assault of the island. These are: naval beach operations; tactical control of aircraft (both off of aircraft carriers, off of amphibious ships, and out of mainland airfields) off of amphibious shipping or an at sea maritime force commander; combat loading of amphibious ships and the tactical use of prepositioned merchant shipping; and high intensity air traffic control off of flight decks.

Moving beyond Taiwan, despite the great strides the PLA has made in evolving an expeditionary oriented out of area military capability, it is still suffering from a number of gaps or shortcomings in that capability as well. First, the PLAN still does not have a uniform force of platforms each equipped with satellite communication capabilities. An increasing number of PLAN ships have long-range communications capability, but this is not universally so.24 Second, the PLANMC has only recently begun its expansion and so it is reasonable to assert that the PLANMC is not fully operational and not expected to be so for at least five to ten years. Third, although the PLA is not planning on a large scale conventional conflict in the Indian Ocean its out of area task forces are still largely vulnerable to attacks in the maritime domain. The PLAN’s notoriously poor ASW capability leaves any type of PLAN out of

area mission seriously vulnerable to submarine attack.\textsuperscript{25} It is also the case that any PLA task force operating abroad would be vulnerable to air and anti-ship missile attack as well.\textsuperscript{26} This will surely continue to be the case until China has developed further its aircraft carrier and associated battle/strike group capabilities.

The PLAN also suffers from a number of maritime capability shortfalls which often go unnoticed to the untrained eye. The ability to successfully conduct expeditionary operations in a contested environment has to account for a number of capabilities that a clever and determined foe can use to seriously impede, degrade and possibly devastate an out of area force. For example, the PLAN has minimal mine clearing capability and would be stopped dead in an expeditionary operation if a determined adversary sowed the very shallow water, shallow water, surf zone and the beach with any variety of modern and vintage sea and land mines. The PLAN has not had time to develop the force protection assets to make forward deployed forces secure in foreign ports; it has not developed a forward deployed naval coastal warfare capability, it does not have a dedicated force of divers to ensure protection against sabotage, and its forward deployed Explosive Ordnance Disposal (EOD) capability, a deployable Riverine force and expeditionary Construction Battalion (Seabee) force are practically non-existent. The PLAN additionally has not thought through and implemented what a military professional might deem a minimal capability to deal with medium to low intensity threats. For example, a PLAN amphibious task force operating forward still will have not worked out tactical air control of its air assets. A carrier may be assigned to protect that task force but the Chinese have not had to work out tactical control of aircraft in operations outside of the Asia-Pacific; the amphibious task force has yet to invent a TACRON.

Additionally, it is one thing to procure a platform which has all of the trappings of a significant expeditionary capability; it is quite another to be able to operate off of that platform with all of the functions associated with that expeditionary capability. Let’s take a closer look at the large deck amphibious ship that the PLAN is purported to be developing. There has thus far been no evidence that the PLANMC has developed the doctrine to operate on that ship and to work out all of the doctrine associated with “Far Seas” expeditionary operations off of that and any other L-class ship. Would the PLANMC know how to conduct an opposed NEO in some war torn country in Africa? Has it worked out the use of rotary wing aircraft to insert PLA Marines deep into a country, round up citizens unable to make their way to the coasts, provide a safe landing zone for the incoming aircraft, properly load the citizens on the aircraft and return these citizens with escort aircraft back to the expeditionary task force. The Chinese are presently wholly unprepared to do this mission.

If we ease the threat environment in which the PLA is expected to operate we still see that the PLA may be suffering from some serious gaps in its capabilities. The most obvious likely real world operation the PLA will have to respond to is a Shanghai Cooperation Organization coalition response to some major disaster or threat to a coalition country. If China dispatches the PLA as part of a coalition effort to address a terrorist, insurgent, or large scale civil unrest, and China has the platforms to reach the target area (all reasonable assumptions) the PLA still suffers from a less than robust command and control structure for far seas and “out of area” operations; its logistical support is not robust enough to

\textsuperscript{25} O’Rourke, pp. 4-5.
\textsuperscript{26} Ibid.
continuously supply a sizeable force abroad;\textsuperscript{27} and the PLA still does not have a robust maintenance and repair capability network abroad to deal with damaged or destroyed equipment.\textsuperscript{28} Related to these points, if the PLA finds itself in a much more severe security environment in which its forces are taking serious casualties, there is no significant casualty care or mortuary service support system upon which the PLA can depend on.\textsuperscript{29}

**Core Technologies in support of Expeditionary Force Building Efforts**

In most of the cases of PLA gaps in expeditionary capabilities, the PLA has not necessarily lacked a specific technology as it has not effectively worked out the doctrine, procured the right equipment, or provided the right training to perform the mission. The PLA has the technological capacity to produce or buy the equipment to address the needed shortfall; the PLA has simply been inexperienced in a particular mission area and does not know what it does not know. For example, the PLA's lack of an opposed NEO capability. That requires the development and purchase of a more robust helicopter force designed to lift troops, provide escort, and can conduct rudimentary close air support. The PLA has the technological capability to procure this kind of capability but for any number of reasons has not done so.

On the other hand, in some cases the PLA does lack the technological skill to address an expeditionary short fall. In some cases, the technological skill lacking isn’t simply a Chinese problem, but a world-wide military problem. The United States Navy has problems with the mine problem and has spent decades trying to work out the best solutions to deal with this thorny problem. Nonetheless, if the PLA intends to be a robust, world class expeditionary force it will have to deal with these problems as well. It will have to deal with the difficult problem of being able to spot mines in varying depths of water, neutralize the mines, clear the mines and dispose of them in a timely fashion. Similarly the PLA will need to explore counter-IED technologies as did the U.S. military in response to its experiences in Iraq and Afghanistan.

The PLA will also eventually have to address obstacles which have tended to plague U.S. amphibious forces. These include the operational limitations associated with landing craft; the complexities of marrying PLA expeditionary ground forces with merchant and prepositioned supplies; the vulnerability of a well deck to an assortment of non-traditional threats (e.g., chemical and biological attacks); and the limitations of capacity on an amphibious flight deck compared to the potential aviation-related missions which could be assigned. Consequently, we can expect to see the Chinese to push for development of: a faster, more survivable, versatile landing craft that can operate regardless of the sea state or the temperature; unmanned systems deployed off of amphibious ships operating over both water and land, and capable of surveying, monitoring, intercepting and attacking targets in a wide range of operating environments; advanced maritime prepositioned forces vessels which can store huge amounts of cargo and equipment, easily rearrange storage at sea, flexibly gain access to the equipment, and can offload the equipment through a variety of means (cranes, lighterage, causeways);

\textsuperscript{27} O'Rourke, p. 58.

\textsuperscript{28} Christopher Yung, “Not An Idea We Have to Shun: Chinese Overseas Basing Requirements for the Twenty First Century”, China Strategic Perspectives # 7, Institute for National Strategic Studies, National Defense University, 2014, pp. 11-2, 28-33, and 39-43.

\textsuperscript{29} Ibid.
and well-decks designed to reduce likelihood, mitigate the consequences of, and speed the cleanup of, chemical, biological and other non-conventional attacks on an expeditionary force.\textsuperscript{30}

Perhaps the area where we can expect to see the PLA pursue technologies in support of expeditionary, and out of area operations will be in support of operations in a non-contested or minimally contested environment. That is, operations which support China’s strategic-political goals and not necessarily those designed for warfighting or contesting in a littoral environment. In short, expeditionary operations which allow China to support host nation countries either with private contractors or a small, minimal PLA presence; operations which permit the PLA to react rapidly to security situations in Belt and Road Initiative countries; operations which permit the PLA to conduct counter-terrorism, counter-insurgency, protection of Chinese businesses abroad; which enhance PLA presence abroad so that the PLA can conduct joint patrolling, joint training and other building partner capacity activities; and operations which cement China’s growing security relationship with host nation governments alongside China’s periphery.

These technologies can largely be grouped into two broad categories: logistics and communications. Recent observers of China’s activities in relation to the Belt and Road Initiative have observed that the Chinese are making a concerted effort to pursue technologies in these core areas. At home the Chinese have been engaging in a “full court press” to develop civilian-military fusion in the logistics arena.\textsuperscript{31} That is, the Chinese have been attempting to marry advances in civilian logistical and communications technologies with military operations. Initially observers of China’s military reforms concluded that such civ-mil fusion ideas could have little relevance to out of area operations or expeditionary operations; however, given the nature of Chinese strategy, which is to enhance its power projection reach gradually through cooperation with host nation countries around its periphery, such an initial assessment must be considered premature. The Chinese have to be marrying “just in time logistics technologies” or “real time” capabilities to identify supply requirements, target suppliers either in China or elsewhere worldwide, notify potential shipping or transport vendors, track the movement of supplies, and then distribute the part or the supply where needed.\textsuperscript{32}

The paucity of Chinese military basing and overseas facilities solely under Chinese jurisdiction also poses technological challenges to China’s out of area operations; in particular PLA command and control of its forces. If the Chinese intend to operate out of area and intend to do so with a minimal footprint and infrastructure, it is going to have to acquire and make more compatible its communications networks with those of the host nation countries it will be operating in. This means that notoriously poor countries with very poor digital footprints will have to serve as the back bone or foundation of China’s communications along its periphery. This is going to require a communications network that is secure, inter-operable or largely compatible with a host nation’s internet infrastructure, and can facilitate China’s underlying strategic rationale for the BRI—its commercial expansion in the

\textsuperscript{30} With the exception of unmanned systems, the remaining technology developments have been on the Amphibious Forces wish list for close to two decades. Two examples are LCU Replacement and Maritime Prepositioned Force (Future).


\textsuperscript{32} Ibid, pp. 264-7.
developing world; no mean feat. A commercial network which can address all or most of these requirements is a tall order.33

**Potential Congressional Action**

In this testimony I have discussed what I believe to be the direction of China’s expeditionary force development. The Commission staff has asked me to specifically address what Congressional actions might address some of the concerns generated by this testimony. Obviously Congressional oversight of the Defense budget has direct pertinence to this issue. I am on the record in other venues and publications to caution the Department of Defense, and the Department of the Navy to carefully evaluate the force structure implications of the emerging era of Great Power competition.34 There will be a natural rush to procure platforms directly related to large scale conventional conflict. In the Navy’s case, the rush to purchase blue water, power projection, maritime superiority assets. These will unquestionably be important assets to consider; however, the caution comes from the nature of the strategic competition to be. The Chinese are moving to procure long-range, out of area expeditionary platforms like the Type 075 Landing Helicopter Dock; take note that it is also moving toward carrier development. As my testimony should illustrate the Chinese recognize that these expeditionary platforms and capabilities have significant strategic utility, and generate oversized political effects. In shipbuilding and force acquisition considerations, the Navy needs to stop thinking of our amphibious forces simply as transportation assets, and needs to start re-evaluating these platforms as strategic effect platforms. In contemplating a carrier versus amphibious ship purchase, then, that is the proper mind-set to conduct an analysis of trade-offs.

A second potential impact on Congressional action is related to the types of technologies the Chinese will be seeking to obtain over the next few decades. Since the Chinese will be heavily in pursuit of communications technologies and will be pressing hard to develop civilian communications technologies which can be fused with military applications, it is a safe bet that Chinese efforts to obtain these kinds of technologies by a wide variety of means: espionage, forced technology transfers, cyber hacking, and through human capital transfer of Chinese graduate researchers returning to China. Congressional action related to reducing these kinds of activities cannot be overstated. Congress should probably pass the China Technology Transfer Act which places all Chinese “core technologies” from “Made in China 2025” on the Department of Commerce’s Commercial Export Control List; by contrast, and ironically, it should probably take a good look again at laws which discourage Chinese students with STEM backgrounds and a talent for hi-technology research to have to return to China.

Finally, my testimony argues that a large portion of the expeditionary gaps in the Chinese military comes not from the absence of technologies, but simple inexperience and lack of doctrine and training. The Chinese seek to gain this knowledge through its interactions with the U.S. military. I am on the record as stating that US-China mil-to-mil produces more good than ill; however, it is my opinion that certain types of capabilities and knowledge should remain on the restricted list in our interactions with the Chinese. These include the ability to do Non-Combatant Evacuation Operations and other

33 Ibid.
MOOTW like expeditionary operations. Congress has the power to impose these restrictions through the specific restrictions it incorporates in the National Defense Authorization Act (NDAA).

Conclusion

The PLA as a whole is making significant strides toward becoming a “World Class expeditionary power, its procurement of a number of well-known expeditionary platforms is certainly evidence of this. At the same time, the PLA has demonstrated a number of significant gaps in its expeditionary capability. Some of these gaps, largely associated with expeditionary operations in a high intensity conflict environment, will take decades to address. In order to fully address these shortcomings, the PLA will need to embark on a period of sustained naval procurement of some very sophisticated naval platforms and an extended period of training and doctrinal development to bring these capabilities to fruition. Even expeditionary operations in a moderately contested environment will take at least a decade or two to fully address. These specific gaps are not necessarily due to a lack of technological prowess, but can be traced back to simple inexperienence and low visibility deficiencies such as in the areas of counter-mine warfare, force protection, and tactical control of aircraft.

The area where China will seek to vigorously obtain new technologies to complement its evolving expeditionary military capability are those technologies which support PLA operations in a non-contested or minimally contested environment. Since the PLA is supporting China’s larger national objectives of assuring access to energy, raw materials and goods and services, creating a stable and “harmonious” zone along its periphery, and contesting American hegemony and influence in parts of Central, and South Asia, the Middle East and the Eurasian land mass through the Belt and Road Initiative, it can leverage off of initiatives started back in China related to civilian-military fusion of logistics and communications technologies. Initiatives related to “just in time logistics”, and the “digital silk road” are sure to be pursued with military applications in mind.

The purpose of this hearing is to address the question of China’s pursuit of a “World Class Military”. Taken as a theme the question of whether China’s pursuit of expeditionary power has achieved world class status remains. It is the conclusion of this paper that the PLA scorecard in that regard is mixed. The PLA has demonstrated “world class” capability to link its political and strategic objectives with its current and developing military force structure. It has successfully embarked on the acquisition of platforms, weapons systems, and related civilian assets to conduct operations in support of its “out of area” interests and its interests directly related to Taiwan. China has also partially set the stage and laid the ground work to operationally support peacetime, and low intensity contingency missions through joint and service reforms. However, at the same time the PLA must demonstrate that it is able to operate under extremely severe and highly threatening combat environments before a moniker of “World Class” can be assigned to it. It is here that the PLA’s record falls short for the moment: its logistics are still centered on interior, vice exterior lines; its communications are still not robust enough to handle high intensity combat situations; command and control are still designed for a centralized, hierarchical system not a dynamic, autonomous, mission-command oriented process; and the PLA has demonstrated insufficient experience with joint planning and joint operations in an austere, expeditionary environment. The 2015 Joint Reforms is a significant step for the PLA to take in the right direction; however, it is not there yet and it is safe to stay that it won’t be there for quite a number of years.
Testimony before the U.S.-China Economic Security Review Commission


Panel III: Building a World-Class Military: Missions, Modernization, and Bases

David Santoro, PhD
Director and Senior Fellow for Nuclear Policy
Pacific Forum International

June 20, 2019

Thank you to the Commissioners for giving me the opportunity to testify on the implications of China’s military reforms for Chinese nuclear strategy and weapon program. Before I begin, I want to stress that even though the Pacific Forum is an independent, nonpartisan think tank that does not take institutional positions on policy issues, I am speaking in my personal capacity.

To understand the implications of China’s military reforms for Chinese nuclear strategy and weapon program, it is necessary to understand not only the origins and key features of that strategy and program, but also recent developments and the situation on the eve of the reforms. That is why in this testimony, I begin with an overview of the key decisions and developments that have shaped China’s nuclear strategy and weapon program from its inception. I then move on to discuss more recent dynamics and the “state of play” before Chinese President Xi Jinping announced the launch of the reforms, which he stated aim to build “world-class forces” for China by 2049. On that basis and using publicly available information as well as drawing on landmark studies and my work in track-2 and track-1.5 initiatives on strategic nuclear issues with the Chinese national-security community, I reflect on what the reforms could have in store for China’s nuclear strategy and weapon program. Finally, I conclude with recommendations for the U.S. government.

I make the following arguments and recommendations:

- China’s nuclear strategy has been consistent since Beijing first exploded a nuclear device in 1964. It has been a self-defense strategy, which is why China has adopted a no-first-use (NFU) policy and chosen to develop a small nuclear force.
- In recent years, however, China has been modernizing, diversifying, and expanding its nuclear arsenal at a relatively rapid pace, raising concerns in Washington and elsewhere that Beijing may be on the cusp of some policy and strategy changes.

---

1 President Xi and others first announced their intention to launch military reforms at the Third Plenum of the 18th Party Congress in October 2013. Yet it was at the 19th Party Congress in October 2017 that Xi stressed that the people’s armed forces should become “world-class forces” by mid-century.
2 While there are several track-2 and track-1.5 initiatives with the Chinese, the main dialogue on strategic nuclear issues is the biannual “U.S.-China Strategic Nuclear Dynamics Dialogue,” led by the Pacific Forum and Naval Postgraduate School and in partnership with the China Foundation for International and Strategic Studies and China Arms Control and Disarmament Association since the mid-2000s. The public reports of the dialogue are available on the Pacific Forum website at www.pacforum.org. For a summary of findings until 2014, see also Michael O. Wheeler, *Track 1.5/2 Security Dialogues with China: Nuclear Lessons Learnt* (Washington, DC: IDA, 2014).
- Rolled out in that context, it remains to be seen if Beijing’s sweeping military reforms will mean “nuclear continuity” for China or if they will trigger “nuclear change.” Looking ahead, however, it appears clear that some degree of change is likely to happen.
- In these circumstances, the United States should 1) invest to maintain effective deterrence of China (and extended-deterrence commitments to its allies); 2) create the conditions for U.S.-China strategic nuclear dialogue to begin now; 3) lead on arms control, beginning by pursuing extension of the 2010 U.S.-Russia New Strategic Arms Reduction Treaty (New START); and 4) prioritize crisis management.

The long shadow of the past: Origins and key features of China’s nuclear strategy and weapon program

China’s conventional military strategy has been dynamic, changing several times since the founding of the People’s Republic of China (PRC) in 1949. Yet by contrast, China’s nuclear strategy has remained unchanged since Beijing exploded its first nuclear device in 1964. Significantly, China did not seek to change its nuclear strategy despite its vulnerability either to an invasion or a nuclear first strike by the United States or the Soviet Union during the Cold War, and despite continued vulnerability after the Cold War, mostly vis-à-vis the United States. Accordingly, one word best describes China’s nuclear strategy: consistency.

Recent scholarship has shown that China’s nuclear strategy and program have several unique features. Three stand out. First, unlike conventional military strategy, the top leadership of the Chinese Communist Party (CCP) never delegated authority over nuclear strategy to senior officers of the People’s Liberation Army (PLA). From the time it was first articulated, Chinese nuclear strategy was viewed, and continues to be viewed thereafter, as a matter of supreme national policy. That means that it had to be controlled at the highest level: the Central Military Commission (CMC), which reports to the Chairman, Xi Jinping today; in addition to his presidential duties, Xi Jinping serves as General-Secretary of the CCP and Chairman of the CMC.

Second, as a result, the views on nuclear weapons of the top leadership of the CCP at the time China built its arsenal had, and have had to this day, a powerful influence on Chinese nuclear strategy. These views, based on the limited utility of nuclear weapons, support maintaining a strategy of assured retaliation and not integrating nuclear strategy with conventional strategy or pursuing any form of nuclear warfighting, even limited. More specifically, longstanding Chinese thinking on nuclear weapons has been that these weapons only serve to prevent nuclear coercion and deter nuclear attack. Mao Zedong, for instance, stated in 1960 that “our country in the future may produce a few atomic bombs, but we by no means intend to use them. Although we do not intend to use them, why produce them? We will use them as a defensive weapon.” Chinese officials have also held the belief that nuclear weapons provide other important benefits, notably major-power status to China and a source of national pride to all Chinese.

---

4 Concerns that the United States would use tactical nuclear weapons during the 1950-1953 Korean War, a threat Washington made almost explicit, was a major factor in Beijing’s decision to develop nuclear weapons. Significantly, Beijing declared upon conducting its first nuclear test in 1964 that it was meant to respond to “the United States imperialist policy of nuclear blackmail and nuclear threats.”
5 Quoted in Fravel, op. cit., p. 238.
Third, and logically, that is why Beijing has always claimed to have a “self-defense nuclear strategy.” That is also why Beijing has given the Second Artillery Force (SAF), the component part of the PLA created in 1966 to control Chinese nuclear weapons, the sole mission of conducting a nuclear counterstrike, and why Beijing has “only” sought to develop a small nuclear force and refused to join any arms races. Beijing, in other words, has focused on developing “the minimum means of reprisal,” just enough to conduct an effective nuclear counterstrike. In turn, that explains why Beijing has focused on developing a nuclear force based on missiles rather than gravity bombs (missiles are more adequate for counterstrike purposes), why it has maintained a de-mated force posture (because it has no intention to engage in nuclear warfighting), and why it has adopted an NFU policy and given negative security assurances to non-nuclear-weapon states.

**Recent developments: The state of play on the eve of China’s military reforms**

Accordingly, at least until the mid-late 2000s, China was “little more than a footnote in the history of the nuclear era,” an “afterthought,” and even a “forgotten nuclear power” in U.S. strategic thinking. China’s nuclear-weapon program, quite simply, was not deemed a serious threat to the United States. What’s more, Washington had other priorities. During the Cold War, its focus was the Soviet Union and, in the 1990s, U.S. attention shifted to “rogue states,” notably Iraq, North Korea, and Iran, and to strengthening the nonproliferation and nuclear-security regimes.

Over the past decade, however, Washington has begun to worry about China’s nuclear-weapon program, mostly because Beijing has been modernizing its strategic force, diversifying its delivery systems, and increasing the number of nuclear weapons; China now has an arsenal more capable than ever of striking the U.S. homeland. Moreover, Beijing has been improving its capacity for power projection into neighboring waters as well as in the space and cyber domains, becoming increasingly capable of holding U.S. forward military presence and U.S. allies and partners at risk.

China does not reveal the size of its nuclear arsenal, but experts estimate that it has nearly doubled over the past decade and a half, consisting today of approximately 290 warheads. While it is

---

6 For a long time, China’s nuclear strategy was based on the statements of CCP leaders and internal doctrinal publications. References to China’s “self-defense nuclear strategy” first appeared in the 2006 Defense White Paper. See Information Office of the State Council of the PRC, China’s National Defense in 2006.


8 Immediately after conducting its first nuclear test in 1964, China declared that “The Chinese Government hereby solemnly declares that China will never at any time and under any circumstances be the first to use nuclear weapons.” Since then, China’s NFU commitment has been emphasized in all official statements and publications.


12 Hans M. Kristensen and Robert S. Norris, “Chinese Nuclear Forces, 2018,” _Bulletin of the Atomic Scientists_, June 2018. See also Hans M. Kristensen and Matt Korda, “The Pentagon’s 2019 China Report,” Report from the Federation of American Scientists, Washington, DC, May 2019. Note that there is no certainty to this figure. Some estimates suggest that China’s arsenal is significantly bigger: up to 1,600-3,000 weapons. These higher estimates, however, are largely based on speculation. Most experts do not believe they are credible.
**much** smaller than the U.S. and Russian arsenals (estimated to sit at approximately 6,185 and 6,500 warheads, respectively), it is bigger than the United Kingdom’s (estimated to consist of 215 warheads) and roughly on par with France’s (estimated to include 300 warheads).  

More worrying has been Beijing’s rapid and impressive modernization and expansion of its nuclear delivery systems, which are becoming increasingly diversified, mobile, resilient, and effective.  

Beijing’s land-based nuclear missile force now includes mobile, solid-fueled systems, approximately 80 intermediate-range ballistic missiles (IRBMs) and 90 intercontinental ballistic missiles (ICBMs); the most notable additions have been the dual-capable DF-26 IRBMs and DF-31AG ICBMs, as well as the DF-31 ICBMs (the latter are still in development). Beijing also has been developing penetrative aids and MIRVing existing missile models, notably the DF-5C ICBMs, while pursuing hypersonic glide vehicle technology, which makes systems more maneuverable, faster, and more capable of penetrating existing missile defense systems. Finally, Beijing has begun to bring online sea and air nuclear platforms, entering the exclusive club of nuclear-armed states possessing a nuclear triad. The PLA Navy (PLAN) has been developing China’s first credible sea-based nuclear capability in the form of four Jiin-class (Type 094) ballistic missile submarines (SSBNs), each capable of carrying 12 JL-2 MIRV-capable submarine-launched ballistic missiles (SLBMs); China’s next-generation SSBNs, the Type 096, will likely be armed with the JL-3 SLBMs, which are still in development. The PLA Air Force (PLAAF), for its part, has been developing an air-based capability in the form of a new strategic bomber (dubbed H-20) coupled with nuclear-air-launched ballistic missiles.

In response to concerns, Beijing has argued that these developments are purely defensive, that China has always had, and maintains, a self-defense nuclear strategy and NFU policy, and that its modernization efforts are consistent with its tradition of minimum deterrence and solely aimed at developing a “lean and effective” force. These are codewords to stress that China must ensure that its nuclear forces remain reliable and survivable, especially in the context of improving U.S. missile defense and conventional strike capabilities and, more recently, the U.S. refocus on the Indo-Pacific, which Beijing regards as directed against China and an attempt to maintain U.S. military hegemony. As one senior Chinese scholar has put it: “Be it the Rebalance or the Indo-Pacific Strategy, it’s always been about containing China and maintaining U.S. primacy.”

Yet in addition to doubting the strength and even the veracity of China’s NFU policy, the United States has been concerned that Beijing may decide to abandon its practice of minimum deterrence. The concern that Beijing might “sprint to nuclear parity” with Washington and

---

15 China’s old Xia-class submarine has not gone on patrol and is usually assumed to be not operational/nor deployed.
16 There is disagreement among experts as to whether China’s old H-6 bomber is nuclear-capable. The U.S. Department of Defense typically assesses that it is.
17 Fravel reports that the “lean-and-effective” formulation was first uttered by Commander Li Shuang in a 1978 speech (op. cit., p. 261). It appeared in writing in the 2006 Defense White Paper and is used in follow-on documents.
18 Interviews conducted by the author, Beijing, China, March 2019.
19 Chinese strategists have been debating the pros and cons of maintaining an NFU policy since the 2000s. While most agree that China should maintain that policy, Beijing has injected uncertainty as to whether it would go nuclear in
Moscow has been especially serious given that the United States and Russia, unlike China, have been building their nuclear arsenals down, not up.\textsuperscript{20}

Furthermore, Washington has been worried that China’s evolving nuclear capabilities will present Beijing with new, problematic strategic options and create significant command, control, and communication (C3) issues. For starters, the Chinese modernization program could lead Beijing to change its stance on nuclear counterattack: it could adopt a launch-on-warning (LOW) posture, abandoning its traditional stance to retaliate only after it has absorbed a nuclear strike. The improved mobility, readiness, and informatization of SAF assets and the PLA’s space-based early-warning system have increasingly made adoption of such a posture possible. The emerging nuclear roles of the PLAN and PLAAF will make it even easier because nuclear warheads have to be mated with delivery systems on sea and air platforms. Is an LOW posture compatible with an NFU policy, especially given that Beijing has often pointed to its de-mated posture as evidence that it abides by NFU principles?

Another area of possible change concerns Chinese thinking about adopting a limited nuclear warfighting posture as a result of the increasing commingling and co-location of its nuclear and conventional assets, the diversification of its nuclear forces (notably its emerging nuclear triad), and its work to enhance “integrated strategic deterrence.”\textsuperscript{21} Could these developments lead Beijing to endorse warfighting as an option for its nuclear forces?

The consequences of Chinese modernization for C3 have also been worrisome to Washington. While the SAF was tasked to pursue “dual deterrence and dual operations,” i.e., wield both nuclear- and conventional-capable missiles, as early as in the mid-1980s, the modernization, diversification, and expansion of China’s conventional force has, as mentioned earlier, only begun to grow fast in recent years. Looking ahead, it is likely that the continued introduction of new dual-capable missiles, the increasing dispersal of land-mobile missiles, and the steady rise in the number of deployable nuclear weapons will, at the very least, complicate the C3 systems of China’s land-based nuclear delivery systems. What’s more, the emerging nuclear roles of the PLAN and PLAAF will add extra and probably major layers of complexity.

The concern is that a human error or malfunction could increase instability or lead to inadvertent escalation. Many questions remain unanswered: Will C3 systems be modernized in a timely fashion, as nuclear modernization proceeds? Will the SAF be involved in PLAN and PLAAF nuclear missions? Will the PLAN and PLAAF develop nuclear-warhead management know-how and capability of their own? How do Beijing and the PLA intend to communicate with PLAN assets? Will they introduce pre-delegated authority to launch nuclear weapons?

---


These worries have been magnified by China’s lack of transparency about the current and future size and shape of its nuclear forces and activities. For instance, despite invitations to do so (including in track-1.5 discussions), Chinese officials have refused to articulate a level at which China would have “enough” nuclear weapons and, significantly, China is the only P-5 member that leaves open the possibility of producing more fissile material for explosive purposes. Opacity has been Beijing’s tradition practice given its choice to develop a smaller arsenal than the United States and Russia. As PLA Major-General (Ret.) Yao Yunzhu has put it, “For a state adopting a no-first-use policy and intending not to waste too much money on unusable weapons, dependence on opaqueness to bring about greater deterrent value is a wise choice.”

In recent years, worries have also heightened as a result of China’s growing assertiveness in the Indo-Pacific and beyond, notably since President Xi Jinping took office in 2012. Moreover, Beijing’s refusal to engage in comprehensive strategic nuclear dialogue with Washington has not helped. To better understand Chinese nuclear thinking and developments, address China’s concerns about the United States, and move toward a more predictable strategic relationship, Washington has been seeking to engage in official discussions with Beijing for years, an offer that Chinese officials have systematically declined, arguing that “the conditions are not ripe” because the U.S. arsenal is much larger than China’s and because they stand to lose as they would be required to accept a level of transparency that would compromise the survivability of their strategic force. Yet while rejecting dialogue, Beijing has still sought reassurance from Washington, encouraging the United States, in vain, to adopt an NFU policy and to accept mutual vulnerability as the basis of the U.S.-China strategic relationship.

Of note: a considerable amount of work has been done between Americans and Chinese at the track-2 and track-1.5 levels, which has been invaluable in helping Washington and Beijing better understand each other. From a U.S. perspective, however, these initiatives are not, and should not be considered, a substitute for track-1 engagement. While an increasing number of Chinese participants have come to concur with U.S. participants that China should engage in official dialogue, Beijing has chosen not to take up their advice, so far.

China’s military reforms: The trigger to nuclear change?

Xi Jinping rolled out China’s military reforms in that context. The reforms, which aim to reshape the PLA to improve its ability to fight and win informationized wars and to ensure that it remains loyal to the CCP, have sought to strengthen civil-military integration and to improve joint-operations capability. So far, the most significant (or most visible) change to China’s nuclear-weapon program has been renaming the SAF the PLA Rocket Force (PLARF) and upgrading it to full-service status, equal to the army, navy, and air force; until then, the SAF had been an independent branch that is considered equal to the services.

22 Yao Yunzhu, “China’s Perspective on Nuclear Deterrence,” Senior Leaders Perspective, Spring 2010, p. 29.
While there is much uncertainty about what the reforms will mean for China’s nuclear strategy and weapon program, both because the situation remains extremely fluid and because there is little public information available, there seem to be two possible options: continuity or change.

**Option 1: Continuity**

The new PLARF name and its upgrade to a full service might merely codify the Force’s de facto status. This is a possibility. One analyst has made that case, stressing that the change is mainly giving the Force the status and prestige it deserves. As he points out:

> The Second Artillery’s organizational clout had steadily grown in the last 15 years. Prior to the creation of the Rocket Force, the Second Artillery commander and other senior leaders enjoyed ranks and grades equivalent to that of their counterparts in the services. The Second Artillery had the same constellation of bureaucratic structures as the services, including a Political Department, Logistics Department, Armaments Department, and Command Academy.25

In these circumstances, the most likely developments in the foreseeable future would involve the continuation of steady yet relatively modest growth of the Chinese nuclear arsenal. Similarly, China’s longstanding nuclear policy and strategy, which, as mentioned earlier, are and always have been deeply ingrained in the Chinese psyche, would be maintained. According to Chinese official statements, multiple Chinese media reports, and Chinese strategists, this is what to expect.

In describing the PLARF, Xi Jinping has used language similar to the one authoritative Chinese documents described the SAF, notably the 2015 Defense White Paper (China’s latest).26 For instance, he said that the PLARF will be “a fundamental force for our country’s strategic deterrent, a strategic pillar for our country’s great power status, and an important cornerstone in protecting our national security.”27 A China Daily article also added that China’s nuclear policy will remain unchanged: “Reiterating the no-first-use nuclear weapons policy and the country’s defensive nuclear strategy, [Ministry of National Defense Spokesman] Yang [Yujun] said China always keeps its nuclear capabilities at the minimum level required for safeguarding its national security.”28 In track-1.5 and track-2 engagements as well as one-on-one discussions, Chinese strategists have echoed these words: the reforms, they say, will not lead to nuclear change.

Moreover, in addition to dismissing systematically (to this day) the possibility that Chinese nuclear forces adopt a warfighting role, Beijing has insisted that technological and operational improvements of its forces will not affect China’s longstanding policy and strategy. The PLA’s 2013 *Science of Military Strategy*, for instance, suggests that adoption of an LOW posture would be consistent with China’s NFU policy: “Rapid launch of nuclear missiles for counterattack is

---

consistent with [China’s] no first use policy and could effectively prevent further loss of nuclear forces, and increase the survivability and counterattack capabilities of [China’s] nuclear power.”

It is also worth noting that despite the creation of a new, operational command structure for the PLA, PLARF C3 systems do not appear to have changed. An article in *Rocket Force News* stated that the PLARF is “a strategic military service directly controlled and used by the Central Party Committee, Central Military Commission, and Chairman Xi.” Chinese strategists, similarly, have insisted that the command authority of the nuclear forces *in particular* (but of conventional assets too) remains centralized under the CMC. Some have even argued that such centralization could be *reinforced* as a result of the reforms. That is why they have dismissed concerns about potential issues involving China’s C3 systems, often adding that new technologies will help enhance control over these forces, including the emerging PLAN and PLAAF nuclear platforms.

If all this is confirmed, the PLARF can be expected to continue to focus on expanding and improving its conventional assets, while keeping (maybe even pushing?) nuclear forces in the background, even as Beijing is bringing online new and more diversified nuclear-capable systems (including a nuclear triad) and making progress towards a more integrated strategic deterrence posture. Significantly, a recent study has shown that the PLARF could strengthen its conventional mission over the nuclear mission because the latter is less dynamic and deemed *much* less prestigious, making it more difficult, as a result, for officers who choose it to ascend to the ranks of senior leadership.

**Option 2: Change**

Alternatively, the PLARF’s new name and upgrade to full-service status might signal or lead to much greater autonomy, even independence, for the Force, potentially opening to the door to radical changes in China’s nuclear force structure and posture, and in turn in policy and strategy. Despite the insistence of the Chinese leadership, media outlets, and expert community that the reforms will not bring about change for China’s nuclear strategy and weapon program, change, even major change is a possibility.

Some analysts have stressed that despite important similarities with the SAF, official characterizations of the PLARF seem to point to a much more expansive role and greater expectations for the new Force. They explain that at the PLARF’s inauguration ceremony in December 2015, Xi Jinping articulated a new formulation for the Force’s strategic requirements, arguing that it needs to “possess both nuclear and conventional [capabilities]” and be prepared to conduct “comprehensive deterrence and warfighting” operations. While, as mentioned earlier, the requirement to possess both nuclear and conventional capabilities is not new, the emphasis on “comprehensive deterrence and warfighting” is, they opine, significant because it suggests that the

---

31 Interviews conducted by the author, Beijing, China, August 2018.
32 Discussions held at the track-1.5 “U.S.-China Strategic Nuclear Dynamics Dialogue” on Maui, Hawaii, April 2018.
PLARF now needs to be able to operate not only across different regions and distances, but also across land, sea, aerospace, and electromagnetic spectrums, and do so both for deterrence and warfighting purposes. The fact that President Xi added that the PLARF should enhance its ability for “strategic balancing” (obviously of the United States) also suggests that Beijing might envision a much greater role for the Force, including of its nuclear components.

If this assessment is correct, faster growth of the Chinese nuclear arsenal could be in the works. China might also decide to adopt a much more aggressive nuclear posture, including the peacetime mating of warheads, an increase in alert status, endorsement of an LOW posture, and abandonment of the longstanding NFU policy and traditional practice of minimum deterrence. These are steps that some PLA officers (so far a minority) have recommended occasionally.\(^\text{35}\) Significantly, in the context of mounting tensions between Washington and Beijing (notably after the release of the U.S. Nuclear Posture Review in February 2018 and the U.S. Missile Defense Review in January 2019), some Chinese officials and PLA officers—still a small minority—have been reportedly “quite active” in lobbying Beijing to implement changes of that sort.\(^\text{36}\)

Should such changes be implemented, China’s nuclear doctrine and forces would be much more closely aligned with the country’s conventional doctrine and forces. In other words, they would have both a deterrence and a warfighting mission. Presumably, nuclear and conventional forces would also be (further) integrated and PLARF as well as emerging PLAN and PLAAF nuclear assets would become active, rather than passive, components of China’s evolving integrated strategic deterrence posture. Such integration could even be further enhanced through coordination with the new PLA Strategic Support Force, an independent branch (and a product of the ongoing military reforms) which, as two analysts have described it, is intended to “create synergies between disparate information warfare capabilities in order to execute specific types of strategic missions that Chinese leaders believe will be decisive in future major wars.”\(^\text{37}\)

In these circumstances, it is even possible to envision that C3 systems over China’s nuclear forces be relaxed or that the CMC even end up abandoning its role of command authority altogether. Beijing and the PLA could choose to give some authority to the theater commands to make nuclear use easier in the event of a crisis or war, which, of course, would amount to a 360-degree departure from China’s traditional nuclear policy and strategy.

The way forward

It is too early to tell whether the military reforms will, as Chinese authorities and strategists claim, lead to continuity rather than change for China’s nuclear strategy and weapon program. Yet it is important to keep in mind that even if the balance does tip in favor of the “continuity scenario,” some degree of change will take place, probably sooner rather than later. This is virtually guaranteed, at least for three reasons.

\(^{35}\) Discussions held in various track-1.5 and track-2 forums. See also Gregory Kulacki, “China’s Military Calls for Putting Its Nuclear Forces on Alert,” Report from the Union of Concerned Scientists, Washington, DC, Jan. 2016.

\(^{36}\) Interviews conducted by the author, Beijing, China, March 2019.

First, there is almost no doubt that the Chinese nuclear arsenal will continue to grow. The question is not whether it will grow, but how fast, and how big it will become. Speculations abound. For instance, U.S. Senator Jim Risch (R-Idaho), chairman of the Senate Foreign Relations Committee, recently stated that “Reports indicate China is on track to double its nuclear stockpile over the next decade.”

Lieutenant General Robert Ashley, director of the Defense Intelligence Agency, went further, indicating that “Over the next decade, China is likely to at least double the size of its nuclear stockpile.” Independent experts, however, have expressed skepticism about these predictions. Others, for their part, have assessed that Beijing may be aiming to build an arsenal of, or close to, 600 warheads because it would be consistent with Chinese fissile material stocks. Still, while this is difficult (perhaps even impossible) to predict the future size China’s nuclear arsenal with accuracy, there is at least broad consensus among experts that, as two analysts have put it:

Although China’s nuclear arsenal is far smaller than that of Russia and the United States, the growing and increasingly capable Chinese nuclear arsenal is pushing the boundaries of China’s “minimum” deterrent and undercutting its promise that it “will never enter into a nuclear arms race with any other country.”

Looking ahead, that makes it difficult for Beijing to continue to remain silent about the current and future size and shape of its nuclear forces and activities. Plainly, China will likely have to become more transparent and possibly abandon its traditional practice of opacity.

Second, it will become increasingly difficult for China to maintain its longstanding nuclear policy and strategy as is because of the rapid and impressive modernization, diversification, and expansion of its nuclear forces, especially the emergence of a nuclear triad. Even if Chinese officials do want continuity, they most likely will have to, at a minimum, adjust the country’s policy and strategy, de facto or in more real, measurable ways. They have already begun to do so: they have worked hard, as mentioned earlier, to reconcile possible adoption of an LOW posture with China’s NFU policy; many experts question whether it is a tenable position. Discussions in track-1.5 and track-2 dialogues also suggest that Chinese strategists are well-aware that technological developments will begin to loom large on China’s policy and strategy and that, looking over the horizon, some degree of change is probably unavoidable. For instance, when describing the likely impact of technological developments, Chinese strategists, of late, have been careful to stress that the “broad contours” of China’s policy and strategy will not be affected.

Third, it is highly unlikely that the modernization, diversification, and expansion of Chinese forces, which, significantly, are taking place at a rapid pace, will not create at least some complications

---

41 Therese Delpech, Nuclear Deterrence in the 21st Century: Lessons from the Cold War for a New Era of Strategic Policy (Santa Monica, CA: RAND Corporation, 2012), p. 120.
43 Discussions held at the track-1.5 “U.S.-China Strategic Nuclear Dynamics Dialogue” in Beijing, China, June 2016.
for C3 systems, even if control is maintained by the CMC. In other words, over the next few years, business-as-usual is not in the cards for China’s nuclear C3 systems: Beijing and the PLA will have to make important adjustments.

In sum, while the jury is still out regarding what the reforms have in store for China’s nuclear strategy and weapon program, one thing is clear: Beijing is reaching a crossroads and will soon have to make decisions to, at a minimum, adjust many of the features that have been central to its approach to nuclear weapons since 1964. As suggested earlier, Chinese authorities would have reached that decision point regardless of the reforms. The question is whether the reforms will trigger radical change or slower, more managed change. Much of it will likely depend on how the reform process proceeds, notably who “wins” the growing inter- and intra-service competition, which is reportedly becoming “extremely severe” because “everyone is competing for Xi’s ear.”

Irrespective of what happens (and to some extent, how it happens), it is important to keep in mind that the outcome can be positive. Chinese nuclear forces may end up more reliable and more survivable, which could help strengthen strategic stability. A negative outcome is also possible, however: Chinese decisions and developments may fuel competition and lead to arms-race instability or, worse, crisis instability and the overall deterioration of strategic stability.

**Recommendations for the U.S. government**

This analysis leads me to make the following four recommendations for the U.S. government:

1. **Invest to maintain deterrence of China and extended-deterrence commitments to allies.**

   Because advances in the modernization, diversification, and expansion of China’s nuclear and conventional arsenal will present new deterrence complexities and challenges, both to the U.S.-China strategic relationship and to China’s deterrence of U.S. allies, Washington should keep pace with these developments and craft strategies to deter Beijing effectively and provide an adequate security umbrella to its allies. In other words, as recommended in the 2018 *Nuclear Posture Review*, Washington should develop deterrence strategies appropriately tailored to China as Beijing is adapting its military forces.

   It is true that, on the one hand, a stronger Chinese arsenal may strengthen strategic stability. Yet, on the other, China’s ability to deter the United States and its allies more effectively may embolden Beijing to act more aggressively up to, and perhaps even at, the nuclear level. Washington, therefore, should maintain and modernize its own deterrence capabilities at all rungs of the escalation ladder, and discuss and coordinate strategy implementation with its allies.

   Given China’s growing and diversifying array of nuclear and strategic conventional capabilities as well as its leverage of the space and cyber domains, the United States and its allies should focus on enhancing defensive and offensive countermeasures in all these areas. The goal should be not only to deter attacks, notably nuclear attacks, but also to strengthen U.S. and allied ability to preempt, eliminate, and defend against acts of aggression. This requires, of course, that the United

---

44 Discussions held at the track-1.5 “U.S.-China Strategic Nuclear Dynamics Dialogue” on Maui, Hawaii, April 2018.
States be in sync with its allies not only about its assessment of the “China threat,” but also about what responses are most appropriate, how they should be made, and by who.

2. Create the conditions for U.S.-China strategic nuclear dialogue to begin now.

Washington should make every effort to encourage Beijing to engage in bilateral strategic nuclear dialogue expeditiously. Launching such dialogue, which, as mentioned earlier, the United States has long sought (and which remains a goal of the 2018 Nuclear Posture Review), would be timely to help Washington better understand China’s nuclear decisions and developments in the context of its ongoing military reforms.46 Beijing, for its part, would gain a better understanding of U.S. nuclear policy and actions. The hope is that this would help Washington and Beijing develop a framework to allow for a more stable and more predictable strategic nuclear relationship. To the extent possible, seeking to insulate the bilateral strategic nuclear relationship from the increasingly competitive nature of broader U.S.-China relations should be a priority.

Of course, launching such dialogue will be possible only if concessions are made on both sides. Washington would need to acknowledge what has long been the case (and the primary sticking point for Beijing to accept dialogue): that China possesses a credible nuclear deterrent, i.e., that the United States and China are in a mutually-vulnerable relationship.47 Beijing, meanwhile, would need to accept (or be made to understand) that despite disparities between the U.S. and Chinese arsenals, it has reached a point where it can no longer be considered a “responsible nuclear-weapon state” or seek a “constructive nuclear relationship” with Washington and reject dialogue.48 Especially if the United States concedes on mutual vulnerability, China would need to be convinced that it would lose more if it still refused to engage.

3. Lead on arms control.

Leading on arms control begins by not letting the entire arms-control architecture collapse. In other words, it means that Washington should pursue extension of New START, which is set to expire in February 2021. This should be a no-brainer not only because it is both in U.S. and Russian interests (and because Moscow has already expressed interest in extending the Treaty), but also because failure to do so would signal to Beijing that Washington and Moscow can now operate, and potentially perfect, their large nuclear forces unconstrained.

Because Chinese strategists have for years stressed that arms control between the United States and Russia has a positive impact on international stability and China’s security specifically, the collapse of New START could, in theory, push Beijing toward strategic nuclear dialogue with the United States, especially if the alternative would be unrestrained competition with a much more

47 Acknowledgement of mutual vulnerability with China would come with some risks. It could, in theory, embolden Beijing to act more aggressively at the conventional level. It is unlikely, however, especially if such acknowledgement is made, as it should be, with the explicit goal of opening strategic nuclear dialogue, i.e., easing tensions.
powerful nuclear contender.\textsuperscript{49} This is unlikely, however. Rather, as one Chinese strategist has explained, the end of New START may not, in and of itself, drive China to implement radical changes to its nuclear strategy and weapon program, but that could well happen depending on U.S. actions after Treaty’s demise, with negative consequences for strategic stability.\textsuperscript{50} At a minimum, he argues, the collapse of New START would comfort Beijing’s belief of the strategic necessity of its traditional practice of opacity as well as its skepticism about arms control more generally.

There is another reason why extending New START is important: because it would give time to open discussions about confidence-building measures and arms control at the multilateral level, i.e., with other nuclear-armed states.\textsuperscript{51} Such discussions, which should build on the preliminary work conducted by the P-5 since 2010, are essential to engage China. Of late, Chinese strategists have stressed in track-1.5 and track-2 dialogues that while Beijing worries mostly about the United States, it now also has to take into account “other nuclear-armed states.”\textsuperscript{52} This reflects the fact that when it comes to defense planning, China must look east, to the United States, but also north and increasingly south, i.e., to Russia and India, and what’s more, China must factor in the increasingly sophisticated North Korean nuclear arsenal. Improving the U.S.-China strategic nuclear relationship, in other words, cannot happen solely via bilateral engagement; it also has a multilateral dimension.

4. **Prioritize crisis management.**

Independently of whether or not U.S.-China strategic nuclear dialogue commences, Washington should immediately seek to establish crisis-management mechanisms with Beijing in specific areas. Despite rising tensions between Washington and Beijing since 2012, some crisis-management mechanisms have been set up in recent years, suggesting that progress is possible. A 2014 memorandum of understanding, for instance, led to the establishment of two bilateral military-to-military mechanisms, one setting rules of behavior for safety in air and maritime encounters, the other requiring advanced notification of major military activities.

More mechanisms of that sort are needed, notably ones that focus on preventing escalation to the nuclear level. In that spirit, defining “rules of the road” for nuclear, space, and cyber domains and the interplay between them could help prevent misunderstandings during crises or during the early stages of conflict, thereby avoiding “nuclear war by accident.” Significantly, the track-1.5 “U.S.-China Strategic Nuclear Dynamics Dialogue” has developed a memorandum on these issues, which Washington could use as a starting point to engage Beijing.\textsuperscript{53} This is an initiative that Washington should prioritize, especially given the progress that each are making toward integrated strategic deterrence.


\textsuperscript{50} Tong Zhao, “China in a World with No U.S.-Russia Treaty-Based Arms Control” in Manzo, *op. cit.*, pp. 118-125.

\textsuperscript{51} New START extension would constrain U.S. and Russian strategic nuclear forces for five additional years from February 2021, bringing the Treaty’s new expiration date to February 2026.

\textsuperscript{52} Chinese strategists have begun to voice concerns about “other nuclear-armed states” from the mid-2010s.

\textsuperscript{53} For the latest (published) working draft of the memorandum, see Ralph A. Cossa, Brad Glosserman, and David Santoro, “Reaching an Inflection Point? The Tenth China-U.S. Dialogue on Strategic Nuclear Dynamics,” *Issues & Insights*, vol. 16, no. 20, Beijing, China, Dec. 2016, p. C-1.
Thank you for the opportunity to appear before you today to discuss the implications of a “World-Class” Chinese military for the United States and its allies and partners.

Gone are the days when China posed solely a regional challenge to the United States and its allies in the Western Pacific. It now poses a global challenge to world order. China is seeking not only to exert influence in the Asia-Pacific region, but across the globe. Indeed, Beijing is increasingly exerting its political, economic, and military influence to coerce U.S. allies and partners, contest international law and freedom of navigation in crucial waterways such as the South China Sea; weaken the U.S. position across the globe; and otherwise seek a position of geopolitical dominance from the Western Pacific to the Indian Ocean and influence far beyond.¹ It is using predatory economic statecraft in an effort to weaken its geopolitical rivals, including the United States, and give it decisive strategic leverage over its neighbors.

Gone also are the days that the military challenge posed by China was confined to the U.S. Indo-Pacific Command’s area of operations. Rather, China poses a challenge – political, economic, and military – that crosses the boundaries of the Defense Department’s geographic combatant commands and the State Department’s regional bureaus.

Four aspects of the rise of China stand out as being of particular concern to the United States and its allies.² If these features were to change, all else being equal, the United States would be much apt to view China as a competitor.


The first has to do with the Chinese Communist Party (CCP) leadership’s increasing attention to external affairs. It is axiomatic that any country’s political leaders pay greater attention to domestic matters than to international affairs, and that is certainly true regarding the CCP leadership, which is highly attentive to threats to domestic stability. Nevertheless, in recent years China has become increasingly active on the international stage. China has not only exerted its weight in its neighborhood, but also doing so increasingly in areas far removed from the Asian continent, to include Africa and the Persian Gulf. This international activism, to include not only economic investment and attempts to increase political influence, but also increasingly military deployments, raises concerns in the United States and among America’s allies.

The second aspect of China’s rise that raises concern has to do with China’s geopolitical orientation. Whereas the People’s Liberation Army (PLA) was long focused on the Asian continent, in recent decades it has increasingly adopted a maritime orientation. It is thus the build-up of the PLA Navy (PLAN) and PLA Air Force (PLAAF), as well as other anti-access/area denial (or, in Chinese parlance, counter-intervention) capabilities, such as Beijing’s missile and anti-satellite weapons, and not Chinese military spending in the abstract, which has stimulated a US and allied response. Similarly, China’s efforts to claim sovereignty over the South China Sea and East China Sea and attempts to coerce or invade Taiwan would bring China into conflict with the United States and its allies.

A third area of concern, related to the previous two, involves China’s attitude toward the international status quo: China’s leadership has increasingly challenged the status quo, whether rhetorically or, increasingly, through action. Nothing illustrates this attitude more tangibly and dramatically than China’s campaign of building and then militarizing new land features in the South China Sea as a means of bolstering Beijing’s claim of ownership.

A final area of concern has to do with China’s domestic political system. However loudly or quietly the United States and its allies seek to promote democracy abroad, China’s authoritarian political system and disregard for human rights and personal freedom is a recurring source of tension with the United States, its allies, and others in the region and beyond. Whatever U.S. leaders say, the leadership of the CCP firmly believes that the United States is out to overthrow it. Moreover, under Xi Jinping the CCP has set about establishing an authoritarian alternative to the liberal international order.

A strong case can be made that if these features were to change – if China were to become more internally focused, emphasize more the Asian continent over its maritime periphery, become more supportive of the status quo, and more pluralistic – then the United States and its allies would be much less concerned about China’s overall rise. Indeed, under these circumstances China would come more to resemble today’s India: a rising power with growing economic strength that is internally focused, continentally focused, supportive of large parts of the international status quo, and pluralistic—indeed, a robust—democracy.

China’s military modernization has been driven in large measure by a perceived set of strategic and operational challenges – strategic and operational challenges that, in the view of Beijing’s leaders, we pose to them. These include the perceived need to counter (1) the attractiveness of democracy, (2) the pervasiveness of Western media, and (3) the dominance of U.S. power projection forces. China has been innovating to solve these challenges for years and even decades and have in the process developed new ways of war that range from so-called “anti-access/area denial” (or “counter intervention”) capabilities to so-called “gray-zone warfare”.

Beijing has also invested in a series of capabilities designed to demonstrate that China possesses a top-tier military. Thus, the PLA has not only built a formidable force to counter U.S. power projection capabilities (including aircraft carriers), but also pursued power projection capabilities (including aircraft carriers) of its own. China is not only developing and fielding a suite of anti-satellite weapons, but also lofting an ever-larger constellation of military satellites.

China’s drive to become a world-class military is also threatening the qualitative superiority of the U.S. armed forces — something we have long taken for granted. To date, China has been most successful in innovating in a limited set of areas, to include missile and space capabilities. However, Beijing is devoting considerable resources to spur innovation in emerging areas of technology, to include artificial intelligence, quantum computing, and other areas with significant military potential. The U.S. Government needs to ensure that it is able to harvest the fruits of private sector innovation for national defense and to safeguard the national security innovation base against malign foreign influence. Doing so will be vital to maintaining our qualitative edge into the future.

Beyond additional defense spending, developing innovative operational concepts and fielding new organizations and capabilities to overcome the challenges posed by China should become the urgent focus of Defense Department investment. In an era of constrained resources, those concepts and capabilities that offer the greatest strategic and operational leverage should receive preferential funding over those that do not.

The Office of the Secretary of Defense and the Joint Staff should lead the development of joint operational concepts, including efforts both to use existing capabilities in new and innovative ways as well as to craft roles for truly new capabilities. Today as in the past, Congress can spark the development of innovative operational concepts by requiring and funding experiments and demonstrations and demanding realistic assessments of them.

Potential innovative programs where the Department of Defense can begin these experiments include:

**Neutralizing Anti-Access/Area-Denial Threats through Long-Range, Multi-Dimensional Strike.** Several subordinate efforts appear particularly promising.

First, the U.S. government purchased two X-47B stealthy unmanned aerial system (UAS) technology demonstrator aircraft before terminating the program. The Defense Department could use the aircraft to develop innovative concepts of operations for stealthy land- and sea-based unmanned systems, to include the value of autonomy in such systems as well as the use of innovative logistical concepts to extend their range.

Second, the Navy is procuring three DDG-1000 Zumwalt class surface vessels. The attributes of these ships, to include their stealth, large displacement, and electric propulsion, make them both unique as surface combatants as well as potentially valuable assets for experimentation. The Defense Department could use the ships to develop concepts of operations for operating within range of an adversary’s anti-access/area-denial capabilities. Specifically, they could be used to determine the value of stealthy surface combatants for conducting anti-air, anti-surface, and strike warfare in denied environments.

---

Third, the Defense Department is currently procuring a new Long-Range Anti-Ship Missile (LRASM), which should provide a highly capable weapon against enemy ships. However, current plans call for the missile to be carried by three aircraft, the B-1B, F/A-18E/F, and F-35, which will be increasingly challenged to operate in the Western Pacific due to growing threats to aircraft, tankers, and bases in that region. Accordingly, the Defense Department should develop concepts to integrate LRASM onto the B-2 stealth bomber, which has the range and survivability that may be needed to reach Chinese or Russian shipping in defended waters. Should the concept prove successful, LRASM could subsequently be integrated onto the forthcoming B-21 bomber, which should be available in greater numbers than the B-2 for missions such as maritime strike.

**Creating Anti-Access/Area Denial Challenges for Competitors.** Each of the Services is developing capabilities that could be used to create anti-access challenges for competitors. The Army and Marine Corps are both exploring deploying land-based anti-ship missiles such as LRASM, the Naval Strike Missile, and Maritime Strike Tomahawk; the Navy is modernizing its anti-ship and land-attack capabilities; and, as described above, the Air Force plans to equip some of its aircraft with anti-ship missiles. Deployed in the First and Second Island Chains and fed by ISR and targeting information from UASs such as the MQ-9, such capabilities could reassure allies and deter China from committing aggression. Further experiments and demonstrations could yield innovative operational concepts for linking U.S. and allied forward-based and expeditionary land-based precision strike systems with sea-based munitions and tactical aircraft. Such experiments could yield new concepts for projecting and sustaining forces in A2/AD environments as well as reinforcing and sustaining forward engaged forces.

**Protecting Critical Bases of Operations Against Salvo Attacks.** The United States should develop innovative operational concepts for defending those bases. Such defenses could include medium-range high-energy lasers (HEL), high-power microwave (HPM) systems, guided projectiles launched by rapid-ring guns, and low-cost surface-to-air missiles. Unmanned and manned aircraft carrying extended-range air-to-air missiles and equipped with wide-area surveillance sensors, HELs, and possibly HPM systems could further extend the range and increase the threat engagement capacity of a base salvo defense complex.4

**Establishing Survivable C4ISR Networks.** The Defense Department should develop innovative operational concepts and business practices to allow it to develop rapidly new space capabilities, and to launch them on relatively short notice. Such an approach could include not just the development of innovative practices, but also relationships with civilian space industry. It should also explore alternatives to space for services such as communications; intelligence, surveillance, and reconnaissance; and precision navigation. For example, the Defense Department should experiment with the use of UASs such as the MQ-9 to provide such services in a space-denied environment. Indeed, UASs can provide these capabilities at much lower cost than launching new satellites. Such initiatives would yield insight into the capabilities needed to enhance the capability and survivability of space systems and the services they provide, as well as new ways to leverage interoperable joint C4ISR in the face of adversary threats.

The development of new concepts and conclusion of experiments are not ends in and of themselves. Too often, Defense Department experiments have been side projects that create a façade of innovation without actually having any substantial impact. As a result, the forces and capabilities we have today—and are

---

currently procuring—are out of alignment with the world of 2019 and beyond. The objective of concept development and experimentation must be to inform major shifts in investment and force structure toward the forces and capabilities that can bring the U.S. military back into alignment with the operational challenges it faces.

About the Center for Strategic and Budgetary Assessments

The Center for Strategic and Budgetary Assessments (CSBA) is an independent, nonpartisan policy research institute established to promote innovative thinking and debate about national security strategy and investment options. CSBA’s analysis focuses on key questions related to existing and emerging threats to U.S. national security, and its goal is to enable policymakers to make informed decisions on matters of strategy, security policy, and resource allocation.
Chairman Lewis, Chairman McDevitt, and Commissioners: I am honored to join you at the end of what I expect has been a long and fascinating day of testimony on China’s ambitions to field a world-class military.

From my positions inside and outside of government for the past 15 years, I have both studied and interacted directly with both the People’s Liberation Army (PLA) as well as our allies and partners across the Indo-Pacific. I was therefore pleased to be asked to focus my remarks on how U.S. allies and partners have reacted to China’s ambitions to develop a world-class military. These are critical issues for the United States, and will have significant implications for the long-term prosperity and security of our country and the Indo-Pacific. With that said, I would like to note that my testimony today reflects my views alone, and are not those of the Wilson Center or of the U.S. government.

Geopolitical Context

Commissioners, before delving into the specifics of how U.S. allies and partners are reacting to China’s ambitions to field a world-class military, I want to begin with five observations regarding the geopolitical context of this subject:

1. The perspectives of U.S. allies and partners on issues related to China are informed by their broad assessment of geopolitical trends – not solely military issues. While most U.S. allies and partners are certainly concerned about China’s expanding military power and Beijing’s ambitions for regional dominance and global influence, they also see China as a critical source of trade as well as an unavoidable political power. In fact, for most U.S. allies and partners, China is not seen primarily as a military threat, but rather as both a geopolitical challenge and an economic opportunity.

2. The significant economic connectivity between China and U.S. allies and partners has important geopolitical implications. These close economic ties represent a potential avenue for
China to exert pressure, as we have seen when Japan, the Republic of Korea (ROK), and Australia have made decisions to counter Beijing’s prerogatives. Yet this is not to say that the specter of China’s economic coercion is decisive in the minds of our allies and partners. Indeed, the story of Chinese attempts at economic coercion has often been a story of Beijing’s failure to use economic coercion to achieve its strategic objectives.

3. **U.S. allies and partners in the Indo-Pacific, therefore, confront a geopolitical dynamic that is entirely new and, for them, deeply challenging.** They must navigate a strategic conundrum in that their primary economic partner – China – is embroiled in an escalating strategic competition with their primary security partner – the United States. Moreover, they see China not only as a critical economic partner, but also as an increasingly problematic source of instability and, for some, as a threat to their sovereignty and territorial integrity.

4. **Within foreign policy circles among several U.S. allies and partners, there is a robust and active debate about the sustainability of American power, the reliability of American commitments, and the implications of intensifying competition between China and the United States.** While most have concluded that sustaining robust relations with the United States remains in their long-term interests, U.S. allies and partners also seek to build productive relations with China despite any lingering territorial disputes or diverging interests. Simultaneously, many are concerned that the intensifying geopolitical competition between China and the United States threatens to drive the region toward strategic decoupling, potentially forcing them to choose sides.

5. **U.S. allies and partners are supportive of the United States continuing to play a leading role in the Indo-Pacific and either support U.S. competition with China or understand the drivers and motivation of that competition, yet many are perplexed by Washington’s unwillingness or inability to pursue policies that would better enable its ability to compete successfully.** Several policies that limit the ability of the United States to compete – including the withdrawal from TPP, the lack of a compelling alternative to Beijing’s the Belt and Road Initiative, threats to sanction imports that are critical for allied economies, and elevated expectations for allied payments for host nation support – drive questions about U.S. intentions, commitment, focus, and priorities.

**The View from U.S. Allies and Partners: Military Calculations**

Commissioners, as I’m sure you have heard throughout the day, and as described in the Pentagon’s annual report to Congress, Beijing’s military ambitions have expanded greatly. Xi Jinping’s call from the 19th Party Congress of the Chinese Communist Party to “strive to fully transform the people’s armed forces into a world-class military by the mid-21st century,”1 seemed to divorce the PLA’s

---

development from any specific set of contingent capability requirements, and instead tied military modernization to China’s future as a great power. The 2017 Party Congress report identifies two stages of development, the first occurring from 2020 to 2035 (during which China sees itself as growing its economic and technological strength while addressing domestic challenges that could cause instability) and the next coming from 2035 to 2050, which Beijing identified as a period during which China will become a prosperous, modern, and strong socialist country with a “world-class” military.

Across the Indo-Pacific, and especially in East Asia, China’s military modernization and Beijing’s expanding strategic ambitions are a source of concern. The 2018 U.S. National Defense Strategy accurately describes the challenge from China thusly:

China is leveraging military modernization, influence operations, and predatory economics to coerce neighboring countries to reorder the Indo-Pacific region to their advantage. As China continues its economic and military ascendance, asserting power through an all-of-nation long-term strategy, it will continue to pursue a military modernization program that seeks Indo-Pacific regional hegemony in the near-term and displacement of the United States to achieve global preeminence in the future. The most far-reaching objective of this defense strategy is to set the military relationship between our two countries on a path of transparency and non-aggression.²

This trend has not gone unnoticed around the world. While countries have welcomed China’s prosperity and sought to benefit from it, many have grown increasingly concerned about the scope and pace of China’s military modernization and how Beijing may seek to utilize its newfound military might. Speaking at the 2019 Shangri-La Dialogue, Singapore’s Prime Minister Lee Hsien Loong gave voice to the concerns held by countries across the Indo-Pacific:

… now that China is a major power with the second largest defence budget in the world, its words and actions are seen differently. To protect its territories and trade routes, it is natural that China would want to develop modern and capable armed forces, and aspire to become not just a continental power but also a maritime power. At the same time, to grow its international influence beyond hard power, military strength, China needs to wield this strength with restraint and legitimacy.³

Each U.S. ally and partner has particular priorities and concerns about China’s military modernization and ambitions. Broadly speaking, however, they see China as narrowing U.S. military

advantages, exacerbating regional territorial disputes, and asserting Chinese interests and ambitions at increasingly greater distances beyond China’s immediate periphery.

**Perceived Diminishing U.S. Advantages**

U.S. allies and partners are broadly concerned that they see China as making progress in its ambition to acquire the ability to undermine the effectiveness of an armed U.S. intervention in a China-related contingency by building military capabilities to degrade core U.S. operational and technological advantages. This trend is especially worrying for those countries that have heated disputes with China and also rely on the United States for their security. If China succeeds in its stated ambition to eventually field a “world-class military,” and if the United States were to fail to maintain its military advantages and perceived reliability as a security guarantor, U.S. allies and partners in the Indo-Pacific may examine options to either pursue a strategy of internal balancing (i.e., building their own military capabilities sufficient to defend their interests and deter conflict) or bandwagoning (i.e., acceding to Beijing’s demands and aligning more closely with China).

There are two interrelated aspects of how U.S. allies and partners will evaluate the relative balance of U.S. and Chinese military capabilities. The first is the most straightforward: assessing the overall military balance of power between the PLA and what the U.S. military can plausibly deploy to a China-related contingency. There are both quantitative and qualitative aspects of these calculations. Any assessment of the military balance at any given time between China and the United States will be necessarily unspecific and reflective broader trends than a specific correlation of forces. Moreover, the potential role of the armed forces of a U.S. ally or partner in such a U.S.-China military contingency would also need to be taken into account.

The second aspect of how U.S. allies and partners will evaluate U.S. military advantages and disadvantages vis-à-vis China is not entirely military, per se, but political. Even if the United States maintains a technical military advantage, U.S. allies and partners in this scenario would be concerned that China would be able to inflict sufficient damage on the U.S. military to render the costs of an intervention unacceptable for Washington. In other words, they worry that a world-class PLA would have the ability to deter a U.S. intervention even before it has the ability to defeat it. Their calculation, therefore, will be based as much on their evaluation of the will of the American president to sacrifice American lives in defense of their country – a perpetual question for allies, but one that is exacerbated when the number of lives that may potentially be lost increases as a result of diminishing American military advantages.

So far, most U.S. allies and partners have decided to remain aligned with the United States, even while they may pursue a productive relationship with China. Australia’s 2016 Defense White Paper made an assessment that I judge most others around the world would agree to: “The United States will remain the pre-eminent global military power over the next two decades. It will continue to be
Australia’s most important strategic partner through our long-standing alliance, and the active presence of the United States will continue to underpin the stability of our region.”

**Exacerbating Regional Disputes**

Across the Indo-Pacific, several U.S. allies and partners are embroiled in some form of a dispute with China. As China’s military capabilities continue to improve, U.S. allies and partners are concerned that the PLA is growing increasingly capable of asserting China’s interests and claims or responding to crises, in the Taiwan Strait, in disputed claims in the East and South China Seas, along China’s border with India, and on the Korean peninsula. Even for those allies and partners without a specific dispute with China, most are deeply concerned about China’s regional assertiveness and how these disputed areas may impact regional stability and the course of China’s rise.

While the security dynamics that Taiwan and Japan have with China are significantly different in several important ways, they also share similar concerns about China’s rapid military modernization and the recent actions of its military forces. Both see Chinese forces as unilaterally escalating tensions by increasing the pace and scope of its military operations around Taiwan and in the East China Sea respectively, and both are concerned about Beijing’s attempts to change the status quo by employing political, economic, and military coercion. Finally, both are concerned – as described above – that China’s growing military capabilities have the potential to eventually enable China to deter or defeat an armed U.S. intervention into a future crisis related to Taiwan or Japan.

The South China Sea is a different story, both as a result of the area’s unique geography but also due to the different nature of U.S. relationships with the two countries with the most active disputes with China: the Philippines and Vietnam. While Manila is a long-standing treaty ally of the United States, and is therefore covered by American extended deterrence commitments, Hanoi has no such guarantees. Yet under President Rodrigo Duterte the Philippines has leaned closer toward China, and Defense Secretary Delfin Lorenzana has called for a review of the Mutual Defense Treaty with the United States out of fear it could pull the Philippines into an unwanted war with China. The result is that both Hanoi and the Manila are hedging between Beijing and Washington, and seek to avoid scenarios that would drive them to lean heavily in either direction.

---


5 For example, see Japan Ministry of Defense, *Defense of Japan 2018*, 2019, 10.

Countries with active disputes with China are concerned that China may continue to use so-called “gray-zone” tactics to advance its claims in disputed waters while staying below the threshold of conflict. In these cases, U.S. allies and partners are less concerned about China’s military modernization ambitions per se and more about China’s apparent ability to reclaim islands and militarize them with few significant consequences. Over time, China’s military modernization could allow it to solidify and enforce its claims across nearly the whole South China Sea, effectively turning the entire body of water into a Chinese territorial sea, and using it as a base of operations to enable power projection throughout Southeast Asia, deep across Oceania, and into the Eastern portion of the Indian Ocean.

India is also watching China’s military modernization very closely. Having already fought a war with China over their disputed northern border, many in Delhi believe that border tensions could generate more crises. Others are equally concerned about China’s rapidly improving naval capabilities and apparent interest in establishing overseas military facilities to support naval operations in the high seas, and fear that Beijing may be eyeing the Indian Ocean as a future locus for competition and crisis. 7

Finally, Seoul is primarily and understandably focused on the military threat posed by North Korea. Yet below the surface, there are deepening concerns about the role China may play in contingencies on the Korean Peninsula. While this is a subject that is not often discussed publicly by Korean officials and scholars, it is a topic that deserves a greater degree of scrutiny. China already has significant land power capabilities, and there are critical open questions as to how China may respond in the face of instability on the Korean peninsula. As China’s military capabilities improve, these questions will gain even greater importance and urgency. While more analysis on this issue is warranted, I would point this commission to the excellent work by Dr. Oriana Mastro of Georgetown University, who wrote in Foreign Affairs that “in the event of a conflict or the regime’s collapse, Chinese forces would intervene to a degree not previously expected—not to protect Beijing’s supposed ally but to secure its own interests.” 8

Concerns Further Afield

As a result of China’s growing military capabilities, U.S. allies and partners are increasingly concerned about China’s expanding international interests and global footprint as driving a range of missions beyond China’s periphery, including power projection and sea-lane security. For countries further afield from the Chinese mainland, China’s expanding military interests and capabilities are uniquely troubling, but in some cases are also seen as a positive and beneficial development. For

---


countries less concerned about China’s strategic ambitions, China is seen as a potential partner for providing humanitarian assistance and disaster relief, military assistance, and potentially domestic security support.

For most African and Latin American countries, China’s military modernization represents little more than an additional potential benefit building off of opportunities for Chinese trade, investment, and infrastructure assistance. Indeed, Djibouti saw benefits to expand its strategic relationship with China – and acquire some much-needed financial support – by hosting China’s first overseas military facility. In all likelihood, Beijing expects this facility is to be the first of many. We can expect other countries in key geographic positions to also look favorably at potentially hosting Chinese military facilities, although I do not expect to see any such a facility in Latin America for the foreseeable future. Commissioners, considering the dearth of conflicting security interests between China and the nations of Africa and Latin America, I do not expect China’s military modernization will play a significant role in the foreign policy calculations of either continent – beyond as a driver of competition between China and the United States and (for some) as a potential source of arms, training, and humanitarian assistance.

Europe, however, is another matter. For Europe’s larger nations – especially France and the UK – China’s military modernization and concerns about potential Chinese revisionism have recently drawn renewed attention to China as a geopolitical and security challenge. At the 2019 Shangri-La Dialogue, French Defense Minister Florence Parly described a more active and engaged role for France in the Indo-Pacific, and released a major report on the subject. The report describes France’s concerns about China’s actions in the South China Sea and elsewhere, and details France’s expanded military engagements across the region.⁹ Similarly, in April 2019, the UK House of Commons Foreign Affairs Committee published a report on the UK’s relations and strategy toward China, noting that “the combination of a China characterised by strengthened Communist Party control and a desire to project its influence outwards, on the one hand, and ever-increasing economic, technological and social links between the UK and China, on the other, presents serious challenges for the UK.”¹⁰ It calls for London to take a more balanced view of China and to recognize that China’s interests and values are not always the same as those of the UK.

Even though they do not have specific territorial disputes with China, it is clear that Europe’s major powers have deep concerns about China’s ambitions and its approach to the liberal international order, and see a role for themselves in responding. Their position is nuanced, and they also continue to recognize the significant opportunities that China represents. Nevertheless, Europe’s newfound concerns about the challenges posed by China and its expanding military positions are strategically significant and indicate an opening for the United States to deepen its engagement with European allies on these issues.

---

⁹ Ministère des Armées, France and Security in the Indo-Pacific.
¹⁰ House of Commons Foreign Affairs Committee, China and the Rules-Based International System, April 4, 2019, 4.
Recommendations

For the United States to successfully compete with China and sustain a robust and successful liberal international order, U.S. allies and partners will be critical to U.S. foreign policy. Not only do they facilitate American military presence and access around the world, but they are also vital partners to advancing shared interests and addressing mutual challenges.

Unfortunately, the U.S. approach to alliances and partnerships has recently seemed increasingly bifurcated. While officials in the Pentagon and State Department continue to laud the importance of U.S. alliances and partnerships, other parts of the U.S. government seem to see our allies and partners more as competitors or freeloaders. For example, President Trump’s threat to invoke a Section 232 tariff on auto imports threatens a key sector of both the South Korean and Japanese economies. Additionally, President Trump’s oft-repeated criticism of the levels of allied host nation support – as a candidate in July 2016, for example, he stated that the United States would defend only NATO allies who have “fulfilled their obligations to us” – suggests he sees the relationships less as based on mutual interests and shared values, but more as a financial transaction for protection.  

The United States should treat its allies for what they are: tremendous geopolitical assets and a critical source of American power, access, and influence. Not only should the United States continue to maintain a robust military presence in the region and sustain its commitments to its allies, but there are also a range of policy options the U.S. should consider to react to China’s rapidly growing military capabilities. To these ends, I have several recommendations of how the U.S. can engage its allies and partners in response to China’s ambitions to develop and field a world-class military.

Avoid a False, Unnecessary Choice: In recent months, there have been reports that some U.S. officials have sought to force U.S. allies and partners to “choose” between China and the United States. For example, U.S. officials have sought to dissuade allies and partners from pursuing trade and investment agreements with China, and have criticized those that have agreed to allow Huawei to install telecommunications equipment in their networks. Additionally, former Obama White House official Ryan Hass described the overriding message of Vice President Mike Pence’s remarks on China in October of 2018 as “the United States is strong and determined, China is a significant threat, and countries should position themselves with the United States.” In doing so, Hass rightly


argued that “the Trump administration risks embarking on a Cold War-like approach toward China, but without the clear backing of any ally anywhere in the world for joining the United States in a purely confrontational posture toward China.”

Being forced to choose between Washington and Beijing is a nightmare for most of our allies and partners. Moreover, I believe it is an unnecessary choice at this juncture. Alliances are not relationships in which a smaller power cedes its sovereignty to the larger power. In fact, the health and success of U.S. alliances since the end of World War II can be attributed to American support for the sovereignty and independence of its allies – friends and allies can disagree. Recall that Canada did not officially send troops to support U.S. military operations in Vietnam, and that the Suez Crisis pitted Washington against London and Paris on an issue of tremendous geopolitical significance. Yet in both cases, NATO survived.

Issues such as China’s debt trap diplomacy, the South China Sea, and Huawei are certainly of great importance. We should be engaging with our allies and partners on these issues, and working with them to develop common strategies against common challenges. Yet this is done most effectively through dialogue and cooperation – not with threats and ultimatums. While eventually a choice may need to be made if some in the Trump administration succeed in truly “decoupling” the U.S. and Chinese economies, at this point they remain too interconnected at this time to force any sort of choice upon U.S. allies and partners whose economies are far more profoundly connected to China than is that of the United States. Prematurely demanding U.S. allies and partners to “choose” risks further alienating them, and could limit the ability of the United States to harness alliances and partnerships toward shared objectives.

Empower U.S. Allies and Partners: There are substantial opportunities for the United States to build the capabilities of its allies and partners across the Indo-Pacific, and empower them to defend themselves from potential Chinese aggression and contribute more to the health and success of the liberal international order. While I will primarily focus on military opportunities, I would briefly note that non-military cooperation in areas such as infrastructure development, creating and enforcing international laws and norms, supporting good governance, and promoting political and economic liberalism are all areas where U.S. allies and partners – large or small, close or distant – can contribute.

At the most fundamental level, the United States should work with its allies and partners to ensure that each country in the Indo-Pacific has the ability to peacefully pursue its interests and defend its sovereignty free of Chinese military coercion. For the larger and more advanced U.S. allies and partners in the Indo-Pacific – such as Japan, Taiwan, Australia, and India – this strategy will mean consistently providing military capabilities that are both effective and sustainable, while also relevant

---

and effective in blunting potential Chinese military aggression. This approach will also involve continuing to build and utilize bilateral, trilateral, minilateral, and multilateral military cooperation mechanisms that enable closer training, joint operations, and greater interoperability across shared contingencies.

For America’s smaller and less advanced allies and partners, Washington should modulate its ambitions to match their lower capacities. This tactic will mean a greater emphasis on low-end security cooperation and support, such as building regional coast guards and facilitating greater maritime domain awareness cooperation, as well as assistance with maintenance, training, and sustainability. The unfortunate reality, however, is that there are few U.S. military platforms that are affordable for many of its smaller or developing allies and partners – they do not have the funds to purchase high-end U.S. military equipment, which is often more advanced than they require regardless. In these cases, the U.S. should prioritize developing Indo-Pacific allies and partners when distributing Excess Defense Articles in relevant security domains. Additionally, Washington should encourage its more advanced allies and partners, whose defense industries produce more appropriate systems, to deepen defense cooperation with the U.S. smaller allies and ensure that such cooperation contributes to a broader, networked approach to regional security.

There are a few challenges that the United States should consider, however, when pursuing a strategy to empower its allies and partners. For some allies and partners, China is not the only – or even the primary – security challenge. They may see the acquisition of additional military capabilities as a way to not only defend against potential Chinese coercion, but also as a means to assert other interests or claims against countries other than China. Clearly, the United States does not want to fuel an arms race that detracts from our shared objectives and could undermine – rather than buttress – regional stability. That is why such military cooperation must be done responsibly, emphasizing defensive rather than offensive capabilities, and alliance and partner relationships should continue to be strengthened.

Additionally, there is a danger that calling on other countries to “do more” to contribute to regional security and provide public goods may be interpreted as the United States withdrawing from the region. Perceptions that the United States was reducing its engagement and commitment to the Indo-Pacific, and attempting to use its allies and partners to fill the void, would precipitate a rapid geopolitical adjustment across the region, likely including broad realignment toward Beijing and some countries’ pursuing indigenous nuclear capabilities. This means that the United States cannot look to its allies and partners as potential replacements for American military power, but rather, as supplements to American military capabilities that continue to grow more capable.

**Invest in American Military Advantages in the Indo-Pacific and Beyond:** While I have full confidence in the ability of the United States to achieve its military objectives across the Indo-Pacific, my confidence will diminish if Washington is unable to make significant investments in the kinds of military capabilities that would be necessary to sustain American military advantages vis-à-
vis China. This will mean investing in critical high-end military capabilities, while also practicing strategic restraint in other areas of the world where American priorities and interests are less critical.

**Reduce the PLA’s Options to Expand:** The United States should work to limit the options Beijing has to build new military facilities abroad. This policy would mean engaging potential Chinese military partners, and offering the appropriate mix of incentives and disincentives to prevent the construction of additional Chinese military facilities abroad.

**Continue to Adjust U.S. Defense Posture across the Indo-Pacific:** During the Obama administration, the United States sought to build a defense posture in the region that is geographically distributed, operationally resilient, and politically sustainable. While significant progress was made, this initiative remains incomplete – especially as China’s military modernization continues to progress. The United States should continue to make progress on defense posture initiatives in Okinawa, Australia, Guam, the Philippines, and elsewhere in order to ensure the U.S. military is able to effectively defend the United States, its allies, and its interests. Yet to accomplish this goal, Washington will need strong, collaborative relationships with its allies and partners across the various government departments and, especially, between the countries’ leaders.

**Conclusion**

Mr. Chairman, Commissioners: China has been modernizing its military for decades, and is now reaping the benefits of decades of significant, targeted investments in its armed forces. While the PLA one day may achieve Xi Jinping’s vision of being a world-class military, the United States has the opportunity maintain, and even expand, its military advantages. To stay ahead, the United States must be focused in its investments and policy decision-making, and prioritize strategic competition with China above other, less significant long-term challenges.

A critical aspect to any American strategy to successfully compete with China will require robust relations with its allies and partners. While China has significantly improved its military capabilities already and has grand ambitions for the future, there is still time to focus our policies and investments and successfully compete with China. But this strategic window of opportunities is closing. I hope that my recommendations can help adjust the U.S. approach to our allies and partners in the face of China’s expanding military ambitions, and I look forward to your questions.

Thank you.

---